

## PART XI. FACTORIES, FISHERIES, MINES, ETC.

### FISHERIES.

Certain particulars relating to the fishing industry in Victoria are given hereunder.

**VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED;  
 QUANTITY AND VALUE OF VICTORIAN FISH SOLD  
 IN VICTORIAN MARKETS DURING EACH OF THE  
 YEARS 1941-42 TO 1945-46.**

Year Ended 30th June.	Number of Men.	Boats Employed.		Value of Nets and Other Plant.	Victorian Fish Sold in Victorian Markets.			
					Fish.		Crayfish.	
		Number.	Value.		Quantity.	Value.	Quan- tity.	Value.
					lb.	£	doz.	£
1942 ..	1,501	969	131,595	26,654	12,843,152	454,862	4,496	8,992
1943 ..	1,682	994	134,094	38,841	11,388,160	443,663	2,508	4,307
1944 ..	1,928	1,117	175,036	46,569	9,723,280	405,136	1,824	3,313
1945 ..	2,082	1,190	243,866	55,352	9,310,336	397,629	1,242	2,244
1946 ..	2,329	1,194	306,585	65,803	11,923,072	543,719	2,313	4,164

**Melbourne  
 Fish Market.**

The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1944-45 and 1945-46 are shown in the next table:—

### FISH SOLD IN THE MELBOURNE FISH MARKET, 1944-45 AND 1945-46.

				Year Ended 30th June.			
				1945.		1946.	
				Quantity.	Value.	Quantity.	Value.
			£			£	
Fresh Fish (Victorian) ..	lb.	9,156,280	391,049	11,777,430	539,799		
Crayfish .. .. .	doz.	11,778	21,200	9,132	16,437		
Imported Fish (fresh or frozen) ..	lb.	2,866,740	188,734	3,063,540	200,991		
Oysters .. .. .	bags	6,160	30,566	5,328	26,403		
Total .. .. .			631,549		783,630		

**Victorian  
fish sold.**

The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and in other towns in Victoria in 1945-46 were:—

## VICTORIAN FISH SOLD IN 1945-46.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lb.	doz.	£	£
Melbourne .. .. .	11,777,430	2,313	539,799	4,164
Ballarat .. .. .	125,755	..	2,930	..
Other towns in Victoria ..	19,887	..	990	..
Total .. .. .	11,923,072	2,313	543,719	4,164

**Fish  
imported.**

Particulars of imports of fish into Victorian Ports from oversea countries in each of the two years 1944-45 and 1945-46 are given in the following statement:—

VICTORIA—FISH IMPORTED FROM OVERSEA,  
1944-45 AND 1945-46.

	Year Ended 30th June.			
	1945.		1946.	
	Quantity.	Value.	Quantity.	Value.
	lb.	£	lb.	£
Fish—				
Fresh or Preserved by Cold Process	1,847,615	72,881	1,941,864	91,100
Potted or Concentrated, &c. ..	660	656	5,751	2,735
Preserved in tins, &c. .. .. .	221,851	18,960	2,386,598	117,416
Other.. .. .	..	..	13,082	603
Total .. .. .	2,070,126	92,497	4,347,295	211,854

**RABBITS, ETC.**

**Frozen rabbits, &c., exported.** Large quantities of frozen rabbits and hares and of rabbit and hare skins are exported from Victorian Ports to oversea countries. The following table shows the quantities and values so exported during each of the years 1943-44 to 1945-46:—

**VICTORIA—RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA 1943-44 TO 1945-46.**

Year Ended 30th June—	Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
	Quantity.	Value.	Quantity.	Value.
	Pairs.	£	lb.	£
1943 .. .. .	95,793	10,283	3,234,179	988,346
1944 .. .. .	328,487	28,520	5,906,243	2,072,741
1945 .. .. .	1,379,537	160,675	5,750,112	1,750,681
1946 .. .. .	1,035,311	109,044	6,203,553	2,616,670

**Rabbits, &c., sold at Melbourne Fish Market.** The number of pairs of rabbits and hares sold at the Melbourne Fish Market in each of the past five years were as follows:—1941-42, 291,516; 1942-43, 251,928; 1943-44, 436,440; 1944-45, 570,880 and 1945-46, 479,532.

**MINES AND MINERALS.**

The rights of the Crown to all minerals on or below the surface of the ground were matters of dispute in English law over a very long period. By the time of Elizabeth, however, those rights, so far as pure gold and silver were concerned, were firmly established,<sup>(1)</sup> and the only remaining doubt was whether, if gold or silver was found intermixed with the baser metals, the whole became a royal mine. "Pure gold and silver, wherever found, whether in the demesnes of the Crown, in public roads, highways, in waste or unappropriated lands, or in the lands and tenures of private persons, are the absolute property of the Crown."<sup>(2)</sup>

(1) Arundel Rogers—The Law of Mines, Minerals, and Quarries.

(2) *Ibid.*

On 22nd May, 1851, just prior to the separation of Victoria from New South Wales, the Crown's prerogative in respect of gold was asserted, for the first time in Australia, in the following preamble of a proclamation by Sir Charles Augustus Fitz Roy :—

“Whereas by Law, all mines of Gold and all gold in its natural place of deposit within the Territory of New South Wales, whether on the lands of the Queen or of any of Her Majesty's subjects, belong to the Crown . . . . .”

The establishment in English law of the Crown's right to gold and silver and the doubt in respect of other minerals is apparently the reason for the distinction to be observed in Section 330 of the *Victorian Mines Act 1928*. Whilst sub-section (1) maintains the Crown's rights to gold and silver “on or below the surface of all land whatsoever in Victoria whether alienated or not alienated from the Crown, and if alienated whensoever alienated,” sub-section (2) limits the Crown's rights, in respect of minerals, to lands not alienated from the Crown on or before the 1st March, 1892. As, at that date, the Crown had parted with some sixteen million acres of the public estate in Victoria, or roughly two-sevenths of the area of the State, it will be seen that quite a considerable portion of Victoria is exempt from the Crown's rights to minerals other than gold or silver.

So far as minerals on the lands alienated on or before 1st March, 1892, are concerned, the position of the Crown in respect thereof has been clarified by the *Mines (Minerals) Act 1944*, which provides—

that a person may petition the Minister of Mines to bring land alienated on or before the 1st March, 1892, under the *Mines Act 1928*, for the purpose of the mining of minerals (other than silver and petroleum) thereon ;

that the Minister upon such petition or of his own motion may direct a geological survey of any such land ;

that where such survey discloses a reasonable probability of the land containing any such mineral in payable quantities the Minister may require the owner and occupier within six months to make suitable arrangements for its mining ; and that, if such arrangements are not made, the land may be brought under the operation of Part III. of the *Mines Act 1928* by a declaration of the Governor in Council, upon which the minerals therein or thereon will be vested in the Crown and the provisions of the *Mines Act 1928* relating to mineral leases will apply thereto, but so that the petitioner, if any, shall have a preferential right to the grant of a mineral lease. Compensation to be paid to the owner

shall be on the higher scale provided in the *Mines Act* 1928, and 90 per cent. of the rents and royalties paid to the Crown under the lease shall be paid by the Crown to the owner.

Since the passing of the *Land Act* 1891, the rights of the Crown to the minerals in the earth are safeguarded by the inclusion, in all Crown Grants of land issued after the commencement of such Act, of a special "depth condition," which limits the title of the land to the surface and, usually, to 50 feet below the surface thereof. The same Act, in Section 12, provided that:—

"so far as regards any metal or mineral declared by any Act to be the property of the Crown, no grant or lease or licence (not being solely a mining lease or licence) made after the passing of this Act of any land of the Crown shall purport to or shall pass or convey the property in or right to any metal or mineral on, in or under such land, but the same shall remain the property of the Crown."

**Regulation of mining.** The supervision of mining and the inspection of mines are regulated by Act of Parliament.

**Miners' rights.** The taking out of a "Miner's Right" entitles the holder to prospect for gold on Crown lands. The "Right" may be had for any number of years not exceeding fifteen on payment of a fee at the rate of 2s. 6d. per annum. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands which is called a "claim." "Claims" may also be taken up under certain conditions on private land. The authority to occupy Crown land under a Miner's Right as a residence area was withdrawn in 1935 by Act No. 4319. The revenue in 1945-46 from "Miners' Rights" was £210.

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

**Petroleum leases and licences.** Under the Mines (Petroleum) Acts petroleum mineral leases of not more than 100 square miles and petroleum prospecting licences covering a maximum area of 200 square miles are granted, over Crown lands and land alienated since 1st March, 1892, at yearly rentals of 6d. and 1d. per acre, respectively. There was no revenue from these two sources in 1945-46.

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

The area of Crown and of private lands occupied under the Mines Acts on 31st December, 1946, was 645,858 acres. The subjoined table shows the area being worked for different minerals under such Acts.

VICTORIA—AREA OCCUPIED UNDER THE MINES ACTS,  
31st DECEMBER, 1946.  
(Crown Land and Private Land.)

Nature of Lease or Licence.	Area.	Nature of Lease or Licence.	Area.
	Acres.		Acres.
Gold .. .. .	24,024	Kaolin and Gold .. .. .	6
Coal (black)* .. .. .	9,677	Limestone .. .. .	129
Coal (brown)† .. .. .	3,271	Magnesite .. .. .	57
Coal (black and brown) .. .. .	100	Marble .. .. .	6
Antimony .. .. .	84	Mineral Water and Gas .. .. .	1
Antimony and Gold .. .. .	28	Molybdenite .. .. .	30
Barytes .. .. .	45	Ochre .. .. .	6
Basalt .. .. .	3	Oil and Gas‡ .. .. .	605,335
Bauxite .. .. .	305	Pigment .. .. .	12
Bluestone .. .. .	13	Sand .. .. .	20
Clay .. .. .	97	Silver, Lead, and Fluorspar .. .. .	23
Granite .. .. .	24	Tailings Licences .. .. .	1,133
Gypsum .. .. .	891	Water Right Licences .. .. .	398
Kaolin .. .. .	48	Wolfram .. .. .	92
		Total .. .. .	645,858

\* Includes State Coal Mine Area, 7,575 acres.

† Includes State Electricity Commission Area, 2,800 acres.

‡ Includes Petroleum Prospecting Licences, 604,806 acres.

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

Certain mineral leases include the right to mine for gold.

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

Since 1935 advances to mining companies have been made under the joint Commonwealth-State scheme for the development of metalliferous mining. The amount so expended up to 31st December, 1946, amounted to £100,018.

**VICTORIA—STATE EXPENDITURE AND REVENUE  
CONNECTED WITH MINING, 1941-42 TO 1945-46.**

Item.	Expenditure from Consolidated Revenue.				
	Year ended 30th June.				
	1942.	1943.	1944.	1945.	1946.
<b>EXPENDITURE.</b>	£	£	£	£	£
Mines Department .. ..	28,959	27,799	25,491	27,539	30,678
State Coal Mine .. ..	438,317	475,188	446,282	446,479	397,530
Boring for Gold, Coal, Oil, &c. ..	6,225	7,263	8,201	13,470	8,618
State Batteries—Expenses of Operation and Maintenance ..	6,537	4,235	4,372	3,082	3,288
Geological and underground surveys of mines .. ..	1,444	1,355	569	1,078	1,362
Laboratory Expenses, &c. ..	514	168	265	265	397
Contribution towards Lakes Entrance Oil Development ..	..	12,263	8,326	9,499	5,191
Miscellaneous .. ..	1,511	3,340	1,200	2,318	1,010
<b>Total .. ..</b>	<b>483,507</b>	<b>531,611</b>	<b>494,706</b>	<b>503,730</b>	<b>448,074</b>
<b>REVENUE.</b>					
State Coal Mine .. ..	337,361	410,466	395,142	397,739	344,979
All other .. ..	17,317	14,083	14,947	12,829	18,150
<b>Total .. ..</b>	<b>354,678</b>	<b>424,549</b>	<b>410,089</b>	<b>410,568</b>	<b>363,129</b>

**Total mineral production.** The mineral production of the State from lands occupied under the Mines Act (excluding stone raised in quarries, and salt) for the year 1946 and the aggregate mineral production up to 31st December, 1946, are shown in the subjoined statement:—

### VICTORIA—MINERAL PRODUCTION.

Metals and Minerals.	During 1946.		Total to 31st December, 1946.*	
	Quantity.	Value.	Quantity.	Value.
	Fine Oz.	£	Fine Oz.	£
Gold .. .. .	86,993	936,268	72,911,667	325,653,613
Platinum .. .. .	..	..	311	1,671
Silver .. .. .	13,560	2,687	1,640,285	248,363
	Tons.		Tons.	
Antimony concentrates ..	7	409	105,971	636,830
Barytes .. .. .	..	..	69	270
Bauxite .. .. .	2,314	3,406	25,099	27,578
Coal, black .. .. .	191,290	397,662	20,207,525	16,754,144
Coal, brown .. .. .	5,707,039	706,504	70,362,378	7,822,519
Copper ore .. .. .	..	..	18,740	218,620
Diatomaceous earth .. ..	1,113	4,098	17,117	91,275
Felspar .. .. .	..	..	662	2,362
Fluorspar .. .. .	321	2,247	3,074	9,444
Gypsum .. .. .	14,944	6,534	305,968	171,973
Iron ore .. .. .	..	..	5,461	12,552
Kaolin and other pottery clays ..	5,875	7,738	92,106	138,823
Manganese ore .. .. .	..	..	422	2,009
Magnesite .. .. .	..	..	3,296	11,041
Molybdenite .. .. .	..	..	1,005	63,984
Phosphatic rock .. .. .	..	..	15,781	16,704
Pigment clays .. .. .	..	..	4,502	5,623
Red oxide ex Jarosite .. ..	..	..	109	1,359
Silver lead ore .. .. .	..	..	804	5,992
Tin concentrates .. .. .	64	14,917	18,503	1,255,807
Wolfram .. .. .	..	..	137	18,965

\* Diamonds valued at £128 and sapphires £630 have been discovered.

*Note.*—The value of gold as shown above is based on the average value of Victorian gold received at the Melbourne Mint.

Gold  
production  
in Victoria.

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

### GOLD PRODUCTION IN VICTORIA, 1851 TO 1946.

Period.	Quantity (Gross oz.).	Period.	Quantity (Fine oz.).
1851-60 .. ..	23,334,263	1936 .. ..	117,596
1861-70 .. ..	16,276,566	1937 .. ..	145,799
1871-80 .. ..	10,156,297	1938 .. ..	144,243
1881-90 .. ..	7,103,448	1939 .. ..	156,522
1891-1900 .. ..	7,476,038	1940 .. ..	180,567
1901-10* .. ..	7,095,061	1941 .. ..	149,769
1911-15 .. ..	2,161,349	1942 .. ..	101,497
1916-20 .. ..	905,561	1943 .. ..	56,511
1921-25 .. ..	421,250	1944 .. ..	54,086
1926-30 .. ..	171,927	1945 .. ..	61,790
1931-35 .. ..	307,370	1946 .. ..	86,993

\* Gross oz. 1851-1900; fine oz. from 1901 inclusive.

From 1906 until 1930 the yield of gold continued to decrease, that for 1930 (24,119 gross oz.) being the lowest since 1851. In 1930 both the State and Commonwealth Governments undertook a campaign to encourage prospecting and mining, particularly amongst the unemployed, and this resulted in a gradual increase in the production of gold throughout the State. A steady increase in the world price of gold and the depreciation of the Australian Currency in terms of gold further stimulated the mining industry until 1941 when, owing to man-power restrictions due to the necessities of the war effort, production declined. It reached the low figure of 54,086 ounces in 1944 but in each of the two following years a slight increase was experienced. The price of gold in Australia in 1930 was £4 8s. 9d. per fine ounce (export parity calculated from London price). In 1947 the Australian Mint price per fine ounce was £10 15s. 3d.

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

The yields in fine ounces in the other principal gold-producing States in 1946 were 616,964 in Western Australia, 62,733 in Queensland, and 32,009 in New South Wales.

The total production of the Commonwealth in fine ounces was 1,178,581 in 1936, 1,381,135 in 1937, 1,592,034 in 1938, 1,645,697 in 1939, 1,643,999 in 1940, 1,495,367 in 1941, 1,155,086 in 1942, 751,279 in 1943, 654,467 in 1944, 657,212 in 1945, and 824,480 in 1946.

The total production of gold in the world in fine ounces, as shown in the United States Mint Report, was 25,400,295 in 1933, 27,372,374 in 1934, 29,999,245 in 1935, 32,930,554 in 1936, 35,118,298 in 1937, 37,703,334 in 1938, 39,534,430 in 1939, 41,067,101 in 1940, and 40,332,204 in 1941. No information is available for later years.

**Mining district gold yields.**

The yield of gold (given in gross ounces) for 1945 and 1946 in each mining district of the State, as estimated by the mining registrars, is shown in the following table:—

**VICTORIA—DISTRICT YIELDS OF GOLD (ALLUVIAL AND QUARTZ) 1945 AND 1946.**

Mining District.	1945.			1946.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	oz.	oz.	oz. (gross)	oz.	oz.	oz. (gross)
Ararat and Stawell ..	5	63	68	11	159	170
Ballarat .. ..	520	1,377	1,897	1,705	2,351	4,056
Beechworth .. ..	2,212	31,945	34,157	5,178	36,880	42,058
Bendigo .. ..	119	19,709	19,828	423	32,417	32,840
Castlemaine .. ..	3,560	17,040	20,600	3,290	10,379	13,669
Gippsland .. ..	46	2,737	2,783	83	3,309	3,392
Maryborough .. ..	93	1,839	1,932	119	2,053	2,172
Total .. ..	6,555	74,710	81,265	10,809	87,548	98,357

**Government batteries, cyanidation, and dredging and sluicing.**

Particulars relating to the operations of Government batteries, all cyanide works, and of dredging and sluicing plants for the years 1942 to 1946 are as follows:—

**VICTORIA—GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1941 TO 1946.**

Year.	Government Batteries.			Cyanidation.			Dredging and Sluicing.		
	Number of Batteries Operating.	Quantity of Ore Treated for Gold.	Yield of Gold.	Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Number of Plants.	Quantity of Material Treated.	Yield of Gold.
		tons.	fine oz.		tons.	fine oz.		cu. yds.	fine oz.
1941 ..	27	7,593	4,226	165	1,176,936	37,050	38	7,242,316	26,601
1942 ..	20	2,848	2,556	85	626,643	19,869	22	7,160,936	25,035
1943 ..	14	1,108	1,054	36	78,716	6,626	15	4,660,474	16,563
1944 ..	9	1,318	969	20	59,045	2,936	7	2,158,823	10,764
1945 ..	11	589	515	22	47,197	2,442	7	3,290,050	6,035
1946 ..	12	979	740	40	262,810	8,694	15	4,530,956	14,129

The first Government battery was erected in 1897. Since that date Government batteries have crushed 246,490 tons of ore for 135,623 oz. of gold.

Up to the end of 1946, tailings aggregating 25,261,501 tons had been treated by the cyanide and other processes, and 1,601,120 oz. of gold had been won therefrom.

Since the inception of mechanical dredge and sluice mining 2,143,333 oz. of gold have been won by these systems.

**Coal.** Bituminous coal was mined during 1946 at Kilcunda, Korumburra, Outtrim, and Wonthaggi, and brown coal at Bacchus Marsh, Dean Marsh, Thorpdale, Wensleydale, and Yallourn. The coal resources of Victoria have been described in detail in previous issues of the *Year-Book*.

**Production of black coal, brown coal, and briquettes.** The average annual production and value per ton of black and brown coal, and the production of briquettes up to the end of 1946 are given in the following table:—

### VICTORIA—COAL PRODUCTION AND VALUE PER TON.

Period.	Black Coal.		Brown Coal.		Briquettes— Annual Production.
	Annual Production.	Value per Ton at Pit's Mouth.	Annual Production.	Cost of Production per Ton at Mine.	
	tons.	s. d.	tons.	s. d.	tons.
Prior to 1892 ..	77,914	18 8			
1892-1900 ..	184,517*	9 11			
1901-10 ..	168,548*	11 8	} 81,748†	6 10	..
1911-15 ..	608,512*	9 2			
1916-20 ..	437,833*	15 11	76,514*	6 9	..
1921-25 ..	520,705*	22 8	258,094*	4 9	77,945‡
1926 ..	591,001	22 3	957,935	3 11	95,477
1927 ..	684,245	22 4	1,455,482	3 0	121,644
1928 ..	658,323	22 2	1,591,858	2 6	131,349
1929 ..	703,828	23 1	1,741,176	2 1	146,548
1930 ..	703,487	23 0	1,831,507	1 11	180,905
1931 ..	571,342	12 8	2,194,452	2 3	290,558
1932 ..	432,353	12 9	2,612,512	2 1	319,979
1933 ..	523,000	12 7	2,580,060	2 5	310,767
1934 ..	356,958	12 1	2,617,534	2 0	316,594
1935 ..	476,495	11 10	2,221,515	2 3	317,200
1936 ..	426,725	11 11	3,044,897	2 2	355,088
1937 ..	257,945	12 0	3,393,919	1 11	390,493
1938 ..	307,258	12 3	3,675,450	1 11	414,059
1939 ..	364,895	12 10	3,651,014	2 1	414,598
1940 ..	267,694	15 3	4,280,275	2 0	427,530
1941 ..	326,441	17 2	4,565,638	1 10	419,104
1942 ..	312,854	24 7	4,933,861	1 11	416,928
1943 ..	287,100	27 5	5,091,729	2 1	411,355
1944 ..	257,692	29 3	5,016,437	2 3	428,844
1945 ..	247,297	37 11	5,445,108	2 4	455,076
1946 ..	191,290	40 5	5,707,039	2 6	504,275

\* Average annual production. † Total production to 1916.

‡ 1,392 tons in 1924, 76,553 tons in 1925.

The quantities of coal which were produced in the other States during the last five years were as follows:—

### COAL PRODUCTION—IN STATES OTHER THAN VICTORIA.

Year.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
	tons.	tons.	tons.	tons.	tons.
1942 .. ..	12,236,219	1,637,148	1,650*	581,176	134,442
1943 .. ..	11,528,893	1,699,521	..	531,546	145,882
1944 .. ..	11,102,138	1,659,675	34,620*	558,323	143,641
1945 .. ..	10,176,254	1,637,467	41,383*	546,692	146,185
1946 .. ..	11,216,535	1,567,520	135 460*	642,287	158,751

\* Sub-bituminous.

#### Tin Production in Victoria.

According to returns supplied to the Mines Department by the various Mining Companies, the amount of tin concentrates obtained in Victoria up to 31st December, 1946, was 18,503 tons, valued at £1,255,807. A large proportion of this yield was obtained as an incidental return from gold-mining operations.

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

#### Mining Accidents.

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

### VICTORIA—MINING ACCIDENTS, 1942 TO 1946.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1942 .. ..	1,101	1	8	1,850	..	7
1943 .. ..	719	..	4	1,864	1	12
1944 .. ..	841	..	..	1,809	2	9
1945 .. ..	643	..	2	1,600	3	4
1946 .. ..	1,282*	..	7	1,579†	1	7

\* 1946, Alluvial, 350; Quartz, 932.

† 1946, Surface, 922; Underground, 657.

**Quarries.** The recorded quantities and values of the principal kinds of stone raised in Victoria during the past five years are as set forth in the following table:—

VICTORIA—QUARRIES AND STONE-CRUSHING PLANTS,  
1941-42 TO 1945-46.

Year ended 30th June—	Number of Returns.	Main Kinds of Stone Extracted.				Approximate Value of Stone Raised. *
		Bluestone.	Sand-stone.	Granite.	Limestone.	
		cub. yds.	cub. yds.	tons.	tons.	£
1942 ..	108	902,079	29,562	16,764	381,719	437,185
1943 ..	98	666,405	16,697	35,617	287,886	393,090
1944 ..	103	591,208	11,162	31,274	346,507	417,010
1945 ..	93	554,978	9,867	31,290	317,469	454,849
1946 ..	91	652,696	7,832	35,887	327,840	549,318

\* Wholesale selling value of stone at the works, exclusive of delivery charges.

In former years the recorded production of stone was confined to that of registered quarries, i.e., those quarries with a fixed plant in regular and permanent production. In recent years, however, an endeavour has been made to record the production by contractors who require material from a source as adjacent as possible to the work for which they are suppliers and who open up quarries for this purpose or exploit stone outcrops, mine tailings, &c.

Much of the sand and gravel used in road, railway, and general building is obtained from sources other than regular sand and gravel pits; limestone rubble extensively used on roads in the north-western portion of the State is usually obtained from adjacent outcrops. It has been found impracticable to obtain quantities and values of all such materials.

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

**VICTORIA—QUANTITY OF STONE, ETC., USED FOR  
ROAD MAKING, REPAIR, AND MAINTENANCE.**

Material.	Municipalities.		Railways.		Country Roads Board.	
	1944-45.	1945-46.	1944-45.	1945-46.	1944-45.	1945-46.
	cub. yds.	cub. yds.	cub. yds.	cub. yds.	cub. yds.	cub. yds.
Bluestone, basalt, &c. ..	151,188	264,969	84,599	82,941	29,860	52,804
Salamander ..	4,505	8,574	..	..	580	..
Scoria .. ..	80,471	57,229	..	..	3,500	3,296
Sandstone ..	15,925	32,639	..	..	33,693	48,560
Limestone ..	124,445*	243,526*	..	..	25,107	44,373
Quartzite-Quartz ..	17,736	30,610	..	..	32,046	17,585
Toscanite ..	276	..	..	..	..	..
Ironstone ..	11,016	22,656	..	..	..	..
Shale .. ..	1,495	3,555	..	..	..	1,000
Schist .. ..	4,180	6,186	..	..	..	..
Granite .. ..	9,801	28,236	4,652	3,511	850	300
Other stone ..	9,649	26,470	..	..	..	..
Gravel .. ..	375,830	583,803	16,428	22,149	100,479	49,801
Sand .. ..	113,635	155,688	..	..	134,793	49,998
Total ..	920,152	1,464,141	105,679	108,601	360,908	267,717

\* Includes limestone rubble, 87,308 cub. yds. in 1944-45 and 146,580 cub. yds. in 1945-46.

**THE SEARCH FOR OIL IN VICTORIA.**

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

The rotary plant installed for boring purposes at Nelson in 1942 ceased operations in 1945. It had reached its drilling capacity of 7305 feet.

The Commonwealth and State Governments jointly have conducted a scheme of shaft-sinking for the development of oil deposits at the district of Lakes Entrance. The total quantity of oil produced from oil wells drilled there amounted to 115,283 gallons.

**FACTORIES IN VICTORIA.****Industrial  
Progress.**

Statistical records of factories in Victoria date from 1850, when the number of factories was 68. In 1900 the total had reached 3,097 and 64,207 persons were employed therein. Fairly regular progress, concurrent with increase in population and consequent extension of the home market, was maintained until 1928-29 when the onset of the world depression caused a severe check to the manufacturing industries of the State. Statistics for the years 1927-28 to 1931-32 demonstrate clearly the effect of gradually declining prices and restricted activity.

Thereafter, however, an upward trend obtained until 1938-39 when due to a drop in export prices and also to a severe drought in Victoria, manufacturing industries were adversely affected and there was a consequent decline in employment.

The exigencies of the world war which commenced in September, 1939, made unprecedented demands on the industrial capacity of the State both in regard to the equipment of the armed forces and the provision of civilian needs.

In order to ensure that the resources of the State would be used to the best possible advantage in the national interest the Commonwealth Government established controls in 1941. As a result of the controls thus exercised the activities of "luxury" industries were drastically curtailed, while outstanding expansion took place in those industries deemed vital to the war effort.

The end of the war in August, 1945, brought about a relaxing of war-time controls and the commencement of the rehabilitation of men and women of the fighting forces into civil activities. This transposition did not have a marked effect on factory production as a whole during 1945-46, for the decline which took place in the industries which had been closely associated with the war effort was counterbalanced by an expansion in those whose activities had been drastically curtailed as a result of the implementation of the war economy. The net value of production during 1945-46 amounted to £122,406,082 as compared with £122,377,307 in the previous year and the average number of employees was 256,249 as compared with 257,633.

Victoria has a comparatively compact territory producing a variety of raw materials, a temperate climate, an intelligent labour supply, large power resources, a growing home market, an extensive system of State-owned railways served by constantly improving feeder roads, and an effective network of highways and main roads. It is reasonable to assume therefore that with the advantages possessed by this State as a manufacturing field, and with continued organization both of production and of markets therefor, progress should be maintained. The Commonwealth Government's policy

of protection, by tariffs, for local industries has no doubt been of assistance in attracting capital for investment in manufacturing industries in this State.

In the table below particulars indicating the development of the manufacturing industries of Victoria during the twenty-year period 1926-27 to 1945-46 are given.

Attention is especially drawn to the fact that statistics of the baking industry were included for the first time in the year 1927-28.

### VICTORIA—GROWTH IN FACTORY PRODUCTION.

Year ended 30th June—	Number of Factories.	Number of Persons Employed.	Value of Plant, Machinery, Land, and Buildings.	Amount of Salaries and Wages Paid.	Value of Materials used (including Containers).	Value of Output.
			£	£	£	£
1927..	7,690	161,639	63,850,005	31,822,589	69,816,935	127,397,951
1928..	8,245	160,357	67,507,020	32,087,851	69,637,778	128,465,317
1929..	8,197	156,568	69,909,370	31,533,586	70,100,456	127,897,463
1930..	8,195	151,009	72,011,020	30,517,535	66,770,302	122,811,099
1931..	8,199	126,016	70,990,071	23,279,689	50,380,110	93,425,795
1932..	8,204	128,265	68,350,575	21,258,599	51,727,685	93,388,617
1933..	8,612	144,428	67,827,428	23,096,512	56,757,681	102,085,429
1934..	8,896	156,334	68,834,279	24,819,143	59,776,270	108,496,310
1935..	9,100	169,691	70,591,677	27,318,815	63,387,061	117,182,857
1936..	9,160	183,390	71,872,906	30,593,707	74,568,205	134,043,170
1937..	9,165	191,383	75,161,894	33,192,904	78,233,032	142,692,192
1938..	9,241	201,789	77,207,830	37,228,543	85,926,478	157,050,725
1939..	9,250	201,831	80,596,625	38,305,885	80,721,680	152,967,611
1940..	9,215	212,461	84,553,699	41,920,726	93,390,751	174,304,401
1941..	9,121	237,636	92,050,326	52,294,673	112,024,332	209,348,845
1942..	8,918	258,400	98,157,370	67,158,613	136,058,136	257,281,080
1943..	8,738	262,357	104,605,310	76,033,111	144,778,354	277,678,940
1944..	9,317	261,299	110,520,701	77,400,688	149,189,244	284,647,914
1945..	9,669	257,633	116,379,925	74,227,245	152,761,198	287,422,311
1946..	10,195	256,249	118,802,347	70,499,214	154,224,950	289,145,003

NOTE:—Particulars of the amounts taken by working proprietors as drawings are not now available.

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

Statistics relating to the factories of Victoria are collected by the Government Statist in accordance with the provisions of the *Statistics Act* 1928. In the year 1902, Australian statisticians adopted a uniform classification of industries for statistical purposes in all States. A factory was then defined as "any establishment employing on the average four persons or more, or any establishment employing less than four

persons where machinery is worked by other than manual power, whether the business carried on is that of making or repairing for the trade (wholesale or retail) or for export." In 1930, a new classification, based upon that used in Great Britain for census purposes, was adopted and still obtains. The definition of a factory remains unchanged.

**Added Value.** In estimating the relative importance of various industries, or the value of manufacturing industry as a whole, the method used is to calculate the value added in the process of manufacture. This "added value" is arrived at in the following way:—From the value of output of each industry are deducted the most important items of manufacturing expense such as costs of raw materials, containers, fuel and light, repairs to plant and machinery, replacement of tools, and any other important costs of manufacture, the difference being the value added to raw materials in the process of manufacture, and representing the fund available for the payment of wages, taxation, rent, interest, insurance, &c., and profit.

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

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

The subjoined table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1946.

VICTORIA—VALUE ADDED BY PROCESS OF MANUFACTURE,  
1945-46.

Class of Industry.	Average Number of Persons Employed.	Value Added.	Value Added per Person Employed.
		£	£
1. Treatment of non-metalliferous mine and quarry products .. ..	2,659	1,615,400	608
2. Bricks, pottery, glass, &c. .. ..	3,574	1,715,095	480
3. Chemicals, dyes, explosives, paint, oils, and grease .. ..	11,961	7,395,125	618
4. Industrial metals, machines, implements, and conveyances .. ..	88,421	39,165,141	443
5. Precious metals, jewellery, and plate	1,602	721,505	450
6. Textiles and textile goods (not dress)	30,215	12,415,596	411
7. Skins and leather (not clothing or footwear) .. ..	4,558	2,331,064	511
8. Clothing .. ..	38,552	13,236,705	343
9. Food, drink, and tobacco .. ..	33,811	19,695,942	583
10. Woodworking and basketware .. ..	10,139	4,196,609	414
11. Furniture, bedding, &c. .. ..	3,724	1,652,635	444
12. Paper, stationery, printing, book-binding, &c. .. ..	13,723	7,189,107	524
13. Rubber .. ..	3,644	2,123,914	583
14. Musical instruments .. ..	83	36,101	435
15. Miscellaneous products .. ..	6,570	3,208,797	488
16. Heat, light, and power .. ..	3,013	5,707,346	1,894
Total .. ..	256,249	122,406,082	478*

\* Average for whole State.

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

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

### VICTORIA—VALUE ADDED BY PROCESS OF MANUFACTURE.

Year ended 30th June—	Value of Output.	Expenses of Manufactur- ing.*	Value Added.	Average Number of Persons Employed.	Value Added per Person Employed.
1.	2.	3.	4.	5.	6.
	£	£	£		£
1937 .. ..	142,692,192	83,979,911	58,712,281	191,383	307
1938 .. ..	157,050,725	92,161,335	64,889,390	201,789	322
1939 .. ..	152,967,611	86,971,542	65,996,069	201,831	327
1940 .. ..	174,304,401	100,273,914	74,030,487	212,461	348
1941 .. ..	209,348,845	120,348,134	89,000,711	237,636	375
1942 .. ..	257,281,080	146,343,466	110,937,614	258,400	429
1943 .. ..	277,678,940	156,299,193	121,379,747	262,357	463
1944 .. ..	284,647,914	161,317,396	123,330,518	261,299	472
1945 .. ..	287,422,311	165,045,004	122,377,307	257,633	475
1946 .. ..	289,145,003	166,738,921	122,406,082	256,249	478

\* "Expenses of manufacturing" includes the following costs only:—Raw materials, containers, fuel and light, tools replaced, repairs to plant and machinery, lubricating oil, and water.

NOTE.—Column 3 deducted from column 2 gives column 4, which when divided by column 5 gives column 6.

**Production of different industries, 1945-1946.** The classification of industries, as adopted in 1930, is set out in the next table. The data shown were compiled from returns rendered compulsorily by all factory proprietors in Victoria. It should, however, be noted that, with the effect of war conditions still being felt, the records of production of certain industries, whilst measuring the volume and value of such production, represent, in many cases, and in some instances to a considerable degree, products other than that for which the firms are classified.

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFAC

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
	No.	H.P.	No.	No.	£
<b>Class 1.—Non-metalliferous Mine and Quarry Products</b>	<b>178</b>	<b>37,227</b>	<b>2,512</b>	<b>147</b>	<b>815,994</b>
Briquetting, &c.	1	22,950	338	11	153,059
Lime, Plaster of Paris and asphalt	20	2,305	203	15	70,584
Fibrous plaster and products	61	321	509	20	147,161
Marble, slate, &c.	38	1,683	266	10	76,785
Cement and cement goods	41	8,553	979	32	286,854
Other	17	1,415	217	59	81,551
<b>Class 2.—Bricks, Pottery, Glass, &amp;c.</b>	<b>100</b>	<b>18,563</b>	<b>3,189</b>	<b>385</b>	<b>1,002,859</b>
Bricks, tiles, and firebricks	51	11,572	1,336	40	383,530
Earthenware, china, and porcelain, &c.	28	2,415	870	222	288,816
Glass, including bottles	19	4,574	970	122	326,983
Other	2	2	13	1	3,530
<b>Class 3.—Chemicals, Dyes, Explosives, Paint, Oils, and Grease</b>	<b>272</b>	<b>61,222</b>	<b>8,895</b>	<b>3,066</b>	<b>3,714,276</b>
Industrial and heavy chemicals	47	10,382	1,445	171	570,694
Pharmaceutical and toilet preparations	48	2,329	690	1,040	414,543
Explosives	11	25,557	2,806	886	1,213,079
White lead, paints, and varnish	42	2,464	528	150	192,117
Oils, vegetable (including oilcake)	4	634	98	7	39,221
Oils, mineral	15	605	325	64	113,492
Oils, animal	5	1,775	166	15	60,097
Boiling-down, tallow refining, and bone milling works	27	2,992	381	4	131,555
Soap and candles	16	2,117	559	179	213,617
Chemical fertilizers	8	9,628	1,145	34	419,340
Inks, polishes, &c.	41	1,106	285	224	142,161
Other	8	1,633	467	292	204,360
<b>Class 4.—Industrial Metals, Machines, Implements, and Conveyances</b>	<b>2,934</b>	<b>204,471</b>	<b>78,383</b>	<b>10,038</b>	<b>26,876,774</b>
Smelting, refining, &c., of iron and steel	10	6,752	1,096	30	410,716
Foundries, ferrous	212	12,566	2,645	96	796,963
Plant, equipment, and machinery, &c.	315	42,439	13,567	1,153	4,622,060
Other engineering	344	14,468	5,979	537	1,970,270
Extracting and refining of other metals and alloys	18	449	161	22	58,178
Electrical apparatus	172	8,844	4,905	1,494	1,749,827
Tram and railway workshops	25	13,146	7,162	100	2,344,878
Motor vehicles—					
Construction and assembly	14	3,817	1,618	223	636,033
Repairs	988	5,351	5,827	520	1,509,299
Motor-bodies	74	6,890	3,347	258	1,160,482
Horse-drawn vehicles	44	239	192	6	38,964
Motor accessories	49	4,490	1,829	682	764,360
Aircraft	30	5,491	6,919	13,26	2,654,255
Cycles, foot and hand driven, &c.	23	499	437	136	150,201
Ship and boat building and repairing, marine engineering—					
Government	3	5,407	1,472	75	523,235
Municipal and other	23	1,924	1,078	15	414,528
Cutlery and small tools (not machine tools)	42	4,539	1,368	224	483,517
Agricultural implements	57	12,861	4,633	272	1,584,777
Foundries, non-ferrous	125	10,201	2,239	225	723,210
Sheet metal working	189	9,241	5,009	1,574	1,817,134
Wireworking (including nails)	32	2,201	934	124	320,786
Stoves and ovens	19	2,011	777	99	256,188
Gas fittings and meters	4	23	209	1	70,210
Lead mills	6	659	107	33	38,406
Arms	5	24,957	2,283	261	887,878
Wireless apparatus	20	674	1,309	451	484,290
Other metal works	91	4,332	1,281	101	406,129

## TURING COSTS AND VALUE OF PRODUCTION, 1945-46.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
<b>242,091</b>	<b>16,278</b>	<b>108,347</b>	<b>1,333,472</b>	<b>3,315,588</b>	<b>1,615,400</b>	<b>943,917</b>	<b>1,311,900</b>
73,485	7,808	13,396	146,735	504,117	262,693	326,170	563,018
31,399	1,363	11,432	325,966	552,041	181,881	63,014	81,528
1,301	600	6,638	220,643	473,058	243,876	93,511	21,475
3,423	735	4,753	45,713	183,785	129,161	46,731	37,182
122,815	5,223	58,844	453,330	1,296,952	656,740	365,801	571,250
9,668	549	13,284	141,085	305,635	141,049	48,690	37,447
<b>360,812</b>	<b>20,228</b>	<b>125,999</b>	<b>496,177</b>	<b>2,718,311</b>	<b>1,715,095</b>	<b>798,248</b>	<b>759,723</b>
124,355	7,854	43,180	67,655	756,382	513,338	328,610	377,667
50,553	2,949	20,061	78,938	566,306	413,805	201,523	149,654
185,836	9,397	62,701	348,516	1,388,220	781,770	262,250	231,936
68	28	57	1,068	7,403	6,182	5,865	466
<b>420,004</b>	<b>60,232</b>	<b>424,261</b>	<b>11,961,176</b>	<b>20,260,798</b>	<b>7,395,125</b>	<b>6,104,394</b>	<b>6,752,375</b>
106,582	11,257	95,578	1,496,291	2,970,628	1,260,920	571,805	1,006,232
13,705	3,574	25,140	1,905,805	3,226,080	1,277,856	426,781	291,255
75,002	16,120	99,345	950,942	2,844,072	1,702,663	3,599,605	3,992,704
11,914	1,342	17,475	1,043,403	1,624,138	550,004	241,018	131,979
6,415	525	4,440	504,815	600,480	84,285	33,925	27,856
8,078	3,582	4,731	470,203	650,642	164,048	68,071	70,107
22,866	3,613	9,117	135,391	260,659	89,682	100,436	86,383
46,711	3,622	20,482	241,689	514,899	202,395	137,090	130,454
54,884	3,887	46,639	858,989	1,613,919	649,520	185,866	151,597
50,658	9,100	81,862	2,806,442	3,676,922	728,860	465,131	655,372
6,289	950	6,199	741,003	1,132,384	377,943	155,321	55,755
16,910	2,660	13,253	806,203	1,145,975	306,949	119,352	152,681
<b>1,138,727</b>	<b>122,154</b>	<b>1,634,214</b>	<b>35,182,909</b>	<b>77,243,145</b>	<b>39,165,141</b>	<b>17,174,574</b>	<b>15,661,705</b>
80,120	2,238	52,058	254,200	908,663	520,047	194,002	240,418
79,284	3,814	41,489	619,188	1,882,043	1,138,268	487,793	330,237
183,675	24,442	300,034	5,614,122	13,154,372	7,032,099	2,410,725	2,577,135
69,359	9,897	112,641	1,914,029	5,028,087	2,922,161	1,195,642	1,145,793
10,234	197	4,893	477,112	621,336	128,900	61,523	25,436
53,733	4,369	83,104	2,281,565	5,045,516	2,622,745	933,375	589,418
65,970	2,399	162,728	1,660,375	4,525,198	2,633,726	1,487,546	1,116,680
19,898	4,298	87,993	1,173,408	2,194,047	908,540	501,025	365,403
51,700	9,395	59,656	1,360,340	3,967,049	2,485,958	1,973,061	482,342
24,572	4,202	87,183	1,522,664	3,514,868	1,876,247	728,636	492,638
1,939	275	1,871	29,949	100,524	66,490	57,715	10,454
30,347	5,004	42,532	666,082	1,969,818	1,225,853	382,798	295,740
49,138	11,285	26,570	4,179,030	7,359,659	3,093,636	1,288,575	850,611
6,424	1,940	10,649	297,312	529,567	213,242	88,920	37,633
11,452	2,558	14,323	277,586	867,894	561,975	416,477	356,003
7,329	1,196	14,840	210,977	983,812	749,470	93,059	64,520
32,847	3,150	34,760	429,738	1,368,037	867,542	212,085	229,495
112,480	7,661	106,794	1,461,788	3,747,487	2,058,764	609,043	719,690
145,574	2,571	40,621	680,733	1,919,708	1,150,209	363,020	261,217
106,411	7,432	172,102	4,521,329	7,984,839	3,219,785	971,240	850,272
105,847	2,626	22,682	512,972	1,054,673	500,546	269,021	214,757
32,417	1,814	18,686	238,927	677,582	385,738	127,370	127,901
1,538	83	785	30,936	121,055	87,713	22,978	5,574
1,699	208	9,967	135,611	215,823	63,947	33,856	23,570
143,522	5,461	39,510	2,538,917	3,780,215	1,152,796	1,691,135	3,775,971
10,158	889	52,359	1,389,650	2,233,733	780,677	191,730	101,722
28,889	2,750	33,375	704,369	1,487,540	718,157	382,224	371,075

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
			No.	No.	
<b>Class 5.—Precious Metals, Jewellery and Plate</b>	<b>125</b>	<b>2,351</b>	<b>1,314</b>	<b>288</b>	<b>433,617</b>
Jewellery .. .. .	52	284	425	118	138,761
Watches and clocks .. .. .	14	264	362	131	142,017
Gold, silver, and electroplate .. .. .	59	1,803	527	39	152,839
<b>Class 6.—Textiles and Textile Goods (not dress)</b>	<b>490</b>	<b>61,333</b>	<b>13,208</b>	<b>16,681</b>	<b>7,233,154</b>
Cotton .. .. .	36	9,911	1,256	1,519	695,627
Wool, worsted, &c. (including wool scouring) .. .. .	65	30,769	5,779	5,315	2,855,086
Hosiery and other knitted goods .. .. .	255	7,851	3,336	8,200	2,501,753
Silk, natural .. .. .	3	1,072	105	191	75,941
Rayon, nylon, and other synthetic fibres .. .. .	6	493	33	107	30,211
Flax .. .. .	14	1,891	685	181	237,162
Rope and cordage .. .. .	12	5,899	1,125	607	467,582
Canvas goods, tents, &c. .. .. .	33	147	263	226	114,472
Bags and sacks .. .. .	22	266	132	47	45,894
Other .. .. .	44	3,034	494	288	209,426
<b>Class 7.—Skins and Leather (not Clothing or Footwear)</b>	<b>216</b>	<b>14,084</b>	<b>3,871</b>	<b>1,013</b>	<b>1,474,729</b>
Furriers and fur dressing .. .. .	53	386	222	171	96,469
Fellmongery and woolscouring .. .. .	30	3,452	801	12	261,033
Tanning and leather dressing .. .. .	44	9,227	2,141	116	778,865
Saddlery, harness, and whips .. .. .	8	76	93	83	42,131
Machine belting .. .. .	7	552	90	38	41,094
Bags and trunks .. .. .	62	294	416	469	200,868
Other leather goods .. .. .	12	97	108	124	54,269
<b>Class 8.—Clothing</b>	<b>1,933</b>	<b>16,282</b>	<b>11,025</b>	<b>27,527</b>	<b>8,018,580</b>
Tailoring and readymade clothing .. .. .	388	1,615	1,943	6,489	1,675,620
Waterproof and oilskin clothing .. .. .	6	497	85	208	80,799
Dressmaking .. .. .	483	1,479	849	9,031	1,782,477
Millinery .. .. .	69	699	214	938	239,235
Shirts, collars, and underclothing .. .. .	108	1,085	351	2,915	583,571
Stays and corsets .. .. .	19	407	107	784	178,805
Handkerchiefs, ties, and scarves .. .. .	15	35	42	223	54,828
Hats and caps .. .. .	24	1,032	436	254	189,976
Gloves .. .. .	23	144	107	498	118,498
Boots and shoes .. .. .	195	5,337	4,939	4,525	2,353,753
Boot repairing .. .. .	469	605	746	25	74,390
Boot accessories .. .. .	18	229	96	134	50,002
Umbrellas and walking sticks .. .. .	3	7	9	14	5,431
Dyeworks and cleaning .. .. .	86	2,946	1,013	1,053	541,431
Other .. .. .	27	165	88	436	89,764
<b>Class 9.—Food, Drink, and Tobacco</b>	<b>1,656</b>	<b>119,953</b>	<b>23,811</b>	<b>10,000</b>	<b>9,419,282</b>
Grain milling .. .. .	40	9,561	963	58	343,275
Cereal foods and starch .. .. .	22	7,265	742	436	337,284
Animal and-bird foods .. .. .	8	765	126	15	48,252
Chaff-cutting and corn crushing .. .. .	81	2,225	335	25	87,006
Bakeries .. .. .	746	3,568	3,176	936	930,304
Biscuits .. .. .	11	1,706	580	544	246,805
Confectionery .. .. .	76	9,151	1,025	1,245	541,361
Jam, fruit, and vegetable canning .. .. .	34	7,441	2,432	1,822	1,102,351
Pickles, sauces, and vinegar .. .. .	18	1,450	371	239	165,199
Bacon curing .. .. .	20	4,056	640	75	218,321
Butter and cheese factories, &c. .. .. .	148	20,857	3,265	609	1,235,307
Margarine and butterine .. .. .	9	390	86	15	31,553
Meat and fish preserving, meat extracts .. .. .	12	2,128	679	410	310,686
Condiments, coffee, spices, &c. .. .. .	70	3,005	670	775	331,111
Ice and refrigerating .. .. .	89	22,481	2,264	178	754,533
Aerated waters, cordials, &c. .. .. .	89	1,602	866	213	291,013
Breweries .. .. .	8	6,612	1,492	34	621,716

## COSTS AND VALUE OF PRODUCTION, 1945-46—continued.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
<b>15,646</b>	<b>1,896</b>	<b>15,529</b>	<b>594,480</b>	<b>1,349,056</b>	<b>721,505</b>	<b>343,760</b>	<b>130,889</b>
2,983	472	5,994	365,261	679,573	304,863	136,463	34,677
2,195	496	2,530	100,237	272,249	166,791	66,535	36,639
10,468	928	7,005	128,982	397,234	249,851	140,762	59,573
<b>497,635</b>	<b>61,093</b>	<b>671,636</b>	<b>15,754,141</b>	<b>29,183,535</b>	<b>12,199,030</b>	<b>4,821,139</b>	<b>3,989,692</b>
54,125	6,452	65,180	1,783,594	3,320,384	1,411,033	691,609	945,901
257,994	29,751	301,271	6,263,676	11,752,967	4,900,275	1,600,950	1,410,896
123,117	15,909	197,772	4,408,784	8,615,732	3,870,150	1,546,500	892,739
3,548	336	4,670	142,329	297,826	146,943	67,835	89,771
2,246	552	2,389	73,430	137,599	58,982	27,267	16,483
10,172	1,832	12,025	431,795	701,274	245,450	186,101	232,463
26,751	3,691	49,268	994,641	1,843,861	769,510	289,974	226,217
2,102	429	5,897	432,327	714,058	373,303	134,539	11,707
2,591	391	2,802	176,863	271,808	89,161	44,203	18,870
14,989	1,750	30,362	1,046,702	1,528,026	434,223	232,161	144,645
<b>113,424</b>	<b>28,322</b>	<b>150,364</b>	<b>3,629,068</b>	<b>6,469,308</b>	<b>2,547,630</b>	<b>1,206,083</b>	<b>570,639</b>
2,760	619	4,344	296,936	521,236	216,577	151,328	22,067
57,966	13,822	47,647	639,306	1,201,480	442,739	297,696	169,745
46,577	13,517	87,625	2,055,072	3,430,200	1,227,409	497,837	298,080
573	86	882	114,714	182,196	65,941	30,533	2,340
1,817	233	2,065	109,796	232,635	118,724	49,147	40,621
2,731	449	5,075	340,146	733,113	384,712	151,664	26,552
1,000	96	2,726	73,098	168,448	91,528	27,878	11,234
<b>202,650</b>	<b>17,472</b>	<b>305,312</b>	<b>15,166,095</b>	<b>28,928,234</b>	<b>13,236,705</b>	<b>5,462,115</b>	<b>1,787,796</b>
39,404	2,116	37,248	6,403,713	3,292,459	2,795,459	1,058,076	263,292
3,024	196	1,948	164,852	300,176	130,156	66,334	22,726
30,275	1,394	33,440	3,454,454	6,408,703	2,889,140	1,513,003	195,433
6,812	688	6,905	475,014	1,006,133	516,714	231,880	40,149
11,069	1,386	16,423	1,840,329	2,762,321	893,114	482,659	132,677
2,678	362	20,062	315,125	630,926	292,699	257,417	69,758
902	63	1,008	310,603	485,014	172,438	67,245	3,279
9,273	895	8,109	173,648	490,530	298,605	92,345	44,810
1,625	26	4,874	176,994	383,190	199,671	63,213	23,840
37,505	3,977	129,107	4,020,905	7,765,401	3,573,907	742,870	630,515
3,720	351	1,805	131,884	366,260	228,500	446,868	39,384
1,817	277	9,213	140,476	276,184	124,401	33,156	15,067
104	1	6	9,234	19,623	10,278	14,040	124
52,426	5,592	32,733	202,876	1,206,138	912,511	298,185	287,065
2,016	148	2,431	220,215	423,922	199,112	94,824	19,677
<b>1,287,712</b>	<b>167,504</b>	<b>931,906</b>	<b>48,455,313</b>	<b>70,538,377</b>	<b>19,695,942</b>	<b>11,877,394</b>	<b>7,754,106</b>
63,155	6,475	41,337	3,511,565	4,222,476	599,944	688,849	497,473
57,543	7,872	44,788	1,276,276	2,080,412	694,433	472,007	451,495
3,988	688	7,828	399,393	512,076	100,179	72,477	43,108
7,392	1,213	3,886	609,307	801,018	179,220	109,978	50,112
139,311	29,818	63,682	2,981,031	5,247,154	2,033,312	1,667,986	477,092
25,645	1,910	14,197	502,134	1,124,601	580,715	224,956	109,041
50,933	3,905	71,993	1,680,257	3,176,177	1,369,089	525,911	423,422
75,360	16,175	98,518	4,925,584	6,919,633	1,804,006	840,595	567,916
15,258	3,626	17,591	823,669	1,253,176	393,032	205,918	116,439
27,092	3,328	15,694	1,808,662	2,256,837	402,041	242,331	104,248
335,260	20,775	149,844	13,497,788	16,458,087	2,454,430	1,523,425	1,344,427
4,268	1,043	3,409	236,018	308,059	63,321	17,827	13,209
27,654	5,406	27,718	2,154,730	2,963,365	747,857	190,646	139,945
28,675	5,492	30,262	1,734,192	2,695,946	897,325	484,389	185,646
119,237	8,582	121,818	188,622	1,632,235	1,193,976	1,404,773	682,535
14,911	3,563	29,536	779,448	1,455,962	628,504	296,034	139,093
75,943	19,470	70,781	1,399,001	3,013,132	1,447,937	748,895	815,867

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
			No.	No.	
<b>Class 9.—continued.</b>					
Distilleries .. .. .	9	1,443	217	21	88,337
Malting .. .. .	17	1,517	388	12	160,299
Winemaking .. .. .	27	366	122	8	30,068
Bottling .. .. .	19	375	253	61	102,016
Tobacco, cigars, cigarettes .. .. .	12	2,044	826	1,261	516,643
Dehydrated fruit and vegetables .. .. .	32	2,933	969	704	454,361
Ice cream .. .. .	25	1,685	196	104	87,879
Sausage skins .. .. .	12	153	315	39	115,421
Other .. .. .	22	5,174	813	161	268,181
<b>Class 10.—Woodworking and Basket-</b>					
<b>ware</b> .. .. .	<b>819</b>	<b>53,449</b>	<b>9,660</b>	<b>479</b>	<b>2,715,949</b>
Sawmills .. .. .	332	29,891	4,388	105	1,224,797
Joinery .. .. .	234	6,598	2,017	87	555,291
Cooperage .. .. .	10	551	189	1	68,222
Boxes and cases .. .. .	117	12,786	1,938	75	546,729
Woodturning, woodcarving, &c. .. .. .	92	3,070	790	160	224,131
Basket, wicker, bamboo, &c. .. .. .	11	47	50	2	13,664
Perambulators .. .. .	15	98	147	37	40,055
Other .. .. .	8	408	141	12	43,060
<b>Class 11.—Furniture, Bedding, &amp;c.</b>	<b>372</b>	<b>8,937</b>	<b>3,093</b>	<b>631</b>	<b>843,010</b>
Cabinet and furniture making .. .. .	284	7,888	2,681	151	654,993
Bedding and mattresses (not wire) .. .. .	35	839	285	215	113,575
Furnishing drapery .. .. .	36	105	56	220	49,126
Picture frames .. .. .	8	22	27	14	8,387
Blinds, window, verandah, &c. .. .. .	9	83	44	31	16,929
<b>Class 12.—Paper, Stationery,</b>					
<b>Printing, Bookbinding, &amp;c.</b> .. .. .	<b>618</b>	<b>67,360</b>	<b>9,860</b>	<b>3,863</b>	<b>3,857,265</b>
Newspapers, &c. .. .. .	118	6,607	1,974	211	709,210
Printing—Government, &c. .. .. .	3	920	651	367	277,749
General printing, &c. .. .. .	364	6,530	3,534	1,478	1,322,110
Stationery and paper products .. .. .	30	1,530	436	447	208,836
Stereotyping and electrotyping .. .. .	8	164	62	9	20,567
Process and photo engraving .. .. .	13	163	257	24	92,031
Cardboard boxes, cartons, &c. .. .. .	36	2,088	767	769	365,852
Paper bags .. .. .	15	283	110	188	68,806
Other .. .. .	31	49,075	2,069	370	792,104
<b>Class 13.—Rubber Goods</b> .. .. .	<b>92</b>	<b>29,414</b>	<b>2,917</b>	<b>727</b>	<b>1,158,070</b>
Rubber goods, including tyres, motor .. .. .	26	28,759	2,567	696	1,053,775
Tyre retreading and repairing .. .. .	66	655	350	31	104,295
<b>Class 14.—Musical Instruments</b> .. .. .	<b>14</b>	<b>65</b>	<b>81</b>	<b>2</b>	<b>22,331</b>
<b>Class 15.—Miscellaneous Products</b>	<b>268</b>	<b>11,314</b>	<b>4,143</b>	<b>2,427</b>	<b>1,805,674</b>
Plastic moulding and products .. .. .	42	3,221	1,022	594	438,202
Brooms and brushes .. .. .	22	659	353	214	143,082
Optical instruments and appliances .. .. .	32	252	379	52	114,504
Surgical and other scientific .. .. .					
instruments .. .. .	40	572	484	95	164,011
Photographic material, including .. .. .					
developing and printing .. .. .	27	1,428	427	564	266,784
Toys, games, and sports requisites .. .. .	42	968	404	244	149,048
Artificial flowers .. .. .	7	22	27	110	23,781
Other .. .. .	56	4,192	1,047	554	506,262
<b>Class 16.—Heat, Light, and Power</b>	<b>108</b>	<b>707,933</b>	<b>2,989</b>	<b>24</b>	<b>1,107,650</b>
Electric light and power—					
(a) Government .. .. .	10	636,936	1,246	16	513,950
(b) Local authority .. .. .	34	58,001	422	2	147,577
(c) Companies .. .. .	25	4,606	74	2	20,234
Gas works—					
(a) Local authority .. .. .	9	148	106	1	36,166
(b) Companies .. .. .	30	8,242	1,141	5	389,723
<b>Total all Classes</b> .. .. .	<b>10,195</b>	<b>1,413,958</b>	<b>178,951</b>	<b>77,298</b>	<b>70,499,214</b>

## COSTS AND VALUE OF PRODUCTION, 1945-46—continued.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
30,344	5,691	11,251	467,260	887,862	373,316	161,976	207,729
29,219	3,866	10,606	725,357	1,077,853	308,805	414,200	112,146
2,056	190	1,184	71,049	142,904	68,425	61,449	37,678
3,897	618	4,930	259,827	447,720	178,448	166,439	12,694
12,171	1,867	20,455	3,470,668	4,630,306	1,125,145	341,747	278,015
54,521	8,652	28,615	1,116,536	1,892,959	684,635	257,288	294,577
12,544	1,510	11,489	337,724	811,259	447,992	165,415	87,744
3,197	1,592	6,971	148,876	369,796	209,160	49,148	16,462
68,158	4,677	23,523	3,350,319	4,157,372	710,695	540,735	552,003
<b>124,968</b>	<b>26,028</b>	<b>183,160</b>	<b>4,987,424</b>	<b>9,518,189</b>	<b>4,196,609</b>	<b>1,467,433</b>	<b>1,251,999</b>
72,434	19,010	111,958	2,439,791	4,558,887	1,915,694	488,240	801,396
14,374	1,896	15,781	831,344	1,661,109	797,714	436,780	134,572
1,769	581	2,724	60,959	156,352	90,319	24,121	25,217
26,226	3,557	35,694	1,211,253	2,100,805	824,075	258,126	183,997
8,112	689	12,511	255,120	655,736	379,304	160,187	86,503
335	11	681	24,605	53,767	31,135	16,553	2,991
661	85	1,554	106,201	187,022	78,521	41,185	5,425
1,057	199	2,257	61,151	144,511	79,847	42,241	11,898
<b>20,420</b>	<b>2,562</b>	<b>33,528</b>	<b>1,709,295</b>	<b>3,418,440</b>	<b>1,652,635</b>	<b>1,011,363</b>	<b>214,390</b>
15,929	2,076	26,432	970,594	2,159,572	1,144,541	740,025	169,455
2,917	252	5,830	486,187	858,012	362,826	154,980	31,308
1,013	162	831	188,707	284,737	94,024	79,333	8,209
162	27	117	11,390	30,652	18,956	16,725	1,624
399	45	318	52,417	85,467	32,288	20,300	3,794
<b>345,419</b>	<b>32,591</b>	<b>360,838</b>	<b>7,495,464</b>	<b>15,423,419</b>	<b>7,189,107</b>	<b>3,898,431</b>	<b>2,645,775</b>
25,331	5,492	24,309	1,369,000	2,632,677	1,208,545	776,005	413,428
6,060	818	5,648	218,611	608,565	377,428	204,400	50,802
34,054	5,749	58,253	1,930,950	4,317,287	2,288,281	1,469,818	851,418
6,475	688	23,074	579,404	1,003,119	393,478	241,709	124,225
1,198	34	1,484	20,893	71,347	47,738	22,751	14,499
2,842	267	1,800	28,752	188,843	155,182	83,850	25,559
16,565	2,273	24,733	962,652	1,872,070	865,847	327,054	215,694
1,588	415	2,782	362,071	499,522	132,666	96,002	62,810
251,306	16,855	218,755	2,023,131	4,229,989	1,719,942	676,842	887,340
<b>177,733</b>	<b>16,696</b>	<b>197,912</b>	<b>3,614,977</b>	<b>6,131,232</b>	<b>2,123,914</b>	<b>721,245</b>	<b>610,545</b>
166,325	16,044	183,711	3,390,872	5,642,682	1,885,730	584,332	545,690
11,408	652	14,201	224,105	488,550	238,184	136,913	64,855
<b>476</b>	<b>66</b>	<b>1,011</b>	<b>8,584</b>	<b>46,238</b>	<b>36,101</b>	<b>32,339</b>	<b>6,671</b>
<b>74,503</b>	<b>11,002</b>	<b>124,940</b>	<b>2,422,779</b>	<b>5,842,021</b>	<b>3,208,797</b>	<b>1,313,732</b>	<b>1,016,211</b>
28,955	5,609	56,166	597,206	1,451,746	763,810	232,668	306,176
2,584	513	6,911	252,028	568,551	306,515	82,279	55,441
2,919	313	5,032	212,577	407,400	186,559	105,565	35,889
3,675	724	6,130	141,596	469,932	317,807	99,105	59,020
13,085	1,462	1,331	435,145	964,373	513,350	225,210	80,352
5,000	412	8,120	159,828	446,668	273,308	96,616	41,745
239	70	639	29,724	81,523	50,851	28,455	5,536
18,046	1,899	40,611	594,675	1,451,828	796,597	443,834	432,052
<b>1,283,507</b>	<b>50,629</b>	<b>304,034</b>	<b>1,413,596</b>	<b>8,759,112</b>	<b>5,707,346</b>	<b>3,088,786</b>	<b>14,072,978</b>
1,077,694	6,780	138,629	2,156	5,772,856	4,547,597	2,390,531	9,403,517
171,450	11,076	21,897	377	471,070	266,270	235,209	743,688
22,798	4,497	4,791	195	79,162	46,881	19,204	85,978
2,259	1,113	5,600	68,443	119,001	41,586	31,011	139,219
9,306	27,163	133,117	1,342,425	2,317,023	805,012	412,831	3,700,576
<b>6,305,727</b>	<b>635,253</b>	<b>5,572,991</b>	<b>154,224,950</b>	<b>289,145,003</b>	<b>122,406,082</b>	<b>60,264,953</b>	<b>58,537,394</b>

## INDIVIDUAL INDUSTRIES.

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

Tanning was one of the earliest industries established in Victoria; in the year 1850 there were thirteen tanneries in the State. Particulars relating to the industry for the year 1936-37 and the past five years are given in the following table:—

## VICTORIA—TANNERIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	41	41	38	40	40	44
Number of persons engaged ..	2,460	2,149	2,025	2,040	2,071	2,257
Horsepower of engines used ..	7,460	7,797	7,879	8,166	8,363	9,227
Value of plant and machinery £	241,453	228,515	211,704	213,672	246,288	298,080
Value of land and buildings £	418,191	422,302	419,424	408,453	425,878	497,837
Salaries and wages paid .. £	506,810	653,683	694,263	718,260	728,817	778,865
Fuel, light, and power .. £	36,166	47,391	47,366	53,830	50,212	46,577
Value of materials used .. £	1,610,687	1,939,395	1,936,067	1,961,361	1,895,069	2,055,072
Value of output .. .. £	2,517,926	3,080,318	3,050,951	3,119,392	3,093,589	3,430,200
Value added to materials .. £	823,082	1,032,912	1,006,287	1,038,157	1,072,469	1,227,409
Materials treated—						
Cow and ox hides .. No.	921,075	900,740	985,410	975,565	926,381	916,071
Calf hides .. .. "	334,578	572,657	549,558	557,206	542,036	699,480
Other skins and pelts .. "	1,115,689	918,538	1,042,824	1,382,600	1,308,882	1,199,211
Bark used .. .. . tons	10,559	8,636	6,395	6,028	5,296	5,739
Tanning extract (vegetable) 000' lb.	*	6,146	9,974	7,222	8,536	8,536
Sole leather produced .. lb.	12,808,892	15,043,710	14,767,165	14,217,629	13,225,297	13,039,543

\* Not available.

The value of leather (including leather belting) imported into Victoria from oversea countries during the year ended 30th June, 1946, was £25,327, whilst during the same period the value of leather (including leather belting) exported overseas amounted to £570,213.

The manufacture of soap was also one of the earliest of Victorian industries. In the year 1850 the recorded production of the four establishments then operating was 5,840 cwt. of soap. The following table indicates the development which has since taken place.

Soap,  
candies, &c.

## VICTORIA—SOAP FACTORIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	19	13	15	15	16	16
Number of persons engaged ..	700	750	728	683	712	738
Horsepower of engines used ..	1,327	1,995	2,459	2,475	2,607	2,117
Value of plant and machinery £	206,879	183,833	175,289	162,651	151,571	151,597
Value of land and buildings £	203,741	196,925	196,480	191,689	188,752	185,865
Salaries and wages paid £	128,422	189,351	211,493	206,954	209,025	213,617
Fuel, light, and power £	27,793	58,931	64,662	62,839	57,482	54,884
Value of materials used £	586,545	755,861	710,018	697,825	798,995	858,989
Value of output ..	£ 1,243,208	1,678,499	1,678,004	1,442,045	1,571,168	1,613,919
Value added to materials £	595,056	823,446	856,816	634,201	668,479	649,520
Materials used—						
Tallow .. .. cwt.	217,831	323,656	363,189	284,786	312,548	285,674
Alkali .. ..	100,649	120,156	66,768	49,995	58,767	59,292
Coconut oil .. ..	47,393	50,571	28,034	25,160	26,146	30,540
Soda ash .. ..	*	*	52,516	38,611	38,300	49,141
Output—						
Soap, Household .. .. cwt.	199,166	221,163	189,860	118,622	139,373	141,287
" Sand .. ..	34,121	33,187	36,619	26,536	19,733	19,266
" Toilet .. ..	19,192	28,898	36,523	39,406	30,983	30,466
" Extracts and powders,,	*	148,873	153,355	117,042	159,889	179,110
" All other .. ..	*	39,252	53,744	64,779	61,707	48,964
Soda crystals .. ..	30,629	18,754	18,479	12,165	11,538	10,237

\* Not available.

Items of manufacture not specified above include soft soap, wool scouring soap, candles, glycerine, &c.

Imports from oversea countries into Victorian ports in the year ended 30th June, 1946, included 79,721 lb. of soap, and 90,701 lb. of soap substitutes valued at £5,774 and £3,693 respectively.

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

## VICTORIA—BRICKS, POTTERY, PIPES, AND TILES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	79	81	58	51	65	79
Number of persons engaged ..	2,969	3,124	1,670	1,518	1,725	2,468
Horsepower of engines used ..	12,922	15,261	9,868	7,059	10,326	13,987
Value of plant and machinery £	524,667	570,819	410,785	346,442	395,997	527,321
Value of land and buildings £	547,025	546,562	318,255	337,654	421,513	530,133
Salaries and wages paid £	563,858	795,438	464,923	415,919	471,066	672,346
Fuel, light, and power £	190,029	250,413	113,838	97,958	114,887	174,908
Value of materials used £	140,341	175,217	108,135	89,928	105,267	146,593
Value of output ..	£ 1,259,323	1,593,260	885,007	756,175	895,080	1,322,688
Value added to materials £	859,506	1,074,833	624,547	535,811	635,711	927,143
Production—						
Bricks, common (1,000)	183,727	169,180	40,018	26,741	37,839	83,018
Firebricks .. (1,000)	5,187	5,252	6,247	6,026	5,697	5,784
Roofing tiles .. (1,000)	10,232	11,959	1,402	505	2,882	5,422
Pipes, agricultural, &c. £	151,681	174,447	63,406	68,352	79,226	142,571
Pottery .. ..	£ 242,987	405,426	418,378	382,120	409,342	335,873

**Sawmills.**

Detailed information in regard to the sawmills of the State for the five years 1941-42 to 1945-46 is given in the table which follows:—

**VICTORIA—SAWMILLS.**

Year Ended 30th June.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Salaries and Wages Paid.	Rough-Sawn Timber Produced.	
					Quantity.	Value.
		£		£	super ft.	£
1942 ..	299	1,078,820	4,098	1,114,701	167,881,214	1,768,561
1943 ..	284	1,083,438	3,588	1,042,347	160,057,705	1,817,761
1944 ..	294	1,141,942	3,668	1,090,571	153,886,718	1,882,553
1945 ..	294	1,137,689	3,797	1,157,506	173,617,625	2,178,792
1946 ..	332	1,289,636	4,493	1,224,797	186,376,570	2,819,697

Prior to 1945-46 figures given in this table related only to Forest sawmills. In consequence of a revision in the statistical sub-classification of industry the table now relates to all sawmills (Forest and Town).

It should be noted that the number of persons employed is comprised of those working in the sawmills only—workers engaged in the felling and in the hauling of timber from forest to mill are excluded from the above figures.

Further particulars of sawmills and the 487 other factories which comprise the wood working group will be found on pages 554 and 555.

**Firewood.** The quantity of timber recorded as sawn in firewood sawmills in the year 1945-46 was 357,436 tons, valued at the sawmills at £430,537. There is also a large amount of firewood taken from the forests and from private land which does not pass through these sawmills and its value cannot be reliably estimated. Statistics collected from factories, mines, and quarries show that, during 1945-46, 519,996 tons of firewood, which cost £440,722, were consumed.

**Agricultural and Dairying Machinery Works.** The value of production of the Agricultural Implement Industry is extremely liable to fluctuation due to seasonal influences and the effects of varying prices of primary products. In recent years, moreover, in common with the metal industries generally, production was affected by the requirements of a war economy.

### VICTORIA—AGRICULTURAL AND DAIRYING MACHINERY WORKS.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	74	74	57	55	54	57
Number of persons employed	3,486	4,674	4,673	4,401	4,637	4,905
Horse-power of engines used	7,939	12,712	12,480	12,312	12,517	12,861
Value of land and buildings £	342,503	609,777	612,708	578,798	571,230	609,043
Value of plant and machinery £	360,033	604,379	697,089	698,962	838,582	719,600
Salaries and wages paid £	757,743	1,490,358	1,613,970	1,490,003	1,512,731	1,584,777
Value of materials used £	855,674	1,615,451	1,319,980	1,304,551	1,446,242	1,461,788
Fuel, light, and power used £	49,118	121,253	134,433	124,894	112,466	112,480
Value of output ..	£ 1,903,662	3,713,633	3,583,298	3,435,008	3,658,935	3,747,487

**Bacon curing.** In the following table particulars of bacon and ham curing establishments are given for the year 1937 and the past five years.

### VICTORIA—BACON FACTORIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	20	16	16	18	20	20
Number of persons employed	554	568	558	578	719	715
Horse-power of engines used	3,954	3,755	3,648	3,680	3,828	4,056
Value of land, buildings, plant, &c. ..	£ 360,320	327,130	311,600	313,956	349,366	346,579
Salaries and wages paid £	120,440	154,795	163,662	174,287	215,773	218,321
Value of materials used £	789,851	1,052,468	1,362,182	1,479,040	2,130,269	1,808,682
Value of fuel and light £	17,606	19,018	22,806	24,967	30,063	27,092
Value of output ..	£ 985,645	1,330,184	1,652,468	1,778,395	2,570,889	2,256,837
Pigs slaughtered for curing No.	193,048	189,614	186,912	201,019	247,147	206,054
Bacon and ham cured lb.	16,652,906	18,739,384	19,334,343	21,168,255	26,609,925	20,961,254

The number of butter, cheese, and kindred factories in 1945-46 was 148. Of these 112 were making butter, 31 cheese, 1 concentrated milk, 4 condensed milk, 11 powdered milk (full cream and skim), 6 dried butter milk, 8 casein, and 3 milk sugar. The following table gives some indication of the value of this industry to the State :—

### VICTORIA—BUTTER AND CHEESE FACTORIES, ETC.

Item.	Year ended 30th June—						
	1937.	1942.	1943.	1944.	1945.	1946.	
Number of establishments	175	165	159	152	148	148	
Number of persons employed	2,859	3,899	3,870	3,804	3,748	3,874	
Horse-power of engines	11,899	17,252	17,523	18,595	19,736	20,857	
Value of plant and machinery	£ 1,157,697	1,460,847	1,386,617	1,367,977	1,332,534	1,344,427	
Value of land and buildings	£ 1,158,068	1,406,777	1,405,563	1,448,699	1,454,364	1,525,425	
Salaries and wages paid	£ 629,230	1,088,618	1,146,015	1,168,650	1,162,211	1,235,307	
Fuel, light, and power	£ 151,767	280,471	312,317	311,100	308,449	335,250	
Value of materials used	£ 9,089,205	12,311,035	12,441,760	11,803,840	11,994,600	13,497,788	
Value of output	£ 10,825,003	15,001,698	15,262,179	14,475,120	14,716,135	16,458,087	
Added value	£ 1,482,540	2,272,901	2,367,199	2,208,267	2,259,915	2,454,430	
Articles produced—							
Butter	lb.	149,897,946	137,889,530	122,864,673	109,456,751	104,832,382	112,180,169
Cheese	lb.	13,040,709	22,483,690	25,236,045	26,583,732	27,340,311	33,405,690
Condensed milk	lb.	31,076,239	78,213,683	69,115,568	73,784,738	76,126,884	80,345,852
Powdered milk (all kinds)	lb.	16,257,678	34,239,074	32,397,697	33,551,215	32,915,162	36,244,293
Casein	lb.	4,502,031	4,592,970	4,096,559	2,740,393	3,136,286	2,809,033

Further particulars relating to butter and cheese factories will be found on page 194.

**Bakeries (including bread, pastry and cakes).**

The statistical definition of a factory (see page 546) excludes from enumeration many small bakeries. Particulars relating to 1945-46 include 746 bakehouses which come within that definition. The increase of 136 establishments between 1943 and 1944 was mainly due to the inclusion for the first time of a number of small establishments which owing to the very small use of motor power had not previously been requested to render returns.

The value quoted is the wholesale selling value of the goods at the factory exclusive of all selling and delivery costs.

## VICTORIA—BAKERIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of factories ..	556	592	592	728	728	746
Number of persons employed	3,374	3,346	3,245	3,632	3,712	4,112
Horse-power of engines used	2,289	2,840	2,866	3,318	3,393	3,568
Value of land and buildings £	1,158,299	1,249,467	1,264,463	1,490,583	1,556,972	1,667,986
Value of plant and machinery £	377,886	442,782	432,115	464,268	455,041	477,092
Salaries and wages paid £	651,183	810,997	859,536	995,382	1,031,434	930,304
Value of materials used £	1,867,858	2,380,439	2,494,883	2,838,305	2,903,301	2,981,031
Fuel, light, and power used £	79,869	102,819	115,766	133,539	136,110	139,311
Repairs, oil and water used £	35,736	39,742	44,295	54,027	60,349	93,500
Total output ..	£ 3,114,907	4,141,700	4,290,071	4,887,909	4,944,910	5,247,154
Value added ..	£ 1,131,444	1,612,065	1,635,127	1,862,038	1,845,150	2,033,312
Value added per worker £	335	482	504	513	497	494
Flour used—tons (2,000 lb.) ..	94,742	107,554	109,892	124,941	125,679	111,560
Bread made—4-lb. loaves ..	56,683,427	65,178,853	64,200,620	76,747,278	76,398,458	70,080,082
Cakes, pastry, pies ..	£ 1,635,766	2,029,798	2,246,428	2,548,761	2,673,367	2,635,193

**Meat and Fish preserving works.** Details appertaining to the meat and fish preserving industry for 1936-37 and the past five years are given hereunder—

## VICTORIA—MEAT AND FISH PRESERVING WORKS.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	8	11	12	12	12	12
Number of persons engaged ..	212	1,039	1,229	1,127	1,338	1,089
Horse-power of engines used	170	874	958	1,340	2,031	2,128
Value of plant and machinery £	17,739	74,100	93,219	86,612	130,491	139,945
Value of land and buildings £	54,398	108,101	111,730	143,325	187,171	190,646
Salaries and wages paid £	31,759	262,761	332,937	341,376	377,323	310,686
Fuel, light, and power £	2,989	15,218	24,148	27,118	27,643	27,654
Value of materials used £	199,562	1,702,687	2,185,066	2,279,190	2,882,204	2,154,730
Value of output ..	£ 309,959	2,240,701	2,973,694	3,311,797	3,879,890	2,963,365
Value added to materials £	102,192	501,341	725,683	959,907	934,922	747,857
Canned meat produced cwt.	49,448	343,350	496,390	511,236	509,624	318,386
Meat extracts .. cwt.	607	2,330	4,428	5,680	5,509	5,669
Fish (all kinds) ... cwt.	3,275	10,868	6,165	3,853	6,663	11,593

**Ice and Refrigeration.** Eighty-nine establishments were included under the industrial Sub-class "Ice and Refrigeration" during 1945-46. There were 2,442 persons employed and the total horsepower of machinery used was 22,481. The value of Land &c. and Plant &c. was £2,087,308 and the value of output £1,632,235. Particulars of Meat Freezing Works are incorporated in the foregoing figures. No collection of statistics is now made regarding quantities of carcasses treated in the freezing works.

**Imports and exports of meats.** The following statement shows the imports from and exports to oversea countries of frozen, chilled, and preserved meats during the year ended 30th June, 1946:—

VICTORIA—MEAT IMPORTED AND EXPORTED OVERSEA,  
1945-46.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Preserved by cold process—				
Beef .. .. .	..	..	lb. 1,212,459	37,622
Lamb .. .. .	..	..	.. 18,560,104	568,285
Mutton .. .. .	..	..	.. 8,884,125	190,576
Pork .. .. .	..	..	.. 10,479,042	403,856
Rabbits and hares .. .. .	..	..	prs. 1,035,311	109,044
Veal .. .. .	..	..	lb. 988,651	26,724
Other .. .. .	..	..	— ..	92,733
Bacon and hams .. .. .	..	..	lb. 2,388,461	201,494
Mutton, dehydrated .. .. .	..	..	.. 256,577	33,320
Potted and concentrated .. .. .	lb. 122,184	12,816	.. 44,644	8,827
Preserved in tins, &c. .. .. .	.. 22,127	1,503	lb. 28,092,602	1,461,462
Sausage casings .. .. .	.. cwt. 1,661	34,372	.. cwt. 7,196	174,749
Other .. .. .	.. ..	259	— ..	29,751
Total value .. .. .	.. ..	48,950	.. ..	3,344,443

**Flour Mills.** Victorian flour mills produce ample flour, &c., to supply all local requirements and a considerable surplus for export. The following table gives particulars of the industry for the year 1936-37 and for the past five years.

## VICTORIA—FLOUR MILLS.

Item.	Year Ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	38	36	35	38	38	40
Number of persons engaged ..	1,112	961	895	1,095	1,056	1,021
Horse-power of engines used ..	6,911	9,404	8,867	9,537	9,845	9,561
Value of plant and machinery £	508,072	508,082	492,992	488,460	482,344	497,473
Value of land and buildings £	546,587	656,432	627,288	661,696	664,672	688,849
Salaries and wages paid £	255,397	284,459	279,227	370,666	361,232	343,275
Fuel, light, and power £	56,037	56,109	57,436	79,436	76,398	63,155
Value of materials used £	4,975,111	3,262,391	3,016,400	4,344,715	4,093,174	3,511,565
Value of output ..	5,574,290	3,859,135	3,677,949	5,170,202	4,902,557	4,222,476
Value added to materials £	511,878	505,615	573,242	702,454	680,634	599,944
Wheat ground into flour, bushels	20,007,387	15,452,897	14,133,140	19,975,712	19,012,208	16,149,846
Flour produced .. tons	420,364	312,147	286,946	409,190	393,036	315,525
(2,000 lb.)						
Bran produced ..	89,832	61,736	57,079	84,562	76,925	66,177
Pollard produced ..	91,978	68,514	59,050	80,456	73,723	64,659
Wheatmeal produced .. cwt.	122,100	289,750	404,100	329,700	302,220	339,500

During the year ended 30th June, 1946, 127,843 tons of flour, valued at £2,897,017 were exported from Victorian ports to countries beyond Australia.

**Jam, pickle, and sauce works.** Particulars relating to jam, pickle, and sauce factories and fruit and vegetable canning factories are given in the table hereunder, which shows the main items of output, &c., for the year 1936-37 and for the past five years.

## VICTORIA—JAMS, PICKLES, SAUCES, PRESERVES, ETC.

Item.	Year Ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	45	49	47	51	60	52
Number of persons engaged ..	2,868	3,967	4,431	5,005	5,991	4,864
Horse-power of engines used ..	3,153	5,907	6,445	7,552	8,752	8,891
Value of plant and machinery £	326,249	395,078	429,736	514,836	712,849	683,355
Value of land and buildings £	635,774	745,373	769,766	966,492	1,060,335	1,046,513
Salaries and wages paid £	487,947	879,525	1,053,182	1,259,228	1,476,204	1,267,550
Fuel, light, and power used £	34,641	61,718	78,354	101,819	131,909	90,608
Value of materials used £	1,907,845	3,840,194	4,610,577	5,630,492	6,376,148	5,749,253
Value of output ..	3,023,101	5,807,778	6,838,292	8,238,373	9,579,780	8,172,809
Fresh fruit used .. cwt.	913,275	949,833	1,024,375	1,184,103	1,073,382	973,830
Sugar used ..	315,240	471,829	509,384	538,268	503,914	536,890
Output of—						
Jams and jellies .. cwt.	324,452	574,691	609,320	630,314	568,502	584,972
Fruit preserved in liquid ..	677,085	660,028	671,133	717,900	695,947	561,887
Fruit pulp ..	82,442	139,815	80,814	82,611	121,534	140,403
Sauce .. pints	8,410,984	11,413,867	12,617,134	18,917,172	18,837,150	16,252,192
Pickles and chutney ..	2,189,510	3,734,017	3,957,466	4,240,797	4,096,654	4,984,520

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

The following table contains particulars relating to the production, &c., of beet sugar for the past ten years:—

### VICTORIA—BEET SUGAR PRODUCTION.

Year Ended 30th June.	Area.	Beet Yield.	Sugar Content.	Sugar Produced.
	acres.	tons.	%	tons.
1937 .. ..	3,475	31,079	17·58	4,180
1938 .. ..	4,046	48,594	15·46	5,625
1939 .. ..	4,268	13,454	14·83	1,507
1940 .. ..	4,234	42,898	18·65	6,250
1941 .. ..	3,588	27,031	16·29	3,279
1942 .. ..	2,866	24,546	15·82	2,769
1943 .. ..	955	5,997	17·13	678
1944 .. ..	836	6,975	16·11	704
1945 .. ..	485	3,200	(For Fodder only)	
1946 .. ..	108	975		

Prices paid to growers for beet usually vary annually in accordance with the sugar content and the Australian price of sugar. The prices per ton for the past four years, when sugar was produced, were as follows:—1940-41, 44s.; 1941-42, 43s.; 1942-43, 48s.; 1943-44, 50s.

The decline in the area under beet in 1943-4-5-6 can be attributed to the impact of a war economy which caused a general reorganization of industry.

**Breweries and Distilleries.** Particulars regarding breweries and distilleries for the year 1936-37 and for the past five years are set forth in the succeeding tables.

### VICTORIA—BREWERIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of breweries ..	9	8	8	8	8	8
Number of persons engaged ..	1,325	1,726	1,477	1,374	1,385	1,526
Horse-power of engines ..	6,815	6,593	6,597	6,597	6,597	6,612
Value of plant and machinery £	842,958	899,401	861,935	830,740	818,950	815,857
Value of land and buildings £	766,377	772,397	762,219	756,689	752,040	748,895
Salaries and wages paid £	456,312	634,350	575,840	556,889	561,767	621,716
Fuel, light, and power used £	54,566	79,181	79,381	78,402	75,340	75,943
Value of materials used £	987,897	1,845,922	1,417,857	1,338,428	1,372,644	1,399,001
Value of output £	2,499,494	3,504,521	2,676,126	2,621,378	2,718,027	3,013,132
Value added to materials £	1,345,467	1,448,003	1,113,814	1,139,842	1,200,780	1,447,937
Materials used—						
Sugar .. .. cwt.	106,042	146,846	125,242	121,580	124,321	139,102
Malt .. .. bush.	863,330	1,226,263	983,431	956,171	989,614	1,016,854
Hops .. .. lb.	746,794	964,736	829,302	798,410	830,179	879,377
Beer and stout made gals.	27,246,234	38,048,080	31,644,186	30,743,871	31,787,067	35,484,347

## VICTORIA—DISTILLERIES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of distilleries ..	7	9	9	9	9	9
Number of persons engaged ..	81	152	181	189	175	238
Horse-power of engines ..	405	1,184	1,288	1,293	1,429	1,443
Value of plant and machinery £	112,381	206,419	234,035	221,258	189,491	207,729
Value of land and buildings £	188,848	232,833	227,333	223,951	196,671	161,976
Salaries and wages paid £	18,755	47,714	62,668	72,423	63,405	88,337
Fuel, light, and power £	7,300	18,996	36,597	37,618	26,217	30,344
Value of materials used £	69,926	232,339	410,181	422,263	338,200	467,260
Value of output .. £	170,121	522,261	759,823	777,796	636,728	887,862
Materials used—						
Wine .. .. gals.	2,147,674	479,758	609,140	661,012	581,708	1,117,090
Malt .. .. bush.	34,160	138,108	159,317	172,567	183,866	206,134
Other grain .. bush.	58,091	161,500	197,620	225,529	248,718	354,322
Molasses .. .. lb.	1,723,120	14,459,760	12,486,992	22,053,533	16,815,792	9,814,784
Raw sugar, sugar, &c. lb.	*	32,220,048	56,984,144	43,761,088	18,617,536	22,543,136
Spirits distilled in distilleries proof gals.	594,134	3,964,984	6,103,442	5,916,779	3,501,376	3,720,276
Spirits distilled by vintgrowers proof gals.	36,798	14,754	9,164	12,048	12,262	12,328

\* Not available.

The twelve establishments engaged in the manufacture of tobacco, cigars, and cigarettes during 1945-46 which conformed to the statistical definition of a factory gave employment to 2,087 persons, who were paid £516,643 in wages and who used machinery, plant, land, and buildings valued at £614,762. The subjoined table shows the quantity of tobacco leaf used by and the output of the full number of licensed establishments for the past ten years:—

## VICTORIA—TOBACCO FACTORIES.

Year Ended 30th June.	Leaf Operated on.		Production.		
	Australian.	Imported.	Tobacco.	Cigars.	Cigarettes.
	lb.	lb.	lb.	No.	No.
1937 ..	1,509,120	4,150,400	4,906,102	22,744,652	670,676,576
1938 ..	1,565,159	4,727,731	5,229,385	23,076,385	837,549,346
1939 ..	1,592,449	5,093,062	5,296,000	22,797,977	1,032,768,141
1940 ..	1,753,752	5,069,611	5,043,425	21,654,357	1,219,518,315
1941 ..	1,842,953	5,432,331	5,131,890	25,273,046	1,419,168,642
1942 ..	1,927,629	5,922,807	5,538,393	27,107,268	1,515,517,910
1943 ..	1,973,027	5,722,124	5,829,487	19,914,219	1,350,087,444
1944 ..	1,838,650	5,815,429	5,864,285	14,802,342	1,333,952,191
1945 ..	1,799,295	5,769,847	5,841,035	14,320,780	1,293,700,665
1946 ..	1,698,514	6,051,854	5,988,762	13,446,593	1,316,541,823

**Woollen mills.**

Victorian manufacturers supply nearly half of the Australian requirements in woollen piece goods. They have also developed an oversea export trade in wool tops, noils, and waste, the value of which, for the year 1945-46, was £2,110,684.

## VICTORIA—WOOLLEN MILLS.

Item.	Year Ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	52	62	65	64	67	65
Number of persons employed ..	10,036	12,060	12,051	11,834	11,363	11,094
Horse-power of engines ..	23,874	31,257	32,244	33,043	32,524	30,769
Value of plant and machinery £	1,776,088	1,596,452	1,529,782	1,468,274	1,459,495	1,410,896
Value of land and buildings £	1,252,528	1,496,219	1,499,939	1,517,095	1,594,797	1,600,950
Salaries and wages paid ..	1,320,125	2,778,159	2,992,594	2,955,664	2,817,138	2,855,086
Fuel, light, and power ..	159,801	283,854	314,501	319,429	292,667	257,994
Value of materials used ..	3,689,537	7,192,043	7,664,482	7,238,085	6,684,542	6,263,676
Value of output ..	6,156,701	12,683,553	13,267,842	12,534,481	11,823,664	11,752,967
Added value ..	2,161,754	4,850,103	4,917,482	4,526,808	4,496,264	4,900,275
Scoured wool used .. lb.	16,250,885	44,826,929	44,026,360	41,732,978	36,737,722	33,956,769
Cotton used .. lb.	839,356	189,143	81,403	45,247	83,968	209,216
Tweed and cloth made sq. yds.	12,757,001	17,827,084	18,870,925	16,682,579	15,671,208	16,079,393
Flannel made .. sq. yds.	3,217,803	2,211,209	2,068,775	2,385,085	1,627,997	1,815,504
Blankets .. pairs	317,348	1,252,555	1,184,688	1,099,910	1,064,141	651,212
Rugs and shawls .. No.	129,340	54,993	43,190	1,797	11,911	23,332

**Hosiery and Knitting.**

Early records show that, in the year 1886-87, there were three hosiery factories in Victoria, employing 56 hands. The capital value of land, buildings, and machinery was £2,080. The following table shows the main details relating to this industry for 1937 and the past five years:—

## VICTORIA—HOSIERY AND KNITTING.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	208	231	226	231	250	255
Number of persons employed—						
Male ..	3,632	3,168	2,406	2,443	2,818	3,336
Female ..	7,964	8,914	7,939	7,935	8,122	8,200
Salaries and wages paid ..	1,427,980	2,196,960	2,074,893	2,241,543	2,328,847	2,501,753
Value of land and buildings £	1,181,990	1,334,321	1,418,384	1,417,746	1,489,061	1,546,500
Value of plant and machinery £	1,273,751	1,043,866	964,452	911,304	868,495	892,739
Value of materials used ..	2,564,249	4,792,235	4,521,834	4,590,545	4,278,066	4,408,784
Fuel, light, and power ..	64,993	97,793	106,568	106,664	110,461	123,117
Value of output ..	5,213,388	8,975,065	8,364,803	8,576,213	8,288,324	8,615,732
Added value ..	2,460,934	3,911,541	3,563,102	3,720,254	3,717,604	3,870,150
Yarn used—						
Woollen .. lb.	3,674,751	8,373,235	8,227,663	8,033,891	7,713,200	5,763,239
Cotton ..	2,406,832	4,554,819	5,187,578	4,056,866	3,794,826	3,189,953
Silk ..	767,090	278,784	21,012	2,250	8,553	277
Rayon ..	2,803,599	3,474,403	2,574,767	2,558,304	2,935,052	3,027,083
Stockings made .. doz. pair	*1,359,548	*1,382,951	*1,025,915	*993,525	*823,517	*929,484
Socks made .. doz. pair	†1,006,454	†1,479,776	†1,382,673	†1,387,592	†1,347,054	†1,191,592
Garments made .. number	16,406,904	23,924,496	22,651,620	19,574,604	18,772,896	16,696,080

\* Women's socks and stockings only.

† Includes men's socks and stockings, doz. pair—1936-37, 775,443; 1941-42, 1,178,548; 1942-43, 1,164,919; 1943-44, 1,084,442; 1944-45, 1,067,046; 1945-46, 841,957. Children's socks and stockings, doz. pair—1936-37, 231,011; 1941-2, 301,228; 1942-43, 217,754; 1943-44, 303,150; 1944-45, 280,008; 1945-46, 349,635.

Boots and  
Shoes.Particulars relating to factories manufacturing boots  
and shoes are shown in the following table:—

## VICTORIA—BOOTS AND SHOES.

Item.	Year ended 30th June—					
	1937.	1942.	1943.	1944.	1945.	1946.
Number of establishments ..	165	164	167	177	182	195
Number of persons employed	9,362	9,814	8,534	8,423	8,704	9,464
Horse-power of engines used	3,219	4,746	4,985	5,993	6,219	5,337
Value of plant, machinery, land, and buildings ..	£ 1,045,991	1,088,328	1,067,950	1,203,014	1,307,608	1,373,385
Salaries and wages paid	£ 1,354,623	2,230,556	2,150,133	2,162,210	2,205,611	2,353,753
Fuel, light, and power	£ 27,948	34,746	33,457	34,255	37,414	37,505
Value of materials used	£ 2,395,438	4,174,394	4,045,432	4,092,681	4,260,161	4,020,905
Value of output ..	£ 4,288,431	7,672,775	7,357,218	7,376,946	8,234,686	7,765,401
Boots and shoes made	pairs 8,253,084	8,861,131	8,432,500	8,160,178	7,864,401	7,031,105
Slippers made ..	pairs 4,173,599	3,869,409	2,786,762	2,833,633	2,882,816	3,246,022

The following table shows particulars for each of the  
past ten years of establishments connected with the  
manufacture of dress, i.e., clothing, tailoring, dressmaking,  
millinery, underclothing, hats and caps, &c., but exclusive  
of boots and shoes:—

Dress  
(exclusive of  
boot)  
factories.

## VICTORIA—DRESS (EXCLUSIVE OF BOOT) FACTORIES.

Year ended 30th June—	Number of Factories.	Number of Persons Employed.			Salaries and Wages Paid	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
1937 .. ..	1,417	9,828	30,981	40,809	£ 4,770,768	£ 8,831,838	£ 16,655,155
1938 .. ..	1,479	9,231	32,225	41,456	5,352,401	9,700,508	18,027,406
1939 .. ..	1,441	9,350	31,840	41,190	5,471,374	9,164,940	17,703,544
1940 .. ..	1,411	9,462	32,607	42,069	5,868,961	10,426,504	19,811,880
1941 .. ..	1,423	9,406	32,925	42,331	6,454,817	12,469,012	23,070,998
1942 .. ..	1,398	7,881	31,922	39,803	6,962,657	14,392,261	26,466,497
1943 .. ..	1,295	6,279	28,186	34,465	6,653,613	13,819,869	24,910,037
1944 .. ..	1,113	4,001	20,070	24,071	4,935,092	9,971,430	17,804,115
1945 .. ..	1,179	4,269	21,991	26,260	5,374,556	10,669,587	19,378,990
1946 .. ..	1,162	4,222	21,776	25,998	4,993,573	10,660,720	19,294,628

Particulars relating to the electric light and power works of the State are given in the next table :—

### VICTORIA—ELECTRIC LIGHT AND POWER WORKS.

Year ended 30th June—	Number.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Generated.	Value of Output.
		£		£	'000 kilowatt hours.	£
1937 .. ..	91	6,934,522	1,346	320,098	1,049,768	2,635,151
1938 .. ..	81	6,327,762	1,306	345,576	1,071,596	2,524,528
1939 .. ..	79	6,617,530	1,376	390,090	1,136,301	2,435,604
1940 .. ..	78	7,467,138	1,445	418,511	1,252,936	2,673,351
1941 .. ..	73	8,040,055	1,417	454,182	1,385,038	2,980,947
1942 .. ..	71	8,119,400	1,418	486,931	1,539,960	3,415,892
1943 .. ..	70	8,284,916	1,397	544,551	1,648,233	3,837,000
1944 .. ..	72	8,394,868	1,438	595,315	1,671,745	3,779,763
1945 .. ..	70	10,103,146	1,534	612,553	1,714,763	3,993,472
1946 .. ..	69	10,233,183	1,760	681,761	1,803,407	4,167,493

Employees engaged in the transmission and distribution of electricity have not been included. In addition to the power stations shown above there is a number of factories which generate electricity mostly for their own use; the recorded total of thousand kwh's. generated for each of the past five years was as follows:—1941-42, 120,004; 1942-43, 128,466; 1943-44, 106,024; 1944-45, 102,584; and 1945-46, 100,996. Prior to 1937-38 the power generated in such factories was included in the production of Electric Light and Power Works.

### STATE ELECTRICITY COMMISSION OF VICTORIA.

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

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

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

A comprehensive generation and transmission system has been established based mainly upon the brown coal deposits at Yallourn, where the installed capacity of generators is 195,000 kW., including six turbo alternators of 12,500 kW., four of 25,000 kW., and two of 10,000 kW. (installed at briquette factory). From Yallourn, two 132,000 volt lines transmit electricity to receiving stations at Richmond and Yarraville. Other stations at Thomastown and Brunswick receive electricity from the Sugarloaf-Rubicon (installed 26,415 kW.) and the Kiewa hydro-electric stations in the north-eastern district (installed 24,000 kW.).

There are also generating stations at Newport (installed 108,000 kW.), Richmond (installed 15,000 kW.), Geelong (installed 10,500 kW.), and Ballarat (installed 5,900 kW.). All these generating sources are electrically inter-connected.

The Kiewa scheme to provide by economic instalments ultimately 117,000 kW. now has No. 3 power station (24,000 kW.) operating, and other works under construction. Additional plant at Newport under construction or on order will add 60,000 kW. to the peak load capacity.

There are nine main receiving stations (total kVA. 418,200), in addition to which there are 34 main metropolitan sub-stations (aggregating 480,750 kVA.), four distribution sub-stations at line voltage (aggregating 16,500 kVA.), and 4,584 metropolitan and rural sub-stations (aggregating 444,633 kVA.)—grand total, 1,359,483 kVA. High and low tension lines aggregate 5,878 and 4,773 route miles respectively, excluding 653 cable miles of underground cables. The Commission retails direct in twenty-two of the metropolitan municipalities, in addition to outer metropolitan centres.

The rural centres supplied by the Commission number 584, of which 492 had no supply previously. These figures exclude the provincial cities of Ballarat, Bendigo, and Geelong, where the Commission also operates tramways.

The Commission also operates at Yallourn a briquette factory, the production of which in 1945-46 amounted to 493,144 tons. The plant includes eight steam presses and eleven electric presses, with a total capacity of approximately 1,600 tons of brown coal briquettes a day. The bulk of the output is required for electricity generation. By-product electricity amounting to 88.81 million kWh. was generated at the briquette factory during 1945-46.

**Gasworks.** Particulars in regard to gasworks are given below for each of the past five years.

## VICTORIA—GASWORKS.

Year ended 30th June—	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Oil Used.	Gas Made.	Coke Produced.	Value of Output.
			£	Tons.	Gals.	'000 cubic feet.	Tons.	£
1942 ..	39	960	290,857	522,067	1,045,609	9,289,804	295,821	1,872,474
1943 ..	39	1,074	365,391	579,956	1,236,961	10,129,175	323,191	2,223,945
1944 ..	39	1,109	379,696	590,894	1,293,828	10,118,621	328,821	2,299,945
1945 ..	39	1,107	389,420	628,383	1,625,056	11,004,662	345,478	2,493,117
1946 ..	39	1,253	425,889	608,942	1,703,068	10,862,865	347,149	2,436,024

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

## VICTORIA—VALUE OF ARTICLES PRODUCED IN FACTORIES.

Class of Industry.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
1. Treatment of non-metalliferous mine and quarry products ..	3,145,439	2,550,795	2,565,401	2,624,954	3,315,588
2. Bricks, pottery, glass, &c. ..	2,886,317	2,050,168	2,037,535	2,176,842	2,718,311
3. Chemicals, dyes, explosives, paint, oils, and grease ..	25,037,087	28,116,873	22,779,005	21,554,314	20,260,798
4. Industrial metals, machines, implements, and conveyances ..	67,969,927	82,765,045	86,834,407	83,422,824	77,243,145
5. Precious metals, jewellery, and plate ..	1,351,672	890,369	951,237	957,425	1,349,056
6. Textiles and textile goods (not dress) ..	28,205,495	29,342,465	30,461,302	29,284,607	29,748,722
7. Skins and leather (not clothing or footwear) ..	5,583,322	5,828,842	5,781,860	5,631,579	5,904,121
8. Clothing ..	25,469,702	24,600,217	25,855,930	28,260,412	28,928,234
9. Food, drink, and tobacco ..	59,291,002	62,873,996	67,351,533	70,649,023	70,538,377
10. Woodworking and basket ware ..	8,005,131	7,864,039	8,785,451	9,077,021	9,518,189
11. Furniture, bedding, &c. ..	3,891,886	2,981,944	2,452,199	2,528,483	3,418,440
12. Paper, stationery, printing, bookbinding, &c. ..	12,101,259	12,717,878	13,356,139	14,544,374	15,423,419
13. Rubber ..	5,789,074	5,321,366	5,491,770	5,618,711	6,131,232
14. Musical instruments ..	70,431	20,865	22,768	32,376	46,238
15. Miscellaneous products ..	3,194,970	3,793,133	3,841,669	4,572,797	5,842,021
16. Heat, light, and power ..	5,288,366	5,960,945	6,079,708	6,486,569	8,759,112
Total ..	257,281,080	277,678,940	284,647,914	287,422,311	289,145,003

**Employment in factories.** The average number of persons employed over the whole year in each class of industry is shown below. The table of monthly employment in factories (see page 592) is designed to show seasonal employment.

VICTORIA—AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

Class of Industry.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
1. Treatment of non-metalliferous mine and quarry products .. .. .	2,742	1,964	1,897	2,025	2,659
2. Bricks, pottery, glass, &c. .. .. .	4,193	2,676	2,508	2,644	3,574
3. Chemicals, dyes, explosives, paint, oils, and grease .. .. .	24,961	25,615	18,385	15,207	11,961
4. Industrial metals, machines, implements, and conveyances .. .. .	82,010	99,220	102,607	97,022	88,421
5. Precious metals, jewellery, and plate .. .. .	2,238	1,217	1,164	1,149	1,602
6. Textiles and textile goods (not dress) .. .. .	31,309	29,078	29,858	29,686	30,215
7. Skins and leather (not clothing or footwear)	4,566	4,449	4,456	4,419	4,558
8. Clothing .. .. .	38,151	33,640	33,451	35,899	38,552
9. Food, drink, and tobacco .. .. .	31,052	30,549	32,622	33,991	33,811
10. Woodworking and basketware .. .. .	8,926	8,457	8,847	8,999	10,139
11. Furniture, bedding, &c. .. .. .	4,286	2,978	2,542	2,595	3,724
12. Paper, stationery, printing, bookbinding, &c. .. .. .	13,099	12,091	12,130	12,552	13,723
13. Rubber .. .. .	3,854	2,911	3,132	3,231	3,644
14. Musical instruments .. .. .	132	46	43	53	83
15. Miscellaneous products .. .. .	4,503	4,995	5,110	5,520	6,570
16. Heat, light, and power .. .. .	2,378	2,471	2,547	2,641	3,013
Total .. .. .	258,400	262,357	261,299	257,633	256,249

**Size of factories.** Particulars in the following table show that by comparison with the previous year the main increases in the number of factories and the persons employed therein were recorded in the size groups 5-10, 11-20, 21-50, and 51-100 hands respectively. Two groups—the lowest, under 4 hands—and the highest, 100 hands and over—showed decreases both in the number of factories, and in the number of employees.

## VICTORIA—FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

		Showing Annual Percentage Increase or Decrease (Year ended 30th June).									
		1942.	Increase.	1943.	Increase.	1944.	Increase.	1945.	Increase.	1946.	Increase.
			%		%		%		%		%
<b>Under 4 hands—</b>											
Number of—											
Factories ..		2,934	- 4.1	2,933	..	3,213	9.5	3,232	0.6	3,065	-5.2
Employees ..		5,537	- 3.7	5,522	-0.3	6,147	11.3	6,108	-0.6	6,025	-1.4
<b>4 hands—</b>											
Number of—											
Factories ..		659	-12.6	655	-0.6	745	13.9	760	2.0	785	3.3
Employees ..		2,636	-12.6	2,620	-0.6	2,980	13.7	3,040	2.0	3,140	3.3
<b>5 to 10 hands—</b>											
Number of—											
Factories ..		2,092	0.3	2,016	-3.6	2,087	3.5	2,205	5.7	2,520	14.3
Employees ..		14,963	2.0	13,995	-6.5	14,605	4.4	15,404	5.5	17,632	14.5
<b>11 to 20 hands—</b>											
Number of—											
Factories ..		1,236	- 2.5	1,234	-0.2	1,316	6.6	1,393	5.9	1,584	13.7
Employees ..		18,282	- 1.8	18,105	-1.0	19,359	6.9	20,552	6.2	23,521	14.4
<b>21 to 50 hands—</b>											
Number of—											
Factories ..		1,115	2.1	1,034	-7.3	1,066	3.1	1,159	8.7	1,287	11.0
Employees ..		35,633	2.9	33,040	-7.3	34,105	3.2	36,796	7.9	40,876	11.1
<b>51 to 100 hands—</b>											
Number of—											
Factories ..		425	- 4.1	406	-4.5	416	2.5	453	8.9	490	8.2
Employees ..		29,495	- 3.8	28,180	-4.5	28,803	2.2	31,458	9.2	34,314	9.1
<b>Over 100 hands—</b>											
Number of—											
Factories ..		457	8.8	460	0.7	474	3.0	467	-1.5	464	-0.7
Employees ..		153,256	16.3	161,892	5.6	156,312	-3.4	145,215	-7.1	132,285	-8.9

*Note.*—Minus sign indicates decrease.

### VICTORIA—PROPORTION OF FACTORIES OF DIFFERENT SIZES.

Size of Factory.	Percentage to Total (Year ended 30th June)—									
	1942.		1943.		1944.		1945.		1946.	
	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.
Under 4 hands ..	32.9	2.1	33.6	2.1	34.5	2.3	33.4	2.4	30.1	2.3
4 ..	7.4	1.0	7.5	1.0	8.0	1.1	7.9	1.2	7.7	1.2
5 to 10 ..	23.4	5.8	23.1	5.3	22.4	5.6	22.8	5.9	24.7	6.9
11 to 20 ..	13.9	7.0	14.1	6.9	14.1	7.4	14.4	7.9	15.5	9.1
21 to 50 ..	12.5	13.7	11.8	12.5	11.4	13.0	12.0	14.2	12.6	15.9
51 to 100 ..	4.8	11.4	4.6	10.7	4.5	11.0	4.7	12.2	4.8	13.3
101 and over ..	5.1	59.0	5.3	61.5	5.1	59.6	4.8	56.2	4.6	51.3
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Occupations in factories.** In the following table the persons employed in factories are grouped according to their occupational status:—

### VICTORIA—OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
Working proprietors ..	No. 7,399	7,180	7,906	8,223	8,089
Managers, overseers ..	8,738	9,444	9,776	10,145	} 24,236
Accountants, clerks ..	15,478	17,504	18,879	19,549	
Chemists, draftsmen, research staff, &c. ..	No. ..	..	..	..	
Engine-drivers, firemen ..	2,102	2,047	2,011	2,135	..
Foremen and overseers ..	..	..	..	..	9,439
Workers in factory or works ..	222,301	223,759	220,187	214,876	208,725
Outworkers ..	191	196	287	389	} 2,505
Carters, messengers, others ..	2,191	2,227	2,253	2,316	
Total ..	258,400	262,357	261,299	257,633	256,249

Particulars relating to 1945-46 have been presented in accordance with amendments adopted at the 1945 Conference of Statisticians which provided for the collection of the following types of occupation:—

- (1) Working proprietors.
- (2) Managerial and clerical staff including salaried managers and working directors.
- (3) Chemists, draftsmen, and other laboratory and research staff.
- (4) Foremen and overseers.

- (5) Workers in factory (skilled and unskilled).  
 (6) Carters (excluding delivery only), messengers, and persons working regularly at home for the establishment.

**Outworkers.** The term "outworkers" used in the preceding table relates to persons working for factories in their own homes, but does not include individuals working for themselves. The employment of outworkers is regulated by a special provision of the Factories and Shops Act. They are required to register their names and addresses with the Chief Inspector of Factories, and factory proprietors are forbidden to give work to those who are not so registered.

**Sex distribution in factories.** The average numbers of males and of females employed in factories, and their proportions to the male and female populations, for each of the years, 1936-37 to 1945-46, were as follows:—

VICTORIA—EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

Year Ended 30th June—	Males.		Females.		Total.	
	Number.	Average per 10,000 of Male Population.	Number.	Average per 10,000 of Female Population.	Number.	Average per 10,000 of Total Population.
1937 ..	128,457	1,403	62,926	672	191,383	1,033
1938 ..	136,160	1,481	65,629	697	201,789	1,084
1939 ..	136,218	1,470	65,613	692	201,831	1,076
1940 ..	143,238	1,533	69,223	724	212,461	1,124
1941 ..	161,880	1,745	75,756	781	237,636	1,252
1942 ..	175,691	1,812	82,709	840	258,400	1,322
1943 ..	175,340	1,792	87,017	874	262,357	1,331
1944 ..	175,049	1,780	86,250	858	261,299	1,314
1945 ..	174,424	1,769	83,209	820	257,633	1,285
1946 ..	178,951	1,798	77,298	758	256,249	1,271

Of the total persons employed, males formed 67 per cent. in 1936-37 and 68 per cent. in 1945-46. As compared with the year 1936-37, the number of males employed increased by 50,494 or 39 per cent. during 1945-46 and the number of females employed by 14,872 or 23 per cent.

**Employment of females.** Of the total number of females in factories, 57 per cent. were engaged in the textile and clothing groups of industries, 13 per cent. in the industrial metals, machines, &c., and 13 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table:—

## VICTORIA—FEMALE EMPLOYMENT IN FACTORIES, 1945-46.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Pharmaceutical and toilet preparations ..	690	1,040	151
Inks—polishes .. .. .	285	224	79
Cotton spinning and weaving .. .. .	1,256	1,519	121
Wool, carding, spinning, and weaving ..	6,099	5,321	87
Hosiery and knitting .. .. .	3,336	8,200	246
Silk, natural .. .. .	105	191	182
Rayon, nylon, and other synthetic fibres ..	33	107	324
Rope, cordage .. .. .	1,125	607	54
Canvas goods, &c. .. .. .	263	226	86
Furriers and fur dressing .. .. .	222	171	77
Bags, trunks, &c. .. .. .	416	469	113
Tailoring and ready-made clothing .. ..	1,943	6,489	334
Clothing, waterproof .. .. .	85	208	245
Dressmaking .. .. .	849	9,031	1,064
Millinery .. .. .	214	938	438
Shirts, collars, underclothing .. .. .	351	2,915	830
Stays and corsets .. .. .	107	784	733
Handkerchiefs, ties, &c. .. .. .	42	223	531
Hats and caps .. .. .	436	254	58
Gloves .. .. .	107	498	465
Boots and shoes .. .. .	4,939	4,525	92
Boot and shoe accessories .. .. .	96	134	140
Dyeworks and cleaning .. .. .	1,013	1,053	104
Cereal foods, &c. .. .. .	742	436	59
Biscuits .. .. .	580	544	94
Confectionery .. .. .	1,025	1,245	121
Jams, pickles, &c. .. .. .	3,217	2,591	81
Meat and fish preserving, &c. .. .. .	679	410	60
Condiments, grocers' sundries .. .. .	670	775	115
Tobacco, cigarettes, &c. .. .. .	826	1,261	153
Ice cream .. .. .	196	104	53
Bedding mattresses (not wire) .. .. .	285	215	75
Furnishing, drapery .. .. .	56	220	393
Government printing .. .. .	651	367	56
General printing and bookbinding .. ..	3,534	1,478	42
Envelopes, stationery, &c. .. .. .	436	447	103
Cardboard boxes, cartons .. .. .	767	769	100
Paper bags .. .. .	110	188	171
Plastic moulding and products .. .. .	1,022	594	58
Brooms and brushes .. .. .	353	214	61
Photographic material .. .. .	427	564	132
Toys, games, and sporting requisites ..	404	244	60
Artificial flowers .. .. .	27	110	407
All other factories .. .. .	138,932	19,395	14
Total .. .. .	178,951	77,298	43

Child labour  
in factories.

The main reason for the small proportion of children engaged in factories is that daily attendance at school is compulsory between the ages of 6 and 14 years.

Another reason is the restriction imposed by the Victorian Factories Act on the employment of female children under the age of 15 years unless a special permit is granted by the Chief Inspector of Factories on the grounds of poverty or hardship.

### VICTORIA—FACTORY EMPLOYMENT—AGE GROUPS.

Year.	Males.				Females.			
	Under 16 Years.	16 and Under 21 Years.	21 Years and Over.	Total Males.	Under 16 Years.	16 and Under 21 Years.	21 Years and Over.	Total Females.
June 15th, 1937	6,213	24,851	92,264	123,328	5,298	21,296	34,600	61,194
„ „ 1938	6,017	26,444	97,188	129,649	5,279	22,429	36,428	64,136
„ „ 1939	5,772	26,303	96,508	128,583	5,005	21,999	36,808	63,812
„ „ 1940	6,060	27,150	105,978	139,188	5,276	23,153	40,531	68,960
„ „ 1941	5,775	27,248	130,919	163,942	4,664	23,238	49,776	77,678
„ „ 1942	5,458	20,039	141,481	166,978	3,754	20,900	58,051	82,705
„ „ 1943	5,251	19,407	143,826	168,484	3,477	20,224	62,422	86,123
„ „ 1944	5,031	19,928	141,943	166,902	3,731	19,274	59,389	82,394
„ „ 1945	4,607	20,379	142,117	167,103	3,609	18,473	58,195	80,277
„ „ 1946	3,449	20,836	155,504	179,789	3,007	17,568	54,630	75,205

#### Percentage—

Year.	To Total Males Employed				To Total Females Employed			
	5·04	20·15	74·81	100·00	8·66	34·80	56·54	100·00
June 15th, 1937	5·04	20·15	74·81	100·00	8·66	34·80	56·54	100·00
„ „ 1938	4·64	20·40	74·96	100·00	8·23	34·97	56·80	100·00
„ „ 1939	4·49	20·46	75·05	100·00	7·84	34·48	57·68	100·00
„ „ 1940	4·35	19·51	76·14	100·00	7·65	33·58	58·77	100·00
„ „ 1941	3·52	16·62	79·86	100·00	6·00	29·92	64·08	100·00
„ „ 1942	3·27	12·00	84·73	100·00	4·54	25·27	70·19	100·00
„ „ 1943	3·12	11·52	85·36	100·00	4·04	23·48	72·48	100·00
„ „ 1944	3·01	11·94	85·05	100·00	4·53	23·39	72·08	100·00
„ „ 1945	2·76	12·20	85·04	100·00	4·50	23·01	72·49	100·00
„ „ 1946	1·92	11·59	86·49	100·00	4·00	23·36	72·64	100·00

#### Machinery in factories.

In the following tables are shown the number of factories using mechanical power, and the value of the machinery and plant for each of the ten years, 1936-37 to 1945-46. The value recorded is the depreciated value or book value less any existing depreciation reserve.

## VICTORIA—MACHINERY IN FACTORIES.

Year ended 30th June.	Number of Factories Equipped with Power-driven Machinery.	Rated Horse-power Used. *	Value of Machinery and Plant.
			£
1937 .. ..	8,538	789,524	36,213,626
1938 .. ..	8,655	858,216	36,868,289
1939 .. ..	8,761	862,221	38,570,380
1940 .. ..	8,741	997,768	40,849,523
1941 .. ..	8,678	1,063,200	44,985,756
1942 .. ..	8,527	1,167,102	48,065,805
1943 .. ..	8,426	1,209,668	51,963,258
1944 .. ..	8,988	1,282,764	55,457,719
1945 .. ..	9,318	1,337,871	58,571,064
1946 .. ..	9,851	1,413,958	58,537,394

\* See paragraph below relating to Horse-power.

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

## VICTORIA—NATURE OF POWER USED IN FACTORIES.

Year ended 30th June—	Number of Factories with Engines Operated by—					Manual Labour.
	Steam.	Gas.	Electricity.	Oil.	Water.	
1937 .. ..	402	171	7,465	489	11	627
1938 .. ..	385	146	7,661	455	8	586
1939 .. ..	424	129	7,780	424	4	489
1940 .. ..	325	112	7,861	437	6	474
1941 .. ..	300	101	7,863	407	7	443
1942 .. ..	280	91	7,770	382	4	391
1943 .. ..	263	73	7,726	358	6	312
1944 .. ..	247	62	8,296	378	5	329
1945 .. ..	231	59	8,651	370	7	351
1946 .. ..	210	59	9,175	396	11	344

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

From the following table it can be calculated that, during 1945-46, the total rated horse-power used in Victorian factories other than electric generating stations, excluding, to avoid duplication, the horse-power developed by electricity generated in such factories was 654,026.

### VICTORIA—HORSE-POWER OF ENGINES IN FACTORIES, 1945-46.

Class of Engine.	Electric Generating Stations (Maximum Load).	Other Factories.	Total.
Steam—			
Reciprocating .. .. .	545	29,543	30,088
Turbine .. .. .	599,624	37,725	637,349
Internal Combustion—			
Gas .. .. .	1,200	3,501	4,701
Petrol or other light oils .. .. .	20	4,799	4,819
Heavy oils .. .. .	9,798	10,392	20,190
Water .. .. .	66,660	1,389	68,049
Total .. .. .	677,847	87,349	765,196
Electric motors driven by—			
(a) Electricity generated in own works .. .. .	21,696	60,389	82,085
(b) Purchased electricity .. .. .	..	566,677	566,677

Reserve or idle horse-power capacity amounted to 99,770, exclusive of that in generating stations.

The total amount and the average amount of salaries and wages paid to persons employed in factories are given in the following table for each of the past ten years.

### VICTORIA—SALARIES AND WAGES PAID IN FACTORIES.

Year ended 30th June.	Drawings by Working Proprietors (excluding Profits).		Salaries Paid to Managers and Clerks. †		Wages Paid to all other Factory Workers. ‡		Total Salaries and Wages Paid.
	Males.	Females.	Males.	Females.	Males.	Females.	
<i>Aggregate Amounts.</i>							
	£	£	£	£	£	£	£
1937 ..	2,070,557	155,452	3,755,443	691,602	21,208,444	5,331,406	33,212,904
1938 ..	2,126,948	140,684	4,075,295	757,828	24,165,763	5,962,025	37,228,543
1939 ..	2,139,882	139,461	4,322,645	802,841	24,683,101	6,217,955	38,305,885
1940 ..	2,205,339	139,094	4,682,728	876,390	27,117,013	6,900,162	41,920,726
1941 ..	2,352,463	145,603	5,590,750	1,076,741	34,798,321	8,330,795	52,294,673
1942 ..	2,636,721	158,615	6,228,962	1,410,398	45,451,222	10,772,695	67,158,613
1943 ..	2,827,086	170,772	7,760,216	1,959,005	50,329,054	12,986,978	76,033,111
1944 ..	3,229,601	209,894	8,584,082	2,295,621	50,026,632	13,054,858	77,400,688
1945 ..	3,417,682	248,642	8,878,188	2,342,123	47,237,597	12,103,013	74,227,245
1946 ..	*	*	8,415,206	2,157,676	48,357,567	11,568,765	70,499,214*
<i>Average Amounts.</i>							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1937 ..	286 5 4	169 10 7	343 7 5	136 17 5	192 6 1	93 8 3	169 0 1*
1938 ..	297 18 8	180 7 3	349 13 10	138 7 4	205 18 0	100 8 4	180 12 10*
1939 ..	305 12 3	183 19 8	355 14 3	140 5 8	210 17 0	105 3 1	185 12 9*
1940 ..	315 5 6	189 4 10	359 10 4	142 8 8	220 1 6	110 13 11	193 6 2*
1941 ..	343 0 6	202 4 6	376 1 0	146 13 6	248 5 8	123 1 3	216 9 1*
1942 ..	398 17 10	224 19 9	433 1 4	162 10 6	296 3 7	146 18 4	256 8 6*
1943 ..	434 10 9	253 7 5	467 17 7	189 1 2	330 11 6	170 18 6	286 4 4*
1944 ..	451 15 1	277 5 5	492 11 6	204 9 1	332 9 3	175 15 9	291 17 8*
1945 ..	460 0 11	313 3 0	486 6 4	204 15 4	317 11 9	170 10 3	282 18 3*
1946 ..	..	..	495 13 1	205 4 9	312 15 5	175 2 7	284 1 9*

\* From 1945-46 inclusive, particulars of drawings of working proprietors have not been included in the collection form and the average annual salaries and wages paid have been computed exclusive of the number of working proprietors and the drawings made by them.

† From 1945-46 inclusive salaries paid to chemists, draftsmen and research staff are included.

‡ From 1945-46 inclusive wages paid to foremen and overseers are included.

The average annual earnings of all employees (excluding working proprietors) increased by £1 3s. 6d. in 1945-46.

The cost of production and the value of the output in each class of manufacturing industry during the year 1945-46 are given in the subjoined statement:—

## VICTORIA—FACTORY COSTS AND OUTPUT, 1945-46.

Class of Industry.	Cost of—				Value of Output.
	Raw Materials Used (including Containers).	Fuel, Light, and Power Used.	Salaries and Wages Paid.	Tools Replaced, Repairs to Plant, Oil and Water Used.	
	1.	2.	3.	4.	
	£	£	£	£	£
1. Treatment of non-metalliferous mine and quarry products .. ..	1,333,472	242,091	815,994	124,625	3,315,588
2. Bricks, pottery, glass, &c.	496,177	360,812	1,002,859	146,227	2,718,311
3. Chemicals, dyes, explosives, paint, oils, and grease	11,961,176	420,004	3,714,276	484,493	20,260,798
4. Industrial metals, machines, implements, and conveyances ..	35,182,909	1,138,727	26,876,774	1,756,368	77,243,145
5. Precious metals, jewellery, and plate .. ..	594,480	15,646	433,617	17,425	1,349,056
6. Textiles and textile goods (not dress) .. ..	16,033,671	533,899	7,334,537	765,556	29,748,722
7. Skins and leather (not clothing or footwear) ..	3,349,538	77,160	1,373,346	146,359	5,904,121
8. Clothing .. ..	15,166,095	202,650	8,018,580	322,784	28,928,234
9. Food, drink, and tobacco	48,455,313	1,287,712	9,419,282	1,099,410	70,538,377
10. Woodworking and basketware .. ..	4,987,424	124,968	2,715,949	209,188	9,518,189
11. Furniture, bedding, &c.	1,709,295	20,420	843,010	36,090	3,418,440
12. Paper, stationery, printing, bookbinding, &c.	7,495,464	345,419	3,857,265	393,429	15,423,419
13. Rubber .. ..	3,614,977	177,733	1,158,070	214,608	6,131,232
14. Musical instruments ..	8,584	476	22,331	1,077	46,238
15. Miscellaneous products ..	2,422,779	74,503	1,805,674	135,942	5,842,021
16. Heat, light, and power ..	1,413,596	1,283,507	1,107,650	354,663	8,759,112
Total .. ..	154,224,950	6,305,727	70,499,214	6,208,244	289,145,003

The difference between the sum of the first four columns and the last column in the preceding table represents the amount available for taxation, depreciation, interest, rent, insurance, &c., and funds available for profit. The proportions which this margin and the chief items of the specified costs of production bear to the total value of production in each class of industry are shown in the following table:—

VICTORIA—PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION IN FACTORIES, 1945-46.

Class of Industry.	Percentage of Costs, &c., to Total Value of Output.				
	Materials Used, Including Containers.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All Other Expenditure, Interest, and Profit.
	%	%	%	%	%
1. Treatment of non-metallic products .. ..	40.2	7.3	24.6	3.8	24.1
2. Bricks, pottery, glass, &c.	18.3	13.3	36.9	5.4	26.1
3. Chemicals, dyes, explosives, paint, oils, and grease	59.0	2.1	18.3	2.4	18.2
4. Industrial metals, machines, implements, and conveyances ..	45.5	1.5	34.8	2.3	15.9
5. Precious metals, jewellery, and plate .. ..	44.1	1.2	32.1	1.3	21.3
6. Textiles and textile goods (not dress) .. ..	53.9	1.8	24.7	2.6	17.0
7. Skins and leather (not clothing or footwear)	56.7	1.3	23.3	2.5	16.2
8. Clothing .. ..	52.4	0.7	27.7	1.1	18.1
9. Food, drink, and tobacco	68.7	1.8	13.4	1.6	14.5
10. Woodworking and basketware .. ..	52.4	1.3	28.5	2.2	15.6
11. Furniture, bedding, &c.	50.0	0.6	24.7	1.1	23.6
12. Paper, stationery, printing, bookbinding, &c.	48.6	2.2	25.0	2.6	21.6
13. Rubber .. ..	59.0	2.9	18.9	3.5	15.7
14. Musical instruments ..	18.6	1.0	48.3	2.3	29.8
15. Miscellaneous products ..	41.5	1.3	30.9	2.3	24.0
16. Heat, light, and power ..	16.1	14.7	12.6	4.0	52.6
<b>Total ..</b>	<b>53.3</b>	<b>2.2</b>	<b>24.4</b>	<b>2.1</b>	<b>18.0</b>

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to convert the raw material to its manufactured form. Thus, in class two, the sum paid in wages represents 37 per cent. and the cost of raw materials 18 per cent. of the value of the finished article, whilst, in class nine, the expenditure on wages amounts to 13 per cent. and that on raw materials to 69 per cent. of the value of the output.

**Cost of Production.** In the next table the cost of production, the value of the output of factories, and the balance available for profit and miscellaneous expenses are compared for each of the years 1936-37 to 1945-46.

#### VICTORIA—COSTS OF PRODUCTION, ETC., AND VALUE OF OUTPUT OF FACTORIES.

Year ended 30th June—	Specified Costs of Production.				All other Costs, &c.	Total Value of Output.
	Materials, Including Containers.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.		
	£	£	£	£	£	£
1937 .. ..	78,233,032	3,302,178	33,192,904	2,444,701	25,519,377	142,692,192
1938 .. ..	85,926,478	3,627,106	37,228,543	2,607,751	27,660,847	157,050,725
1939 .. ..	80,721,680	3,595,128	38,305,885	2,654,734	27,690,184	152,967,611
1940 .. ..	93,390,751	3,920,967	41,920,726	2,962,196	32,109,761	174,304,401
1941 .. ..	112,024,332	4,622,042	52,294,673	3,701,760	36,706,038	209,348,845
1942 .. ..	136,058,136	5,560,913	67,158,613	4,724,417	43,779,001	257,281,080
1943 .. ..	144,778,354	5,955,767	76,033,111	5,565,072	45,346,636	277,678,940
1944 .. ..	149,189,244	6,177,388	77,400,688	5,950,764	45,929,830	284,647,914
1945 .. ..	152,761,198	6,298,860	74,227,245	5,984,946	48,150,062	287,422,311
1946 .. ..	154,224,950	6,305,727	70,490,214	6,208,244	51,906,868	289,145,003

\* Includes all expenditure not specified on collection form viz.: taxation, depreciation, interest, rent, insurance, &c., and funds available for profit.

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

### VICTORIA—PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES.

Year ended 30th June—	Proportion of Outlay to Output.					Total.
	Materials, Including Containers.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	Other Expendi- ture, Interest, and Profit.	
	%	%	%	%	%	%
1937 .. ..	54·8	2·3	23·3	1·7	17·9	100·0
1938 .. ..	54·5	2·3	23·6	1·7	17·9	100·0
1939 .. ..	52·8	2·3	25·1	1·7	18·1	100·0
1940 .. ..	53·6	2·2	24·1	1·7	18·4	100·0
1941 .. ..	53·5	2·2	25·0	1·8	17·5	100·0
1942 .. ..	52·9	2·2	26·1	1·8	17·0	100·0
1943 .. ..	52·1	2·2	27·4	2·0	16·3	100·0
1944 .. ..	52·4	2·2	27·2	2·1	16·1	100·0
1945 .. ..	53·1	2·2	25·8	2·1	16·8	100·0
1946 .. ..	53·3	2·2	24·4	2·1	18·0	100·0

The ratio of cost of materials to the value of the output of factories was 52·8 per cent. on the average of the last five years, as against 53·8 per cent. in the period 1936-37 to 1940-41. The ratio of salaries and wages to output averaged 26·2 per cent. over the last five years, as against 24·2 per cent. over the period 1936-37 to 1940-41. The proportionate outlay on fuel, light, and power was 2·2 per cent. in the first-mentioned and 2·3 per cent. in the last-mentioned period. After allocating the proportion for repairs to plant and buildings, replacement of tools, and costs of lubricating oil and of water, the balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £16 16s. in every £100 of the total output value in the period 1941-42 to 1945-46, as compared with £17 19s. in the preceding five-year period.

In 1945-46, wages and salaries took 57·6 per cent. of the value added in manufacturing (see page 548), leaving 42·4 per cent. for the payment of expenses not specified above (taxation, depreciation, interest, rent, insurance, &c.), and funds available for profits.

In the following statement the amount of capital invested in machinery, plant, land, and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1945-46.

**Capital  
invested in  
manufacturing  
plant and  
premises.**

VICTORIA—VALUE OF MACHINERY AND PLANT, LAND  
AND BUILDINGS, 1945-46.

Class of Industry.	Value of Land and Buildings.	Value of Machinery and Plant.
	£	£
1. Treatment of non-metalliferous mine and quarry products ..	943,917	1,311,900
2. Bricks, pottery, glass, &c. ..	798,248	759,723
3. Chemicals, dyes, explosives, paint, oils, and grease ..	6,104,394	6,752,375
4. Industrial metals, machines, implements, and conveyances ..	17,174,574	15,661,705
5. Precious metals, jewellery, and plate ..	343,760	130,889
6. Textiles and textile goods (not dress) ..	4,899,073	4,067,833
7. Skins and leather (not clothing or footwear) ..	1,128,149	492,498
8. Clothing ..	5,462,115	1,787,796
9. Food, drink, and tobacco ..	11,877,394	7,754,106
10. Woodworking and basketware ..	1,467,433	1,251,999
11. Furniture, bedding, &c. ..	1,011,363	214,390
12. Paper, stationery, printing, bookbinding, &c. ..	3,898,431	2,645,775
13. Rubber ..	721,245	610,545
14. Musical instruments ..	32,339	6,671
15. Miscellaneous products ..	1,313,732	1,016,211
16. Heat, light, and power ..	3,088,786	14,072,978
Total ..	60,264,953	58,537,394

The capital invested in plant, buildings, &c., used in connexion with three classes of industry—food and drink, industrial metals, &c., and heat, light, and power—amounted, in the year under review to £69,629,543, appreciably more than one-half of the total for all manufacturing industries.

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries and the value of depreciation allowed thereon are shown in the next table for the years 1941-42 to 1945-46. The value recorded is the depreciated value or the book value less any existing depreciation reserve.

VICTORIA—VALUE OF MACHINERY AND PLANT, LAND  
AND BUILDINGS, AND DEPRECIATION.

Year ended 30th June—	Land and Buildings.		Machinery and Plant.	
	Value at end of Year.	Depre- ciation allowed during Year.	Value at end of Year.	Depre- ciation allowed during Year.
	£	£	£	£
1942 .. .. .	50,091,565	589,443	48,065,805	3,997,818
1943 .. .. .	52,642,052	676,241	51,963,258	4,762,145
1944 .. .. .	55,062,982	817,039	55,457,719	4,946,224
1945 .. .. .	57,808,861	768,690	58,571,064	4,674,061
1946 .. .. .	60,264,953	719,383	58,537,394	4,156,927

**Accidents in factories.** In the appended table the number of accidents in factories is given for the past ten years. The particulars in the table relate to establishments which came within the scope of the Factories Acts in force in the years specified.

### VICTORIA—ACCIDENTS IN FACTORIES.

Year.	Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1937 .. .. .	179,650	2,432	1·353
1938 .. .. .	184,509	2,374	1·286
1939 .. .. .	187,690	2,505	1·334
1940 .. .. .	196,263	3,534	1·801
1941 .. .. .	224,347	5,592	2·493
1942 .. .. .	215,456	6,347	2·946
1943 .. .. .	227,407	7,828	3·442
1944 .. .. .	229,397	7,235	3·154
1945 .. .. .	231,984	6,116	2·636
1946 .. .. .	241,705	6,387	2·642

**Manufactures—Penal Department and Blind Institute.** The foregoing tables do not include particulars relating to work of various kinds done at the Pentridge Penal Establishment and at the Royal Victorian Institute for the Blind. At the former establishment the manufacture and process treatment in relation to the following industries are carried on :—Wire-netting, textile, tailors, clothing, footwear, brushware, coir-matting, wood and metal works, knitting, printing, bookbinding, and photography. The estimated value of the output for 1945-46 was £61,694 and, of the materials used, £27,506. The articles produced are used principally by Government departments. The work carried on by the latter establishment is the manufacture of brushware, brooms, basketware, mats, and matting, and gives employment to 115 persons (105 males and 10 females). The value of the articles produced for the period under review was £62,770.

**Factory Statistics by Municipalities.** Although approximately 70 per cent. of the factories in Victoria are located within the Metropolitan area, some of the municipalities outside Greater Melbourne also have important manufacturing industries.

The following table gives factory statistics for the Metropolitan and for the more important extra-metropolitan municipalities for the year 1945-46.

VICTORIA—FACTORY STATISTICS BY MUNICIPALITIES, 1945-46.

Municipality.	Number of Factories.	Persons Employed.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used (including Containers).	Value of Articles Produced or Work Done
		Males.	Females.					
				£	£	£	£	£
Melbourne .. .. .	2,432	31,765	21,687	14,015,776	13,620,858	7,888,339	29,524,513	54,948,946
Brunswick .. .. .	432	6,551	4,701	2,808,104	1,964,412	1,238,123	5,260,944	10,301,120
Essendon .. .. .	142	2,172	522	812,177	303,290	196,316	938,666	2,044,022
Coburg .. .. .	109	2,034	1,454	890,983	496,570	279,184	1,480,081	3,101,406
Preston .. .. .	105	1,845	479	664,187	671,703	291,461	1,259,616	2,345,262
Northcote .. .. .	140	1,621	537	568,375	441,198	557,214	812,505	1,886,710
Fitzroy .. .. .	343	5,972	3,646	2,494,866	1,751,484	1,062,730	4,693,027	9,187,116
Collingwood .. .. .	443	11,337	7,061	4,964,409	2,905,564	2,284,352	9,495,367	18,443,860
Kew .. .. .	39	113	121	45,458	67,059	22,272	104,414	194,343
Camberwell .. .. .	125	787	795	324,751	283,351	123,959	471,699	1,061,655
Hawthorn .. .. .	174	1,338	806	516,125	456,776	252,290	1,002,738	2,031,165
Richmond .. .. .	376	11,592	5,667	4,827,268	3,443,369	2,441,090	9,045,509	17,950,254
Prahran .. .. .	342	3,955	2,832	1,694,597	1,251,923	558,939	4,490,912	7,742,200
Malvern .. .. .	154	885	505	311,777	314,771	157,686	550,118	1,108,228
Caulfield .. .. .	174	801	449	256,159	270,306	133,651	512,297	1,016,866
Oakleigh .. .. .	51	781	209	246,520	181,862	180,329	351,753	785,991
Sandringham .. .. .	52	286	264	111,357	116,890	63,155	167,988	410,351
Brighton .. .. .	112	958	564	394,905	322,658	275,820	784,372	1,575,870
St. Kilda .. .. .	144	935	524	353,627	340,171	136,506	655,965	1,422,507
South Melbourne .. .. .	464	15,962	4,624	6,171,240	4,268,043	3,336,923	14,458,394	26,652,324
Port Melbourne .. .. .	99	8,830	2,164	3,377,194	2,198,088	1,345,012	7,604,744	13,300,599
Footscray .. .. .	245	12,384	3,081	4,711,099	4,043,628	5,550,268	14,799,050	23,926,766
Williamstown .. .. .	110	9,612	790	3,316,614	3,027,570	4,828,296	3,657,680	9,653,480
Braybrook .. .. .	83	9,487	1,706	3,778,543	4,897,689	6,127,033	7,098,113	13,409,737
Heidelberg .. .. .	75	1,015	307	377,862	349,499	148,863	1,221,656	2,202,048
Box Hill .. .. .	43	523	86	170,957	119,503	243,078	244,872	524,538
Moorabbin .. .. .	60	1,004	360	363,750	258,964	409,983	551,363	1,450,228
Mordialloc .. .. .	32	292	233	100,184	53,709	69,037	192,443	366,484
Chelsea .. .. .	16	109	11	33,074	25,659	17,120	44,151	103,750
Total Metropolitan .. .. .	7,116	144,946	66,185	58,701,918	48,446,567	40,219,029	121,474,950	229,149,826

Factories, Fisheries, Mines, &c.

VICTORIA—FACTORY STATISTICS BY MUNICIPALITIES, 1945-46—*continued.*

586

Victorian Year-Book, 1945-46.

Municipality.	Number of Factories.	Persons Employed.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used (including Containers).	Value of Articles Produced or Work Done.
		Males.	Females.					
				£	£	£	£	£
Dandenong .. .. .	47	1,226	407	445,792	275,283	235,596	1,056,666	1,755,901
*Geelong .. .. .	259	7,187	2,274	2,686,626	2,364,696	2,348,628	5,405,060	10,699,347
Korumburra .. .. .	24	165	22	49,062	57,659	55,718	385,828	600,548
Alexandra .. .. .	16	166	2	52,628	156,111	764,695	85,706	621,832
Kyneton .. .. .	33	230	79	71,761	40,352	40,262	159,077	325,884
Castlemaine .. .. .	33	795	191	266,001	102,157	244,353	296,985	730,361
Maryborough .. .. .	34	554	365	222,330	63,296	55,747	360,329	707,379
†Ballarat (including Sebastopol)	229	3,466	1,666	1,281,091	1,094,652	1,303,937	2,128,915	4,471,334
†Colac .. .. .	68	604	216	217,855	168,018	123,336	770,111	1,135,334
Hampden .. .. .	42	409	120	139,041	112,262	111,239	798,742	1,110,779
†Warrnambool .. .. .	69	1,286	541	495,265	501,506	475,479	2,263,215	3,327,447
Ararat .. .. .	35	335	192	117,296	89,606	89,476	144,109	460,864
Hamilton .. .. .	47	260	72	80,317	83,285	59,937	234,080	397,652
†Portland .. .. .	45	440	24	118,465	87,255	114,933	289,304	525,864
Horsham .. .. .	39	220	47	60,787	109,249	73,220	213,124	354,266
†Stawell .. .. .	41	347	193	125,450	82,249	88,038	351,684	703,307
†Mildura .. .. .	95	906	258	294,386	253,061	326,242	684,809	1,272,324
†Swan Hill .. .. .	53	304	64	85,369	79,810	90,587	215,571	398,790
†Bendigo (including Eaglehawk)	139	1,626	841	610,688	965,267	1,726,119	1,362,721	2,456,005
Strathfieldsaye .. .. .	5	590	47	196,374	261,001	156,118	297,148	593,790
Echuca .. .. .	32	171	28	46,914	41,366	28,901	203,839	279,105
Rodney .. .. .	35	387	202	158,458	222,827	210,071	789,694	1,084,107
†Shepparton .. .. .	59	623	224	221,256	207,270	125,093	1,097,999	1,544,175
†Wangaratta .. .. .	49	344	193	112,989	112,858	114,570	421,897	615,735
Bairnsdale .. .. .	42	188	34	49,452	52,058	36,534	204,707	306,151
Maffra .. .. .	15	403	80	150,735	109,800	172,403	1,342,030	1,656,123
Woorayl .. .. .	17	127	45	38,216	52,023	44,083	493,244	565,663
Morwell .. .. .	22	1,836	240	770,968	1,522,183	5,582,619	1,107,420	6,375,607
Narracan .. .. .	45	378	101	123,612	56,136	143,508	353,568	385,896
Warragul .. .. .	25	217	144	86,143	73,247	48,286	356,969	519,789
Buln Buln .. .. .	20	283	17	99,918	87,238	94,808	537,616	688,670
Other Municipalities .. .. .	1,365	7,932	2,184	2,322,051	2,336,605	3,233,829	8,337,833	13,125,048
Total Country .. .. .	3,079	34,005	11,113	11,797,296	11,818,386	18,318,365	32,750,000	59,995,177
Total State .. .. .	10,195	178,951	77,298	70,499,214	60,264,953	58,537,394	154,224,950	289,145,003

\* Includes Corio, Geelong West, and Newtown and Chilwell.

† Includes Shire of same name.

## VALUE OF VICTORIAN PRODUCTION.

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

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

## VICTORIA—GROSS VALUE OF PRODUCTION.

Division of Industry.	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
Agriculture .. ..	25,794,748	28,333,943	25,027,101	23,911,774	33,156,746
Pastoral .. ..	23,498,063	27,716,439	29,148,380	27,409,567	20,753,083
Dairying .. ..	15,567,176	16,026,887†	16,997,685†	17,864,037†	18,866,694†
Poultry and Bees ..	5,036,181	7,041,842	7,334,746	7,455,981	7,506,706
Trapping .. ..	2,197,815	1,521,598	2,864,377	2,553,735	3,271,866
Forestry .. ..	2,122,463	2,449,484	2,602,467	2,884,556	3,127,887
Fisheries .. ..	463,724	448,546	409,143	400,720	548,081
Mining .. ..	2,987,990	2,542,880	2,179,766	2,176,539	2,506,043
Manufacturing* ..	110,937,614	121,379,747	123,330,518	122,377,307	122,406,082
Total .. ..	188,605,774	207,461,366	209,894,183	207,034,216	212,143,188

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

† Includes Subsidy—1942-43, £675,695; 1943-44, £2,497,404; 1944-45, £3,226,620; 1945-46, £3,147,000.

The ultimate aim of the valuation of production is to arrive at the sum available for distribution among those concerned in each class of industry, i.e.—

- (a) Workers in all grades of the industry.
- (b) Proprietors (including landlords) of any of the instruments of production concerned.
- (c) Providers of capital, including debenture holders and mortgagees.

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

### VICTORIA—VALUE AT THE PLACE OF PRODUCTION.

Produce.	Value in Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
<b>Agriculture</b> .. ..	<b>21,647,390</b>	<b>24,419,285</b>	<b>22,213,552</b>	<b>21,598,093</b>	<b>29,315,445</b>
Barley .. ..	565,310	225,905	217,952	206,589	408,369
Maize .. ..	107,599	89,904	53,379	59,805	112,558
Oats .. ..	762,688	721,571	430,497	535,928	1,129,836
Wheat .. ..	7,993,157	7,518,405	3,753,315	1,896,500	8,621,711
Onions .. ..	301,661	458,075	403,342	697,289	585,789
Potatoes .. ..	1,507,621	1,697,700	2,160,192	3,064,501	2,377,434
Hay and Straw .. ..	4,395,334	4,280,428	4,309,087	4,650,837	5,704,774
Fruit—					
Orchards .. ..	1,404,190	2,077,431	2,904,019	2,700,113	2,550,527
Vineyards .. ..	2,266,924	2,494,337	2,887,618	2,096,206	2,751,473
Other Crops .. ..	2,342,906	4,855,529	5,094,151	5,690,325	5,072,974
<b>Pastoral</b> .. ..	<b>21,692,552</b>	<b>25,739,840</b>	<b>27,097,113</b>	<b>25,457,318</b>	<b>19,348,301</b>
Wool .. ..	11,765,038	13,399,024	12,510,938	11,149,746	8,955,354
Sheep, slaughtered .. ..	4,539,279	6,124,362	7,844,181	7,533,893	4,736,249
Cattle, slaughtered .. ..	5,388,235	6,188,942	6,741,994	6,773,679	5,656,698
Horses .. ..	.. ..	27,512	.. ..	.. ..	.. ..
<b>Dairying</b> .. ..	<b>14,905,707</b>	<b>15,395,512*</b>	<b>16,379,834*</b>	<b>17,237,829*</b>	<b>18,232,630*</b>
Cream for butter .. ..	7,644,724	6,957,188	6,484,915	6,099,988	7,203,179
Milk for cheese .. ..	652,967	819,703	792,856	862,385	1,306,779
Milk for condensing, concentrating, &c. .. ..	1,023,419	1,176,508	1,308,796	1,454,077	1,563,341
Whole milk consumed .. ..	2,851,599	2,789,756	2,832,099	2,823,019	3,006,575
Pigs .. ..	2,732,998	2,976,662	2,463,764	2,771,740	2,005,756

\*Inclusive of Subsidy—1942-43, £675,695; 1943-44, £2,497,404; 1944-45, £3,226,620; 1945-46, £3,147,000.

VALUE AT THE PLACE OF PRODUCTION—*continued.*

Produce.	Value in Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
<b>Poultry and Bees .. ..</b>	<b>4,646,757</b>	<b>6,473,203</b>	<b>6,680,036</b>	<b>6,889,068</b>	<b>6,936,341</b>
Eggs .. .. .	3,591,119	4,616,822	5,097,787	5,317,338	5,208,664
Poultry .. .. .	922,682	1,725,973	1,509,385	1,450,606	1,612,496
Honey and beeswax ..	132,956	130,408	72,864	121,124	115,181
<b>Trapping, &amp;c. .. ..</b>	<b>2,127,645</b>	<b>1,462,031</b>	<b>2,771,645</b>	<b>2,451,538</b>	<b>3,174,158</b>
Rabbits and hares ..	189,875	209,296	229,524	325,131	279,220
Rabbit and hare skins, &c.	1,937,770	1,252,735	2,542,121	2,126,407	2,894,938
<b>Forestry .. .. .</b>	<b>1,898,809</b>	<b>2,162,594</b>	<b>2,294,547</b>	<b>2,565,264</b>	<b>2,826,229</b>
Sawmills .. .. .	1,028,202	1,068,824	1,124,452	1,340,415	1,675,443
Firewood .. .. .	802,364	1,056,457	1,142,655	1,178,753	1,118,180
Bark for tanning ..	68,243	37,313	27,440	46,096	32,606
<b>Fisheries .. .. .</b>	<b>387,462</b>	<b>377,418</b>	<b>345,749</b>	<b>339,043</b>	<b>465,625</b>
Fish .. .. .	379,590	373,113	342,195	336,392	461,846
Crayfish .. .. .	7,831	3,731	2,875	1,947	3,613
Oysters .. .. .	41	574	679	704	166
<b>Mining .. .. .</b>	<b>2,856,306</b>	<b>2,419,006</b>	<b>2,060,048</b>	<b>2,037,838</b>	<b>2,345,366</b>
Gold .. .. .	1,593,776	1,056,639	588,189	566,211	658,850
Coal—					
Black .. .. .	279,743	384,479	400,255	377,624	468,096
Brown .. .. .	422,933	468,868	526,530	565,055	641,069
Other Metals and Minerals	128,330	123,443	136,621	153,077	120,206
Quarrying .. .. .	431,524	385,577	408,453	375,871	457,145
<b>Total Primary .. ..</b>	<b>70,162,628</b>	<b>78,448,889</b>	<b>79,842,524</b>	<b>78,575,991</b>	<b>82,644,095</b>
<b>Manufacturing .. ..</b>	<b>110,937,614</b>	<b>121,379,747</b>	<b>123,330,518</b>	<b>122,377,307</b>	<b>122,406,082</b>
<b>Grand Total .. .. .</b>	<b>181,100,242</b>	<b>199,828,636</b>	<b>203,173,042</b>	<b>200,953,298</b>	<b>205,050,177</b>

The values of production of the various classes of industry, as they appear in the previous table for the year 1945-46, are shown hereafter, together with the costs of production where available. The difference between the two figures represents the net value of production or the net return available to the producers for wages, rent, interest, and profits. As previously explained, the deductions are incomplete, and depreciation (see next page) has been here disregarded, but the margin of error is considered to be small in view of the comparative unimportance of the industries concerned from the point of view of production costs.

## VICTORIA—NET VALUE OF PRODUCTION, 1945-46.

Industry.	Value at Place of Production.	Cost of Production.*	Net Value.	Net Value per Head of Population.
	£	£	£	£ s. d.
Agriculture .. ..	29,315,445	8,988,607	20,326,838	10 1 8
Pastoral .. ..	19,348,301	1,250,355	18,097,946	8 19 7
Dairying .. ..	18,232,630	3,200,643	15,031,987	7 9 2
Poultry and Bees ..	6,936,341	1,154,780	5,781,561	2 17 4
Trapping, Forestry and Fisheries .. ..	6,466,012	415,000†	6,051,012	3 0 0
Mining .. ..	2,345,366	610,789	1,734,577	0 17 3
Manufacturing .. ..	122,406,082	..	122,403,082	60 14 7
Total .. ..	205,050,177	15,620,174	189,430,003	93 19 7

\* Costs of production include stockfeed, seed costs and pickling, manures, spraying, sheep and cattle dips, power, fuel, water, and all other materials used in production.

† Incomplete.

**Employment in factories.**

Every factory in Victoria submits an annual statement showing the number of persons employed on the 15th day of each month, and from these data an index of employment is constructed.

It will be appreciated that, in order to publish figures to the latest possible date, it is necessary to anticipate these annual statements. Consequently, in the table which follows, the figures from July, 1947, are estimates based on the monthly pay-roll tax returns rendered by factories. It is considered that such returns cover 90 per cent. of total factory employment in Victoria.

## INDEX OF FACTORY EMPLOYMENT.

(Base—July, 1933, 136,793 = 1,000.)

Month.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
July ..	1,796	1,851	1,863	1,832	1,805	1,879	1,952
August ..	1,804	1,845	1,857	1,829	1,803	1,890	1,961
September ..	1,801	1,853	1,860	1,825	1,771	1,903	1,957
October ..	1,844	1,861	1,866	1,827	1,749	1,903	1,963
November ..	1,868	1,867	1,862	1,826	1,747	1,856	1,971
December ..	1,857	1,872	1,865	1,826	1,747	1,800	1,959
January ..	1,825	1,878	1,867	1,813	1,752	1,802	1,959
February ..	1,842	1,882	1,869	1,830	1,797	1,852	1,973
March ..	1,848	1,894	1,864	1,838	1,826	1,851	1,983
April ..	1,837	1,892	1,845	1,825	1,847	1,846	1,997
May ..	1,826	1,869	1,828	1,812	1,860	1,885	1,993
June ..	1,825	1,862	1,823	1,808	1,864	1,898	..

**Employment  
in Retail  
Trade.**

In peace-time the volume of employment in retail trade is a valuable indicator of economic conditions. A sample collection of 102 large Victorian retail stores was made by the Government Statist from July, 1933, to December, 1941. This collection was then discontinued because of institution of the pay-roll tax. Figures collected in conjunction with this tax cover all retail establishments whose pay-roll is more than £20 per week.

The following table shows a monthly index of total employment in retail establishments based mainly on the latter source:—

**VICTORIA—INDEX OF RETAIL EMPLOYMENT.**  
(Base July, 1941, 58,500 = 1,000.)

Month.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
July ..	943	1,000	877	821	801	828	987	1,052
August ..	931	987	866	812	804	836	994	1,050
September ..	945	993	853	813	802	854	1,004	1,058
October ..	951	996	847	806	804	859	1,014	1,070
November ..	983	1,004	853	814	824	907	1,053	1,096
December ..	1,156	1,038	857	820	835	925	1,069	1,120
January ..	995	964	834	799	817	914	1,046	1,083
February ..	961	954	832	796	818	933	1,048	1,090
March ..	960	949	835	793	824	936	1,045	1,093
April ..	970	935	824	796	823	956	1,050	1,097
May ..	976	907	827	803	826	968	1,044	1,099
June ..	1,006	895	824	803	829	974	1,048	..

**Monthly  
employment  
in factories.**

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

**VICTORIA—MONTHLY EMPLOYMENT**

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Aerated waters .. .. .	875	916	946	896
Agricultural implements .. .. .	4,752	4,739	4,695	4,744
Aircraft .. .. .	11,555	11,228	9,449	8,168
Arms .. .. .	4,249	4,121	3,425	2,804
Artificial flowers .. .. .	88	90	96	112
Bacon curing .. .. .	692	714	704	669
Bags and sacks .. .. .	149	155	149	158
Bags, trunks, &c. .. .. .	740	743	746	765
Bakeries .. .. .	3,151	3,164	3,171	3,187
Basketware .. .. .	33	34	37	37
Bedding and mattresses .. .. .	455	441	454	460
Biscuits .. .. .	1,211	1,216	1,168	1,119
Boiling down, tallow, &c. .. .. .	380	367	361	349
Boot accessories .. .. .	212	207	212	208
Boot repairing .. .. .	281	285	293	288
Boots and shoes .. .. .	8,817	8,805	8,956	9,027
Bottling .. .. .	272	268	263	267
Boxes and cases .. .. .	1,910	1,908	1,910	1,878
Breweries .. .. .	1,414	1,417	1,418	1,434
Bricks, tiles, firebricks .. .. .	985	1,042	1,095	1,182
Brooms and brushware .. .. .	630	620	611	504
Butter and cheese .. .. .	3,397	3,493	3,802	3,997
Cabinet and furniture making .. .. .	2,177	2,189	2,195	2,241
Cement and cement goods .. .. .	857	871	899	918
Cereal foods .. .. .	1,155	1,141	1,143	1,164
Chaffcutting .. .. .	267	272	263	281
Chemical fertilizers .. .. .	1,114	1,053	1,036	1,024
Chemicals—Industrial and heavy .. .. .	1,724	1,684	1,689	1,649
Chemicals—Pharmaceutical .. .. .	1,597	1,650	1,642	1,671
Condiments, coffee .. .. .	1,442	1,437	1,418	1,424
Confectionery .. .. .	2,177	2,171	2,194	2,179
Cooperage .. .. .	173	170	167	168
Corsets, stays .. .. .	845	846	858	863
Cotton .. .. .	2,748	2,720	2,717	2,735
Cutlery and small tools .. .. .	1,561	1,557	1,531	1,528
Cycle and accessories .. .. .	500	491	514	526
Dehydrated fruit and vegetables .. .. .	541	521	570	561
Distilleries .. .. .	215	215	209	211
Dressmaking .. .. .	8,880	9,008	9,074	9,213
Dyeworks and cleaning .. .. .	1,716	1,743	1,837	1,885
Earthenware, china, &c. .. .. .	988	979	991	1,041

messengers and all others engaged in work connected with manufacturing.

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

IN FACTORIES, 1945-46.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
1,016	1,066	1,066	1,097	1,086	1,008	958	920
4,825	4,859	4,896	4,897	4,966	4,958	4,982	5,007
7,842	7,550	7,457	7,168	7,139	7,143	6,996	6,986
2,114	2,004	1,998	2,004	1,929	1,978	1,965	1,931
125	121	126	129	132	155	163	173
683	705	704	712	702	695	707	724
164	159	163	163	163	167	166	166
789	819	846	861	875	905	928	957
3,212	3,246	3,268	3,323	3,355	3,437	3,464	3,482
39	43	44	47	47	44	46	43
468	470	437	472	491	507	520	520
1,067	1,114	1,031	1,049	1,047	1,101	1,092	1,152
349	346	347	342	331	333	347	360
213	205	191	207	221	227	234	234
292	298	312	321	326	331	338	338
9,113	9,135	9,050	9,272	9,445	9,704	9,935	9,969
277	329	307	319	327	342	370	361
1,873	1,868	1,881	1,910	1,906	1,914	1,930	1,914
1,453	1,505	1,550	1,553	1,589	1,628	1,663	1,680
1,278	1,289	1,383	1,449	1,501	1,616	1,704	1,735
488	484	489	498	524	545	574	606
4,131	4,082	3,933	3,788	3,845	3,915	3,961	3,962
2,322	2,407	2,584	2,768	2,907	3,003	3,049	3,084
911	931	962	1,014	1,067	1,070	1,115	1,149
1,154	1,148	1,138	1,178	1,200	1,203	1,226	1,216
302	294	326	363	353	358	351	358
999	1,026	1,226	1,213	1,275	1,419	1,456	1,269
1,627	1,578	1,505	1,507	1,504	1,542	1,539	1,530
1,686	1,690	1,625	1,666	1,751	1,790	1,823	1,845
1,417	1,393	1,359	1,418	1,438	1,429	1,470	1,476
2,193	2,199	2,036	2,147	2,220	2,242	2,311	2,332
172	180	189	185	188	191	204	211
859	861	861	852	866	909	954	1,000
2,674	2,704	2,739	2,750	2,777	2,836	2,802	2,816
1,531	1,553	1,548	1,539	1,512	1,555	1,535	1,616
515	524	525	553	572	589	597	602
558	559	589	627	659	1,315	1,221	977
226	228	199	220	250	290	286	267
9,325	9,349	9,215	9,586	9,764	9,894	9,977	9,966
1,981	1,981	2,018	2,082	2,134	2,129	2,191	2,169
1,047	1,055	1,086	1,118	1,121	1,153	1,127	1,144

## VICTORIA—MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Electric light—Government .. ..	1,151	1,171	1,186	1,221
„ Local authority .. ..	416	417	417	418
„ Companies .. ..	70	70	70	70
Electrical apparatus .. ..	6,142	6,180	6,139	6,127
Electrotyping and stereotyping .. ..	54	56	52	54
Engineering (not marine or electrical) .. ..	6,360	6,313	6,124	6,043
Explosives .. ..	5,840	5,707	4,359	3,389
Extracting and refining—other metals .. ..	172	173	173	169
Fellmongery .. ..	659	586	598	591
Fibrous plaster .. ..	348	340	381	407
Flax mills .. ..	964	1,206	935	904
Foundries—Ferrous .. ..	2,536	2,523	2,504	2,487
Furnishing, drapery .. ..	220	229	240	247
Furriers .. ..	260	265	267	287
Galvanized iron working and tinsmithing .. ..	6,325	6,313	6,324	6,296
Gas fittings and meters .. ..	190	190	195	197
Gasworks—Local authorities .. ..	101	103	105	107
„ Companies .. ..	1,090	1,103	1,099	1,101
Glass (including bottles) .. ..	883	858	874	874
Gloves .. ..	553	562	554	542
Gold, silver, and electroplating .. ..	375	387	406	445
Grain milling .. ..	793	815	825	830
Handkerchiefs, ties, &c. .. ..	233	231	243	239
Hats and caps .. ..	651	655	653	658
Horse-drawn vehicles .. ..	138	139	142	144
Hosiery and knitting .. ..	10,985	10,861	10,877	10,924
Ice, refrigerating .. ..	2,736	2,609	2,506	2,548
Ice cream .. ..	219	227	254	284
Inks, polishes, &c. .. ..	477	470	465	464
Jams and fruit preserving .. ..	4,817	4,862	4,773	4,603
Jewellery .. ..	416	398	409	410
Joinery .. ..	1,609	1,621	1,659	1,694
Lime, plaster, and asphalt .. ..	203	193	189	194
Machine belting .. ..	132	135	130	132
Malting .. ..	384	371	375	372
Margarine .. ..	90	83	91	90
Marble, slate, &c. .. ..	181	182	194	210
Meat and fish preserving .. ..	1,501	1,506	1,396	1,231
Millinery .. ..	990	992	1,027	1,033
Motor accessories .. ..	2,459	2,430	2,408	2,385
Motor body building .. ..	4,003	3,904	3,869	3,717
Motor construction and assembly .. ..	1,977	1,971	1,933	1,925
Motor repairs .. ..	4,728	4,767	4,863	4,945
Musical instruments .. ..	58	59	62	62
Newspapers .. ..	1,778	1,800	1,837	1,886
Non-ferrous metals—Rolling, founding, &c. .. ..	2,579	2,601	2,630	2,559
Oils, mineral .. ..	368	352	352	357
Oils, vegetable .. ..	96	99	95	91
Paper, paper bags, and cardboard boxes .. ..	3,711	3,711	3,717	3,726
Perambulators .. ..	126	132	131	142
Photo engraving .. ..	213	218	225	235

## FACTORIES, 1945-46—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
1,239	1,233	1,285	1,306	1,322	1,342	1,341	1,352
416	417	391	423	430	444	435	446
70	70	72	70	71	72	73	73
6,107	5,804	6,101	6,250	6,317	6,472	6,618	6,658
55	55	57	59	59	60	64	63
6,065	5,983	6,008	6,095	6,160	6,167	6,279	6,222
3,171	3,109	3,112	3,075	3,095	3,117	3,139	3,141
171	170	171	177	168	175	179	182
441	413	418	421	374	318	400	413
441	452	461	540	577	591	612	620
828	809	852	846	828	818	859	824
2,450	2,464	2,495	2,503	2,560	2,562	2,579	2,594
251	250	249	266	279	285	293	298
296	310	331	351	370	392	425	430
6,317	6,237	6,195	6,355	6,362	6,545	6,648	6,670
198	203	213	216	222	224	227	228
105	103	106	109	112	110	109	110
1,117	1,155	1,141	1,158	1,156	1,181	1,197	1,211
882	909	944	949	970	970	989	992
547	559	568	566	589	612	634	613
459	484	513	541	559	573	617	638
845	865	1,028	1,166	1,201	1,225	1,222	1,232
249	258	244	252	251	265	269	275
670	665	669	684	704	701	692	689
140	142	146	156	158	159	161	161
10,945	11,027	11,004	11,404	11,646	11,832	12,106	12,169
2,631	2,657	2,424	2,166	1,908	1,887	2,138	2,433
305	336	336	334	310	273	248	241
467	451	458	482	504	526	548	548
4,485	4,425	5,137	6,445	7,234	6,092	4,386	4,155
437	464	471	500	546	574	620	632
1,702	1,761	1,777	1,847	1,880	1,913	1,956	1,951
196	193	198	214	223	237	250	248
130	116	111	116	126	126	128	127
361	372	338	388	422	450	479	480
94	101	98	104	98	85	93	100
216	226	249	260	271	280	284	292
977	833	799	915	891	849	924	1,033
1,048	1,070	1,076	1,135	1,189	1,211	1,209	1,232
2,386	2,400	2,308	2,487	2,511	2,563	2,619	2,722
3,553	3,485	3,411	3,432	3,292	3,295	3,182	3,136
1,975	1,845	1,772	1,764	1,760	1,802	1,789	1,743
5,046	5,246	5,565	5,798	5,940	6,085	6,181	6,231
64	65	69	73	78	80	86	90
1,983	2,036	2,103	2,162	2,216	2,269	2,322	2,437
2,523	2,546	2,599	2,662	2,672	2,740	2,775	2,787
398	399	408	410	390	396	366	366
107	117	107	105	107	98	100	118
3,676	3,773	3,770	3,878	3,972	4,013	4,060	4,079
157	170	169	179	182	178	182	177
242	254	259	285	302	310	314	319

## VICTORIA—MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Photographic material .. .. .	980	971	971	976
Pickles and sauces .. .. .	508	521	524	538
Picture frames .. .. .	25	26	26	26
Pipes, tubes, and fittings .. .. .	285	308	310	312
Plant equipment and machinery .. .. .	13,638	13,529	13,341	13,125
Plastics .. .. .	1,305	1,377	1,463	1,488
Printing and bookbinding .. .. .	5,293	5,295	5,347	5,394
Rope and cordage .. .. .	1,755	1,771	1,725	1,700
Rubber goods (other) .. .. .	2,844	2,909	2,911	3,001
Rubber tyres, &c. .. .. .	297	301	296	319
Saddlery, harness .. .. .	220	220	216	205
Sausage skins .. .. .	381	375	359	355
Sawmills .. .. .	3,991	4,022	4,016	4,044
Ship and boat building .. .. .	3,389	3,384	3,258	2,996
Shirts, collars, &c. .. .. .	3,162	3,193	3,198	3,168
Silk, natural and artificial .. .. .	373	376	383	388
Smelting, iron rolling .. .. .	1,199	1,189	1,151	1,100
Soap and candle .. .. .	724	717	682	702
Stationery .. .. .	824	830	808	820
Stoves and ovens .. .. .	784	807	804	819
Surgical and scientific instruments .. .. .	528	518	528	528
Tailoring .. .. .	7,820	7,801	7,815	7,923
Tanning and leather dressing .. .. .	2,035	2,086	2,075	2,131
Tents and other canvas goods .. .. .	492	475	487	455
Tobacco and cigarettes .. .. .	2,002	1,999	2,009	1,997
Toys, games, &c. .. .. .	528	534	579	585
Tram and railway workshops .. .. .	7,558	7,537	7,277	7,223
Umbrellas .. .. .	22	22	22	22
Watches and clocks .. .. .	454	465	456	455
Waterproof clothing .. .. .	323	332	320	283
White lead, paint, &c. .. .. .	555	558	597	604
Window blinds, &c. .. .. .	55	57	57	55
Wireless apparatus .. .. .	1,773	1,730	1,699	1,687
Wire working .. .. .	1,031	1,039	1,017	1,014
Woodturning .. .. .	770	788	787	811
Woollen mills .. .. .	11,358	11,352	11,204	11,167
Other factories .. .. .	7,325	7,345	7,281	7,291
All industries—Total .. .. .	246,891	246,594	242,239	239,308

## BUILDING STATISTICS.

The collection of statistics relating to building construction in Victoria was first undertaken in 1929.

Since there is no system in existence which makes registration of builders obligatory it is not possible to ensure that a return is received from every builder. Furthermore, it is known that many former contractors, owing to the difficulty and delay in obtaining

## FACTORIES, 1945-46—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
980	991	953	947	957	984	979	977
589	607	611	657	709	651	633	574
25	37	40	44	44	46	44	46
308	310	354	344	337	330	336	327
12,996	12,952	12,812	12,894	13,005	13,034	13,070	13,095
1,574	1,602	1,531	1,670	1,676	1,741	1,777	1,770
5,473	5,577	5,648	5,844	6,029	6,112	6,184	6,240
1,707	1,696	1,634	1,679	1,690	1,730	1,740	1,778
3,133	3,246	3,208	3,348	3,448	3,539	3,574	3,603
324	331	338	344	357	359	377	361
185	151	147	138	131	143	144	142
365	370	358	351	280	302	333	358
4,203	4,148	4,172	4,320	4,387	4,396	4,421	4,406
2,771	2,504	2,254	2,178	2,222	2,181	2,178	2,177
3,076	3,153	3,089	3,144	3,235	3,264	3,344	3,359
417	420	429	429	468	458	506	529
1,062	1,032	1,069	1,105	1,112	1,120	1,116	1,141
678	686	733	766	770	765	743	738
831	850	836	850	880	901	907	930
824	821	850	860	871	896	918	939
533	536	550	561	555	579	601	603
7,897	7,842	7,756	8,022	8,239	8,330	8,460	8,472
2,169	2,177	2,200	2,272	2,295	2,337	2,453	2,433
461	475	457	433	446	434	422	430
2,034	2,034	2,031	2,110	2,145	2,115	2,267	2,196
601	592	580	612	637	652	683	703
7,245	7,272	7,170	7,179	7,191	7,190	7,189	7,176
22	22	22	23	23	23	24	25
469	478	476	498	510	510	509	518
287	287	291	278	273	289	279	275
639	649	666	674	691	705	700	716
57	60	62	68	64	72	74	75
1,694	1,729	1,797	1,807	1,663	1,808	1,772	1,790
1,020	964	962	990	1,026	1,059	1,093	1,085
831	838	826	870	889	915	917	922
11,181	11,231	11,102	11,266	11,431	11,555	11,776	11,740
7,328	7,402	7,575	7,784	7,831	8,010	8,097	8,117
238,933	238,946	239,694	245,805	249,586	252,649	254,323	254,994

materials are now working on a "wages only" or "wages and commission" basis frequently for "owner builders" from whom it has been found impracticable to obtain returns. The statistics presented therefore, while not an absolute measure of the value of the work done, serve as a good indication of the trend of building activities. The figures also provide valuable information relating to the division of the expenditure amongst the various trades engaged

in and those dependent upon the industry, and also supply important data not otherwise available regarding the contribution of the building trade to the national income.

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

### VICTORIA—VALUE OF BUILDING WORK.

	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.
Number of returns* ..	687	431	392	545	2,005
	£	£	£	£	£
New buildings .. ..	6,969,431	3,629,904	3,172,545	3,068,482	6,616,030
Repairs and additions ..	1,483,488	1,214,273	1,245,465	1,537,395	2,426,110
Other construction ..	704,059	796,750	354,800	430,420	657,345
Total .. ..	9,156,978	5,640,927	4,772,810	5,036,297	9,699,485

\* "Number of returns" means the number of returns received from builders who were actually operating in the period.

Returns received in respect of 1945-46 show that the number of persons employed in the industry (exclusive of sub-contractors and their employees) was as follows:—Working proprietors, 1,866; managers, 254; clerks, male 129; clerks, female 134; other workers, 8345. The total salaries and wages paid (exclusive of the drawings of working proprietors) was £2,380,154.

### VICTORIA—PAYMENTS TO SUB-CONTRACTORS, 1945-46.

	£		£
Plasterers, including fibrous ..	387,867	Bricklayers .. ..	124,036
Plumbers .. ..	301,813	Tilers .. ..	192,204
Painters .. ..	159,197	Others .. ..	311,466
Electricians .. ..	107,923		
Carpenters and Joiners ..	190,091	Total .. ..	1,774,597

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

#### Materials used.

The following statistics should be read in conjunction with the preceding table. The values of the various materials set out hereunder are exclusive of those supplied by sub-contractors.

## VALUE OF MATERIALS USED.

Materials.	Value (Year ended 30th June)—				
	1942.	1943.	1944.	1945.	1946.
	£	£	£	£	£
Timber and Joinery .. .. .	1,545,457	1,030,499	824,723	983,634	1,728,159
Bricks .. .. .	508,193	157,673	126,405	183,082	371,236
Iron and Steel .. .. .	488,999	317,127	255,692	243,578	318,016
Tiles .. .. .	110,228	19,118	21,633	36,686	79,406
Cement, Lime, and Sand .. .. .	475,149	296,089	210,594	194,994	308,688
Other Materials .. .. .	879,937	509,727	466,549	500,532	908,746*
Total .. .. .	4,007,963	2,330,233	1,905,596	2,142,506	3,714,251

\* Includes those items in the succeeding paragraph which are not marked "(incl. above)"

During 1945-46 the following individual items were collected for the first time, viz. :—Structural iron and steel, £273,756 (incl. above); corrugated roofing—iron, £44,260 (incl. above); corrugated roofing, fibro-cement, £76,637; fibro-cement sheets, £56,054; fibro-plaster sheets, £86,469; wall-boards (incl. plywood), £15,762; sand (incl. above), £91,941; crushed stone, £100,654; prefabricated housing units, £94,729.

In addition to payments for wages, materials, and sub-contracts, there are numerous other expenses incidental to building, such as fuel, insurance, building fees of various kinds, &c. These have been included under the heading of "Other expenses," and totalled £159,701 in 1941-42, £156,996 in 1942-43, £158,825 in 1943-44, £155,045 in 1944-45, and £304,285 in 1945-46.

Capital invested in plant and machinery amounted to £171,642 in 1941-42, £143,995 in 1942-43, £167,201 in 1943-44, £177,507 in 1944-45, and £341,474 in 1945-46; capital invested in land and buildings used as workshops amounted to £138,323 in 1941-42, £120,663 in 1942-43, £133,058 in 1943-44, £153,664 in 1944-45, and £260,199 in 1945-46.

The following table is an analysis of the buildings completed during the years 1942-43 to 1945-46. As some of these buildings were doubtless commenced in the previous year, the total value is not a measure of the value of building construction for each respective year. The table published at the beginning of this review shows the total value of construction and repair work done for those years.

### VICTORIA—VALUE OF BUILDINGS COMPLETED, 1942-43 TO 1945-46.

	Year ended 30th June—				
	1942.	1943.	1944.	1945.	1946.†
	£	£	£	£	£
Business premises .. ..	1,418,129	780,175	1,081,013	883,338	930,693
Other buildings .. ..	3,033,096	3,138,989	2,015,291	948,392	993,454
<b>Dwellings—</b>					
Brick .. ..	1,667,999*	126,353*	39,457*	201,275*	909,236
Brick veneer † .. ..				119,626	970,404
Wood .. ..	520,146	63,715	94,338	355,509	1,097,078
Concrete § .. ..					167,162
<b>Total value .. ..</b>	<b>6,639,370</b>	<b>4,109,232</b>	<b>3,230,099</b>	<b>2,508,140</b>	<b>5,077,027</b>

\* Includes Flats for which no further particulars are available. 1942-43, £52,131 1943-44, £3,884; 1944-45, £4,050.

† Dwellings includes "Flats, &c."—Brick, £133,800; brick veneer, £27,503; wood, £11,515.

‡ First collected 1944-45. § First collected 1945-46.

Prior to 1945-46 information collected regarding dwellings was confined to those constructed of brick and of wood respectively. During that year the collection was extended to embrace brick veneer dwellings. A summary of the results is set out in the following table:—

### VICTORIA—DWELLINGS CONSTRUCTED, 1945-46.

Number of Rooms.	Dwellings—								
	Brick.			Brick Veneer.			Other Wood-framed.		
	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.
Three ..	12	£ 8,920	£ 743	14	£ 9,212	£ 658	72	£ 33,703	£ 468
Four ..	147	161,076	1,096	184	215,511	1,171	338	288,082	852
Five ..	364	404,579	1,276	458	580,276	1,267	561	577,446	1,029
Six ..	91	111,495	1,225	89	124,802	1,402	136	157,576	1,159
Seven ..	17	24,110	1,418	5	10,100	2,020	17	23,149	1,362
Eight ..	3	5,256	1,752	1	3,000	3,000	3	4,107	1,369
Nine ..	..	..	..	..	..	..	..	..	..
Ten ..	..	..	..	..	..	..	1	1,500	1,500
Over ten ..	..	..	..	..	..	..	..	..	..
<b>Total</b>	<b>634</b>	<b>775,436</b>	<b>1,223</b>	<b>751</b>	<b>942,901</b>	<b>1,256</b>	<b>1,128</b>	<b>1,085,563</b>	<b>962</b>

The total number of concrete houses erected was 166 valued at £167,162.

The value of flats, semi-detached houses, and maisonettes erected during the year was as follows:—Brick, £133,800; brick veneer, £27,503; and wood, £11,515. This represented approximately 170 dwelling units and is not included in the preceding table.

Further reference to building will be found in Part "Local Government" of this volume under the heading "Housing".