## 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 oversea 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, reference to which also appears in Chapter XXX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.
(ii) The Standards Association of Australia. This Association, which is referred to also in Chapter 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 Statisticians' Conference, 1945.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or 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 Clothtng or Footwear).
Furriers and Fur-dressing.
Woolscouring and Fellmongery.
Tanning, Currying 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 Tobaccocontinued.
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, Bedping, 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, lvory 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. |  | Fac.tories. | Employment.(a) | Salaries and Wages Paid.(b) | Value of- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Materials and Fuel Used. | Output. | Production. <br> (c) | Land and Buildings. | Plant <br> and Machinery. |
| 1901 | . | No. ${ }_{11,143}$ | $\begin{gathered} \prime 000 . \\ 198 \end{gathered}$ | $\mathrm{f}^{\prime} 000 .$ (d) | $£^{\prime} 000$ <br> (d) | $£^{\prime} 000 .$ (d) | $£^{\prime} 000 .$ (d) | $£^{\prime} 000 .$ (d) | $\begin{gathered} £^{\prime} 000 . \\ (d) \end{gathered}$ |
| 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 | $\ldots$ | 21,751 | 339 | 62,455 | 172,489 | 290,799 | 118,310 | 112,211 | 124,498 |
| 1940-41 | $\ldots$ | 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 |
| 1953-54 | . | 49,576 | 990 | 705,137 | 1,868,431 | 3,095,476 | 1,227,045 | 483,431 | 580,715 |
| 1954-55 | . | 51,056 | 1,031 | 781,640 | 2,069,080 | 3,434,589 | 1,365,509 | 555,996 | 698,292 |
| 1955-56 | $\ldots$ | 52,406 | 1,060 | 853,469 | 2,263,346 | [3,764,060 | 1,500,714 | 655,582 | 803,540 |
| 1956-57 |  | 53,200 | 1,063 | 891,090 | 2,400,293 | 4,022,413 | 1,622,120 | 761,995 | 923,954 |
| 1957-58 |  | 53,988 | 1,074 | 929,290 | 2,545,159 | 4,273,882 | 1,728,723 | 851,686 | 1,021,351 |

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## § 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 1953-54 to 1957-58:-

FACTORIES: NUMBER.

2. Number of Factories in Industrial Classes.-(i) Australia. The next table shows the number of factories in Australia during 1938-39 and 1953-54 to 1957-58 classified in 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 186.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES: AUSTRALIA.

| Class of Industry. |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

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 1957-58. In the latter year, the number of factories in Australia reached the record total of 53,988 or more than twice the number in 1938-39.
(ii) States, 1957-58. The following table shows the number of factories in each State classified according to the nature of the industry:-

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1957-58.

| 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 | 442 | 101 | 166 | 117 | 54 | 1,328 |
| II. Bricks, Pottery, Glass, etc. . | 311 | 159 | 57 | 64 | 48 | 21 | 660 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 589 | 350 | 78 | 85 | 60 | 22 | ,184 |
| IV. Industrial Metals, Machines, Conveyances | 8,528 | 5,971 | 2,060 | 1,81 | ,60 | 537 | 20,518 |
| V. Precious Metals, Jewellery, Plate | 368 | 266 | 40 | 57 |  | 6 | 20,518 808 |
| VI. Textiles and Textile Goods (not Dress) | 472 | 748 | 30 | 51 |  | 19 | ,364 |
| VII. Skins and Leather (not Clothing or Footwear) | 339 | 289 | 55 | 39 | 31 | 8 | 61 |
| VIII. Clothing (except Knitted) | 3,363 | 2,516 | 521 | 375 | 407 | 84 | 7,266 |
| IX. Food, Drink and Tobacco ... | 2,798 | 2,022 | 1,035 | 699 | 609 | 292 | 7,455 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 2,257 | 1,407 | 831 | 353 | 456 | 460 | ,764 |
| XI. Furniture of Wood, Bedding, etc. | 801 | 704 | 293 | 162 | 169 | 71 | 2,200 |
|  | 1,017 | 884 | 203 | 151 | 123 | 35 | 2,413 |
| XIII. Rubber | 219 | 151 | 81 | 55 | 40 | 19 | 565 |
| XIV. Musical Instruments | 35 616 | 28 411 | 60 | 10 | $\begin{array}{r}8 \\ \hline 8\end{array}$ | 14 | $\begin{array}{r}88 \\ 1,207 \\ \hline\end{array}$ |
| Total Classes I. to XV. | 22,161 | 6,348 | 5,452 | 4,127 | 3,851 | 1,642 | 53,581 |
| XVI. Heat, Light and Power | 109 | 78 | 76 | 41 | 90 | 13 | 407 |
| Grand Total | 22,270 | 16,426 | 5,528 | 4,168 | 3,941 | 1,655 | 53,988 |

## § 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, 1957-58.-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, 1957-58.

| Size of Factory <br> (Persons employed). | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Number of Factories.

| Under 4 | . | . | 8,987 | 6,077 | 1,869 | 1,460 | 1,980 | 739 | 21,112 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 |  | . | 1,903 | 1,254 | 546 | 383 | 152 | 160 | 4,398 |
| 5 to 10 |  |  | 5,331 | 3,862 | 1,564 | 1,077 | 924 | 385 | 13,143 |
| 11 to 20 | . |  | 2,759 | 2,268 | 693 | 597 | 429 | 170 | 6,916 |
| 21 to 50 |  |  | 1,946 | 1,721 | 515 | 370 | 291 | 124 | 4,967 |
| 51 to 100 |  |  | 690 | 621 | 159 | 151 | 97 | 45 | 1,763 |
| 101 to 200 |  | $\cdots$ | 353 | 345 | 92 | 71 | 43 | 14 | 918 |
| 201gto 300 | . | . . | 100 | 114 | 55 | 24 | 17 | 4 | 314 |
| 301 to 400 |  |  | 60 | 43 | 8 | 10 | . | 5 | 126 |
| $401{ }^{\text {in }}$ to 500 |  | . | 36 | 32 | 12 | 6 | 3 | 1 | 90 |
| 501 to 750 |  |  | 44 | 60 | 9 | 7 | 3 | 3 | 126 |
| 751 to 1,000 |  | . | 24 | 11 | 3 | . | 1 | 1 | 40 |
| Over 1,000 |  | . | 37 | 18 | 3 | 12 | 1 | 4 | 75 |
| Total |  | . | 22,270 | 16,426 | 5,528 | 4,168 | 3,941 | 1,655 | 53,988 |

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, 1957-58.

| Size of Factory <br> (Persons employed). | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Average Number Employed during Period Worked.

| Under 4 | 16,897 | 11,748 | 3,921 | 3,072 | 3,884 | 1,430 | 40,952 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 7,612 | 5,016 | 2,184 | 1,532 | 608 | 640 | 17,592 |
| 5 to 10 | 36,932 | 27,252 | 10,842 | 7,456 | 5,970 | 2,690 | 91,142 |
| 11 to 20 | 40,357 | 33,341 | 10,102 | 8,720 | 6,072 | 2,470 | 101,062 |
| 21 to 50 | 61,075 | 54,254 | 16,079 | 11,826 | 9,093 | 3,902 | 156,229 |
| 51 to 100 | 48,216 | 43,358 | 11,475 | 10,425 | 6,704 | 3,343 | 123,521 |
| 101 to 200 | 49,783 | 47,790 | 12,692 | 9,870 | 5,905 | 1,982 | 128,022 |
| 201 to 300 | 24,808 | 27,515 | 13,272 | 5,645 | 4,091 | 1,045 | 76,376 |
| 301 to 400 | 20,222 | 14,927 | 2,614 | 3,391 |  | 1,663 | 42,817 |
| 401 to 500 | 16,043 | 13,958 | 5,392 | 2,603 | 1,334 | 448 | 39,778 |
| 501 to 750 | 27,748 | 35,964 | 5,658 | 4,330 | 1,657 | 1,886 | 77,243 |
| 751 to 1,000 | 21,295 | 9,448 | 2,864 |  | 786 | 775 | 35,168 |
| Over 1,000 | 78,221 | 34,319 | 5,618 | 23,974 | 2,980 | 6,261 | 151,373 |
| Total | 449,209 | 358,890 | 102,713 | 92,844 | 49,084 | 28,535 | 1,081,275 |
| Average per Factory | 20.17 | 21.85 | 18.58 | 22.28 | 12.45 | 17.24 | 20.03 |

3. Australia, 1938-39 and 1953-54 to 1957-58.-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.


## § 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 1957-58, 395 factories were recorded as using no power other than manual, the distribution of these factories among the various industries being as follows:-Fibrous Plaster and Products, 24; Galvanized Ironworking, Tinsmithing, 14; Tailoring and Readymade Clothing, 93; Dressmaking, 10; Millinery, 4; Bakeries, 27; Cabinet and Furniture Making, 11; all other industries, 212.
2. Rated Horse-power of Engines in Factories other than Central Electric Stations.The following table shows the number of factories and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1957-58:-

FACTORIES (a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1957-58.

(a) Includes Gas Works but excludes Central Electric Stations.
(b) Excludes motors driven by 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, 1957-1958.
(a) Includes Gas Works but excludes Central Electric Stations. column (c).
(b) Excludes particulars in
(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 1953-54 to 1957-58:-

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

(a) Includes Gas Works but excludes Central Electric Stations.
(b) Excludes particulars in column (c).
(iii) In Classes of Industry, 1957-58. The next table shows the total rated horsepower 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 $(b)$, 1957-58.

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry |  |  |  |  |  |  |  |
| Products | 83,220 | 44,451 | 18,820 | 20,536 | 16,623 | 14,941 | 198,591 |
| II. Bricks, Pottery, Glass, etc. | 51,585 | 38,855 | 8,639 | 9,584 | 11,077 | 2,211 | 121,951 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 150,105 | 135,921 | 10,989 | 21,577 | 38,791 | 11,886 | 369,269 |
| IV. Industrial Metals, Machines, Conveyances | 1,056,532 | 414,656 | 91,086 | 170,343 | 67,817 | 61,536 | 1,861,970 |
| V. Precious Metals, Jewellery, Plate | 5,456 | 5,046 | 1,241 | 1,011 | 627 | 64 | 13,445 |
| VI. Textiles and Textile Goods (not Dress) | 53,178 | 102,841 | 7,256 | 8,000 | 2,822 | 8,281 | 182,378 |
| VII. Skins and Leather (not Clothing or Footwear) | 19,193 | 20,361 | 5,517 | 6,141 | 3,052 | 8,281 | +54,780 |
| VIII. Clothing (except Knitted) . | 23,698 | 29,265 | 4,480 | 3,471 | 2,500 | 976 | 64,390 |
| IX. Food, Drink and Tobacco .. | 211,497 | 215,984 | 223,164 | 58,114 | 38,604 | 19,619 | 766,982 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 178,463 | 118,720 | 100,908 | 37,522 | 48,116 | 41,109 | 524,838 |
| XI. Furniture of Wood, Bedding, etc. | 17,920 | 16,886 | 8,744 | 6,526 | 4,072 | 1,469 | 55,617 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 69,856 | 81,134 | 21,453 | 14,030 | 5,710 | 86,472 | 278,655 |
| XIII. Rubber .. . . . | 57,651 | 58,143 | 9,401 | 4,200 | 876 | 417 | 130,688 |
| XIV. Musical Instruments | 1,660 | 440 | 46 | 14 | 9 |  | 2,169 |
| XV. Miscellaneous Products | 25,837 | 26,844 | 665 | 2,160 | 819 | 419 | 56,744 |
| Total, Classes I. to XV. .- | 2,005,851 | 1,309,547 | 512,409 | 363,229 | 241,515 | 249,916 | 4,682,467 |
| XVI. Gas Works | 18,393 | 15,840 | 2,482 | 6,868 | 1,204 | 126 | 44,913 |
| Grand Total | 2,024,244 | 1,325,387 | 514,891 | 370,097 | 242,719 | 250,042 | 4,727,380 |

[^1]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 1957-58 are given in the following table:-

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1957-58.

| Particulars. | Capacity of Engines and Generators. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Steam. |  | Internal Combustion. |  |  | Water. | Total. |
|  | Reciprocating. | Turbine. | Gas. | Petrolor Other Light Oils. | Heavy Oils. |  |  |
| Engines installed . . Rated H.P. | 6,016 | 5,057,307 | 12,348 | 15,977 | 331,047 | 1,304,728 | 6,727,423 |
| Generators installedKilowatt capacity - |  |  |  |  |  |  |  |
| Total installed .. kW | 4,484 | 3,700,047 | 8,064 | 10,252 | 225,099 | 933,045 | 4,880,991 |
| Effective capacity .. " | 4,224 | 3,419,029 | 6,602 | 9,713 | 208,106 | 867,942 | 4,515,616 |
| Horse-power equivalentTotal installed .. H.P. | 6,011 | 4,959,839 | 10,810 | 13,742 | 301,741 | 1,250,728 | 6,542,871 |
| Effective capacity . . | 5,662 | 4,583,140 | 8,850 | 13,020 | 278,962 | 1,163,459 | 6,053,093 |

Note.-The number of establishments classified as Central Electric Stations in 1957-58 was 319
(ii) States. Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1957-58 are given in the next table:-

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Electric Stations No. | 72 | 51 | 60 | 38 | 87 | 11 | 319 |
| Engines installed .. Rated H.P. | 2,688,724 | 1,565,409 | 814,981 | 546,613 | 410,906 | 700,790 | 6,727,423 |
| Generators installedKilowatt capacity- |  |  |  |  |  |  |  |
| Total installed .. kW | 1,928,112 | 1,160,196 | 596,461 | 400,098 | 299,384 | 496,740 | 4,880,991 |
| Effective capacity | 1,786,252 | 1,087,053 | 469,043 | 394,418 | 287,290 | 491,560 | 4,515,616 |
| Horse-power equivalentTotal installed .. H.P. |  |  | 799,544 | 536,323 |  | 665870 |  |
| Effective capacity . ${ }^{\text {. }}$ H.P. | 2,394,435 | $1,457,173$ | 628,742 | 528,709 | 385,107 | 658,927 | 6,053,093 |

## § 5. Employment in Factories.

1. Number Employed.-(i) General. All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see para. 4 (ii), p. 163), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen, are excluded. Prior to 1945-46, the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) enginedrivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and in 1945-46 the set-up on the collection form was amended to obtain the following groupings:-(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home.

Prior to the year 1928-29, average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29. the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (see § 3, p. 155), 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 1953-54 to 1957-58 in the following table:-

## FACTORIES: EMPLOYMENT, AUSTRALIA.

| Year. |  | Males. |  |  | Females. |  |  | Persons. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number ployed. | Increase on Preceding Year. |  | $\underset{\text { Ember }}{\text { Number }}$ ployed. | Increase on Preceding Year. |  | Number Employed. | Increase on Preceding Year. |  |
|  |  |  | Number.' | Per Cent. |  | Number. | Per Cent. |  | Number. | Per Cent. |
| 1938-39 | $\cdots$ | 412.591 | 3,989 | 0.98 | 152,515 | 1,957 | 1.30 | 565,106 | 5,946 | 1.06 |
| 1953-54 | . | 758,508 | 35,104 | 4.85 | 231,034 | 21,177 | 10.09 | 989,542 | 56,281 | 6.03 |
| 1954-55 | . | 788,691 | 30,183 | 3.98 | 242,391 | 11,357 | 4.92 | 1,031,082 | 41,540 | 4.20 |
| 1955-56 | $\cdots$ | 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 |

(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. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Average Number Employed during Full Year (52 Weeks).

| $1938-39$ | $\ldots$ | 228,781 | 201,831 | 54,110 | 43,371 | 23,211 | 13,802 | 565,106 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1953-54$ | $\ldots$ | 402,595 | 331,277 | 98,119 | 85,503 | 47,459 | 24,589 | 989,542 |
| $1954-55$ | $\ldots$ | 419,810 | 346,648 | 100,293 | 89,565 | 49,314 | 25,452 | $1,031,082$ |
| $1955-56$ | $\ldots$ | 433,081 | 355,185 | 102,473 | 92,589 | 50,108 | 27,062 | $1,060,498$ |
| $1956-57$ | $\ldots$ | 436,369 | 355,204 | 103,426 | 91,981 | 48,748 | 27,670 | $1,063,398$ |
| $1957-58$ | $\ldots$ | 445,802 | 357,143 | 101,844 | 92,472 | 48,462 | 28,084 | $1,073,807$ |

Percentage of Australian Total.

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1938-39$ | $\ldots$ | 40.48 | 35.72 | 9.58 | 7.67 | 4.11 | 2.44 | 100 |
| $1953-54$ | $\ldots$ | 40.68 | 33.48 | 9.92 | 8.64 | 4.80 | 2.48 | 100 |
| $1954-55$ | $\ldots$ | 40.71 | 33.62 | 9.73 | 8.69 | 4.78 | 2.47 | 100 |
| $1955-56$ | $\ldots$ | 40.84 | 33.49 | 9.66 | 8.73 | 4.73 | 2.55 | 100 |
| $1956-57$ | $\ldots$ | 41.04 | 33.40 | 9.73 | 8.65 | 4.58 | 2.60 | 100 |
| $1957-58$ | $\cdots$ | 41.51 | 33.26 | 9.48 | 8.61 | 4.52 | 2.62 | 100 |

FACTORIES: EMPLOYMENT-continued.

| Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Per 10,000 of Population. |  |  |  |  |  |  |  |
| 1938-39 | 836 | 1,078 | 537 | 729 | 497 | 581 | 815 |
| 1953-54 | 1,182 | 1,367 | 754 | 1,088 | 753 | 795 | 1,112 |
| 1954-55 | 1,213 | 1,393 | 757 | 1,109 | 746 | 813 | 1,134 |
| 1955-56 | 1,229 | 1,385 | 758 | 1,110 | 750 | 848 | 1,138 |
| 1956-57 | 1,216 | 1,345 | 749 | 1,068 | 712 | 848 | 1,115 |
| 1957-58 | 1,219 | 1,319 | 726 | 1,044 | 694 | 841 | 1,108 |

2. Rates of Increase, 1938-39 and 1953-54 to 1957-58. -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 |
| 1953-54 | 5.89 | 6.60 | 5.36 | 6.24 | 5.03 | 4.66 | 6.03 |
| 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 |

Note.-Minus sign ( - ) indicates decrease.
3. Persons Employed in Classes of Industry.-(i) Australia. The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39 and 1953-54 to 1957-58:-

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

| Class of Industry | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 10,343 | 18,748 | 20,560 | 20,893 | 20,318 | 20.883 |
| II. Bricks, Pottery, Glass, etc. . . | 15,709 | 21,708 | 22,549 | 22,914 | 22,162 | 22,448 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 19,816 | 37,988 | 41,324 | 44,718 | 45,753 | 46,986 |
| IV. Industrial Metals, Machines, Conveyances | 177,677 | 397,713 | 422,124 | 444,274 | 447,405 | 59,345 |
| V. Precious Metals, Jewellery, Piate | 3,726 | 5,970 | 6,029 | 5,894 | 6,053 | 5,905 |
| VI. Textiles and Textile Goods (not Dress) | 46,082 | 69,482 | 69,046 | 68,356 | 70,176 | 68,875 |
| VII. Skins and Leather (not Clothing or Footwear) | 10,76 | 14,676 |  |  |  | 13,171 |
| VIII. Clothing (except Knitted) | 86,092 | 112,520 | 112,802 | 110,820 | 109,266 | 106,947 |
| IX. Food, Drink and Tobacco | 83,846 | 123,073 | 125,934 | 126,493 | 124,723 | 123471 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving |  | 58,93 | 61,153 |  |  | 59,238 |
| XI. Furniture of Wood, Bedding, etc | 15,287 | 20,975 | 21,342 | 21,508 | 21,258 | 22,099 |
| XII. Paper, Stationery, Printing, Book binding, etc. | 39.91 | 56,11 | 9,775 | 62,71 | 64,7 | 66.285 |
| XIII. Rubber | 7,502 | 14,962 | 16,325 | 17,287 | 17,844 | 18,105 |
| XIV. Musical Instruments | 451 | 1,575 | ,623 | ,739 | ,902 | 1,101 |
| XV. Miscellaneous Products | 7,727 | 19,565 | 19,962 | 20,967 | 21,746 | 22,332 |
| Total, Classes I. to XV. | $\overline{555,677}$ | 974,006 | 1,015,052 | 1,044,300 | 1,046,787 | 1,057,191 |
| XVI. Heat, Light and Power | 9,429 | 15,536 | 16,030 | 16,198 | 16,611 | 16,616 |
| Grand Total | 565,106 | 989,542 | 1,031,082 | 1,060,498 | 1,063,398 | 73,807 |

(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, 1957-58.

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 8,294 | 6,341 | 1,975 | 1,974 | 1,519 | 780 | 20,883 |
| III. Bricks, Pottery, Gläss, etc. ... | 11,623 | 5,660 | 1,270 | 2,086 | 1,457 | 352 | 22,448 |
| III. Chemicals, Dyes, Explosives, | 21,444 | 16,996 | 1,780 | 3,230 | 2,747 | 789 | 6,986 |
| . Industrial Metals, Machines, Conveyances | 209,583 | 134,221 | 36,284 | 50,235 | 19,549 | 9,473 | 459,345 |
| V. Precious Metals, Jewellery, Plate | 2,452 | 2,46 | 309 | 428 | 232 | 15 |  |
| VI. Textiles and Textile Goods (not Dress) | 22,178 | 38,0 | 2,1 | 2,590 | 949 | 21 |  |
| VII. Skins and Leather (not Cloth- | 22,178 |  | 1259 | ,292 | 626 | 67 |  |
| VIII. Clothing (except Knitted) $\quad .$. | 43,731 | 45,764 | 8,091 | 5,094 | 3,380 | 887 | 13,171 106,947 |
| IX. Food, Drink and Tobacco | 38,741 | 37,310 | 25,358 | 11,050 | 6,436 | 4,576 | 123,471 |
| X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving | 19,850 | 14,815 | 10,510 | 4,900 | 5,755 | 3,408 | 59,238 |
| XI. Furniture of Wood, Bedding, etc. | 8,913 | 6,550 | 2,869 | 2,013 | 1,301 | 453 | 22,099 |
| II. Paper, Stationery, Printing, Bookbinding, etc. | 28,158 | 22,113 | 5,717 | 4,015 | 2,537 | 3,745 | 66,285 |
| XIII. Rubber . | 7,956 | 6,932 | 1,636 | 1,146 | 270 | 165 | 18,105 |
| XIV. Musical Instruments | 9,688 | 269 10.357 | 61 | 797 | 38 412 |  | 1,101 |
| XV. Miscellaneous Products | 9,962 | 10,357 | 602 | 797 | 412 | 202 | 22,332 |
| Total Classes I. to XV. | 438,851 | 352,524 | 99,880 | 90,895 | 47,208 | 27.833 | 1,057,191 |
| XVI. Heat, Light and Power | 6,951 | 4,619 | 1,964 | 1,577 | 1,254 | 25 | 16,616 |
| Grand Total | 445,802 | 357,143 | 101,844 | 92,472 | 48,462 | 28,084 | 1,073,807 |

4. Persons Employed According to Occupational Grouping.-(i) General. In the following table, the average number of persons employed in each State during 1957-58 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. 159).

FACTORIES: PERSONS EMPLOYED-OCCUPATIONAL GROUPING, 1957-58.

| State. |  | Average Number of Persons Employed. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Working Proprietors. | Mana- gerial and Clerical Staff, etc.(a) | Chemists, Draftsmen, etc. | Foremen and Overseers. | Workers in Factory (Skilled and Unskilled). | Carters <br> (excluding <br> Delivery <br> only) and <br> Messen-- <br> gers, etc. <br> (b) | Total. |
| New South Wales | . | 16,202 | 53,896 | 6,955 | 19,521 | 347,182 | 2,046 | 445,802 |
| Victoria |  | 13,934 | 40,951 | 5,751 | 16,262 | 278,110 | 2,135 | 357,143 |
| Queensland | $\cdots$ | 4,946 | 10,169 | 1,073 | 4,080 | 80,831 | 745 | 101,844 |
| South Australia |  | 2,941 | 11,028 | 1,672 | 4,446 | 72,037 | 348 | 92,472 |
| Western Australia |  | 2,714 | 4,220 | 473 | 2,121 | 38,835 | 99 | 48,462 |
| Tasmania .. |  | 1,052 | 2,895 | 584 | 1,334 | 22,102 | 117 | 28,084 |
| Total Males | . | 36,373 | 75,871 | 15,036 | 44,252 | 646,256 | 4,727 | 822,515 |
| Total Females | $\ldots$ | 5,416 | 47,288 | 1,472 | 3,512 | 192,841 | 763 | 251,292 |
| Total Persons |  | 41,789 | 123,159 | 16,508 | 47,764 | 839,097 | 5,490 | 1,073,807 |

(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 1953-54 to 1957-58.-(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.)


Females.

| July | $\cdots$ |  |  | 147,282 | 212,322 | 231,222 | 238,883 | 240,918 | 242,399 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| August |  |  |  | 149,294 | 214,644 | 232,603 | 240,857 | 241,429 | 243,489 |
| September |  |  |  | 151,159 | 218,078 | 234,818 | 243,289 | 243,199 | 245,019 |
| October |  |  |  | 152,473 | 222,255 | 236,930 | 244,840 | 245,130 | 246,360 |
| November |  |  |  | 152,806 | 224,672 | 238,146 | 244,582 | 245,006 | 247,805 |
| December |  |  |  | 151,165 | 224,100 | 236,804 | 242,366 | 242,175 | 244,653 |
| January |  |  |  | 141,853 | 228,838 | 236,664 | 240,574 | 243,191 | 245,340 |
| February |  |  |  | 151,883 | 232,678 | 242,008 | 247,841 | 248,336 | 250,891 |
| March | - | . | $\cdots$ | 154,854 | 236,354 | 242,573 | 247,209 | 250,728 | 252,918 |
| April |  | . | . | 152,614 | 234,175 | 239,460 | 244,588 | 245,873 | 247,439 |
| May | . | . |  | 150,693 | 232,333 | 238,450 | 243,989 | 244,054 | 245,855 |
| June | $\cdots$ | . | . | 148,601 | 232,009 | 238,529 | 242,548 | 242,966 | 244,052 |

Persons.

| July | .. |  |  | 534,975 | 916,431 | 970,672]1,007,265 | [1,016,498 | 1,023,555 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| August |  |  | $\cdots$ | 539,273 | 922,082 | 974,038 1,011,169 | 1,015,935 | 1,024,119 |
| September | $\cdots$ |  |  | 542,735 | 928,324 | 978,456 1,015,004 | 1,017,318 | 1,028,007 |
| October |  |  |  | 546,450 | 937,593 | 983,069 1,018,911 | 1,019,585 | 1,031,649 |
| November |  |  |  | 547,998 | 943,902 | 988,431 1,021,886 | 1,022,133 | 1,033,630 |
| December |  |  |  | 545,603 | 940,302 | 984,034 1,014,875 | 1,014,654 | 1,025,707 |
| January | .. | .. | .. | 527,595 | 951,115 | 987,4871,014,651 | 1,016,610 | 1,031,860 |
| February |  |  |  | 543,939 | 960,432 | 997,464 1,026,393 | 1,027,982 | 1,041,726 |
| March | $\cdots$ | .. |  | 550,000 | 968,354 | 1,000,529 1,026,736 | 1,031,701 | 1,046,245 |
| April | .. | $\cdots$ | . | 543,619 | 966,098 | 999,599 1,025,006 | 1,023,135 | 1,039,056 |
| May | $\cdots$ | $\cdots$ | . | 544,302 | 966,673 | 1,000,005 1,024,241 | 1,023,811 | 1,037,258 |
| June | . | . |  | 539,564 | 970,011 | 1,002,01711,020,516 | (1,023,122 | 1,035,150 |

(ii) States. Particulars of the numbers employed in each State on the last pay-day of each month in 1957-58 are shown in the following table:-

FACTORIES: MONTHLY EMPLOYMENT, 1957-58.
(Excluding Working Proprietors.)

| Month. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |  |
| July | . | 318,674 | 245,685 | 83,459 | 72,731 | 39,156 | 21,451 | 781,156 |
| August | . | 318,989 | 244,951 | 83,215 | 72,841 | 39,160 | 21,474 | 780,630 |
| September | . | 320,128 | 246,093 | 82,561 | 73,015 | 39,602 | 21,589 | 782,988 |
| October | - | 321,472 | 247,017 | 82,122 | 73,383 | 39,702 | 21,593 | 785,289 |
| November | . | 323,329 | 247,928 | 79,865 | 73,290 | 39,730 | 21,683 | 785,825 |
| December | . | 322,365 | 247,903 | 75,715 | 73,121 | 39,550 | 22,400 | 781,054 |
| January | . | 323,544 | 249,998 | 76,962 | 73,780 | 39,506 | 22,730 | 786,520 |
| February | . | 325,441 | 251,277 | 78,149 | 73,716 | 39,792 | 22,460 | 790,835 |
| March | . | 326,235 | 251,815 | 79,306 | 73,830 | 39,924 | 22,217 | 793,327 |
| April | . | 326,523 | 250,065 | 79,691 | 73,453 | 39,642 | 22,243 | 791,617 |
| May | . | 326,605 | 249,153 | 81,276 | 72,982 | 39,280 | 22,107 | 791,403 |
| June | . | 326,008 | 248,065 | 83,031 | 73,026 | 39,054 | 21,914 | 791,098 |

Females.

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| July | $\ldots$ | $\ldots$ | 104,315 | 94,753 | 16,470 | 15,695 | 6,173 | 4,993 | 242,399 |
| August | $\ldots$ | $\ldots$ | 104,937 | 95,155 | 16,680 | 15,847 | 6,184 | 4,686 | 243,489 |
| September | $\ldots$ | $\ldots$ | 106,307 | 95,532 | 16,476 | 15,953 | 6,265 | 4,486 | 245,019 |
| October | $\ldots$ | $\ldots$ | 107,114 | 95,995 | 16,549 | 16,005 | 6,264 | 4,433 | 246,360 |
| November | $\ldots$ | $\ldots$ | 107,858 | 96,731 | 16,418 | 16,035 | 6,330 | 4,433 | 247,805 |
| December | $\ldots$ | $\ldots$ | 105,785 | 95,335 | 16,076 | 16,253 | 6,317 | 4,887 | 244,653 |
|  |  |  |  |  |  |  |  |  |  |
| January | $\ldots$ | $\ldots$ | 104,338 | 96,733 | 16,013 | 16,939 | 6,198 | 5,119 | 245,340 |
| February | $\ldots$ | $\ldots$ | 106,019 | 99,864 | 16,889 | 16,797 | 6,356 | 4,966 | 250,891 |
| March | $\ldots$ | $\ldots$ | 106,669 | 100,448 | 17,208 | 17,123 | 6,437 | 5,033 | 252,918 |
| April | $\ldots$ | $\ldots$ | 106,130 | 97,170 | 16,129 | 16,301 | 6,420 | 5,289 | 247,439 |
| May | $\ldots$ | $\ldots$ | 105,834 | 96,055 | 16,290 | 16,023 | 6,320 | 5,333 | 245,855 |
| June | $\ldots$ | $\ldots$ | 105,535 | 94,700 | 16,343 | 15,961 | 6,178 | 5,335 | 244,052 |
|  |  |  |  |  |  |  |  |  |  |

Persons.

| July | $\ldots$ | $\ldots$ | 422,989 | 340,438 | 99,929 | 88,426 | 45,329 | 26,444 | $1,023,555$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| August | $\ldots$ | $\ldots$ | 423,926 | 340,106 | 99,895 | 88,688 | 45,344 | 26,160 | $1,024,119$ |
| September | $\ldots$ | $\ldots$ | 426,435 | 341,625 | 99,037 | 88,968 | 45,867 | 26,075 | $1,028,007$ |
| October | $\ldots$ | $\ldots$ | 428,586 | 343,012 | 98,671 | 89,388 | 45,966 | 26,026 | $1,031,649$ |
| November | $\ldots$ | $\ldots$ | 431,187 | 344,659 | 96,283 | 89,325 | 46,060 | 26,116 | $1,033,630$ |
| December | $\ldots$ | $\ldots$ | 428,150 | 343,238 | 91,791 | 89,374 | 45,867 | 27,287 | $1,025,707$ |
|  |  |  |  |  |  |  |  |  |  |
| January | $\ldots$ | $\ldots$ | 427,882 | 346,731 | 92,975 | 90,719 | 45,704 | 27,849 | $1,031,860$ |
| February | $\ldots$ | $\ldots$ | 431,460 | 351,141 | 95,038 | 90,513 | 46,148 | 27,426 | $1,041,726$ |
| March | $\ldots$ | $\ldots$ | 432,904 | 352,263 | 96,514 | 90,953 | 46,361 | 27,250 | $1,046,245$ |
| April | $\ldots$ | $\ldots$ | 432,653 | 347,235 | 95,820 | 89,754 | 46,062 | 27,532 | $1,039,056$ |
| May | $\ldots$ | $\ldots$ | 432,439 | 345,208 | 97,566 | 89,005 | 45,600 | 27,440 | $1,037,258$ |
| June | $\ldots$ | $\ldots$ | 431,543 | 342,765 | 99,374 | 88,987 | 45,232 | 27,249 | $1,035,150$ |
|  |  |  |  |  |  |  |  |  |  |

6. Distribution of Employees According to Age.-The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 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, 1957 and 1958, are given below:-

FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1957 AND 1958.
(Excluding Working Proprietors.)

| Age Group. |  | June, 1957. |  |  | June, 1958. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. | Persons. | Males. | Females. | Persons. |
| Under 16 years | . | 9,158 | 6,828 | 15,986 | 8,710 | 6,924 | 15,634 |
| 16 years | $\cdots$ | 13,310 | 8,292 | 21,602 | 13,817 | 9,180 | 22,997 |
| 17 " | . | 15,289 | 9,276 | 24,565 | 16,347 | 9,790 | 26,137 |
| 18 " | $\cdots$ | 16,104 | 9,715 | 25,819 | 16,802 | 10,025 | 26,827 |
| 19 |  | 15,219 | 8,986 | 24,205 | 16,337 | 9,421 | 25,758 |
| 20 ", | $\cdots$ | 14,162 | 7,959 | 22,121 | 15,315 | 8,737 | 24,052 |
| 21 " and over |  | 696,914 | 191,910 | 888,824 | 703,770 | 189,975 | 893,745 |
| Total | . | 780,156 | 242,966 | 1,023,122 | 791,098 | 244,052 | 1,035,150 |

The following table shows the age distribution in sexes for Australia in June, 1939, and 1954 to 1958:-

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. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |  |
| $1939(a)$ | 16,109 | 76,418 |  |  |  |  | 298,436 | 390,963 |
| 1954 | 9,294 | $12,874$ | 14,947 | 14,591 | 12,971 | 12,426 | 660,899 | 738,002 |
| 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 | $\begin{aligned} & 780,156 \\ & 791,098 \end{aligned}$ |
| 1958 | 8,710 | 13,817 | 16,347 | 16,802 | 16,337 | 15,315 | 703,770 |  |

Females.

| $1939(a)$ | $\cdots$ | 15,497 | 50, |  |  |  |  | 76,831 | 148,601 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1954 | $\ldots$ | 7,228 | 8,945 | 9,899 | 9,702 | 8,719 | 7,807 | 179,709 | 232,009 |
| 1955 | $\cdots$ | 6,605 | 8,547 | 9,902 | 9,994 | 8,600 | 7,710 | 187,171 | 238,529 |
| 1956 | $\cdots$ | 6,557 | 8,163 | 9,390 | 10,102 | 9,072 | 7,801 | 191,463 | 242,548 |
| 1957 | $\cdots$ | 6,828 | 8,292 | 9,276 | 9,715 | 8,986 | 7,959 | 191,910 | 242,966 |
| 1958 | $\cdots$ | 6,924 | 9,180 | 9,790 | 10,025 | 9,421 | 8,737 | 189,975 | 244,052 |

Persons.

| 1939(a) |  | 31,606 | 132,691 |  |  |  |  | 375,267 | 539,564 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1954 |  | 16,522 | 21,819 | 24,846 | 24,293 | 21,690 | 20,233 | 840,608 | 970,011 |
| 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 |

(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 1953-54 to 1957-58:-

## FACTORIES: MALES AND FEMALES EMPLOYED.

| State. | $1938-39$. | $1953-54$. | $1954-55$. | $1955-56$. | $1956-57$. | $1957-58$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Males.

| New South Wales |  | 167,172 | 305,040 | 316,673 | 327,106 | 329,386 | 337,211 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Victoria |  | 136,218 | 240,698 | 251,675 | 258,006 | 258,119 | 259,404 |
| Queensland |  | 43,941 | 81,425 | 83,290 | 85,123 | 85,899 | 84,871 |
| South Australia |  | 35,406 | 70,657 | 73,714 | 76,144 | 75,543 | 75,909 |
| Western Australia |  | 18,704 | 40,439 | 42,294 | 43,340 | 42,122 | 42,039 |
| Tasmania |  | 11,150 | 20,249 | 21,045 | 22,128 | 22,482 | 23,081 |
| Australia | $\cdots$ | 412,591 | 758,508 | 788,691 | 811,847 | 813,551 | 822,515 |

Females.

| New South Wales | $\ldots$ | 61,609 | 97,555 | 103,137 | 105,975 | $\mathbf{1 0 6 , 9 8 3}$ | 108,591 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Victoria | $\ldots$ | $\ldots$ | 65,613 | 90,579 | 94,973 | 97,179 | 97,085 |
| Queensland $\ldots$ | $\ldots$ | 10,169 | 16,694 | 17,003 | 17,350 | 17,527 | $\mathbf{1 6 , 9 7 3}$ |
| South Australia | $\ldots$ | 7,965 | 14,846 | 15,851 | 16,445 | 16,438 | $\mathbf{1 6 , 5 6 3}$ |
| Western Australia | $\ldots$ | 4,507 | $\mathbf{7 , 0 2 0}$ | 7,020 | 6,768 | 6,626 | 6,423 |
| Tasmania.. | $\ldots$ | 2,652 | 4,340 | 4,407 | 4,934 | 5,188 | 5,003 |
| Australia | $\ldots$ | $\mathbf{1 5 2 , 5 1 5}$ | $\mathbf{2 3 1 , 0 3 4}$ | $\mathbf{2 4 2 , 3 9 1}$ | $\mathbf{4 8 , 6 5 1}$ | $\mathbf{2 4 9 , 8 4 7}$ | $\mathbf{2 5 1 , 2 9 2}$ |

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 1953-54 to 1957-58:-

FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

| State. | $1938-39$. | $1953-54$. | $1954-55$. | $1955-56$. | $1956-57$. | $1957-58$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Males.

| New South Wales |  | 1.69 | 4.57 | 3.81 | 3.29 | 0.70 | 2.38 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Victoria |  | 0.04 | 5.24 | 4.56 | 2.52 | 0.04 | 0.50 |
| Queensland |  | 3.79 | 4.89 | 2.29 | 2.20 | 0.91 | -1.20 |
| South Australia |  | -2.39 | 5.28 | 4.33 | 3.30 | -0.79 | 0.48 |
| Western Australia |  | -0.30 | 4.73 | 4.59 | 2.47 | -2.81 | -0.20 |
| Tasmania |  | 4.40 | 3.20 | 3.93 | 5.15 | 1.60 | 2.66 |
| Australia | $\ldots$ | 0.98 | 4.85 | 3.98 | 2.94 | 0.21 | 1.10 |

Females.

| New South Wales |  | 1.88 | 10.22 | 5.72 | 2.75 | 0.95 | 1.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Victoria |  | -0.03 | 10.42 | 4.85 | 2.32 | -0.10 | 0.88 |
| Queensland |  | 3.96 | 7.73 | 1.85 | 2.04 | 1.02 | -3.16 |
| South Australia |  | 1.98 | 11.05 | 6.77 | 3.75 | -0.04 | 0.76 |
| Western Australia |  | 3.06 | 6.78 |  | $-3.59$ | -2.10 | -3.06 |
| Tasmania |  | 6.51 | 12.03 | 1.54 | 11.96 | 5.15 | -3.57 |
| Australia |  | 1.30 | 10.09 | 4.92 | 2.58 | 0.50 | 0.58 |

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 1953-54 to 1957-58:-

FACTORIES: MASCULINITY(a) OR PERSONS EMPLOYED.

| Year. |  |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | $\cdots$ | 271 | 208 | 432 | 445 | 415 | 420 | 271 |
| 1953-54 | . | . | 313 | 266 | 488 | 476 | 576 | 467 | 328 |
| 1954-55 | . | . . | 307 | 265 | 490 | 465 | 602 | 478 | 325 |
| 1955-56 | . |  | 309 | 265 | 491 | 463 | 640 | 448 | 327 |
| 1956-57 | . | $\cdots$ | 308 | 266 | 490 | 460 | 636 | 433 | 326 |
| 1957-58 |  | . . | 311 | 265 | 500 | 458 | 655 | 461 | 327 |

(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 1957-58, there were 327 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 1957-58, these industries accounted for 78.38 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 131 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 1957-58:-

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1957-58.

| Class. | N.S.W. | Vic. | Q'and. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |
| IV. Industrial Metals, etc. | 183,165 | 118,775 | 34,036 | 44,613 | 18,682 | 8,917 | 408,188 |
| (not Dress) | 9,082 | 16,789 | 780 | 1,320 | 531 | 1,288 | 29,790 |
| VIII. Clothing (except Knitted) | 12,310 | 13,984 | 2,345 | 1,706 | 1,143 | , 384 | 31,872 |
| LX. Food, Drink and Tobacco | 27,061 | 26.981 | 21,601 | 8,012 | 5,044 | 3,130 | 91,829 |
| All Other Classes | 105,593 | 82,875 | 26,109 | 20,258 | 16,639 | 9,362 | 260,836 |
| Total | 337,211 | $\overline{259,404}$ | 84,871 | 75,909 | 42,039 | 23,081 | 822,515 |
| Females. |  |  |  |  |  |  |  |
| IV. Industrial Metals, etc. | 26,418 | 15,446 | 2,248 | 5,622 | 867 | 556 | 51,157 |
| VI. Textiles and Textile Goods |  |  |  |  | 418 | 1,633 | 39,085 |
| VIII. Clothing (except Knitted) | 31,421 | 31,780 | 5,746 | 3,388 | 2,237 | , 503 | 75,075 |
| IX. Food, Drink and Tobacco | 11,680 | 10,329 | 3,757 | 3,038 | 1,392 | 1,446 | 31,642 |
| All Other Classes .. | 25.976 | 18,895 | 3,843 | 3,245 | 1,509 | 865 | 54,333 |
| Total .. .. | 108,591 | 97,739 | 16,973 | 16,563 | 6,423 | 5,003 | 251,292 |

(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), 1957-58.

| Industry. | New South Wales. |  |  | Victoria. |  |  | Other States. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Femininity. (a) | Males. | $\mathrm{Fe}-$ | Femininity. (a) | Males. | Females. | Femininity. (a) |
| Tailoring and Ready-made Clothing | 2,986 | 14,403 | 482 | 2,865 | 6,914 | 241 | 1,074 | 3,215 | 299 |
| Waterproof and Oilskin |  |  |  |  |  |  |  |  |  |
|  | 114 | $\begin{array}{r}535 \\ 1358 \\ \hline\end{array}$ | 469 +021 | 1,216 | $\begin{array}{r}334 \\ 7,528 \\ \hline\end{array}$ | 288 622 | 10 150 | 2,537 | 1,691 |
| Dressmaking, Hemstitching | 133 240 | 1,358 | 1,021 524 | 1,211 180 | 7,528 636 | 622 353 | 150 | $\begin{array}{r}2,537 \\ \hline\end{array}$ | 1,691 |
| Shirts, Collars, Underclothing | 465 | 4,174 | 898 | 723 | 5,626 | 778 | 164 | 1,886 | 1,150 |
| Foundation Garments | 116 | 1,412 | 1,217 | 234 | 1,504 | 643 | 23 | 153 | 665 |
| Handkerchiefs, Ties and | 163 | 1,028 | 631 | 76 | 373 | 491 | 33 | 121 | 367 |
| Hats and Caps .. | 479 | 476 | 99 | 202 | 171 | 85 | 26 | 109 | 429 |
| Gloves.. | 103 | 348 | 338 | 35 | 218 | 623 | 41 | 141 | 344 |
| Boots and Shoes (not Rubber).. | 3,367 | 3,410 | 101 | 5,371 | 5,721 | 107 | 1,689 | 1,281 | 76 |
| Boot and Shoe Repairing | 1,505 | 112 | 7 | 712 | 54 | 7 | ,668 |  | 10 |
| Boot and Shoe Accessories | 197 | 103 | 52 | 375 | 211 | 56 | 39 | 7 | 18 |
| Umbrellas Sticks and Walking | 55 | 95 | 173 | 21 | 66 | 314 | 17 | 40 | 235 |
| Dyeworks and Cleaning (including Renovating and Repairing) |  |  |  |  |  |  |  |  |  |
| $\begin{array}{cl}\text { Repairing) } & . . \\ \text { Other } . . & . .\end{array}$ | 2,342 45 | $\begin{array}{r}2.333 \\ \hline\end{array}$ | 100 836 | 1,756 $\mathbf{1 0 7}$ | 2,054 $\mathbf{3 7 0}$ | 117 346 | 1,606 | 1,867 | 116 |
| Total | 12,310 | 31,421 | 255 | 13,984 | 31,780 | 227 | 5,578 | 11,874 | 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, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.
2. Number of Children Employed, 1939, 1957 and 1958.-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 15,634 in June, 1958, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

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

FACTORIES: CHILDREN( $a$ ) EMPLOYED, JUNE.

| State. | 1939. |  |  | 1957. |  |  | 1958. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Persons. |  | Females. | Persons. |  |  |  |
|  | Males. | Females. | Persons. | Males. | Females. | Persons. | Males. | Females. | Persons. |
| New South Wales | 5,759 | 7,084 | 12,843 | 2,584 | 1,981 | 4,565 | 2,575 | 1,929 | 4,504 |
| Victoria | 6,167 | 5,005 | 11,172 | 2,966 | 2,480 | 5,446 | 2,805 | 2,608 | 5,413 |
| Queensland | 1,790 | 1,334 | 3,124 | 1,711 | 1,205 | 2,916 | 1,588 | 1,151 | 2,739 |
| South Australia | 1,296 | 1,053 | 2,349 | 878 | 724 | 1,602 | 873 | 796 | 1,669 |
| Western Australia | 705 | 521 | 1,226 | 898 | 327 | 1,225 | 769 | 327 | 1,096 |
| Tasmania .. | 392 | 500 | 892 | 121 | 111 | 232 | 100 | 113 | 213 |
| Australia | 16,109 | 15,497 | 31,606 | 9,158 | 6,828 | 15,986 | 8,710 | 6,924 | 15,634 |

(a) Under sixteen years of age.
3. Industries Employing Child Labour.-The distribution of children employed in factories in June, 1958, 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, 1958.

| Class of Industry. | Children Employed. |  | Total Employees. |  | Proportion (per cent.) of Children Employed to Total Employees. <br> (b) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Fermales. | Males. | Females. | Males. | Females. |
| Industrial Metals, Machines, Conveyances | 3,872 | 701 | 396,137 | 52,249 | 0.98 | 1.34 |
| Textiles and Textile Goods (not Dress) | , 465 | 1,347 | 28,471 | 37,494 | 1.63 | 3.59 |
| Clothing (except Knitted) .. .. | 551 | 2,772 | 26,483 | 72,072 | 2.08 | 3.85 |
| Food, Drink and Tobacco .. | 1,008 | 735 | 87,648 | 29,054 | 1.15 | 2.53 |
| Sawmills, Joinery, Boxes, etc. .- | 706 459 | 104 | 51,988 | 3,050 | 1.36 | 3.41 |
| Furniture of Wood, Bedding, etc. ${ }_{\text {Paper }}$ | 459 | 91 | 16,667 | 3,794 | 2.75 | 2.40 |
| Paper, Stationery, Printing, Bookbinding | 698 | 608 | 48,222 | 17,210 | 1.48 | 3.53 |
| All other Industries .. .. | 951 | 566 | 135,482 | 29,129 | 0.70 | 1.94 |
| Total .. | 8,710 | 6,924 | 791,098 | 244,052 | 1.10 | 2.84 |

(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 1957-58 was $£ 4,273,882,000$, of which $£ 2,386,361,000$ was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and $£ 158,798,000$ 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, $£ 1,728,723,000$, 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. 175). 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 $1957-58$ was $£ 929,290,000$. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of $£ 38,200,000$ or 4.29 per cent. on that for the previous year.
2. Salaries and Wages Paid.-(i) In Classes of Industry, 1957-58. 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, 1957-58.

( $\left.£^{\prime} \mathbf{0 0 0}.\right)$

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 8,406 | 6,118 | 1,742 | 1,834 | 1,248 | 743 | 20,091 |
| II. Bricks, Pottery, Glass, etc. .- | 11,122 | 5,262 | 1,061 | 1,978 | 1,283 | 327 | 21,033 |
| III. Chemicals, Dyes, Explosives, | 21,590 | 17,235 | 1,537 | 3,038 | 2,771 | 900 | 47,071 |
| IV. Industrial Metals, Machines, Conveyances | 199,129 | 124,314 | 28,633 | 45,217 | 15,450 | 9,033 | 421,776 |
| V. Precious Metals, Jewellery, Plate | 1,906 | 2,066 | 203 | 315 | 153 | 11 | 4,654 |
| VI. Textiles and Textile Goods (not Dress) | 16,705 | 29,353 | 1,268 | 2,046 | 700 | 2,144 | 52,216 |
| VII. Skins and Leather (not Clothing or Footwear) | 4,402 | 3,841 | 979 | 1,145 | 513 | 51 | 10,931 |
| VIII. Clothing (except Knitted) - | 27,346 | 30,127 | 4,234 | 3,061 | 1,719 | 528 | 67,015 |
| IX. Food, Drink and Tobacco | 32,139 | 32,560 | 21,848 | 8,873 | 5,009 | 3,717 | 104,146 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 16,408 | 12,470 | 7,568 | 4,070 | 4,345 | 2,666 | 47,527 |
| XI. Furniture of Wood, Bedding, etc. | 7,231 | 5,143 | 1,862 | 1,489 | 862 | 298 | 16,885 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 26,011 | 21,031 | 4,471 | 3,384 | 2,105 | 4,286 | 61,288 |
| XIII. Rubber . . | 7,822 | 6,884 | 1,280 | 1,131 | 208 | 147 | 17,472 |
| XIV. Musical Instruments | 650 8,466 | 218 8,582 | 39 393 | 28 599 | 256 | 153 | 18,449 |
| XV. Miscellaneous Products Total, Classes I, to XV. | $\begin{array}{r}8,466 \\ \hline 389,333 \\ \hline\end{array}$ | $\begin{array}{r}8,582 \\ \hline 305,204 \\ \hline\end{array}$ | $\begin{array}{r}393 \\ \hline 77,118\end{array}$ | $\begin{array}{r}599 \\ \hline 78,208\end{array}$ | 256 | 25,004 | $\begin{array}{r}18,449 \\ \hline 911,514\end{array}$ |
| XVI. Heat, Light and Power | 7,359 | 5,336 | 1,840 | 1,636 | 1,288 | $3 \overline{17}$ | 17,776 |
| Grand Total | 396,692 | 310,540 | 78,958 | 79,844 | 37,935 | 25,321 | 929,290 |

(ii) Totals and Averages, 1938-39 and 1953-54 to 1957-58. 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. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Total Amount Paid ( $f^{\prime} 000$ ).

| 1938-39 |  |  | 44,606 | 36,027 | 10,887 | 8,169 | 4,574 | 2,480 | 106,743 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 |  |  | 293,586 | 236,037 | 63,433 | 63,110 | 31,590 | 17,381 | 705,137 |
| 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 | $\cdots$ |  | 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 |

Average Per Employee (£.)

| $1938-39$ | $\ldots$ | $\ldots$ | 201.77 | 185.64 | 210.78 | 195.57 | 207.90 | 188.31 | 196.31 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1953-54$ | $\ldots$ | $\ldots$ | 758.65 | 743.29 | 678.35 | 761.27 | 703.26 | 734.60 | 742.62 |
| $1954-55$ | $\ldots$ | $\ldots$ | 804.43 | 790.00 | 714.83 | 810.32 | 744.17 | 771.27 | 789.35 |
| $1955-56$ | $\ldots$ | $\ldots$ | 860.91 | 841.16 | 740.93 | 848.43 | 785.23 | 828.65 | 837.35 |
| $1956-57$ | $\ldots$ | .. | 900.06 | 869.21 | 789.63 | 872.87 | 801.95 | 886.68 | 871.98 |
| $1957-58$ | . | $\ldots$ | 923.40 | 904.81 | 814.86 | 891.80 | 829.22 | 936.70 | 900.46 |

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 1957-58 were paid in Tasmania, New South Wales 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 1957-58 reached a record level of slightly over $£ 900$.
(iii) Total and Average Earnings of Males and Females, 1938-39 and 1953-54 to 1957-58. 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. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Males.
Total Amount Paid ( $\mathbf{\varepsilon}^{\prime} 000$ ).

| 1938-39 |  | 38,272 | 29,006 | 9,920 | 7,488 | 4,129 | 2,234 | 91,049 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 | . $\cdot$ | 245,749 | 190,573 | 56,608 | 56,299 | 28,684 | 15,320 | 593,233 |
| 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 | 70,934 | 71,153 | 34,938 | 22,516 | 787,148 |

Average Per Male Employee (£).

| 1938-39 | $\cdots$ | 239.24 | 224.47 | 238.59 | 220.95 | 235.49 | 212.09 | 231.84 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 | $\cdots$ | 844.05 | 833.71 | 733.34 | 824.49 | 754.20 | 791.86 | 820.98 |
| 1954-55 | . | 906.61 | 891.40 | 773.47 | 883.13 | 797.80 | 833.05 | 877.84 |
| 1955-56 | $\cdots$ | 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 |

Females.
Total amount Paid ( $\mathbf{f}^{\prime} 000$ ).

| 1938-3 |  | 6,334 | 7,021 | 967 | 681 | 445 | 246 | 15,694 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 | $\because$ | 47,837 | 45,464 | 6,825 | 6,811 | 2,906 | 2,061 | 111,904 |
| 1954-55 | $\cdots$ | 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 | $\cdots$ | 59,720 | 55,020 | 7,907 | 8,174 | 3,021 | 2,758 | 136,600 |
| 1957-58 | $\ldots$ | 62,447 | 57,198 | 8,004 | 8,691 | 2,997 | 2,805 | 142,142 |

average Per Fbaale Employer (e).

| 1938-39 |  | 103.66 | 108.25 | 96.00 | 86.44 | 99.58 | 93.19 | 103.92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 | $\cdots$ | 499.19 | 510.96 | 418.23 | 465.95 | 421.93 | 477.84 | 493.10 |
| 1954-55 | . | 514.94 | 529.63 | 431.68 | 477.12 | 434.21 | 487.12 | 509.56 |
| 1955-56 | $\cdots$ | 540.06 | 547.42 | 445.22 | 496.84 | 449.61 | 500.06 | 530.23 |
| 1956-57 | $\ldots$ | 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 |

(iv) Managers, Clerical Staff and Other Employees. A further analysis of salaries and wages paid is given in the following table for $1957-58$ 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, 1957-58.

| Class of Industry. | Managers, Clerical Staff, Chemists, Draftsmen, etc. |  | All Other Employees. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Males. | Females. |
| 1. Treatment of Non-metalliferous Mine and Quarry | £'000. | $£^{\prime} 000$. | $f^{\prime} 000$. | £'000. |
| Products . . . . . | 2,557 | 434 | 16,971 | 129 |
| II. Bricks, Pottery, Glass, etc. | 1,901 | 440 | 17,974 | 718 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 10,736 | 2,237 | 30,026 | 4,072 |
| IV. Industrial Metals, Machines, Conveyances . . | 61,015 | 12,761 | 330,773 | 17,226 |
| V. Precious Metals, Jewellery, Plate .. | 556 | 204 | 3,443 | , 451 |
| VI. Textiles and Textile Goods (not Dress) | 4,880 | 1,981 | 24,855 | 20,499 |
| VII. Skins and Leather (not Clothing or Footwear) | 1,275 | 259 | 7,892 | 1,505 |
| VIII. Clothing (except Knitted) .. .. | 4,789 | 2,503 | 20,910 | 38,813 |
| IX. Food, Drink and Tobacco . .. .. | 13,950 | 3,870 | 72,663 | 13,663 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 4,931 | 1,068 | 40,948 | 580 |
| XI. Furniture of Wood, Bedding, etc. ${ }^{\text {XII }}$ | 1,692 | , 527 | 13,109 | 1,557 |
| XII, Paper, Stationery, Printing, Bookbinding, etc. | 7,987 | 2,610 | 43,482 | 7,210 |
| XIII. Rubber . . . . | 2,585 | 560 | 12,708 | 1,618 |
| XIV. Musical Instruments | 104 | 23 | . 762 | 71 |
| XV. Miscellaneous Products | 2,660 | 808 | 11,333 | 3,649 |
| Total, Classes I. to XV. | 121,618 | 30,285 | 647,849 | 111,761 |
| XVI. Heat, Light and Power | 1,726 | 71 | 15,954 | 25 |
| Grand Total . . | 123,344 | 30,356 | 663,803 | 111,786 |
| Average paid per employee | $1,356.81$ | $\underset{622.56}{5}$ | $\begin{gathered} \mathbf{f} \\ 954.79 \end{gathered}$ | $567.11$ |

3. Power, Fuel and Light Used.-(i) In Classes of Industry, 1957-58. The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1957-58 it amounted to a new high level of $£ 158,798,000$, an increase of $£ 5,688,000$ as compared with the previous year and more than ten 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 $(a)$, 1957-58.
( ${ }^{\prime} \mathbf{0 0 0}$.)

| Class of Industry. | N.S.W, | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 2,881 | 2,028 | 773 | 902 | 545 | 335 | 7,464 |
| II. Bricks, Pottery, Glass, etc. - . | 3,608 | 1,974 | 404 | 587 | 542 | 142 | 7,257 |
| III. Chemicals, Dyes, Explosives, Paints, Oils. Grease | 5,901 | 6,355 | 322 | 820 | 2,055 | 338 | 15,791 |
| IV. Industrial Metals, Machines, Conveyances | 29,632 | 6,963 | 1,744 | 5,801 | 1,046 | 1,912 | 47,098 |
| V. Precious Metals, Jewellery, Plate | 138 | 142 | 12 | 36 | 11 | 1 | 340 |
| VI. Textiles and Textile Goods (not Dress) | 1,482 | 2,367 | 65 | 215 | 55 | 222 | 4,406 |
| VII. Skins and Leather (not Clothing or Footwear) | 412 | 469 | 77 | 146 | 70 | 7 | 1,181 |
| VIII. Clothing (exce pt Knitted) - . | 894 | 905 | 177 | 128 | 84 | 41 | 2,229 |
| IX. Food, Drink and Tobacco . . | 6,023 | 5,747 | 2,794 | 1,350 | 1,000 | 499 | 17,413 |
| X. Sawmills, Join:ry, Boxes, etc., Wood Turning and Carving | 1,498 | 663 | 467 | 207 | 326 | 311 | 3,472 |
| XI. Furniture of Wood, Bedding, etc. | 182 | 121 | 47 | 40 | 23 | 7 | 420 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 1,378 | 1,792 | 228 | 294 | 93 | 1,219 | 5,004 |
| XIII. Rubber . . . . | 1,046 | 1,088 | 169 | 135 | 26 | 1,21 | 2,485 |
| XIV. Musical Instruments | 42 | 11 | 1 | 1 | (b) |  | 55 |
| XV. Miscellaneous Products | 555 | 568 | 11 | 50 | 13 | 5 | 1,202 |
| Total, Classes I. to XV. | 55,672 | 31,193 | 7,291 | 10,712 | 5,889 | 5,060 | 115,817 |
| XVI. Heat, Light and Power | 17,780 | 11,569 | 5,861 | 4,221 | 3,536 | 14 | 42,981 |
| Grand Total | 73,452 | 42,762 | 13,152 | 14,933 | 9,425 | 5,074 | 158,798 |

(a) Includes value of lubricants and water.
(b) Less than $£ 500$.
(ii) Values of Items, 1957-58. 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), 1957-58.
( ${ }^{\prime} \mathbf{0 0 0 .}$ )

(a) Includes value of lubricants and water.
(b) Includes $£ 1,444,000$ the value of 672,000 tons of Leigh Creek coal.
(iii) Quantities of Fuel Used, 1957-58. The following table shows the quantities of fuel used in factories in each State during the year:-

FACTORIES: QUANTITIES OF FUEL USED, 1957-58.

(a) Includes 672,000 tons of Leigh Creek coal.
(iv) Total Value, 1938-39 and 1953-54 to 1957-58. The next table shows the amounts expended on power, fuel and light during these years:-

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED.(a)
( $\mathbf{£}^{\prime} \mathbf{0 0 0}$ )

| Year. |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39.. | $\cdots$ | 7,652 | 4,000 | 1,423 | 1,018 | 1,169 | 438 | 15.700 |
| 1953-54 | $\ldots$ | 58,447 | 29,080 | 10,655 | 12,500 | 6.972 | 2,804 | 120,458 |
| 1954-55 | . | 60,925 | 31,767 | 11,620 | 12,897 | 8,046 | 3,127 | 128,382 |
| 1955-56 | $\ldots$ | 66,469 | 34,598 | 11.980 | 12,830 | 9,053 | 4,097 | 139,027 |
| 1956-57 | $\cdots$ | 71,445 | 40,381 | 13,130 | 14,130 | 9,225 | 4,799 | 153,110 |
| 1957-58 | $\ldots$ | 73.452 | 42.762 | 13,152 | 14.933 | 9,425 | 5,074 | 158,798 |

(a) Includes value of lubricants and water.
4. Value of Materials Used.-(i) In Classes of Industry, 1957-58. 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 $1957-58$ reached $£ 2,386,361,000$, representing
55.8 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, 1957-58.(a)
( $\left.\boldsymbol{£}^{\prime} 000.\right)$

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 29,922 | 12,370 | 3,959 | 4,209 | 2,391 | 1,243 | 54,094 |
| II. Bricks, Pottery, Glass, etc. . | 9,504 | 5,102 | 901 | 2,354 | 762 | 223 | 18,846 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 118,164 | 98,261 | 8,590 | 13,616 | 37,838 | 2,338 | 278,807 |
| IV. Industrial Metals, Machines, Conveyances | 448,503 | 202,772 | 48,516 | 88,234 | 22,430 | 16,346 | 826,801 |
| V. Precious Metals, Jewellery, Plate | 1,891 | 2,871 | 95 | 211 | 74 | 8 | 5,150 |
| VI. Textiles and Textile Goods (not Dress) | 39,463 | 77,985 | 4,440 | 4,103 | 4,363 | 6,097 | 136,451 |
| VII. Skins and Leather (not Clothing or Footwear) | 12,668 | 11,129 | 2,828 | 5,974 | 1,061 | 326 | 33,986 |
| VIII. Clothing (except Knitted) | 46,206 | 48,160 | 5,750 | 3,420 | 2,085 | 320 | 105,941 |
| IX. Food, Drink and Tobacco | 166,325. | 183,714 | 140,028 | 38,192 | 26,464 | 16,190 | 570,913 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 39,132 | 26,946 | 15,789 | 10,409 | 7,504 | 5,781 | 105,561 |
| XI. Furniture of Wood, Bedding, etc. | 14,503 | 10,123 | 3,984 | 2,711 | 1,813 | 486 | 33,620 |
| XII. Paper Bookbinding, etc. | 49,467 | 46,425 | 7,602 | 5,789 | 3,152 | 6,928 | 119,363 |
| XIII. Rubber . . . | 17,867 | 17,415 | 3,570 | 1,863 | 372 | 198 | 41,285 |
| XIV. Musical Instruments | 1,036 | , 251 | , 29 | 8 | 15 |  | 1,339 |
| XV. Miscellaneous Products | 14,041 | 18,556 | 509 | 941 | 296 | 91 | 34,434 |
| Total, Classes I. to XV. | 1,008,692 | 762,080 | 246,590 | 182,034 | 110,620 | 56,575 | 2,366,591 |
| XVI. Heat, Light and Power | 8,236 | 6,379 | 2,057 | 1,846 | 905 | 347 | 19,770 |
| Grand Total | 1,016,928 | 768,459 | 248,647 | 183,880 | 111,525 | 56,922 | 2,386,361 |

(a) See para. 1 of this section, p. 169.
(ii) Total Amount, 1938-39 and 1953-54 to 1957-58. The following table shows the value of materials used in factories for these years:-

FACTORIES: VALUE OF MATERIALS USED.(a)
( $\left.\mathbf{f}^{\prime} 000.\right)$

| Year. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | 120,502 | 82,971 | 42,596 | 20,309 | 9,604 | 5,321 | 281,303 |
| 1953-54 | $\ldots$ | 721,311 | 548,111 | 211,451 | 152,590 | 72,468 | 42,042 | 1,747,973 |
| 1954-55 | $\ldots$ | 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 |

(a) See para. 1 of this section, p. 169.
5. Value of Output.-(i) In Classes of Industry, 1957-58. The value of the output of factories in the various classes in each State in 1957-58 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, 1957-58.(a)
( $\left.{ }^{\prime} \mathbf{\prime} 000.\right)$

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | -49,629 | 26,220 | 8,274 | 9,188 | 5,892 | 2,897 |  |
| III. Bricks, Pottery, Glass, etc. $\because$ | 30,813 | 15,844 | 3,152 | 6,256 | 3,508 | 2,849 | 60,422 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 192,241 | 153,180 | 14,063 | 23,086 | 52,282 | 5,405 | 440,257 |
| IV. Industrial Metals, Machines, |  |  |  |  |  |  |  |
| Conveyances <br> V. Precious Metals, Jewellery, | 819,158 | 408,199 | 96,134 | 162,639 | 47,851 | 34,41 | 1,568,395 |
| Plate $\because$. | 5,404 | 6,436 | 3 | 755 | 370 | 31 | 13,419 |
| VI. Textiles and Textile Goods (not Dress) .. .. | 71,293 | 130,872 | 6,612 | 7,93 | 5,864 | 9,779 | 232,355 |
| VII. Skins and Leather (not Cloth- |  |  |  |  |  |  |  |
| VIII. Clothing (except Knitted) | 19,676 91,604 | 17,607 | 4,433 12,898 | 7,555 <br> 8,132 | 1,884 | 1,171 | 516,557 |
| IX. Food, Drink and Tobacco | 249,608 | 260,893 | 185,709 | 55,131 | 38,001 | 23,920 | 816,262 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 70,390 | 49 | 28, | 17,145 | 15,2 | 10,848 | 192,086 |
| XI. Furniture of Wood, Bedding, |  |  |  |  |  |  |  |
|  | 26,803 | 19,307 | 7,093 | 5,227 | 3,298 | 1,013 | 62,741 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 100,290 | 90,058 | 16.289 | 12,707 | 7,348 |  | 245,073 |
| XIII. Rubber ... | 30,247 | 31,959 | 6,494 | 3,995 | 833 | 451 | 73,979 |
| XIV. Musical Instruments | 2,614 |  |  | 48 | 52 |  | 3,499 |
| XV. Miscellaneous Products | 30,216 | 35,107 | 1,153 | 2,150 | 744 | 285 | 69,655 |
| Total, Classes I. to XV. | 1,789,986 | 1,343,433 | 391,663 | 321,949 | 188,163 | 109,846 | 4,145,040 |
| XVI. Heat, Light and Power | 58,256 | 34,264 | 14,094 | 10,149 | 8,099 | 3,980 | 128,842 |
| Grand Total | 1,848,242 | ,377,697 | 405,757 | 332,098 | 196,262 | 113,826 | 4,273,882 |

(a) See para. 1 of this seetion, p. 169
(ii) Total, 1938-39 and 1953-54 to 1957-58. The following table shows the value of output in each State during these years:-

FACTORIES: VALUE OF OUTPUT.(a)
( $\left.£^{\prime} 000.\right)$

| Year. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | 218,420 | 152,967 | 63,321 | 35,005 | 19,549 | 11,158 | 500,420 |
| 1953-54 | . | 1,299.801 | 985,505 | 332,361 | 265,311 | 134,587 | 77,911 | 3,095,476 |
| 1954-55 .. | . | 1,446,669 | 1,100,656 | 356,017 | 293,061 | 149,585 |  | 3,434,589 |
| 1955-56 .. | $\cdots$ | 1,595,137 | 1,201,392 | $\begin{array}{r}371,644 \\ 396 \\ \hline\end{array}$ | 316,962 <br> 325,105 | 175,146 187636 | 103,779 11039 | $3,764,060$ $4,022,413$ |
| 1956-57-58 .. | . | 1,726,637 | 1, 1,376,141 | 396,504 405,757 | 325,105 $\mathbf{3 3 2 , 0 9 8}$ | 187,636 196,262 | 110,390 113,826 | 4,022,413 |

(a) See para. 1 of this section p. 169.
6. Value of Production.-(i) In Classes of Industry, 1957-58. 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."

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In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, toois 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-ef-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. It amounted in $1957-58$ to $£ 1,729$ million to which Class IV., Industrial Metals, etc., with $£ 694$ million made the greatest contribution. The net value of production in 1957-58 showed an increase of $£ 107$ million ( 6.57 per cent.) over the figure for $1956-57$ and $£ 1,525$ million over the value of production recorded in 1938-39.

The following table shows the value of production in 1957-58 in each State for the various classes of industry:-

## FACTORIES: VALUE OF PRODUCTION, 1957-58.(a)

( $\left.{ }^{\prime} \mathbf{0 0 0}.\right)$

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 16,826 | 11,822 | 3,543 | 4,076 | 2,956 | 1,319 | 40,542 |
| II. Bricks, Pottery, Glass, etc. .. | 17,701 | 8,768 | 1,846 | 3,316 | 2,204 | , 484 | 34,319 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 68,176 | 48,563 | 5,151 | 8,650 | 12,389 | 2,730 | 145,659 |
| IV. Industrial Metals, Machines, Conveyances | 341,024 | 198,464 | 45,873 | 68,605 | 24,374 | 16,156 | 694,496 |
| V. Precious Metals, Jewellery, Plate | 3,375 | 3,424 | 315 | 508 | 285 | 22 | 7,929 |
| VI. Textiles and Textile Goods (not Dress) | 30,348 | 50,520 | 2,107 | 3,618 | 1,445 | 3,460 | 91,498 |
| VII. Skins and Leather (not Clothing or Footwear) | 6,595 | 6,009 | 1,529 | 1,435 | 753 | 69 | 16,390 |
| VIII. Clothing (except Knitted) . | 44,504 | 48,347 | 6,972 | 4,584 | 2,853 | 810 | 108,070 |
| IX. Food, Drink and Tobacco .. | 77,260 | 71,433 | 42,887 | 15,588 | 10,537 | 7,231 | 224,936 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 29,760 | 22,030 | 12,594 | 6,529 | 7,384 | 4,756 | 83,053 |
| XI. Furniture of Wood, Bedding, etc. | 12,118 | 9,063 | 3,062 | 2,475 | 1,463 | 520 | 28,701 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 49,444 | 41,841 | 8,459 | 6,624 | 4,103 | 10,235 | 120,706 |
| XIII. Rubber ... . | 11,334 | $-13,457$ | 2,755 | 1,997 | 435 | 231 | 30,209 |
| XIV, Musical Instruments | 1,536 | 13,437 | 256 | , 40 | 36 |  | 2,105 |
| XV. Miscellaneous Products | 15,620 | 15,983 | 633 | 1,159 | 436 | 188 | 34,019 |
| Total, Classes 1. to XV. | 725,621 | 550,161 | 137.782 | 129,204 | 71,653 | 48,211 | 1,662,632 |
| XVI. Heat, Light and Power | 32,241 | 16,315 | 6,176 | 4,081 | 3,659 | 3,619 | 66,091 |
| Grand Total | 757,862 | 566,476 | 143,958 | 133,285 | 75,312 | 51,830 | 1;728,723 |

(a) See para. 1 of this section, p. 169.
(ii) Total and Averages, 1938-39 and 1953-54 to 1957-58. 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 $£ 178.45$ in 1957-58. For value per person employed, the increase was not quite so pronounced (from $£ 360$ per head in 1938-39 to $£ 1,610$ in 1957-58).

FACTORIES: VALUE OF PRODUCTION.(a)

| Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Value. ( $£^{\prime} 000$.)

| 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 |

Per Person Employed. (£.)

| 1938-39 | $\cdots$ | 395 | 327 | 357 | 315 | 378 | 391 | 360 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953-54 | $\cdots$ | 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 |

Per Head of Population. (£.)

| $1938-39-$ | $\cdots$ | 33.00 | 35.25 | 19.14 | 22.98 | 18.80 | 22.72 | 29.34 |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1953-54$ | $\cdots$ | $\cdots$ | 152.70 | 168.53 | 84.78 | 127.50 | 87.44 | 106.85 | 137.86 |
| $1954-55$ | $\cdots$ | $\cdots$ | 168.56 | 181.75 | 90.59 | 137.50 | 93.93 | 121.78 | 150.22 |
| $1955-56$ | $\cdots$ | $\cdots$ | 182.75 | 191.80 | 94.69 | 144.93 | 104.23 | 143.90 | 161.10 |
| $1956-57$ | $\cdots$ | $\cdots$ | 196.99 | 200.00 | 100.26 | 147.17 | 107.29 | 149.27 | 170.12 |
| $1957-58$ | $\cdots$ | $\cdots$ | 207.16 | 209.25 | 102.59 | 150.44 | 107.81 | 155.13 | 178.45 |

(a) See para. 1 of this section, p. 169.

## § 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 1957-58:-

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1957-58. ( $\left.{ }^{\prime} \mathbf{\prime} 000.\right)$

| Value of - | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land and buildings | 350,169 | 280,207 | 63,927 | 61,084 | 36,846 | 59,453 | 851,686 |
| Plant and machinery | 415,838 | 310,879 | 104,598 | 79,336 | 63,840 | 46,860 | 1,021,351 |
| Total | 766,007 | 591,086 | 168,525 | 140,420 | 100,686 | 106,313 | 1,873,037 |

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

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.
2. Value of Land and Buildings.-(i) Total for Australia. The following table shows, for Australia as a whole, the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39 and 1953-54 to 1957-58:-

FACTORIES: VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.
( $£^{\prime} 000$. )

| Class of Industry. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous |  |  |  |  |  |  |
| Mine and Quarry Produ | 2,779 | 8,091 | 9,103 | 11,228 | 12,686 | 13,714 |
| III. Bricks, Pottery, Glass, etc. | 2,954 | 8,535 | 9,849 | 11,301 | 14,498 | 14,986 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 7,377 | 36,931 | 44,658 | 61,863 | 67,719 | 70,090 |
| IV. Industrial Metals, Machines, Conveyances | 34,841 | 159,325 | 184,934 | 218,667 | 252,837 | 00,343 |
| V. Precious Metals, Jewellery, Plate | 633 | 2,523 | 2,888 | 3,233 | 3,525 | 3,777 |
| Textiles and Textile Goods (not Dress) | 6,000 | 25,443 | 29,651 | 31,931 | 37,010 | 40,199 |
| II. Skins and Leather (not Clothing or Footwear) | 2,096 | 6,072 | 6,452 | 6,288 | 7,0 | 7,221 |
| VIII. Clothing (except Knitted) | 10,624 | 28,584 | 31,163 | 33,920 | 37,203 | 39,855 |
| IX. Food, Drink and Tobacco | 33,273 | 86,625 | 94,070 | 108,335 | 118,413 | 129,073 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. | 4,107 | 18,297 | 21,225 | 23,141 | 25,347 | 28,464 |
| XII. Furniture of Wood, Bedding, etc. | 2,533 | 8,069 | 8,981 | 9,915 | 11,223 | 12,992 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 10,639 | 30,444 | 34,156 | 40,256 | 44,912 | 52,854 |
| XIII. Rubber | 1,676 | 6,668 | 7,430 | 8,581 | 9,563 | 11,688 |
| XIV. Musical Instruments | 105 | 468 | 528 | 621 | 987 | 636 |
| XV. Miscellaneous Products | 1,433 | 7,570 | 8,299 | 9,946 | 11,491 | 12,922 |
| Total, Classes I. to XV. | 121,070 | 433,645 | 493,387 | 579,226 | 654,488 | 738,814 |
| XVI. Heat, Light and Power | 9,850 | 49,786 | 62,609 | 76,356 | 107,507 | 112,872 |
| Grand Total | 130,920 | 483,431 | 555,996 | 655,582 | 761,995 | 851,686 |

(a) Includes estimated value of rented premises.
(ii) In Classes of Industry in States, 1957-58. The following table gives particulars of the various classes of industry in each State:-

FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1957-58.
( $\mathbf{f}^{\prime} 000$. )

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 5,012 | 4,365 | 861 | 1,337 | 1,459 | 680 | 13,714 |
| II. Bricks, Pottery, Glass, etc. ... | 8,023 | 3,603 | 747 | 1,074 | 1,255 | 284 | 14,986 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 31,178 | 28,851 | 1,481 | 2,896 | 4,658 | 1,026 | 70,090 |
| . Industrial Metals, Machines, Conveyances | 143,099 | 95,603 | 16,462 | 24,870 | 11,406 | 8,903 | 300,343 |
| Precious Metals, Jewellery, Plate | 1,437 | 1,721 | 129 | 290 | 176 | 24 | 3,777 |
| VI. Textiles and Textile Goods (not Dress) | 12,977 | 22,475 | 763 | 1,769 | 703 | 1,512 | 40,199 |
| VII, Skins and Leather (not Clothing or Footwear) | 2,977 | 2,806 | 356 | 679 | 286 | 117 | 7,221 |
| VIII. Clothing (except Knitted) -. | 16,661 | 16,516 | 2,517 | 1,975 | 1,612 | 574 | 39,855 |
| IX. Food, Drink and Tobacco.... | 42,173 | 43,318 | 21,073 | 10,126 | 7,619 | 4,764 | 129,073 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 11,187 | 7,590 | 2,844 | 3,753 | 1,674 | 1,416 | 28,464 |
| XI. Furniture of Wood, Bedding, etc. | 4,960 | 4,490 | 1,563 | 912 | 786 | 281 | 12,992 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 21,875 | 17,362 | 4,280 | 2,409 | 1,505 | 5,423 | 52,854 |
| XIII. Rubber .. ${ }^{\text {a }}$ | 4,437 | 4,680 | 1,132 | 848 | 389 | 202 | 11,688 |
| XIV. Musical Instruments XV. Miscellaneous Products | 379 5,960 | 5,851 | 275 | 438 | $\begin{array}{r}31 \\ 295 \\ \hline\end{array}$ | 103 | 12,922 |
| Total, Classes I. to XV... | 312,335 | 259,414 | 54,499 | 53,403 | 33,854 | 25,309 | 738,814 |
| XVI. Heat, Light and Power | 37,834 | 20,793 | 9,428 | 7,681 | 2,992 | 34,144 | 112,872 |
| Grand Total | 350,169 | 280,207 | 63,927 | 61,084 | 36,846 | 59,453 | 851,686 |

(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 1953-54 to 1957-58:-

FACTORIES: VALUE OF LAND AND BUILDINGS.(a)
( $\mathbf{E}^{\prime} \mathbf{0 0 0}$.)

| Year. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | 57,353 | 42,026 | 12,299 | 8,711 | 6,814 | 3,717 | 130,920 |
| 1953-54 | .. | 196,724 | 158,389 | 40,003 | 36,579 | 24,739 | 26,997 | 483,431 |
| 1954-55 | $\cdots$ | 221,519 | 186,324 | 46,187 | 42,133 | 30,230 | 29,603 | 555,996 |
| 1955-56 |  | 260,268 | 214,921 | 52,602 | 48,353 | 32,859 | 46,579 | 655,582 |
| 1956-57 |  | 303,981 | 252,024 | 58,654 | 55,343 | 35,520 | 56,473 | 761,995 |
| 1957-58 | .. | 350,169 | 280,207 | 63,927 | 61,084 | 36,846 | 59,453 | 851,686 |

(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 $£ 851.7$ million in 1957-58.
3. Value of Plant and Machinery.-(i) Total for Australia, 1938-39 and 1953-54 to 1957-58. The following table shows for Australia the approximate value of plant and machinery used in factories:-

FACTORIES: VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.
( $\mathbf{f}^{\prime} \mathbf{0 0 0}$.)

| Class of Industry. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products . . | 7,028 | 17,829 | 20,625 | 23,512 | 27,351 | 30,623 |
| II. Bricks, Pottery, Glass, etc. . . | 3,145 | 9,741 | 11,000 | 12,319 | 13,138 | 13,443 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 6,754 | 53,528 | 97,508 | 125,016 | 127,732 | 137,520 |
| IV. Industrial Metals, Machines, Conveyances | 33,038 | 148,178 | 168,651 | 202,286 | 251,161 | 289,969 |
| V. Precious Metals, Jewellery, Plate | 197 | 1,002 | 1,094 | 1,219 | 1,374 | 1,388 |
| VI. Textiles and Textile Goods (not Dress) | 6,658 | 27,567 | 29,658 | 31,155 | 32,570 | 36,040 |
| VII. Skins and Leather (not Clothing or Footwear) | 973 | 4,034 | 4,153 | 4,225 | 4,332 | 4,240 |
| VIII. Clothing (except Knitted) - | 2,557 | 12,363 | 13,452 | 14,340 | 15,699 | 15,621 |
| IX. Food. Drink and Tobacco . $\because$ | 32,101 | 90,624 | 101,700 | 115,904 | 124,406 | 131,708 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving. . | 3,907 | 19,002 | 21,827 | 23,626 | 25,045 | 27,043 |
| XI. Furniture of Wood, Bedding, etc. | 728 | 2,870 | 3,186 | 3,388 | 3,632 | 3,802 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. . . | 9,188 | 41,866 | 46,129 | 51,405 | 53,755 | 59,509 |
| XIII. Rubber .. | 1,368 | 5,677 | 6,843 | 8,971 | 8,626 | 10,234 |
| XIV. Musical Instruments . . | , 12 | 5 458 | , 444 | - 509 | 888 | 10,429 |
| XV. Miscellaneous Products | 758 | 5,968 | 6,614 | 7,459 | 8,515 | 10,417 |
| Total, Classes I. to XV. . . | 108,412 | 440,707 | 532,884 | 625,334 | 698,018 | 771,986 |
| XVI. Heat, Light and Power | 35,250 | 140,008 | 165,408 | 178,206 | 225,936 | 249,365 |
| Grand Total | 143,662 | 580,715 | 698,292 | 803,540 | 923,954 | 1,021,351 |

(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 1957-58 of $£ 97.4$ million over 1956-57 extended over all industrial classes except Classes VII., Skins and Leather, etc., VIII. Clothing (except Knitted) and XIV. Musical Instruments. 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 1953-54 to 1957-58. During 1957-58 increases occurred in all States, New South Wales showing the largest increase, $£ 52.5$ million.

FACTORIES: VALUE OF PLANT AND MACHINERY.(a)
( $\left.{ }^{\prime} \mathbf{0 0 0}.\right)$

| Year. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | 62,693 | 38,627 | 18,095 | 9,750 | 8,095 | 6,402 | 143,662 |
| 1953-54 | . | 233,022 | 181,058 | 64,160 | 46,788 | 28,195 | 27,492 | 580,715 |
| 1954-55 | . | 258,596 | 226,347 | 76,367 | 52,145 | 54,958 | 29,879 | 698,292 |
| 1955-56 | . | 298,913 | 258,295 | 85,777 | 63,596 | 56,534 | 40,425 | 803,540 |
| 1956-57 | . | 363,310 | 290,785 | 89,904 | 71,847 | 63,272 | 44,836 | 923,954 |
| 1957-58 | . | 415,838 | 310,879 | 104,598 | 79,336 | 63,840 | 46,860 | 1,021,351 |

(a) Includes estimated value of rented plant and machinery.
(iii) Value according to Class of Industry, 1957-58. The following table shows the value of plant and machinery used in factories in each State during 1957-58 according to class of industry:-

FACTORIES: VALUE OF PLANT AND MACHINERY( $a$ ), 1957-58.
( ${ }^{\prime}, 000$.)

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. ${ }^{\text {! }}$ | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 15,061 | 6,569 | 2,667 | 3,611 | 1,898 | 817 | 30,623 |
| II. Bricks, Pottery, Glass, etc. .. | 7,345 | 3,005 | 859 | 866 | 1,180 | 188 | 13,443 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 54,290 | 51,435 | 1,867 | 6,176 | 21,325 | 2,427 | 137,520 |
| IV. Industrial Metals, Machines, Conveyances | 164,252 | 69,561 | 10,996 | 25,280 | 9,315 | 10,565 | 289,969 |
| V. Precious Metals, Jewellery, Plate | 574 | 588 | 43 | 120 | 55 | 8 | 1,388 |
| VI. Textiles and Textile Goods (not Dress) | 10,849 | 19,420 | 949 | 2,122 | 429 | 2,271 | 36,040 |
| VII. Skins and Leather (not Clothing or Footwear) | 1,693 | 1,407 | 391 | 513 | 201 | 35 | 4,240 |
| VIII. Clothing (except Knitted) $\quad \cdot$ | 5,759 | 6,850 | 1,253 | 953 | 2616 660 | 240 | 15,621 |
| IX. Food, Drink and Tobacco | 36,150 | 38,525 | 37,682 | 9,038 | 6,019 | 4,294 | 131,708 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 8,652 | 5,237 | 5,072 | 3,347 | 2,335 | 2,400 | 27,043 |
| XI. Furniture of Wood, Bedding, etc. | 1,387 | 1,189 | 493 | 404 | 255 | 74 | 3,802 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 19,131 | 20,925 | 6,337 | 2,982 | 1,705 | 8,429 | 59,509 |
| XIII. Rubber .. $\quad$. | 4,065 | 4,603 | 743 | 474 | 221 | 128 | 10,234 |
| XIV. Musical Instruments | 309 | , 106 | 5 | 6 | 3 |  | 429 |
| XV, Miscellaneous Products | 4,507 | 5,246 | 161 | 362 | 103 | 38 | 10,417 |
| Total, Classes I. to XV. | 334,024 | 234,666 | 69,518 | 56,254 | 45,610 | 31,914 | 771,986 |
| XVI. Heat, Light and Power | 81,814 | 76,213 | 35,080 | 23,082 | 18,230 | 14,946 | 249,365 |
| Grand Total | 415,838 | 310,879 | 104,598 | 79,336 | 63,840 | 46,860 | 1,021,351 |

(a) Includes estimated value of rented plant and machinery.
4. Depreciation of Land and Buildings and Plant and Machinery, 1957-58.-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 DEPRECLATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1957-58.

( ${ }^{\prime}$ ’000.)

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalififerous Mine and Quarry Products | 1,774 | 694 | 369 | 415 | 205 | 80 | 3,537 |
| II. Bricks, Pottery, Glass, etc. . | 1,050 | 511 | 145 | 119 | 137 | 33 | 1,995 |
| III. Chemicals, Dyes, Explosives, Paints, Oils, Grease | 5,241 | 5,040 | 329 | 852 | 2,145 | 527 | 14,134 |
| IV. Industrial Metals, Machines, Conveyances | 15,913 | 7,213 | 1,171 | 3,085 | 844 | 920 | 29,146 |
| V. Precious Metals, Jewellery, Plate | 48 | 59 | 3 | 11 | 3 | 1 | 125 |
| VI. Textiles and Textile Goods (not Dress) | 1,281 | 2,580 | 95 | 156 | 59 | 251 | 4,422 |
| VII. Skins and Leather (not Clothing or Footwear) | 154 | 138 | 35 | 70 | 26 | 2 | +425 |
| VIII. Clothing (except Knitted) . . | 624 | 616 | 118 | 72 | 61 | 44 | 1,535 |
| IX. Food, Drink and Tobacco .. | 3.744 | 4,436 | 3,398 | 1,123 | 668 | 431 | 13,800 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 1,013 | 796 | 465 | 277 | 237 | 264 | 3,052 |
| XI. Furniture of Wood, Bedding, etc. | 152 | 113 | 49 | 42 | 24 | 6 | 386 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 1.925 | 2,825 | 630 | 323 | 202 | 821 | 6,726 |
| XIII. Rubber .. | 931 | 913 | - 150 | 111 | 37 | 15 | 2,157 |
| XIV. Musical Instruments | 43 | 7 |  |  |  |  | 2, 53 |
| XV. Miscellaneous Products | 627 | 753 | 17 | 37 | 11 | 3 | 1,448 |
| Total, Classes I. to XV. | 34,520 | 26,696 | 6,975 | 6.693 | 4,659 | 3,398 | 82,941 |
| XVI, Heat, Light and Power . . | 6,713 | 690 | 1,884 | 840 | 1,002 | 621 | 11,750 |
| Grand Total | 41,233 | 27,386 | 8,859 | 7,533 | 5,661 | 4,019 | 94,691 |

5. Land and Buildings, Plant and Machinery-Values, Additions and Replacements, Depreciation, 1938-39 and 1953-54 to 1957-58. -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 |
| 1953-54.. | $\ldots$ | 483,431 | 580,715 | 55,668 | 128,453 | 5,673 | 41,524 |
| 1954-55. | . | 555,996 | 698,292 | 58,311 | 170,762 | 6,568 | 49,916 |
| 1955-56. |  | 655,582 | 803,540 | 82,808 | 156,535 | 8,030 | 59,909 |
| 1956-57. | $\cdots$ | 761,995 | 923,954 | 87,441 | 195,670 | 9,196 | 69,902 |
| 1957-58. | . | 851,686 | 1,021,351 | 75,762 | 176,903 | 10,414 | 84,277 |

(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, 1956 to 1958. A more complete list, together with values, where available, is published in the bulletin Secondary Industries.
QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA.


[^2]
## QÜANTITY OFEXPRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA-continued.



[^3](b) Includes wheatmeal for

## QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES : AUSTRALJA—continued.


(a) Includes malted milk and infants' and invalids' foods. (b) Water paint in powder form only, including Kalsomine. Excludes production of emulsion types which was 1,801,000 gallons. (c) Not recorded.
(d) Includes canned apple, all types.
(e) Includes industrial flakes and chips.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALYA-continued.

| Article. |  | Unit of Quantity. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Socks and Stockings- |  |  |  |  |  |
| Men's and Youths' | $\cdots$ | '000 Doz. pairs | 1,396 | 1,454 | 1,472 |
| Women's and Maids' |  |  | 2,304 | 2,570 | 2,218 |
| Infants' and Babywear (including Anklets) |  | '000'* | 1,227 | 1,191 | 1,125 |
|  |  | '000 pints | 35,316 | 44,538 | 27,346 |
| Dry-Mix |  | ${ }^{\prime} 000 \mathrm{lb}$. | 3,771 | 4,532 | 3,606 |
| Spades and Shovels | . | Doz. | 33,874 | 33,255 | 23,796 |
| Starch-Edible | . | Cwt. | 391,766 | 468,308 | 443,894 |
| Inedible . . |  |  | 96,929 | 124,895 | 140,891 |
| Steel, Structural, Fabricated | $\cdots$ | Tón | 217,124 | 240,491 | 226,653 |
| Stoves, Ovens and Ranges-Domestic Cooking- |  |  |  |  |  |
| Electric (a) | $\cdots$ | No. | 92,258 | 99,525 | 92,413 |
| Gas | . | ", | 58,080 | 54,966 | 56,300 |
| Solid Fuel.. |  | " | 47,300 | 46.005 | 43,229 |
| Sugar-Raw (94 net titre) | . | Ton | 1,171,713 | 1,207,797. | 1,293,125 |
| Refined |  | " | 482,660 | 480,393 | 493,093 |
| Sulphate of Ammonia |  | ", | -75,321 | 110,898 | 118,732 |
| Superphosphate | $\ldots$ | " | 2,125,803 | 1,975,015 | 2,219,592 |
| Talcum Powder | $\ldots$ | Cwt. | 35,824 | 35,084 | 36,708 |
| Tallow- |  |  |  |  |  |
| Edible |  | " | 533,128 | 584,242 | 620,290 |
| Inedible |  |  | 1,465,502 | 1,655,807 | 1,735,372 |
| Television Sets (b) | . | No. | 2,636 | 121,232 | 282,430 |
|  |  |  |  |  |  |
| Cement | $\cdots$ | '000 | 53,782 | 44,595 | 49,468 |
| Terracotta .. |  | " | 64,746 | 57,673 | 58,935 |
| Timber- |  |  |  |  |  |
| From Native Logs- |  |  |  |  |  |
| Hardwood |  | '000 super. ft. | 1,180,936 | 1,151,429 | 1,127,150 |
| Softwood .. . . | . | ", | 268,785 | 267,431 | 264,027 |
| From Imported Logs- $\quad$ - ${ }^{\text {- }}$ |  |  |  |  |  |
| Hardwood Softwood |  | " | \} 27,894 | 26,853 | 28,634 |
| Toasters, Electric (Domestic) | $\cdots$ | N'o. | 173,549 | 174,531 | 167,984 |
| Tobacco |  | '000 lb. | 18,836 | 18,917 | 18,192 |
| Tomato Juice | $\cdots$ | Gal. | 1,208,758 | 1,508,439 | 1,407,645 |
| Towels |  | Doz. | 767,751 | 740,344 | 807,227 |
|  |  |  |  |  |  |
| For distribution of Power and Light, etc. |  | Number |  |  | 51,333 |
| For Fluorescent Lights and Neon Signs For Radio Receivers, Record Players, etc. |  | " |  |  | 1,306,566 |
|  |  | , | Not collec | in this | 250,052 |
| For Television Receivers | , | " | \} disse | n | 241,900 |
| For Welders | . | " |  |  | 2,761 |
| For other purposes . | . |  |  |  | 50,918 |
| Twine (all types) . |  | Cwt. | 133,694 | 131,424 | 121,405 |
| Tyres, Pneumatic- |  |  |  |  |  |
| Motor Car and Motor Cycle |  | No. | 2,907,492 | 2,711,087 | 3,003,646 |
| Truck and Omnibus .- |  | ", | 544,807 | 536,384 | 502,725 |
| All Other (excl. Bicycle) |  | ", | 184,273 | 190,577 | 295,189 |
| Umbrellas . . |  |  | 570,156 | 622,554 | 470,953 |
| Underwear |  | '000 doz. | 4,460 | 4,687 | 4,740 |
| Vacuum Cleaners (Domestic) | . | No. | 55,674 | 83,910 | 81,257 |
| Washing Machines, Household, | ctric | No. | 165,558 | 144,422 | 164,100 |
| Weatherboards- |  |  |  |  |  |
| Australian Timber . . |  | '000 super. ft. | 23,910 | 22,937 | 24,992 |
| Imported Timber .. |  |  | 2,150 | 1,759 | 4,083 |
| Wheatmeal (c) .- | . | Ton (2,000 lb.) | 110,635 | 123,854 | 123,050 |
| Wheelbarrows (Metal) | . | No. | 73,031 | 66,999 | 63,403 |
| Wireless and Television Cabinets |  | No. | 383,139 | 429,647 | 557,842 |
| Wireless Receiving Sets (incl. Radiograms) |  | " | 458,012 | 366,282 | 380,753 |
| Wool Scoured- |  | , 000 lb |  |  |  |
| For Sale . . ${ }^{\text {F }}$ |  | '000 lb. | 38,921 | 43,632 | 47,663 |
| For use in own works | . | " | 40,875 | 47,625 | 36,866 |
| On Commission - |  | ", | 65,025 | 74,506 | 69,433 |
| Wool Tops . |  | " | 35,640 | 42,661 | 39,253 |
|  |  |  |  |  |  |
| Cotton | $\cdots$ | " | 40,543 | 41,981 | 44,645 |
| Woollen | . | " | 20,033 | 22,884 | 24,152 |
| Worsted |  | " | 23,180 | 24,818 | 21,455 |
| Zinc Oxide (See Pigments) |  |  |  |  |  |

(a) Includes stovettes, cookers, etc. produced in 1958-59 was 318,899 .
c) Excroduction commenced late in 1955-56. Number (d) Including mixtures predominantly of the fibre mentioned.

## § 11. Individual Industries.

1. General.-Particulars on pages 154-181, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

The statistics in the following tables should be read in the light of the following definitions.
Factory. A factory is taken to be a manufacturing establishment in which four or more persons are employed or in which power, other than manual, is used.

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

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

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

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

Value of Production. The value of production is obtained by deducting " Value of materials used " and "Value of fuel used ", as defined above, from the "Value of output ".

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 150.
Details of some of the principal articles produced in factories in Australia during the years $1955-56$ to $1957-58$ 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 1957-58 and for a series of years in the following table:-

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

AUSTRALIA, 1957-58.

| Items. | Portland Cement. | Asbestos Cement Sheets and Mouldings. | Other Cement Goods. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Number of factories | 14 | 13 | 454 | 481 |
| Number of persons employed . | 3,119 | 2,403 | 5,472 | 10.994 |
| Salaries and wages paid . . . $\mathrm{f}^{\prime} 000$ | 3,210 | 2,488 | 5,166 | 10.864 |
| Value of power, fuel, etc., used .. £'000 | 4,601 | 287 | 236 | 5,124 |
| Value of materials used .. .. £'000 | 6,882 | 5,352 | 13,345 | 25,579 |
| Value of production .. .. $\mathrm{f}^{\prime} 000$ | 8,804 | 4,363 | 9,954 | 23,121 |
| Total value of output ... .. $\boldsymbol{£}^{\prime} 000$ | 20,287 | 10,002 | 23,535 | 53,824 |
| Value of land and buildings $\quad . \quad \mathbf{f}^{\prime} 000$ | 3,378 | 1.191 | 2,838 | 7,407 |
| Value of plant and machinery . . $\quad \mathbf{£}^{\prime} 000$ | 14,150 | 1,776 | 3,897 | 19,823 |
| Horse-power of engines ordinarily in use h.p. | 79,000 | 11,041 | 16,864 | 106,905 |

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

AuStralia.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 132 | 479 | 480 | 489 | 479 | 481 |
| Number of persons employed | 3,932 | 9,304 | 10,444 | 11,167 | 10,688 | 10,994 |
| Salaries and wages paid .. £'000 | 897 | 7,435 | 8,704 | 10,044 | 10,312 | 10,864 |
| Value of power, fuel, etc., used $£$ '000 | 562 | 3,950 | 4.445 | 4,792 | 5,119 | 5,124 |
| Value of materials used . . £'000 | 1,542 | 16,013 | 19.418 | 21,999 | 23,226 | 25,579 |
| Value of production .. £'000 | 2,385 | 14,198 | 17,009 | 19,460 | 21,228 | 23,121 |
| Total value of output . . $£^{\prime} 000$ | 4,489 | 34,161 | 40,872 | 46,251 | 49,573 | 53,824 |
| Value of land and buildings $£^{\prime} 000$ | 1,350 | 4,206 | 4,726 | 6,128 | 6,994 | 7,407 |
| Value of plant and machinery $£$ '000 | 2,516 | 10,796 | 13,208 | 15,542 | 18,454 | 19,823 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 39,617 | 89,260 | 95,870 | 108,715 | 105,805 | 106,905 |

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 1957-58 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).
1957-58.

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

Australia.

| Items. |  | 1945-46. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 165 | 234 | 248 | 258 | 270 | 281 |
| Number of persons employed |  | 10,228 | 11,765 | 13,032 | 14,107 | 14,509 | 15,085 |
| Salaries and wages paid .. | $£^{\prime} 0000$ | 3,450 | 9,907 | 11,833 | 13,574 | 14,684 | 15,875 |
| Value of power, fuel, etc., used | £'000 | 618 | 2,757 | 3,043 | 3,462 | 3,845 | 4,208 |
| Value of materials used | £'000 | 6,007 | 25,158 | 29,004 | 33,506 | 38,335 | 43,497 |
| Value of production | $\mathrm{E}^{\prime} 000$ | 6,627 | 20,643 | 25,095 | 29,895 | 34,513 | 35,930 |
| Total value of output | $£^{\prime} 000$ | 13,252 | 48,558 | 57,142 | 66,863 | 76,693 | 83,635 |
| Value of land and buildings | £'000 | 11,697 | 13,389 | 14,190 | 15,987 | 17,831 | 21,055 |
| Value of plant and machinery | $\mathbf{f}^{\prime} \mathbf{0 0 0}$ | 10,964 | 23,573 | 25,607 | 27,125 | 29,190 | 36,157 |
| Horse-power of engines ordinarily in use | h.p. | 69,399 | 90,807 | 95,188 | 101,527 | 107,787 | 121,393 |

## PHARMACEUTICAL AND TOILET PREPARATIONS.

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 129 | 59 | 6 | 13 | 4 | 1 | 212 |
| Number of persons employed | 3,498 | 2,655 | 114 | 489 | (a) | (a) | 6,834 |
| Salaries and wages paid . £ £'000 | 2,692 | 2,376 | 67 | 347 | (a) | (a) | 5,531 |
| Value of power, fuel, etc., <br> used $\quad$.. . $\quad £^{\prime} 000$ | 107 | 241 | 1 | 33 | (a) | (a) | 386 |
| Value of materials used . . £ $£^{\prime} 000$ | 9,521 | 6,499 | 280 | 1,805 | (a) | (a) | 18,226 |
| Value of production . $£^{\prime} 000$ | 14,721 | 5,945 | 143 | 893 | (a) | (a) | 21,856 |
| Total value of output . $\quad$ £ '000 | 24,349 | 12,685 | 424 | 2,731 | (a) | (a) | 40,468 |
| Value of land and buildings $\mathrm{f}^{\prime} 000$ | 3,984 | 5,224 | 62 | 295 | (a) | (a) | 9,677 |
| Value of plant and machinery .. .. $£^{\prime} 000$ | 1,369 | 1,706 | 20 | 138 | (a) | (a) | 3,262 |
| Horse-power of engines ordinarily in use h.p. | 4,514 | 8,738 | 83 | 1,489 | (a) | (a) | 14,962 |

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

Australia.

| Items. |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

4. White Lead, Paints and Varnish.-The following table shows particulars of this industry for each State during 1957-58 and for Australia for a series of years:-

WHITE LEAD, PAINTS AND VARNISH.

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 85 | 52 | 18 | 15 | 11 | 3 | 184 |
| Number of persons employed | 3,029 | 1,724 | 327 | 539 | (a) | (a) | 5,749 |
| Salaries and wages paid . £'000 $^{\prime}$ | 3,042 | 1,710 | 264 | 480 | (a) | (a) | 5,608 |
| Value of power, fuel, etc., used $£$ '000 | 297 | 100 | 16 | 26 | (a) | (a) | 445 |
| Value of materials used . . $£^{\prime} 000$ | 12,682 | 7,197 | 1,610 | 2,412 | (a) | (a) | 24,619 |
| Value of production ... £'000 | 7,171 | 3,282 | 1,186 | 1,826 | (a) | (a) | 13,853 |
| Total value of output . . £ $\mathrm{E}^{\prime 000}$ | 20,150 | 10,579 | 2,812 | 4,264 | (a) | (a) | 38,917 |
| Value of land and buildings $£$ | 2,610 | 2,476 | 332 | 685 | (a) | (a) | 6,397 |
| Value of plant and machinery $£^{\prime} 000$ | 1,392 | 1,934 | 147 | 439 | (a) | (a) | 3,986 |
| Horse-power of engines ordinarily in use .. .. h.p. | 13,368 | 7,643 | 1,510 | 2,081 | (a) | (a) | 25,443 |

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

Australia.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 102 | 174 | 175 | 178 | 186 | 184 |
| Number of persons employed | 2,271 | 4,934 | 5,322 | 5,804 | 5,815 | 5,749 |
| Salaries and wages paid . ¢ £'000 | 535 | 3,757 | 4,636 | 5,300 | 5,508 | 5,608 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 45 | 337 | 376 | 384 | 400 | 445 |
| Value of materials used . $£^{\prime} 000$ | 2,275 | 18,603 | 21,553 | 23,504 | 23,916 | 24,619 |
| Value of production . . $\mathbf{£}^{\prime} 000$ | 1,585 | 9,891 | 11,980 | 12,874 | 13,567 | 13,853 |
| Total value of output . . $\mathbf{£}^{\prime} 000$ | 3,905 | 28,831 | 33,909 | 36,762 | 37,883 | 38,917 |
| Value of land and buildings $\quad \mathbf{x}^{\prime} 000$ | 761 | 4,066 | 5,089 | 5,563 | 6,680 | 6,397 |
| Value of plant and machinery $\mathrm{f}^{\prime} 000$ | 324 | 2,230 | 2,892 | 3,261 | 3,408 | 3,986 |
| Horse-power of engines ordinarily in use $\quad . \quad . \quad . \quad$ h.p. | 7,696 | 22,719 | 24,178 | 25,050 | 26,969 | 25,443 |

5. Soap and Candle Factories.-The following table shows particulars of factories in the Soap and Candle industry in each State for 1957-58 and for Australia for a series of years:-

SOAP AND CANDLES.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factor | 45 | 25 | 9 | 6 | ${ }^{3}$ | 2 | 90 |
| Number of persons employed | 1,791 | 762 | 256 | 83 | (a) | (a) | 2.983 |
| Salaries and wages paid . ${ }^{\text {Value of power fuel etc, used }{ }^{\prime} £^{\prime} 0000}$ | 1,669 | 822 | 202 | 66 10 | (a) | (a) | 2,830 |
| Value of materials used ... $\mathbf{E}^{\prime} 000$ | 7,776 | 5,330 | 785 | 214 | (a) | (a) | 14,446 |
| Value of production $\quad . . \quad \mathbf{E}^{\prime} 000$ | 6,997 | 2,908 | 445 | 77 | (a) | (a) | 10,525 |
| Total value of output .. $\mathbf{£}^{\prime} 000$ | 14,970 | 8,443 | 1,251 | 301 | (a) | (a) | 25,412 |
| Value of land and buildings $£^{\prime} 000$ | 745 | 823 | 157 | 78 | (a) | (a) | 1,871 |
| Value of plant and machinery £'000 | 1,160 | 1,488 | 190 | 58 | (a) | (a) | 2,973 |
| Horse-power of engines ordinarily in use | 5,568 | 3,806 | 981 | 615 | (a) | (a) | 11,296 |

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

Australia.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 65 | 89 | 91 | 2 | 87 | 90 |
| Number of persons employed | 2,620 | 3,058 | 2,962 | 3.167 | 2,932 | 2,983 |
| Salaries and wages paid .. $£^{\prime} 000$ | 501 | 2,544 | 2,589 | 2,858 | 2,704 | 2,830 |
| Value of power, fuel, etc. used $£^{\prime} 000$ | 76 | 427 | 420 | 406 | 393 | 441 |
| Value of materials used .. $£^{\prime} 000$ | 1,568 | 10,214 | 11,941 | 12,057 | 12,437 | 1,446 |
| Value of production .. £'000 | 1,886 | 6,732 | 7,425 | 8,147 | 9,150 | 10,525 |
| Total value of output .. $£^{\prime} 000$ | 3,530 | 17,373 | 19,786 | 20,610 | 21,980 | 25,412 |
| Value of land and buildings $f^{\prime} 000$ | 666 | 1,565 | 1,619 | 1,743 | 1,784 | 1,871 |
| Value of plant and machinery $£^{\prime} 000$ | 577 | 2,244 | 2,653 | 3,001 | 3,150 | 2,973 |
| orse-power of engines ordinarily use | 26 | 8,7 | 8,67 | 10,711 | 10,922 | 11,296 |
| Materials |  |  |  |  |  |  |
| Tallow. | 535,51 | $1,120,828$ | 1,151,146 | 1,162,578 | 1,152,865 | 1,219,538 |
| Alkali for Soap (a) ${ }^{\text {Coconut oil-refined and }}$ unrefined | 194,869 | 377,451 | 421,40 | 390,757 | 366,796 | 386,712 |
|  | 138 | 86 | 93, | ,346 | 80,395 | 4,952 |
| Articles produced- Soap (excl. Sand Soap) | 8,797 | 1,225,183 | 1,263,226 | 1,269,6 | 1,231,8 | 1,311,79 |
| Cleansers and Scourers (inc. Sand Soap) |  |  | 115,3 | 105,0 | 78,1 |  |
| Soap Extracts and Powders , | 191,232 | 890,241 | 1,007,494 | 910,443 | 866,961 | 75,959 |
| Candles made | 28,649 | 8,611 | 10,369 | 10,011 | 10,354 | 7,444 |

(a) Includes Soda Ash.

Note.-Preliminary figures of production in 1958-59 were Soap, $1,243,000 \mathrm{cwt}$; Cleansers and Scourers, $63,000 \mathrm{cwt}$.; and Soap Extracts and Powders, $802,000 \mathrm{cwt}$.
6. Chemical Fertilizers.-The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1957-58 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.
1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Number of factories | $\ldots$ | $\ldots$ | 12 | 8 | 8 | $(a$ | 8 | 8 |

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

## CHEMICAL FERTILIZERS-continued.

Australia.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 36 | 51 | 53 | 54 | 52 | 49 |
| Number of persons employed | 2,540 | 4,531 | 4,735 | 4,911 | 5,074 | 5,050 |
| Salaries and wages paid .- £'000 | 601 | 3,988 | 4,372 | 4,809 | 5,069 | 5,309 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 114 | 842 | 852 | 939 | 1,160 | 950 |
| Value of materials used .. $x^{\prime} 000$ | 3,231 | 20,521 | 21,519 | 24,098 | 25,479 | 28,862 |
| Value of production .. £'000 | 1,600 | 8,109 | 8,794 | 10,267 | 10,158 | 12,175 |
| Total value of output .. $£^{\prime} 000$ | 4,945 | 29,472 | 31,165 | 35,304 | 36,797 | 41,987 |
| Value of land and buildings $£^{\prime} 000$ | 1,449 | 6,067 | 6,512 | 7,033 | 7,341 | 7,583 |
| Value of plant and machinery $£^{\prime} 000$ | 2,353 | 8,067 | 9,270 | 11,645 | 11,404 | 10,835 |
| Horse-power of engines ordinarily in use | 18,165 | 41,644 | 47,595 | 58,044 | 59,457 | 58,212 |

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 1957-58 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.

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S.A. | W.A. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 17 | 11 |  | 5 | 2 |  | 35 |
| Number of persons employed | 26,622 | 1,345 | . | (a) | (a) |  | 28,526 |
| Salaries and wages paid . $£^{\prime} 000$ | 29,513 | 1,396 | $\cdots$ | (a) | (a) | . | 31,469 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 19,423 | 313 |  | (a) | (a) |  | 22,150 |
| Value of materials used .. $£^{\prime} 000$ | 134,882 | 1,189 |  | (a) | (a) |  | 137,674 |
| Value of production .. £'000 | 66,289 | 1,859 | - | (a) | (a) |  | 70,379 |
| Total value of output . . $£$ | 220,594 | 3,361 | $\ldots$ | (a) | (a) |  | 230,203 |
| Value of land and buildings $£^{\prime} 000$ | 9,341 | 280 |  | (a) | (a) |  | 9,953 |
| Value of plant and machinery $£^{\prime} 000$ | 67,454 | 374 |  | (a) | (a) |  | 71,048 |
| Horse-power of engines ordinarily in use | 511,733 | 8,259 | . | (a) | (a) |  | 536,530 |

Australia.

| Items. |  | 1945-46. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 27 | 33 | 33 | (b) 28 | 34 | 35 |
| Number of persons employed | . | 10,413 | 16,688 | 17,842 | 20,805 | 26,078 | 28,526 |
| Salaries and wages paid | £'000 | 4,164 | 15,609 | 18,238 | 22,037 | 28.636 | 31,469 |
| Value of power, fuel, etc., used | $\mathfrak{E}^{\prime} 000$ | 2,777 | 15,430 | 15,670 | 17,864 | 20,538 | 22,150 |
| Value of materials used | $\chi^{\prime} 000$ | 19,134 | 88,802 | 94,928 | 101,416 | 136,483 | 137,674 |
| Value of production | $£^{\prime} 000$ | 7,393 | 27,995 | 34,381 | 44,269 | 66,385 | 70,379 |
| Total value of output | $\chi^{\prime} \mathbf{0} 000$ | 29,304 | 132,227 | 144,979 | 163,549 | 223,406 | 230,203 |
| Value of land and buildings | $\mathbf{x}^{\prime} 000$ | 2,197 | 6,508 | 6,615 | 6,457 | 9,054 | 9,953 |
| Value of plant and machinery | $\mathbf{E}^{\prime} 000$ | 5,669 | 24,279 | 26.394 | 29,154 | 61,608 | 71,048 |
| Horse-power of engines ordinar | n use h.p. | 198,317 | 287,618 | 339,135 | 363,751 | 448,541 | 536,530 |

(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 183 and in Chapter XXVII.-Mineral Industry.
(iii) Foundries (Ferrous). Particulars covering those industries ciassified as founding of iron and steel are shown for each State for 1957-58 and for Australia in selected years in the following table:-

## FOUNDRIES-FERROUS.

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 85 | 224 | 23 | 23 | 18 |  | 73 |
| Number of persons employed | 2,855 | 3,073 | 840 | 503 | 530 |  | 7,801 |
| Salaries and wages paid $£$ | 2,799 | 3,047 | 790 | 465 | 447 |  | 7,548 |
| Value of power, fuel, etc., used £'000 |  | 393 | 55 | 77 | 120 |  | 997 |
| Value of materials used .. $£^{\prime} 000$ | 2,100 | 3,091 | 701 | 390 | 382 |  | 6,664 |
| Value of production .. £'000 | 4,002 | 4,530 | 1,271 | 688 | 746 |  | 11,237 |
| Total value of output . ${ }^{\text {a }}$ '000 | 6,454 | 8,014 | 2,027 | 1,155 | 1,248 |  | 18,898 |
| Value of land and buildings $\mathfrak{E}^{\prime}$ '000 | 1,359 | 2,030 | 517 | 186 | 152 |  | 4,244 |
| Value of plant and machinery f'000 | 1,007 | 1,715 | 534 | 164 | 195 | $\cdots$ | 3,615 |
| Horse-power of engines ordinarily in use | 11,170 | 13,151 | 3,450 | 2,380 | 2,891 |  | 33,042 |

## Australla.

| Items. |  | 1945-46. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 312 | 357 | 368 | 373 | 368 | 373 |
| Number of persons employed | $\cdots$ eroio | 5,344 | 6,611 | 7,099 | 7,434 | 7,633 | 7,801 |
| Salaries and wages paid | £'000 | 1,612 | 5,129 | 6,116 | 6,706 | 7,060 | 7,548 |
| Value of power, fuel, etc., used | £'000 | 161 | 702 | 796 | 918 | 975 | 997 |
| Value of materials used .. | £'000 | 1,210 | 4,057 | 4,881 | 5,396 | 6,221 | 6,664 |
| Value of production | £'000 | 2,341 | 7,469 | 8,983 | 9,652 | 10,235 | 11,237 |
| Total value of output | £'000 | 3,712 | 12,228 | 14,660 | 15,966 | 17,431 | 18,898 |
| Value of land and buildings | £'000 | 988 | 2,299 | 2,623 | 3,564 | 3,899 | 4,244 |
| Value of plant and machinery | £'000 | 619 | 2,123 | 2,342 | 3,234 | 3,545 | 3,615 |
| Horse-power of engines ordinari | in use h.p. | 13,381 | 25,415 | 26,451 | 30,738 | 32,835 | 33,042 |

(iv) Plant, Equipment and Machinery (including Machine Tools). The next table shows particulars for this group for each State during 1957-58 and for Australia in selected years:-

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

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,097 | 686 | 155 | 192 | 101 | 9 | 2,240 |
| Number of persons employed | 27,273 | 24,451 | 6,482 | 7,928 | 3,171 | 235 | 69,540 |
| Salaries and wages paid $£^{\prime}$ '000 | 27,381 | 24,036 | 5,343 | 7,317 | 2,692 | 231 | 67,000 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 1,094 | 1,054 | 242 | 439 | 130 | 5 | 2,964 |
| Value of materials used . . $£^{\prime} 000$ | 50,364 | 40,266 | 7,308 | 12,479 | 3,954 | 345 | 114,716 |
| Value of production . . £'000 | 46,033 | 40,139 | 8,353 | 11,556 | 4,000 | 284 | 110,365 |
| Total value of output . . $£^{\prime} 000$ | 97,491 | 81,459 | 15,903 | 24,474 | 8,084 | 634 | 228,045 |
| Value of land and buildings $£^{\prime} 000$ | 18,834 | 17,698 | 2,400 | 4,151 | 2,243 | 266 | 45,592 |
| Value of plant and machinery £'000 | 12,535 | 12,779 | 1,946 | 3,714 | 1,630 | 201 | 32,805 |
| Horse-power of engines ordinarily in use | 93,748 | 82,291 | 18,806 | 29,324 | 11,414 | 647 | 236,230 |

Australia.

| Items. |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(v) Other Engineering. Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1957-58 and for Australia in selected years in the following table:-

OTHER ENGINEERING.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 795 | 830 | 164 | 184 | 151 | 99 | 2,223 |
| Number of persons employed | 6,805 | 8,607 | 1,736 | 3,698 | 905 | 1,619 | 23,370 |
| Salaries and wages paid. . £'000 | 6,089 | 7,911 | 1,357 | 3,318 | 668 | 1,425 | 20,768 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 214 | 254 | 40 | 102 | 36 | 53 | 699 |
| Value of materials used . . $£^{\prime} 0000$ | 6,848 | 8,697 | 1,781 | 4,002 | 820 | 1,632 | 23,780 |
| Value of production . $\mathbf{£}^{\prime} 000$ | 10,430 | 13,698 | 2,190 | 4,635 | 1,130 | 2,191 | 34,274 |
| Total value of output . . $£$ '000 | 17,492 | 22,649 | 4,011 | 8,739 | 1,986 | 3,876 | 58,753 |
| Value of land and buildings $£^{\prime} 000$ | 4,989 | 5,865 | 844 | 2,283 | 568 | 936 | 15,485 |
| Value of plant and machinery $£^{\prime} 000$ | 3,083 | 4,617 | 655 | 1,479 | 315 | 597 | 10,746 |
| Horse-power of engines ordinarily <br> in use $\quad . \quad \ldots \quad . \quad$ h.p. | 20,373 | 28,144 | 4,855 | 13,482 | 3,692 | 5,954 | 76,500 |

Australia.

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 1957-58 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. 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. (a) | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 28 | 24 | 5 | 2 |  | 3 | 63 |
| Number of persons employed | 1,291 | 306 | 600 | (b) | (b) | (b) | 7,254 |
| Salaries and wages paid. . £'000 | 1,480 | 328 | 742 | (b) | (b) | (b) | 8,667 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 533 | 45 | 726 | (b) | (b) | (b) | 4,413 |
| Value of materials used .. $£^{\prime} 000$ | 12,968 | 2,886 | 14,932 | (b) | (b) | (b) | 58,120 |
| Value of production . $£^{\prime} 000$ | 3,350 | 809 | 1,384 | (b) | (b) | (b) | 18,138 |
| Total value of output $\quad . \quad$ ' 000 | 16,851 | 3,740 | 17,042 | (b) | (b) | (b) | 80,671 |
| Value of land and buildings $\mathbf{£}^{\prime} 000$ | 874 | 371 | 989 | (b) | (b) | (b) | 6,907 |
| Value of plant and machinery $£$ '000 | 1,955 | 236 | 1,373 | (b) | (b) | (b) | 15,262 |
| Horse-power of engines ordinarily in use .. .. h.p. | 10,943 | 1,018 | 7,874 | (b) | (b) | (b) | 76,070 |

Australia.

| Items. |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

(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 1957-58 and for Australia for a series of years:-

ELECTRICAL MACHINERY, CABLES AND APPARATUS.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 549 | 370 | 70 | 69 | 75 | 19 | 1,152 |
| Number of persons employed | 30,040 | 11,971 | 1,810 | 1,568 | 800 | 205 | 46,394 |
| Salaries and wages paid . $£^{\prime} 000$ | 27,799 | 10,603 | 1,471 | 1,248 | 609 | 162 | 41,892 |
| Value of power, fuel, etc., used $£$ '000 | 1,461 | 589 | 38 | 36 | 20 | 11 | 2,155 |
| Value of materials used . . $£$ | 57,060 | 21,932 | 2,622 | 1,570 | 705 | 323 | 84,212 |
| Value of production . . £'000 | 47,809 | 16,342 | 2,184 | 1,864 | 956 | 434 | 69,589 |
| Total value of output . . £ $\quad$ '000 | 106,330 | 38,863 | 4,844 | 3,470 | 1,681 | 768 | 155,956 |
| Value of land and buildings $£^{\prime} 000$ | 17,126 | 9,004 | 681 | 770 | 553 | 182 | 28,316 |
| Value of plant and machinery £'000 | 12,609 | 6,359 | 528 | 320 | 140 | 90 | 20,046 |
| Horse-power of engines ordinarily in use | 61,739 | 28,827 | 4,198 | 2,065 | 1,434 | 416 | 98,679 |
| Australia. |  |  |  |  |  |  |  |
| Items. |  | 1938-39.' 1953-54. 1954-55. |  |  | 1955-56. 1956-57. |  | 1957-58. |
| Number of factories |  | 360 | 1,028 | 1,064 | 1,099 | 1,153 | 1,152 |
| Number of persons employed |  | 10,666 | 38,377 | 42,007 | 43,841 | 44,594 | 46,394 |
| Salaries and wages paid .. | £'000 | 2,031 | 28,969 | 33,403 | 36,663 | 38,780 | 41,892 |
| Value of power, fuel, etc., used | £'000 | 105 | 1,391 | 1,651 | 1,808 | 1,964 | 2,155 |
| Value of materials used .. | $£^{\prime} 000$ | 3,195 | 58,237 | 69,962 | 75,129 | 76,256 | 84,212 |
| Value of production | $£^{\prime} 000$ | 3,655 | 49,032 | 54,637 | 57,036 | 63,198 | 69,589 |
| Total value of output | £'000 | 6,955 | 108,660 | 126,250 | 133,973 | 141,418 | 155,956 |
| Value of land and buildings | £'000 | 1,627 | 13,829 | 16,885 | 19,992 | 25,306 | 28,316 |
| Value of plant and machinery | f'000 | 1897 | 9,709 | 11,915 | 13,854 | 16,409 | 20,046 |
| Horse-power of engines ordinarily in | use h.p. | 12,043 | 74,088 | 81,058 | 83,279 | 91,991 | 98,679 |

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 (fifteen in 1957-58) controlled by non-public bodies are not included in the figures below.

TRAMCARS AND RAILWAY ROLLING STOCK.(a) 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 42 | 22 | 13 | 13 | 27 | 7 | 124 |
| Number of persons employed | 14,904 | 7,554 | 6,763 | 4,233 | 3,840 | 785 | 38,079 |
| Salaries and wages paid .. £'000 | 13,495 | 6,487 | 5,507 | 3,734 | 3,042 | 681 | 32,946 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 435 | 229 | 137 | 133 | 117 | 32 | 1,083 |
| Value of materials used .. $£$ '000 | 6,498 | 5,168 | 3,037 | 3,147 | 1,941 | 259 | 20,050 |
| Value of production . . $£^{\prime} 000$ | 16,564 | 8,603 | 6,399 | 4,600 | 3,644 | 875 | 40,685 |
| Total value of output . . $\mathbf{f}^{\prime} 000$ | 23,497 | 14,000 | 9,573 | 7,880 | 5,702 | 1,166 | 61,818 |
| Value of land and buildings $£^{\prime} 000$ | 6,139 | 2,064 | 785 | 1,543 | 544 | 700 | 11,775 |
| Value of plant and machinery £'000 | 9,396 | 1,108 | 1,190 | 2,163 | 1,042 | 335 | 15,234 |
| Horse-power of engines ordinarily in use $\quad . . \quad . \quad$ h.p. | 45,035 | 23,416 | 17,196 | 14,373 | 11,513 | 3,272 | 114,805 |

Australia.

| Items. |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 1957-58 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA. 1957-58.

| Items. |  | Construc tion and Assembly | Repairs. | Motor Bodies. (a) | Motor <br> Accessories. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{\text { Number of factories }}$ |  | 66 | 9.038 | 1,550 | 255 | 10,909 |
| Number of persons employed | $\cdots \quad \square$ | 17,864 | 56,829 | 25,953 | 9,734 | 110,380 |
| Salaries and wages paid | .. £'000 | 18,219 | 41,047 | 23,520 | 9,100 | 91,886 |
| Value of power, fuel, etc., used | £'000 | 1,272 | 1,312 | 1,022 | 644 | 4,250 |
| Value of materials used | £'000 | 40,041 | 45,706 | 46,118 | 11,859 | 143,724 |
| Value of production | £'000 | 32,152 | 64,589 | 35,260 | 16,382 | 148,383 |
| Total value of output | £'000 | 73,465 | 111,607 | 82,400 | 28,885 | 296,357 |
| Value of land and buildings | £ ${ }^{\prime} 000$ | 16,107 | 53,416 | 13,684 | 6,354 | 89,561 |
| Value of plant and machinery | £'000 | 16,921 | 12,523 | 10,837 | 6,349 | 46,630 |
| Horse-power of engines ordinarily in use h.p. |  | 54,525 | 63,194 | 55,880 | 37,665 | 211,264 |

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

In the next table, similar details are shown on a State basis for 1957-58 and for Australia for selected years for these industries combined:-

MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 4,530 | 2,751 | 1,309 | 1,004 | 972 | 343 | 10,909 |
| Number of persons employed | 37,546 | 37,080 | 10,223 | 16,686 | 6,353 | 2,492 | 110,380 |
| Salaries and wages paid .. $£^{\prime} 000$ | 30,745 | 32,502 | 7,051 | 15,013 | 4,743 | 1,832 | 91,886 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 1,367 | 1,743 | 222 | 669 | 191 | 58 | 4,250 |
| Value of materials used .. $£^{\prime} 000$ | 54,092 | 43,829 | 8,067 | 27,945 | 7,756 | 2,035 | 143,724 |
| Value of production $\quad . \quad{ }^{\prime} \times 000$ | 50,238 | 52,455 | 14,351 | 20,665 | 7,680 | 2,994 | 148,383 |
|  | 105,697 | 98,027 31851 | 22,640 | 49,279 | 15,627 | 5,087 | 296,357 |
|  | 35,229 16,736 | 31,851 17,222 | 6,375 2,039 | 8,888 8,361 | 4,929 | 2,289 614 | $89,561$ |
| Horse-power of engines ordinarily | 71,058 | 79,733 | 12,739 | 41,155 | 13,593 | 2,986 | 211,264 |
| Australia. |  |  |  |  |  |  |  |
| Items. |  | 1945-46. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58 |
| Number of factories |  | 3,592 | 8,302 | 8,993 | 9,707 | 10,334 | 10,909 |
| Number of persons employed |  | 39,706 | 89,913 | 98,343 | 105,959 | 107,480 | 110,380 |
| Salaries and wages paid | ${ }^{\prime} \times 000$ | 10,582 | 62,454 | 73,073 | 84,082 | 86,282 | 91,88 |
| Value of power, fuel. etc., used | £'000 | 395 | 2,477 | 2,798 | 3,189 | 3,747 | 4,250 |
| Value of materials used | f'000 | 12,143 | 94,173 | 108,119 | 126,933 | 120,297 | 143,724 |
| Value of production | £'000 | 15,818 | 101,054 | 112,541 | 126,459 | 132,018 | 148,383 |
| Total value of output | f'000 | 28,356 | 197,704 | 223,458 | 256,581 | 256,062 | 296,357 |
| Value of land and buildings | $\mathrm{f}^{\prime} 000$ | 9,878 | 45,835 | 55,451 | 66,235 | 78,817 | 89,561 |
| Value of plant and machinery | f'000 | 3,758 | 23,397 | 26,073 | 32,390 | 40,890 | 46,630 |
| Horse-power of engines ordinarily in | use h.p. | 56,117 | 146,930 | 160,001 | 202,963 | 206,792 | 211,264 |

The table below shows the production and imports of motor bodies for 1938-39 and 1953-54 to 1958-59:-

PRODUCTION AND IMPORTS OF MOTOR BODIES( $a$ ): AUSTRALLA.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. | $\begin{gathered} 1958-59 . \\ \quad(b) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \hline \text { Motor Bodies }(a) \ldots \\ \text { Made } \ldots & \ldots & \text { No. } \end{array}$ | 79,436 | 113,833 | 126,079 | 129,700 | 120,781 | 160,675 | 169,992 |
| Assembled from Panels imported or made elsewhere . | (c) |  |  |  |  | 81.630 |  |
| $\begin{array}{cccc}\text { or made elsewhere } \\ \text { Imported }(d) & . . & \text {. } & \text { No. } \\ \end{array}$ | (c) 532 | 43,077 26,874 | 62,383 37,924 | 94,676 19,041 | 77,548 7,062 | 81,630 $(e) 5,890$ | $\begin{array}{r} 78,482 \\ (e) 6,104 \\ \hline \end{array}$ |

(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 1957-58 and for Australia for a seties of years:-

## AGRICULTURAL MACHINES AND IMPLEMENTS.

1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. |  |  | $1938-39$. | $1953-54$. | $1954-55$. | $1955-56$. | $1956-57$. | $1957-58$. |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |

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 nearly $2,264,000$ at 30 th June, 1959, and this increase reflects the advancement of the industry during that period. At 30th June, 1959, 577,500 television viewers' licences had been issued.

WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA.

(a) Including radiograms and car radios.

Nore.-There were 383,500 wireless receiving sets (including radiograms) and 319,000 television receiving sets made in 1958-59.
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 44 million lb . in the five years ended 1957-58. The growing of cotton, which is restricted to Queensland, isreferred 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 1958-59) from India, Pakistan, Brazil, Mexico, Peru 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 1953-54 to 1957-58.

## COTTON SPINNING AND WEAVING: AUSTRALIA.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 33 | 96 | 96 | 97 | 91 | 97 |
| Number of persons employed | 3,589 | 9,470 | 9,582 | 9,598 | 9,754 | 9,879. |
| Salaries and wages paid .. .. £'000 | 493 | 6,602 | 6,845 | 7,297 | 7,799 | 8,268. |
| Value of power, fuel, etc., used .. £'000 | 50 | 690 | 706 | 703 | 890 | 958 |
| Value of materials used . . .. £'000 | 1,357 | 18,083 | 18,505 | 18,571 | 19,485 | 24,025. |
| Value of production . .. £'000 | 979 | 10,809 | 11,343 | 12,227 | 14,202 | 15,622 |
| Total value of output . . .. £'000 | 2,386 | 29,582 | 30,554 | 31,501 | 34,577 | 40,605 |
| Value of land and buildings $\quad . . £^{\prime} 000$ | 704 | 4,104 | 5,078 | 5,719 | 6,478 | 7,179 |
| Value of plant and machinery :. $£^{\prime} 000$ | 736 | 4,411 | 4,355 | 4,637 | 5,312 | 6,702 |
| Horse-power of engines ordinarily in use h.p. | 9,128 | 33,201 | 34,356 | 34,657 | 34,568 | 35,880 |

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.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 43 | 88 | 4 | 3 | 3 | 5 | 146 |
| Number of persons employed | 6,133 | 12,055 | 966 | 625 | (a) | (a) | 22,386 |
| Salaries and wages paid .. $£^{\prime} 000$ | 4,455 | 9,065 | 545 | 444 | (a) | (a) | 16,380 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 402 | 811 | 39 | 44 | (a) | (a) | 1,463 |
| Value of materials used . . $\mathrm{f}^{\prime} 000$ | 10,293 | 25,218 | 1,653 | 1,112 | (a) | (a) | 46,012 |
| Value of production .. f'000 | 7,297 | 13.432 | 782 | 782 | (a) | (a) | 25,737 |
| Total value of output . . $£$ | 17,992 | 39,461 | 2,474 | 1,938 | (a) | (a) | 73,212 |
| Value of land and buildings $£^{\prime} 000$ | 2,592 | 5,543 | 194 | 215 | (a) | (a) | 9,364 |
| Value of plant and machinery $£$ '000 | 3,148 | 6,583 | 316 | 276 | (a) | (a) | 11,641 |
| Horse-power of engines ordinarily in use <br> h.p. | 16,436 | 41,081 | 3,706 | 1,614 | (a) | (a) | 70,433 |

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

## WOOL CARDING, SPINNING AND WEAVING-continued.

Australia.

| Items. | $\begin{gathered} 1938-39 . \\ (a) \end{gathered}$ | 953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 90 | 164 | 151 | 145 | 143 | 146 |
| Number of persons employed .. | 19,608 | 22,619 | 21,844 | 21,899 | 23,217 | 22,386 |
| Salaries and wages paid .. . $£$ | 2,888 | 14,382 | 13,945 | 14,409 | 16,340 | 16,380 |
| Value of power, fuel, etc., used .. £'000 | 393 | 1,329 | 1,288 | 1,345 | 1,479 | 1,463 |
| Value of materials used . . . £ $£$ | 7,331 | 45,033 | 38,938 | 39,532 | 49,303 | 46,012 |
| Value of production .. .. £'000 | 4,791 | 23,237 | 21,898 | 24,082 | 27,649 | 25,737 |
| Total value of output . . . . ${ }^{\text {'0000 }}$ | 12,515 | 69,599 | 62,124 | 64,959 | 78,431 | 73,212 |
| Value of land and buildings .. $\mathbf{f}^{\prime} 000$ | 2,380 | 6,894 | 7,369 | 7,713 | 9,019 | 9,364 |
| Value of plant and machinery . $\quad$ ¢ 0000 | 3,370 | 9,086 | 10,053 | 10,673 | 10,855 | 11,641 |
| Horse-power of engines ordinarily in use h.p. | 42,944 | 68,715 | 66,817 | 71,752 | 99,385 | 70,433 |
| Articles produced-- Woollen and worsted cloth $(b)(c)$ '000 sq. yds. | 31,768 | 35,027 | 31,067 | 30,279 | 32,782 | 31,719 |
| Blankets and rugs(b) .. .. '000 | 1,279 | 1,340 | 1,673 | 1,799 | 1,841 | 2,032 |

(a) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Fellmongeries in South Australia.
(b) Includes production in other industries.
(c) Includes mixt ures.

Note.-Preliminary production figures for 1958-59 were: Woollen and Worsted Cloth, 27,245,000 square yards; Blankets and Rugs, 1,815,000.
16. Hosiery and Other Knitted Goods.-Details for each State for 1957-58 and for Australia for a series of years are shown in the following table:-

## HOSIERY AND OTHER KNITTED GOODS.

1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |

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

Australia.

| Items. |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 313 | 645 | 661 | 664 | 665 | 657 |
| Number of persons employed |  | 18,159 | 23,937 | 24,614 | 23,409 | 23,492 | 22,939 |
| Salaries and wages paid .. | £'000 | 2,332 | 14,277 | 15,117 | 15,117 | 16,052 | 16,124 |
| Value of power, fuel, etc., used | £'000 | 133 | 684 | 656 | 687 | 744 | 770 |
| Value of materials used | £'000 | 4,284 | 30,372 | 31,317 | 31,822 | 34,769 | 38,002 |
| Value of production | £'000 | 3,809 | 26,155 | 27,535 | 27,236 | 29,035 | 28,615 |
| Total value of output | £'000 | 8,226 | 57,211 | 59,508 | 59,745 | 64,548 | 67,387 |
| Value of land and buildings | £'000 | 1,962 | 7,253 | 8,643 | 9,339 | 9,939 | 10,910 |
| Value of plant and machinery | $\cdots \quad \mathbf{E}^{\prime} 000$ | 1,931 | 7,201 | 7,917 | 8,159 | 8,143 | 8,539 |
| Horse-power of engines ordinari | in use h.p. | 8,884 | 18,478 | 20,884 | 20,315 | 22,911 | 21,858 |

The following quantities of yarn were used in these establishments during 1957-58:Worsted or woollen $8,629,955 \mathrm{lb}$.; mixtures predominantly woollen or worsted, $1,469,091 \mathrm{lb}$.; cotton, $10,837,056 \mathrm{lb}$. ; mercerised cotton, $368,103 \mathrm{lb}$. ; rayon, spun, $7,575,573 \mathrm{lb} . ;$ rayon filament, $2,916,129 \mathrm{lb}$.; silk, $17,932 \mathrm{lb}$.; nylon, spun, $633,711 \mathrm{lb}$.; nylon filament, 2,936,063 lb. ; other yarns, 747,542 lb. Production of garments and stockings is shown in $\S 10$ (see p. 182).
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. 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 60 | 36 | 13 | 9 | 5 |  | 24 |
| Number of person employed | 1,745 | 1,995 | 582 | 213 | (a) | (a) | 4,708 |
| Salaries and wages paid .. $£^{\prime} 000$ | 1,720 | 1,847 | 498 | 206 | (a) | (a) | 4,413 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 186 | 201 | 45 | 25 | (a) | (a) | 470 |
| Value of materials used .. £'000 | 5,080 | 4,292 | 1,584 | 568 | (a) | (a) | 11,938 |
| Value of production .. £ $£^{\prime} 000$ | 2,296 | 2,590 | 813 | 329 | (a) | (a) | 6,214 |
| Total value of output . $\cdot £^{\prime} 000$ | 7,562 | 7,083 | 2,442 | 922 | (a) | (a) | 18,622 |
| Value of land and buildings $£^{\prime} 000$ | 1,048 | 1,018 | 109 | 88 | (a) | (a) | 2,341 |
| Value of plant and machinery $\mathrm{E}^{\prime} 000$ | 845 | 829 | 254 | 164 | (a) | (a) | 2,154 |
| Horse-power of engines ordinarily in use .. .. h.p. | 12,826 | 12,882 | 3,565 | 1,980 | (a) | (a) | 32,378 |

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

Australia.

(ii) Materials Used and Articles Produced. The quantities of materials used and leather produced in tanneries in each State in 1957-58 are shown in the following table:-

TANNERIES: MATERIALS USED AND PRODUCTION, 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Materials usedHides (cattle) - |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Yearling ( . No. | 147,181 | 49,512 | 5,582 | (a) | (a) |  | 207,758 |
| Light Hides(b) | 367,004 | 582,307 | 208,851 | (a) | 48,670 | (a) | 1,235,830 |
| Heavy Hides( $c$ ) . . | 410,378 | 433,584 | 208,258 | 114,364 | (a) | (a) | 1,228,520 |
| Skins- |  |  | (a) |  |  |  | 1,187,441 |
| Calf | 817,394 | (a) ${ }^{312,31}$ | (a) | (a) | - |  | 1,187,461 |
| Sheep including Pelts | 1,810,460 | 396,876 | (a) | (a) |  |  | 2,690,894 |
| Marsupial .. ", | 36,104 | 22,347 | 81,487 | (a) | (a) | . | 142,411 |
|  | 1,948 | 3,915 | 1,019 | (a) |  | (a) | 7,134 |
| Mallet and Other | (a) | 803 | (a) |  | 263 |  | 1,103 |
|  |  |  |  |  |  |  |  |
| Leather made- <br> Sole | 7,040,497 | 13,082,606 | 6,399,982 | (a) | 1,879,629 | (a) | 29,084,888 |
| Harness, Belting, etc. | 723,357 | 358,532 | 366,354 | (a) | (a) | .- | 2,204,707 |
| Upholstery $\quad$ sq. ft. | (a) | 622,711 | (a) | (a) | (a) | . | 900,150 |
| Hides- |  |  |  |  |  |  |  |
| Sold byMeasurement- |  |  |  |  |  |  |  |
| Patent . . sq. ft. | $\stackrel{(a)}{\text { a }}$ (1,015,250 | $\stackrel{(a)}{23,092,040}$ | 8,769,158 | 1,654 | ) | (a) | $1,186,962$ $59,192,588$ |
| All Other Weight" (all | 21,015,250 | 23,092,040 | 8,769,158 | 1,654 | (a) | (a) | 5,192,588 |
| kinds) .. lb . | 137,926 | (a) | (a) | $\ldots$ | (a) | (a) | 185,313 |
| Dressed from skins- |  |  |  |  |  |  |  |
| Calf $\quad \cdots \quad$ sq.ft. | 4,510,469 | 2,190,447 | (a) | (a) |  | - | 7,251,549 |
| Goat | 1,468,445 | $\begin{gathered} (a) \\ 1.499 .801 \end{gathered}$ | (a) |  |  | - | $1,498,077$ $11,765,996$ |
| Sheep Marsupial .. ", ", | $8,658,785$ 181,666 | $1,499,801$ 138,937 | $\stackrel{(a)}{349,104}$ | (a) | (a) | $\cdots$ | $11,765,996$ 702,357 |
| Marsupia . ${ }^{\text {a }}$ " " | 181,666 | 138,937 | 39,104 |  |  |  | 702,357 |
| (a) Not available for publication; figures are included in the total for Australia. <br> (b) Up to <br> 45 lb. <br> (c) Over 45 lb . |  |  |  |  |  |  |  |

18. Tailoring and Ready-made Clothing.-Statistics showing the distribution of this industry among the States in 1957-58 and for Australia for a series of years are shown in the following table:-

TAILORING AND READY-MADE CLOTHING.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 933 | 634 | 116 | 98 | 116 | 17 | 1,914 |
| Number of persons employed | 17,389 | 9,779 | 2,114 | 1,308 | 675 | 192 | 31,457 |
| Salaries and wages paid .. £'000 | 10,717 | 6,448 | 1,050 | 716 | 306 | 100 | 19,337 |
| Value of power, fuel, etc., $\quad £^{\prime} 000$ used | 226 | 143 | 22 | 19 | 10 | 2 | 422 |
| Value of materials used .. $\mathbf{x}^{\prime} 000$ | 20,112 | 13,113 | 1,987 | 849 | 541 | 78 | 36,680 |
| Value of production .. £'000 | 16,655 | 10,830 | 1,974 | 1,000 | 518 | 140 | 31,117 |
| Total value of output . . $£^{\prime} 000$ | 36,993 | 24,086 | 3,983 | 1,868 | 1,069 | 220 | 68,219 |
| Value of land and buildings $£^{\prime}, 000$ | 5,631 | 3,706 | 613 | 612 | 372 | 80 | 11,014 |
| Value of plant and machinery £'000 | 1,549 | 1,078 | 140 | 94 | 41 | 11 | 2,913 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 5,214 | 3,274 | 564 | 413 | 164 | 42 | 9,671 |

AUSTRALIA.

| AUSTRALIA. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| Number of factories | 1,177 | 1,963 | 1,985 | 1,952 | 1,944 | 1,914 |
| Number of persons employed $\quad$ - | 26,499 | 33,264 | 33,384 | 32,587 | 31,920 | 31,457 |
| Salaries and wages paid .. .. £'000 | 3,168 | 17,215 | 17,968 | 18,261 | 18,760 | 19,337 |
| Value of power, fuel, etc., used . . $\mathbf{£}^{\prime} 000$ | 72 | , 380 | 390 | 393 | 416 | 422 |
| Value of materials used . . . . $\mathbf{£}^{\prime} 000$ | 4,947 | 33,598 | 34,237 | 35,941 | 35,883 | 36,680 |
| Value of production . . . £ $£^{\prime} 000$ | 4,812 | 26,076 | 28,031 | 28,940 | 29,811 | 31,1.17 |
| Total value of output . . . $\mathrm{f}^{\prime} 000$ | -9,831 | 60,054 | 62,658 | 65,274 | 66,110 | 68,219 |
| Value of land and buildings . . $\mathrm{f}^{\prime} 000$ | 3,176 | 8,251 | 8,917 | 9,484 | 10,137 | 11,014 |
| Value of plant and machinery $\quad . \quad \mathbf{£}^{\prime} 000$ | 356 | 2,523 | 2,663 | 2,746 | 2,861 | 2,913 |
| Horse-power of engines ordinarily in use h.p. | 2,607 | 9,339 | 9,198 | 9,017 | 9,133 | 9,671 |

19. Dressmaking and Millinery Establishments.-Particulars of dressmaking and millinery establishments in Australia for the years 1938-39 and 1953-54 to 1957-58 are shown in the following table:-

## DRESSMAKING AND MILLINERY: AUSTRALIA.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 869 | 1,433 | 1,411 | 1,410 | 1,311 | 1,295 |
| Number of persons employed | 16,398 | 19,197 | 18,014 | 17,675 | 16,265 | 15.668 |
| Salaries and wages paid .. .. £'000 | 1,653 | 9,230 | 8,975 | 9,063 | 8,783 | 8,859 |
| Value of power, fuel, etc., used .. £'000 | 1, 33 | , 187 | 176 | 177 | 185 | 184 |
| Value of materials used . . . . $£^{\prime} 000$ | 2,610 | 13,634 | 13,109 | 13,029 | 12,447 | 11,999 |
| Value of production .. .. £000 | 2,592 | 14,392 | 14,501 | 14,585 | 14,244 | 14,220 |
| Total value of output . . . $\mathbf{X}^{\prime} 000$ | 5,235 | 28,213 | 27,786 | 27,791 | 26,876 | 26,403 |
| Value of land and buildings $\quad . . \quad \mathbf{E}^{\prime} 000$ | 2,052 | 5,033 | 5,256 | 5,788 | 5,966 | 6,693 |
| Value of plant and machinery ... £'000 | 189 | 1,108 | 1,123 | 1,174 | 1,152 | 1,246 |
| Horse-power of engines ordinarily in use h.p. | 1,732 | 4,858 | 4,740 | 4,697 | 4,635 | 4,558 |

20. Shirts, Collars and Underclothing.-Particulars of this industry are shown below for each State for 1957-58 and for Australia for a series of years:-

## SHIRTS, COLLARS AND UNDERCLOTHING. <br> 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 156 | 170 | 19 | 23 | 14 | 2 | 384 |
| Number of persons employed | 4,639 | 6,349 | 1,070 | 407 | (a) | (a) | 13,038 |
| Salaries and wages paid .. £'000 | 2,820 | 3,912 | 506 | 205 | (a) | (a) | 7,718 |
| Value of power, fuel, etc., used ${ }^{\prime}$ '000 | 2,820 | , 61 | 8 | 4 | (a) | (a) | 134 |
| Value of materials used . . $\mathbf{£}^{\prime} 000$ | 6,966 | 8,206 | 709 | 271 | (a) | (a) | 16,595 |
| Value of production .. $\mathbf{E}^{\prime} 000$ | 4,388 | 6,188 | 670 | 286 | (a) | (a) | 11,945 |
| Total value of output .. $\mathbf{x}^{\prime} 000$ | 11,409 | 14,455 | 1,387 | 561 | (a) | (a) | 28,674 |
| Value of land and buildings $\mathbf{E}^{\prime} \mathbf{0 0 0}$ | 1,449 | 1,722 | 180 | 96 | (a) | (a) | 3,587 |
| Value of plant and machinery $£^{\prime}$ '000 | , 519 | -579 | 69 | 20 | (a) | (a) | 1,233 |
| Horse-power of engines ordinarily in _use .. .. .. h.p. | 1,768 | 2,689 | 230 | 155 | (a) | (a) | 5,064 |

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

## SHIRTS, COLLARS AND UNDERCLOTHING-continued.

 Australia.| Australia. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Items. | 1938-39. 1953-54. |  | 1954-55. 1955-56.' 1956-57. |  |  | 1957-58 |
| Number of factories | 283 | 379 | 392 | 404 | 397 | 384 |
| Number of persons employed | 11,081 | 11,156 | 12,745 | 12,686 | 13,157 | 13.038 |
| Salaries and wages paid . ${ }^{\text {a }}$-. $£^{\prime} 000$ | 1,143 | 5,684 | 6,702 | 6,957 | 7,640 | 7.718 |
| Value of power, fuel, etc., used .. ${ }_{\text {d,000 }}$ |  |  | 15.102 |  |  | +134 |
| Value of materials used .. .. £'000 | 2,651 | 12,077 | 15,020 | 16,112 | 16,285 | 16,595 |
| Value of production .- $\quad$.- $£^{\prime} 000$ | 1,761 | 9,377 | 10,927 | 11,328 | 12,051 | 11,945 |
| Total value of output $\quad . . \quad . . \quad ¢_{\text {'000 }}$ | 4,435 | 21,546 | 26,053 | 27,559 | 28,465 | 28,674 3887 |
| Value of land and buildings .. $\mathrm{f}^{\prime} 0000$ | 946 | 2,417 | 2,719 | 2,999 | 3,543 | 3,587 |
| Value of plant and machinery ${ }^{\text {a }}$, ${ }^{\prime}$,000 |  |  |  | 4,146 | 1,229 5,177 | 1,233 5,064 |
| Horse-power of engines ordinarily in use h.p. | 1,874 | 4,320 | 4,468 | 4,881 | 5,177 | 5,064 |

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 212.

BOOTS AND SHOES.
1957-58.

| Items. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 1957-58 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: OU'TPUT, 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boots, shoes and sandals |  |  |  |  |  |  |  |
| pairs | 7,472,914; | 10,474,167. | 1,220,623 | 1,609,502 | (a) | (a) | 21,395,431 |
| £ | 13,329,785 | 20,435,904 | 1,944,052 | 2,554,619 | (a) | (a) | 39,149,005 |
| Slippers .. pairs | 2,779,596 | 5,725,161 | 300,169 | -61,602 | 286,176 | (a) | 9,152,704 |
| 茊 | 1,777,501 | 2,934,625 | 199,932 | 41,312 | 224,639 | . | 5,178,009 |

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

Preliminary figures for 1958-59 were-Boots, Shoes and Sandals, 24,024,000 pairs; and Slippers, $8,481,000$ 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 1957-58 and for Australia for a series of years:-

FLOUR-MILLING.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 47 | 34 | 11 | 21 | 19 | 10 | 142 |
| Number of persons employed | 1,409 | 1,314 | 542 | 428 | 455 | 136 | 4,284 |
| Salaries and wages paid .. £'000 | 1,495 | 1,308 | 441 | 414 | 395 | 137 | 4,190 |
| Value of power, fuel, etc., used $£$ '000 | 311 | 232 | 82 | 83 | 104 | 15 | 827 |
| Value of materials used . . £'000 | 17,553 | 18,509 | 5,672 | 5,103 | 5,659 | 1,163 | 53,659 |
| Value of production . $£$ | 4,198 | 3,032 | 987 | 692 | 797 | 228 | 9,934 |
| Total value of output . . $£ \times 000$ | 22,062 | 21,773 | 6,741 | 5.878 | 6,560 | 1,406 | 64,420 |
| Value of land and buildings $\mathbf{f}^{\prime} 000$ | 2,474 | 1,882 | 786 | 369 | 731 | . 80 | 6,322 |
| Value of plant and machinery $\mathfrak{f}^{\prime} 000$ | 2,479 | 1,482 | 796 | 527 | 599 | 79 | 5,962 |
| Horse-power of engines ordinarily in use .. <br> h.p. | 17,808 | 15,235 | 4,944 | 3,729 | 5,537 | 1,196 | 48,449 |

Australia.

| Items. |  | 1938-39.' 1953-54. |  | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 172 | 157 | 151 | 151 | 143 | 142 |
| Number of persons employed | $\cdots$ | 3,783 | 4,602 | 4,528 | 4,548 | 4,729 | 4,284 |
| Salaries and wages paid .. | $\mathrm{f}^{\prime} 000$ | 896 | 3,847 | 3,851 | 4,073 | 4,375 | 4,190 |
| Value of power, fuel, etc., used | £'000 | 231 | 847 | 805 | 835 | 946 | 827 |
| Value of materials used | £'000 | 10,573 | 53,946 | 54,436 | 54,498 | 59,094 | 53,659 |
| Value of production | $\mathrm{f}^{\prime} \mathbf{0} 00$ | 2,091 | 8,134 | 7,311 | 7,575 | 9,608 | 9,934 |
| Total value of output . . | $\mathrm{f}^{\prime} 000$ | 12,895 | 62,927 | 62,552 | 62,908 | 69,648 | 64,420 |
| Value of land and buildings | $\mathrm{f}^{\prime} \mathbf{0} 000$ | 2,091 | 4,260 | 4,533 | 5,211 | 5,686 | 6,322 |
| Value of plant and machinery | £'000 | 1,814 | 4,921 | 5,060 | 5,405 | 5,690 | 5,962 |
| Horse-power of engines ordinaril | in use h.p. | 27,795 | 52,545 | 46,566 | 47,786 | 48,103 | 48,449 |

(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 1953-54 to 1958-59 was as follows:-

FLOUR-MILLING: PRODUCTION OF FLOUR.(a)
(Tons of $\mathbf{2 , 0 0 0} \mathbf{~ l b}$.)

| 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 |
| 1953-54 | 603,575 | 473,842 | 138,524 | 164,907 | 197,654 | 30,556 | 1,609,058 |
| 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 | 461,663 | 170,397 | 164,417 | 184,717 | 29,157 | 1,631,827 |
| 1957-58 | 416,490 | 484,993 | 143,613 | 138,537 | 163,347 | 28,739 | 1,375,719 |
| 1958-59 (b) | 440,392 | 436,764 | 151,711 | 136,844 | 164,475 | 29,141 | 1,359,327 |

(a) Includes wheatmeal for baking and sharps.
(b) Preliminary, subject to revision.

In addition, 523,000 tons ( $2,000 \mathrm{lb}$. per ton) of bran and pollard were produced in 1957-58 and 500,000 tons in 1958-59. The total quantity of wheat ground in flour mills was 62,300,000 bushels in 1957-58 and 62,254,000 bushels in 1958-59.
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).

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas.(a) | Aust.(a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,685 | 1,075 | 505 | 272 | 295 | 154 | 3,986 |
| Number of persons employed | 8,005 | 5,472 | 2,437 | 1,633 | 1,040 | 1,736 1,309 | 20,323 |
|  | 5,235 | 3,605 | 1,315 | 1,063 | 583 | 1,309 | 13,110 |
| Value of materials used... $£^{\prime} 000$ | 17,229 | 10,884 | 4,785 | 3,515 | 2,240 | 4,823 | 43,476 |
| Value of production .. £'000 | 12,271 | 7,845 | 3,182 | 2,358 | 1,489 | 2,671 | 29,816 |
| Total value of output .. £ $^{\prime} 000$ | 30,532 | 19,397 | 8,221 | 6,064 | 3,855 | 7,663 | 75,732 |
| Value of tand and buildings f $^{\prime} 000$ | 8,736 | 5,923 | 1,558 | 1,518 | 928 | 1,542 | 20,205 |
| Value of plant and machinery £'000 | 4,598 | 3,470 | 1,012 | 928 | 677 | 1,112 | 11,797 |
| Horse-power of engines ordinarily in use h.p. | 10,967 | 8,001 | 3,241 | 3,139 | 2,011 | 4,803 | 32,162 |

Australia.(a)

| Items. |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 embodied in the following table refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown; consequently, the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter 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 1953-54 to 1957-58:-

SUGAR-MILLS.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New South Wales. |  |  |  |  |  |  |
| Number of factories ${ }^{\text {Number of persons employed. }}$. | , |  |  | 15 | ${ }^{3}$ | 3 |
| Number of persons employed.. | 337,038 | 156 263,249 | 222,313 | [ $\begin{array}{r}152 \\ 284,539\end{array}$ | 294,087 | 303,086 |
| Raw sugar produced (94 net titre) .. .. tons | 337,08 45,106 | 263,249 34,004 | 22,31 26,301 | 284,53 36,028 | 294,087 35,918 | 303,086 36,854 |
| Queensiand. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Number of factories | 33 | 31 |  |  |  | 31 |
| Number of persons employed.. | 5,432,4193 | -7,358 | 9,8,272 | 7 7,044 | 7,099 | 8, 6,547 |
| Cane crushed | 5,432,193 | 8,751,063 | 9,864,304 | 8,616,163 | 8,978,081 | 8,945,617 |
| Raw sugar produced titre) | 775,064 | 1,220,383 | 1,301,245 | 1,135,685 | 1,171,879 | 1,256,271 |
| Molasses-distilleries. . '000 gals Sold to |  | 23,323 | 23,167 | 22,772 |  |  |
| Used as fodder .. ", | 4,237 | 5,486 | 5,753 | 5,285 | 5,536 | 4,861 |
| Used as manure .. " ", | 3,293 | 11,466 | 10,501 | 10,637 | 9,177 | 10,880 |
| Run to waste . $\quad$ B " | 3 499 |  | +233 | +185 | 1,405 | 285 284 |
| Burnt as fuel for other pur- | 3,749 | 183 | 1,079 | 1,519 | 1,405 | 284 |
| poses $.10 \cdot 000 \mathrm{gals}$ | 232 | 516 | 473 | 588 | 523 | 508 |
| Total molassesdisposed <br> of$\quad . .000$ gals | 20,286 | 41,142 | 41,206 | 40,986 | 40,786 | 37,376 |

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 1957-58, 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 521,920 tons for a yield of 493,093 tons of refined sugar.
26. Confectionery.-Particulars for 1957-58 for each State and for Australia for a series of years are shown hereunder:-

CONFECTIONERY.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. (b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 94 | 83 | 18 | 15 | 7 | (a) | 217 |
| Number of persons employed | 2,905 | 3,042 | 196 | 349 | 297 | (a) | 6,789 |
| Salaries and wages paid £'000 | 2,250 | 2,254 | 95 | 198 | 185 | (a) | 4,982 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 258 | 223 | 10 | 22 | 16 | (a) | 529 |
| Value of materials used .. $£$ '000 | 7,798 | 6,856 | 364 | 531 | 503 | (a) | 16,052 |
| Value of production .. £'000 | 5,242 | 3,753 | 156 | 292 | 328 | (a) | 9,771 |
| Total value of output ... $\mathbf{£}^{\prime} 000$ | 13,298 | 10,832 | 530 | 845 | 847 | (a) | 26,352 |
| Value of land and buildings $\mathbf{f}^{\prime} 000$ | 2,135 | 1,795 | 90 | 236 | 95 | (a) | 4,351 |
| Value of plant and machinery £'000 | 1,805 | 1,802 | 73 | 131 | 80 | (a) | 3,891 |
| Horse-power of engines ordinarily in use .. .. h.p. | 13,496 | 13,664 | 318 | 1,358 | 420 | (a) | 29,256 |
| AUSTRALIA.(b) |  |  |  |  |  |  |  |
| Items. |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| Number of factories |  | 148 | 249 | 238 | 226 | 213 | 217 |
| Number of persons employed |  | 7,256 | 6,976 | 7,069 | 7,183 | 6,818 | 6,789 |
| Salaries and wages paid .. | £'000 | 1,041 | 4,382 | 4,516 | 4,805 | 4,866 | 4,982 |
| Value of power, fuel, etc., used | £'000 | 107 | 444 | 447 | 473 | 509 | 529 |
| Value of materials used .. | £'000 | 3,102 | 13,857 | 14,917 | 15,583 | 15,391 | 16,052 |
| Value of production | £'000 | 2,418 | 8,307 | 8,320 | 8,932 | 9,885 | 9,771 |
| Total value of output | $£^{\prime} 000$ | 5,627 | 22,608 | 23,684 | 24,988 | 25,785 | 26,352 |
| Value of land and buildings | £'000 | 1,423 | 2,650 | 2,964 | 3,324 | 3,239 | 4,351 |
| Value of plant and machinery | £'000 | 1,364 | 3,039 | 3,368 | 3,612 | 3,582 | 3,891 |
| Horse-power of engines ordinarily in | use h.p. | 16,154 | 28,763 | 27,374 | 29,156 | 27,348 | 29,256 |

[^4](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 1957-58 and for Australia for a series of years:-

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR. 1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 to 107.8 million Ib . in 1957-58. Preliminary figures for $1958-59$ show production as being 75.0 million $\mathbf{l b}$.

Production of preserved fruit in 1957-58 was 349.4 million lb ., the highest on record, the previous highest level being 338.6 million lb . in 1953-54. Preliminary figures for 195859 show production as being 317.1 million $\mathbf{l b}$.

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 1957-58 amounted to 87.0 million lb. Preliminary figures for 1958-59 show production as being 66.6 million lb .

The following table shows the total quantity of jams, pickles, sauces and other items manufactured in each State in 1957-58:-

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES: 1957-58.

28. Bacon-curing.-(i) Details of Industry. The table hereunder shows particulars of factories, engaged in bacon-curing in each State for 1957-58 and for Australia for a series of years:-

## BACON-CURING.

1957-58.

| 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 person employed | 712 | 841 | 1,335 | 480 | 268 | 109 | 3,745 |
| Salaries and wages paid .. $£$ '000 | 652 | 756 | 1,102 | 473 | 231 | 97 | 3,311 |
| Value of power, fuel, etc., used $£$ '000 | 84 | 99 | 105 | 66 | 39 | 10 | 403 |
| Value of materials used . $£^{\prime} 000$ | 4,844 | 4,593 | 7,025 | 2,388 | 2,567 | 730 | 22,147 |
| Value of production .. £'000 | 1,430 | 1,904 | 2,257 | 627 | 398 | 182 | 6,798 |
| Total value of output .. £'000 | 6,358 | 6,596 | 9,387 | 3,081 | 3,004 | 922 | 29,348 |
| Value of land and buildings $£^{\prime} 000$ | 577 | 640 | 793 | , 389 | 124 | 144 | 2,667 |
| Value of plant and machinery £'000 | 315 | 366 | 570 | 295 | 69 | 39 | 1,654 |
| Horse-power of engines ordinarily in use | 2,271 | 3,281 | 5,321 | 2,184 | 1,133 | 557 | 14,747 |

Australia.

| Items. |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 1957-58 are shown in the following table:-

BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pigs killed for bacon and ham- |  |  |  |  |  |  |  |
| For curing on own account | 165,640 | 168,793 | 232,548 | 82,223 | \} 122,243 | 31,709 \{ | 802,621 |
| For curing on commission | 12,828 | 3,711 | 2,384 | 1,121 | \} 122,243 | 31,7092 | 20,579 |
| Pork and green bacon used for- <br> Curing on own account |  |  |  |  |  |  |  |
| Curing on ${ }^{\prime} 000 \mathrm{lb}$. | 5,259 | 2,927 | (a) | 1,037 | (a) | $\ldots$ | 10,371 |
| Curing on commission ${ }^{\prime} 000 \mathrm{lb}$. | 4,975 | 197 | (a) | (a) | (a) | (a) | 5,199 |
| Sugar used .. ton | 46 | 37 | 173 | 20 | 30 | 14 | 320 |
| Finished bacon and ham made (b) |  |  |  |  |  |  |  |
| On own account '000 lb. | 17,422 | 14,403 | 18,372 | 6,538 | 6,581 | 1,758 | 65,074 |
| On commission " | 5,656 | 556 | 220 | 113 | (a) | (a) | 6,597 |
| Green bacon and ham ", | . 971 | 2,048 | 1,092 | 462 | 752 | 374 | 5,699 |
| Lard produced . . , | 3,972 | 6,313 | 25,774 | 4,776 | 10,064 | 896 | 51,795 |

(a) Not available for publication; figures are included in the total for Australia.
(b) Includes. s moked 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 d:izd milk factories in each State for 1957-58 and for Australia for a series of years:-

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 74 | 131 | 81 | 41 | 18 | 21 | 366 |
| Number of persons employed | 2,447 | 5,417 | 1,574 | 756 | 302 | 374 | 10,870 |
| Salaries and wages paid .. £'000 | 2,199 | 5,345 | 1,257 | 594 | 254 | 346 | 9,995 |
| Value of power, fuel, etc., used £'000 | 643 | 1,532 | 266 | 113 | 65 | 73 | 2,692 |
| Value of materials used . $\mathbf{£}^{\prime} 000$ | 14,886 | 50,558 | 16,844 | 4,664 | 3,058 | 4,556 | 94,566 |
| Value of production $\quad . \quad \mathbf{E}^{\prime} 000$ | 3,210 | 11,617 | 2,458 | 906 | 467 | . 903 | 19,561 |
| Total value of output $\quad . . \mathfrak{E}^{\prime} 000$ | 18,739 | 63,707 | 19,568 | 5,683 | 3,590 | 5,532 | 116,819 |
| Value of land and buildings $£^{\prime} 000$ | 3,265 | 6,233 | 1,750 | 692 | 247 | 371 | 12,558 |
| Value of plant and machinery $£$ '000 | 3,666 | 7,525 | 2,590 | 732 | 368 | 373 | 15,254 |
| Horse-power of engines ordinarily $\qquad$ | 30,874 | 41,445 | 25,027 | 7,458 | 2,345 | 2,498 | 109,647 |
| Australia. |  |  |  |  |  |  |  |
| Items. |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| Number of factories ... |  | 523 | 380 | 379 | ${ }^{3} 375$ | $\underline{371}$ | $36 \overline{6}$ |
| Number of persons employed |  | 6,851 | 10,580 | 10,567 | 11,119 | 11,189 | 10,870 |
| Salaries and wages paid | £'000 | 1,570 | 8,416 | 8,680 | 9,568 | 10,068 | 9,995 |
| Value of power, fuel, etc. used | £'000 | 390 | 2,396 | 2,423 | 2,741 | 2,797 | 2,692 |
| Value of materials used | $£^{\prime} 000$ | 29,162 | 94,020 | 100,706 | 106,883 | 101,517 | 94,566 |
| Value of production | $£^{\prime} 000$ | 3,543 | 15,914 | 15,394 | 18,893 | 19,265 | 19,561 |
| Total value of output | $\mathrm{f}^{\prime} 000$ | 33,095 | 112,330 | 118,523 | 128,517 | 123,579 | 116,819 |
| Value of land and buildings | £'000 | 2,880 | 9,365 | 10,037 | 11,188 | 11,985 | 12,558 |
| Value of plant and machinery | $£^{\prime} 000$ | 3,067 | 12,083 | 12,553 | 13,923 | 14,631 | 15,254 |
| Horse-power of engines ordinarily in | se h.p. | 45,059 | 94,863 | 98,442 | 102,182 | 108,157 | 109,647 |

(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 1957-58. These details are restricted to factory production and therefore exclude farm output.
BUTIER, CHEESE AND CONDENSED MILK, ETC., FACTORIES: PRODUCTION. 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Materials Used. |  |  |  |  |  |  |  |
| Whole Milk used in manufacture of |  |  |  |  |  |  |  |
| Cheese $\quad \because \quad \because \quad \therefore 000 \mathrm{gal}$, | $\begin{array}{r} 39,155 \\ 8,943 \end{array}$ | 41,453 | 11,847 | 23,012 | 3,180 |  | $\begin{array}{r} 801,991 \\ 78,159 \end{array}$ |
| Condensed, Dried and other Milk <br> Products .. .. '000 gal. <br> Sugar .. .. .. ton | 14,896 | 62,370 15,172 | (a) ${ }_{\text {a }}$ | 4 | $\underset{(a)}{2,722}$ | (a) ${ }^{2}$ | $\begin{aligned} & 88,173 \\ & 18,005 \end{aligned}$ |

Production.
(Tons.)

| Butter | 29,939 | 86,236 | 32,280 | 7,032 | 6,807 | 10,624 | 172,918 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cheese (Green Weight) | 4,042 | 14,840 | 5,175 | 10,495 | 1,017 | 326 | 35,895 |
| Condensed Milk (Sweetened and Unsweetened | (a) | 43,408 |  |  | (a) |  | 47,140 |
| Concentrated- |  |  |  |  |  |  |  |
| Whole Milk | (a) | (a) | (a) |  | (a) | (a) | 12,439 6,285 |
| Powdered Full Cream MilkSpray | (a) | 11,095 | (a) | (a) | (a) |  | 16,876 |
| Infants' and Invalids' Food (including Malted Milk and Milk Sugar (Lactose)) | (a) | (a) |  |  |  | (a) | 1,197 13,977 |
| Powdered Skim MilkSpray Roller | $\} 5,613$ | 17,519 | (a) | (a) | (a) | $\cdots\{$ | 20,175 4,405 |
| Buttermilk and Whey Powder. | 820 | 3,448 | 821 | (a) | (a) |  | 5,668 |
| Casein ${ }^{\text {Ice Cream Mix-- }}$ | 641 | 10,009 | (a) | .. | (a) | .. | 10,663 |
| Powder | (a) | (a) | (a) | (a) | (a) | . | 581 |
|  | (a) | (a) | (a) |  |  | - | 5,022 |
| Processed Cheese, Cheese Paste and Chesse Spreads ( $b$ ) .. .. | (a) | (a) | (a) |  |  | - | 14,407 |

[^5] 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 deait witi more fuily 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.
1957-58.

| Items. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 32 | 106 | 114 | 116 | 113 | 114 |
| Number of persons employed | 4,093 | 9,113 | 9,432 | 9,550 | 8,866 | 8,878 |
| Salaries and wages paid .. . . '0000 $^{\prime}$ | 1,180 | 7,395 | 8,327 | 8,704 | 8,366 | 8,690 |
| Value of power, fuel, etc. used . ${ }^{\prime}$ '000 | 134 | 1,015 | 1,110 | 1,119 | 1,099 | 1,128 |
| Value of materials used .. .. £ ${ }^{\prime} 000$ | 6,351 | 46,671 | 46,642 | 46,359 | 45,483 | 45,695 |
| Value of production .. .. £'000 | 1,601 | 11,374 | 12,182 | 14,345 | 14,385 | 13,723 |
| Total value of output .. .. £'000 | 8,086 | 59,060 | 59,934 | 61,823 | 60,967 | 60,546 |
| Value of land and buildings $\quad$. $£$ '000 | 1,966 | 4,500 | 5,403 | 5,934 | 6,241 | 6,710 |
| Value of plant and machinery $\quad . . \quad £^{\prime} 000$ | 1,325 | 2,826 | 3,409 | 4,118 | 4,147 | 4,594 |
| Horse-power of engines ordinarily in use h.p. | 13,385 | 31,810 | 35,600 | 33,086 | 36,517 | 36,956 |

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 1957-58 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 extrancous activities include cooperage, malt worl ;, aerated waters, etc.

BREWERIES.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 6 | 6 | 6 | 3 | 3 | 2 | 26 |
| Number of persons employed | 1,911 | 1,872 | 878 | (a) | (a) | (a) | 5,909 |
| Salaries and wages paid . $£$ '006 | 2,070 | 2,020 | 783 | (a) | (a) | (a) | 6,228 |
| Value of power, fuel, etc. used $£$ '000 | 548 | 360 | 228 | (a) | (a) | (a) | 1,479 |
| Value of materials used .. $£^{\prime} 000$ | - 91 | 7,292 | 2,226 | (a) | (a) | (a) | 22,146 |
| Value of production . . $£^{\prime} 000$ | 6, ! | 4,114 | 2,581 | (a) | (a) | (a) | 17,271 |
| Total value of output(b) . $£^{\prime} 000$ | 15,76 | 11,766 | 5,035 | (a) | (a) | (a) | 40,896 |
| Value of land and buildings $£$ '000 | 3,745 | 2,978 | 2,956 | (a) | (a) | (a) | 11,797 |
| Value of plant and machinery $£$ '000 | 5,070 | 4,360 | 2,358 | (a) | (a) | (a) | 15,510 |
| Horse-power of engines ordinarily in use .. .. h.p. | 15,461 | 11,765 | 8,455 | (a) | (a) | (a) | 44,869 |

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

Excise Duty.

BREWERIES-continued.
Australia.

| Australia. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Items. |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-5 | 1957-58. |
| Number of factories |  | 34 | 31 | 30 | 28 | 27 | 26 |
| Number of persons employed .. |  | 3,698 | 6,193 | 6,791 | 6,835 | 6,107 | 5,909 |
| Salaries and wages paid .. .. | £'000 $^{\prime}$ | 1,215 | 5,325 | 6,272 | 6,588 | 6,196 | 6,228 |
| Value of power, fuel, etc., used | £'000 | , 251 | 1,366 | 1,369 | 1,396 | 1,509 | 1.479 |
| Value of materials used .. | £'000 | 3,407 | 19,975 | 20,810 | 22,437 | 21,238 | 22,146 |
| Value of production | £'000 | 5,372 | 13,048 | 14,855 | 15,224 | 16,266 | 17,271 |
| Total value of output(a) | £'000 | 9,030 | 34,389 | 37,034 | 39,057 | 39,013 | 40,896 |
| Value of land and buildings | £'000 | 2,801 | 7,256 | 8,307 | 10,099 | 11,069 | 11,797 |
| Value of plant and machinery | £'000 | 2,737 | 7,681 | 10,295 | 12,917 | 14,863 | 15,510 |
| Horse-power of engines ordinarily in use | h.p. | 23,231 | 38,803 | 42,359 | 44,908 | 45,268 | 44,869 |

(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 1958-59 amounted to over 228 million gallons.

The average annual consumption of ale, beer and stout prior to the economic depression of the early thirties exceeded 11 gallons per head of the population: 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. The consumption per head had increased to 22.1 gallons by 1958-59.

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 1957-58:-

BREWERIES: MATERIALS USED AND PRODUCTION, 1957-58.


Ale, Beer and Stout Brewed (excluding Waste Beer).

| Quantity | . . 000 gals. | 94,199 | 66,752 | (a) | (a) | (a) | (a) | 226,449 40,308 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Value (b) | £'000 | 15,602 | 11,616 | (a) | (a) | (a) | (a) | 40,308 |

(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 1957-58 and for Australia for a series of years:-

WINERIES AND DISTILLERIES.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 31 | 28 | 5 | 74 | 22 | $\cdots$ | 160 |
| Number of persons employed | 224 | 361 | 165 | 1,245 | 71 | . . | 2,066 |
| Salaries and wages paid . $£^{\prime} 000$ | 222 | 315 | 150 | 1,073 | 40 | . . | 1,800 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 115 | 105 | 62 | 141 | 3 | . | 426 |
| Value of materials used . . $£^{\prime} 000$ | 1,461 | 1,048 | 393 | 4,391 | 155 | . | 7,448 |
| Value of production .. £'000 | 638 | 1,488 | 314 | 2,028 | 101 | . | 4,569 |
| Total value of output .. £'000 | 2,214 | 2,641 | 769 | 6,560 | 259 | . | 12,443 |
| Value of land and buildings $£^{\prime} 000$ | 423 | 360 | 115 | 1,490 | 70 | * | 2,458 |
| Value of plant and machinery $£$ '000 | 505 | 292 | 366 | 1,112 | 64 | . | 2,339 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 1,328 | 2,207 | 777 | 6,873 | 363 | . | 11,548 |

## WINERIES AND DISTILLERIES-contintued.

Australia.

33. Tobacco, Cigars and Cigarettes.-Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1957-58 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.
1957-58.

| Items. | N.S.W. | Vic. | Q'land. | W. Aust. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 11 | 10 | $)^{4}$ | 2 | 27 |
| Number of persons employed | 2,723 | 1,949 | (a) | (a) | 4,754 |
| Salaries and wages paid .. ${ }^{\prime}$ '000 | 2,461 | 1,696 | (a) | (a) | 4,203 |
| Value of power, fuel, etc., used .. $£^{\prime} 000$ | 72 | 70 | (a) | (a) | 145 |
| Value of materials used .. £'000 | 20,890 | 14,426 | (a) | (a) | 35,408 |
| Value of production .. .. £ ${ }^{\prime} 000$ | 6,482 | 4,650 | (a) | (a) | 11,177 |
| Total value of output(b) .. £ ${ }^{\prime} 0000$ | 27,444 | 19,146 | (a) | (a) | 46,730 |
| Value of land and buildings .. $\mathbf{f}^{\prime} 000$ | 736 | 1,999 | (a) | (a) | 2,962 |
| Value of plant and machinery $\because \quad \mathbf{E}^{\prime} 000$ | 1,899 | 2,088 | (a) | (a) | 4,156 |
| Horse-power of engines ordinarily in use h.p. | 6,821 | 3,343 | (a) | (a) | 10,586 |

AUSTRALIA.

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

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 1957-58 usage was 7.2 million lb. For further information see Chapter XXII.Agricultural Production.

Imports of tobacco during 1957-58 comprised: manufactured tobacco, $402,388 \mathrm{lb}$., cigars, $86,165 \mathrm{lb}$., cigarettes, $370,842 \mathrm{lb}$., unmanufactured tobacco, $43,029,219 \mathrm{lb}$.; and in 1958-59 were $367,441 \mathrm{lb} ., 91,394 \mathrm{lb} ., 391,203 \mathrm{lb}$. and 38,671,462 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.

1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 1,639 | 3,117 | 3,033 | 3,025 | 3,000 | 2,910 |
| Number of persons employed | $\cdots$ - 0000 | 19,056 | 35,448 | 36,631 | 37,102 | 35,835 | 35,185 |
| Salaries and wages paid | $\mathrm{f}^{\prime} 000$ | 3,626 | 23,536 | 25,530 | 27,086 | 27,563 | 27,932 |
| Value of power, fuel, etc., used | £'000 | 225 | 1,639 | 1,805 | 1,938 | 2,056 | 2,143 |
| Value of materials used .. | $\chi^{\prime} 000$ | 8,441 | 53,908 | 61,073 | 65,618 | 66,817 | 69,644 |
| Value of production | f'000 | 5,762 | 39,799 | 45,319 | 47,042 | 47,928 | 50,246 |
| Total value of output | $£^{\prime} 000$ | 14,428 | 95,346 | 108,197 | 114,598 | 116,801 | 122,033 |
| Value of land and buildings | £'000 | 2,029 | 8,775 | 10,321 | 11,136 | 12,079 | 13,924 |
| Value of plant and machinery | $£^{\prime} 000$ | 2,777 | 12,504 | 14,896 | 16,201 | 17,086 | 17,971 |
| Horse-power of engines ordinari | in use h.p. | 89,843 | 336,951 | 359,786 | 371,003 | 378,902 | 380,203 |

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and by 1958-59 had risen to 1,480 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 1957-58:-

CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 536 | 542 | 236 | 120 | 150 | 60 | 1,644 |
| Number of persons employed | 6,033 | 4,743 | 2,252 | 1,506 | 1,009 | 386 | 15,929 |
| Salaries and wages paid .. $£^{\prime} 000$ | 5,183 | 3,807 | 1,459 | 1,110 | 654 | 249 | 12,462 |
| Value of power, fuel, etc., used $£^{\prime}$ '000 | 127 | , 94 | 37 | , 30 | 18 | 5 | 311 |
| Value of materials used . . $£$ '000 | 9.067 | 5,868 | 2,591 | 1,765 | 1,209 | 360 | 20,860 |
| Value of production . . $£$ '000 | 8,287 | 6,424 | 2,273 | 1,685 | 1,070 | 424 | 20,163 |
| Total value of output . . £'000 | 17,481 | 12,386 | 4,901 | 3,480 | 2,297 | 789 | 41,334 |
| Value of land and buildings $£$ '000 | 3,393 | 3,201 | 1,090 | 613 | 572 | 200 | 9,069 |
| Value of plant and machinery $£$ '000 | 864 | 811 | 348 | 267 | 168 | 57 | 2,515 |
| Horse-power of engines ordinarily in use .. .. .. b.p. | 14,792 | 14,431 | 7,472 | 5,112 | 3,363 | 1,277 | 46,447 |

36. Printing Works.-Printing and bookbinding rank high in importance among the industries of Australia and in 1957-58 afforded employment for 40,303 employees, and paid $£ 36,096,000$ in salaries and wages while the value of output amounted to $£ 119,993,000$. The first table below gives particulars of establishments engaged in general printing in each State for 1957-58. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table:-

GOVERNMENT AND GENERAL PRINTING WORKS. 1957-58.

| Items. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |

NEWSPAPERS AND PERIODICALS, 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 179 | 106 | 58 | 37 | 22 | 5 | 407 |
| Number of persons employed | 6,946 | 2,924 | 2,253 | 1,127 | 731 | 406 | 14,387 |
| Salaries and wages paid .. £'000 | 6,807 | 2,951 | 1,963 | 1,090 | 758 | 428 | 13,997 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 285 | 7115 | , 79 | . 35 | 40 | 8 | 562 |
| Value of materials used . . $£^{\prime} 000$ | 11,346 | 7,268 | 2,977 | 2,033 | 1,314 | 361 | 25,299 |
| Value of production .. $\mathbf{f}^{\prime} 0000$ | 12,321 | 5,224 | 3,720 | 2,097 | 1,624 | 594 | 25,580 |
| Total value of output . . $£^{\prime} 000$ | 23,952 | 12,607 | 6,776 | 4,165 | 2,978 | 963 | 51,441 |
| Value of land and buildings $£^{\prime} 000$ | 7,440 | 1,517 | 1,377 | 1,013 | 539 | 226 | 12,112 |
| Value of plant and machinery $£^{\prime} 000$ | 6,109 | 1,790 | 1,428 | 616 | 640 | 250 | 10,833 |
| Horse-power of engines ordinarily in use .. .. h.p. | 14,815 | 9,862 | 5,968 | 3,438 | 2,554 | 803 | 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, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938-39 to 88,000 tons in 1946-47. It remained at about this level until 1949-50 but has since increased steadily to a total of nearly 208,000 tons in 1957-58.

The number of factories operating in 1957-58 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. |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

(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 1957-58 but excludes establishments engaged primarily in the retreading and repairing of tyres:-

RUBBER GOODS, 1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 42 | 54 | 12 | 8 | 2 | $\cdots$ | 118 |
| Number of persons employed | 6,833 | 6,254 | 1,096 | (a) | (a) | . | 15,017 |
| Salaries and wages paid .. £'000 | 6,891 | 6,280 | 894 | (a) | (a) | . | 14,931 |
| Value of power, fuel, etc., used $£^{\prime} 000$ | 929 | 991 | 116 | (a) | (a) |  | 2,131 |
| Value of materials used .. $£^{\prime} 000$ | 16,163 | 15,910 | 2,799 | (a) | (a) | . | 36,044 |
| Value of production .. £'000 | 9,359 | 12,001 | 2,014 | (a) | (a) | $\cdots$ | 24,782 |
| Total value of output .. £'000 | 26,451 | 28,902 | 4,929 | (a) | (a) | . | 62,957 |
| Value of land and buildings $£^{\prime} 000$ | 2,498 | 3,734 | 463 | (a) | (a) | . | 7,120 |
| Value of plant and machinery £'000 | 3,181 | 4,028 | 385 | (a) | (a) | . | 7,839 |
| Horse-power of engines ordinarily in use .. .. h.p. | 53,832 | 55,214 | 8,215 | (a) | (a) | . | 120,602 |

(a) Not available for publication ; figures are included in the total for Australia.
39. Electric Light and Power Works.-(i) Details of Industry. The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter VII.-Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1957-58 and for Australia for a series of years are shown below:-

## ELECTRIC LIGHT AND POWER WORKS.

1957-58.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 72 | 51 | 60 | 38 | 87 | 11 | 319 |
| Number of persons employed | 5,558 | 3,247 | 1,605 | (a) | 1,070 | (a) | 12,833 |
| Salaries and wages paid .. £'000 | 5,739 | 3,599 | 1,537 | (a) | 1,120 | (a) | 13,467 |
| Value of power, fuel, etc., used £'000 | 15,729 | 11,153 | 5,817 | (a) | 3,432 | (a) | 40,261 |
| Value of materials used .. £'000 | 2,300 | 677 | 978 | (a) | 288 | (a) | 4,740 |
| Value of production .. £'000 | 26,283 | 13,706 | 5,261 | (a) | 3,318 | (a) | 55,514 |
| Total value of output ... $£^{\prime} 000$ | 44,312 | 25,536 | 12,056 | (a) | 7,038 | (a) | 100,515 |
| Value of land and buildings $£^{\prime} 000$ | 36,275 | 17,444 | 9,078 | (a) | 2,813 | (a) | 107,162 |
| Value of plant and machinery $£$ '000 | 74,893 | 63,659 | 32,964 | (a) | 16,646 | (a) | 222,542 |
| Generators installed-Kilowatt cap- <br> acity .. .. 000 kW | 1,928 | 1,160 | 597 | (a) | 299 | (a) | 4,881 |

## ELECTRIC LIGHT AND POWER WORKS-continued.

Australia.

| Items. |  |  | 1938-39. | 1953-54. | 1954-55. | 1955-56. | 1956-57. | 1957-58. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  |  | 395 | 351 | 351 | 332 | 328 | 319 |
| Number of persons employed |  |  | 6,508 | 11,395 | 11,927 | 12,111 | 12,473 | 12,833 |
| Salaries and wages paid |  | $£^{\prime} 000$ | 1,977 | 10,308 | 11,457 | 12,497 | 13,571 | 13,467 |
| Value of power, fuel, etc., used |  | £'000 | 3,239 | 35,083 | 36,548 | 37,479 | 39,830 | 40,261 |
| Value of materials used |  | £'000 | 530 | 4,800 | 4,170 | 4,090 | 4,396 | 4,740 |
| Value of production |  | £'000 | 8,714 | 30,098 | 37,568 | 43,219 | 50,722 | 55,514 |
| Total value of output |  | £'000 | 12,483 | 69,981 | 78,286 | 84,788 | 94,948 | 100,515 |
| Value of land and buildings |  | £'000 | 8,388 | 47,369 | 60,120 | 73,688 | 102,318 | 107,162 |
| Value of plant and machinery |  | £'000 | 27,751 | 122,773 | 146,273 | 158,377 | 198,269 | 222,542 |

(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 159.
(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.)

(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 1957-58 and for Australia for a series of years:-

GAS-WORKS.
1957-58.

| 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 |  | 1,393 | 1,372 | 359 | (a) | 184 | (a) | 3,783 |
| Salaries and wages paid .. | $£^{\prime} 000$ | 1,620 | 1,738 | 303 | (a) | 167 | (a) | 4,309 |
| Value of power, fuel, etc., used | £'000 | 2,051 | 417 | 43 | (a) | 104 | (a) | 2,720 |
| Value of materials used .. | $£^{\prime} 000$ | 5,935 | 5,703 | 1,079 | (a) | 618 | (a) | 15,030 |
| Value of production | $\mathrm{f}^{\prime} 000$ | 5,957 | 2,608 | 916 | (a) | 340 | (a) | 10,577 |
| Total value of output .. | $\mathrm{£}^{\prime} 000$ | 13,943 | 8,728 | 2,038 | (a) | 1,062 | (a) | 28,327 |
| Value of land and buildings | £'000 | 1,559 | 3,349 | 2,351 | (a) | 179 | (a) | 5,710 |
| Value of plant and machinery | £'000 | 6,920 | 12,554 | 2,116 | (a) | 1,585 | (a) | 26,823 |
| Horse-power of engines ordina use .. | rily in h.p. | 18,393 | 15,840 | 2,482 | (a) | 1,204 | (a) | 44,913 |


(a) Not available for publication; figures are included in the total for Australia.
(ii) Coal Used and Production. The following table shows details for 1957-58:-GAS-WORKS: COAL USED AND PRODUCTION, 1957-58.

| Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coal used . ${ }^{\text {, } 000}$ tons | 834 | 504 | 200 | (a) | 54 | (a) | 1,779 |
| Gas produced million cu. ft. | 22,506 | 16,684 | 3,153 | (a) | 1,420 | (a) | 47,655 |
| Gas sold | 18,732 | 14,295 | 2,701 | (a) | 1,223 | (a) | 40,394 |
| Coke produced ( $b$ ) '000' tons | 429 | 199 | 76 | (a) | 21 | (a) | 832 |

(a) Not available for publication; figures are included in the total for Australia.
(b) In addition 2,264,032 tons of metallurgical coke were made in Coke Works in 1957-58.

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 48,655 million cubic feet with an equivalent of 245,216 thousand therms ( 1 Therm $=100,000$ B.T.U.), in 1958-59.


[^0]:    (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.

[^1]:    (a) Excludes Central Electric Stations.
    (b) Excludes motors driven by electricity generated in

[^2]:    (a) Includes kitbags.
    (b) Excludes canvas waterbags. metal and bristle brushes. (d) Includes mixtures.
    (c) Excludes tooth and industrial

[^3]:    (a) Excludes motor car, motor cycle, tractor and aero engines.

[^4]:    (a) Not available for publication. Included with baketies.

[^5]:    (a) Not available for publication; figures are included in the total for Australia. (b) The

