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 1942-43 TO 1946-47.

			Boats		Value of		orian Fish ictorian Ma			
Year E 30th J		Number of Men.		oyed.	Nets and Other	Fish	Cray		fish.	
· ·			Number.	Value.	Plant.	Quantity.	Value.	Quan- tity.	Value	
				£	£	lb.	£	doz.	£	
1943 1944 1945 1946 1947		1,682 1,928 2,082 2,329 2,251	994 1,117 1,190 1,194 1,390	134,094 175,036 243,866 306,585 600,451	38,841 46,569 55,352 65,803 75,973	11,388,160 9,723,280 9,310,336 11,923,072 11,538,240	443,663 405,136 397,629 543,719 528,275	2,508 1,824 1,242 2,313 3,956	4,307 3,313 2,244 4,164 7,621	

Melbourne Fish Market. The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1945-46 and 1946-47 are shown in the next table:—

FISH SOLD IN THE MELBOURNE FISH MARKET, 1945–46 AND 1946–47.

	Year Ended 30th June.					
	194	16.	1947.			
	Quantity.	Value.	Quantity.	Value.		
: '		£		£		
Fresh Fish (Victorian) lb.	11,777,430	539,799	11,418,610	523,353		
Crayfish doz.	9,132	16,437	15,761	28,870		
Imported Fish (fresh or frozen) lb.	3,063,540	200,991	2,839,080	186,363		
Oysters bags	5,328	26,403	5,859	31,129		
Total		783,630		769,715		

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 1946–47 were:—

VICTORIAN FISH SOLD IN 1946-47.

Markets.		Quan	tity.	Value.		
		Fish.	Crayfish.	Fish.	Crayfish.	
		lb.	doz.	£	£	
Melbourne	. • •	11,418,610	3,956	523,353	7,621	
Ballarat		58,858		1,390	• •	
Other towns in Victoria	••	60,772		3,532		
				· · · · · ·	:-	
Total		11,538,240	3,956	528,275	7,621	

Fish imported.

Particulars of imports of fish into Victorian Ports from oversea countries in each of the two years 1945–46 and 1946–47 are given in the following statement:—

VICTORIA—FISH IMPORTED FROM OVERSEA, 1945–46 AND 1946–47.

	Year Ended 30th June.						
· · · · · · · · · · · · · · · · · · ·	194	5.	1946.				
particular ()	Quantity.	Value.	Quantity.	Value.			
Fish—	lb.	£	lb.	£			
Fresh or Preserved by Cold Process	1,941,864	91,100	3,209,347	135,831			
Potted or Concentrated, &c	5,751	2,735	49,644	7,746			
Preserved in tins, &c	2,386,598	117,416	2,749,736	193,532			
Other	13,082	603	362,443	16,110			
Total	4,347,295	211,854	6,371,170	353,219			

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 1942-43 to 1946-47:—

VICTORIA—RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA 1942-43 TO 1946-47.

Year Ended 30th June-		Frozen Rabbit	s and Hares.	Rabbit an	Rabbit and Hare Skins.		
			Quantity.	Value.	Quantity.	Value.	
			Pairs.	£	lb.	£	
1943	••		95,793	10,283	3,234,179	988,346	
944			328,487	28,520	5,906,243	2,072,741	
1945	• • •		1,379,537	160,675	5,750,112	1,750,681	
946	•••		1,035,311	109,044	6,203,553	2,616,670	
1947	••		4,528,137	528,825	4,947,452	2,020,950	

Rabbits, &c., sold at Melbourne Fish Market in each of the past five years Fish Market. Melbourne Fish Market in each of the past five years follows:—1942—43, 251,928; 1943—44, 436,440; 1944—45, 570,880; 1945—46, 479,532 and 1946—47, 511,908.

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, (1) 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." (2)

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 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 1946–47 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.

Under the Mines (Petroleum) Acts petroleum mineral leases and 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 1946–47.

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 Area occupied the Mines Acts on 31st December, 1947, was 563,652 The subjoined table shows the area being worked for different minerals under such Acts.

VICTORIA—AREA OCCUPIED UNDER THE MINES ACTS, 31st DECEMBER, 1947.

(Crown Land and Private Land.)

Nature of Lease or Licen	ice.	Area.	Nature of Lease or Licence.	Area.
		Acres.		Acres.
Gold	••	23,697	Kaolin and Gold	6
Coal (black)*		9,273	Limestone	129
Coal (brown)†		3,622	Magnesite	57
Coal (black and brown)	••	100	Marble	6
Antimony	••	84	Mineral Water and Gas	1
Antimony and Gold	••	43	Molybdenite	30
Barytes		45	Ochre	6
Basalt	••	3	Oil and Gast	523,975
Bauxite	••	305	Pigment	12
Bluestone	••	13	Sand	28
Clay		78	Silver, Lead, and Fluorspar	22
Granite		24	Tailings Licences	607
Gypsum		891	Water Right Licences	374
Iron	••	63	Wolfram	92
Kaolin	••	66	Total	563,652

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

Certain mineral leases include the right to mine for gold.

^{*} Includes State Coal Mine Area, 7,575 acres.
† Includes State Electricity Commission Area, 2,800 acres.
‡ Includes Petroleum Prospecting Licences, 523,446 acres.

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, 1947, amounted to £101,772.

VICTORIA—STATE EXPENDITURE AND REVENUE CONNECTED WITH MINING, 1942–43 TO 1946–47.

	Ex	penditure fr	com Consoli	dated Reve	nue.
Item.		Year	ended 30th	June.	
	1943.	1944.	1945.	1946.	1947.
Expenditure.	£	£	£	£	£
Mines Department	27,799	25,491	27,539	30,678	38,267
State Coal Mine	475,188	446,282	446,479	397,530	350,137
Boring for Gold, Goal, Oil, &c	7,263	8,201	13,470	8,618	10,890
State Batteries—Expenses of Operation and Maintenance	4,235	4,372	3,082	3,288	4,229
Geological and underground surveys of mines	1,355	569	1,078	1,362	2,196
Laboratory Expenses, &c	168	265	265	397	356
Contribution towards Lakes Entrance Oil Development	12,263	8,326	9,499	5,191	••
Miscellaneous	3,340	1,200	2,318	1,010	877
Total	531,611	494,706	503,730	448,074	406,952
REVENUE.					
State Coal Mine	410,466	395,142	397,739	344,979	283,333
All other	14,083	14,947	12,829	15,632	18,150
Total	424,549	410,089	410,568	360,611	301,483

Total mineral production of the State from lands occupied under the Mines Act (excluding stone raised in quarries, and salt) for the year 1947 and the aggregate mineral production up to 31st December, 1947, are shown in the subjoined statement:—

VICTORIA-MINERAL PRODUCTION.

Metals and Minerals.		During	1947.	Total to 31st December, 1947.*		
medals divining		Quantity.	Value.	Quantity.	Value.	
		fine oz.	£	fine oz.	£	
Gold	• •	84,709	911,683	72,996,376	326,565,296	
Platinum			• •	oz.	1,671	
Silver		10,133	1,910	1,650,418	250,273	
		Tons.		Tons.		
Antimony concentrates		5	350	105,976	637,180	
Barytes				69	270	
Bauxite		2,515	3,692	27,614	31,270	
Coal, black		173,683	299,784	20,381,208	17,053,928	
Coal, brown		6,140,140	937,429	76,502,518	8,759,948	
Copper ore				18,740	218,620	
Diatomaceous earth		1,113	4,577	18,230	95,852	
Felspar				662	2,365	
Fluorspar		327	1,635	3,401	11,079	
Gypsum		22,895	10,295	328,863	182,268	
Iron ore				5,461	12,555	
Kaolin and other pottery cla	ys	6,245	8,199	98,351	147,02	
Manganese ore				422	2,00	
Magnesite				3,296	11,04	
Molybdenite			••	1,005	63,984	
Phosphatic rock			·	15,781	16,704	
Pigment clays				4,502	5,62	
Red oxide ex Jarosite				109	1,35	
Silver lead ore				804	5,99	
Tin concentrates		87	25,397	18,590	1,281,20	
Wolfram				137	18,96	

^{*} 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.).	Pe	Period.			
1851–60 1861–70		23,334,263 16,276,566	1931–35 1936–40		•.•	307,370 $744,727$	
1871–80	• • .	10,156,297	1941	• •		149,769	
1881–90		7,103,438	1942	• •	••	101,497	
1891–1900		7,476,038	1943	• •		56,511	
1901–10*		7,095,061	1944			54, 086	
1911-15	٠	2,161,349	1945			61,790	
1916–20		905,561	1946			86,993	
1921–25		421,250	1947			84,709	
1926-30		171,927	1				

^{*} 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, increased slightly in each of the two following years but decreased thereafter to 84,709 fine ounces in 1947. 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 number of men employed in gold mining in Victoria during each of the last five years is shown hereunder.

MEN EMPLOYED IN GOLD MINING.

Year.			Alluvial.	Quartz.	Total.	
1943		••		252	467	719
1944	••			328	513	841
1945				157	486	643
1946				350	932	1,282
1947				251	1,033	1,284
			1			•

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 1947 were 703,886 in Western Australia, 72,281 in Queensland, and 50,082 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, 824,480 in 1946, and 937,654 in 1947.

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.

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 1943 to 1947 are as follows:—

VICTORIA—GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1943 TO 1947.

	Governi	nent Batte	ries.	C	yanidation.		Dredging and Sluicing.			
Year.	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.		cub. yds.	fine oz.	
1943 . 1944 . 1945 . 1946 . 1947 .	9 11 12	1,108 1,318 589 979 826	1,054 969 515 740 763	36 20 22 40 39	78,716 59,045 47,197 262,810 268,893	2,936 2,442 8,694	7 7 15	4,660,474 2,158,823 3,290,050 4,530,956 6,913,500	10,764 6,035 14,129	

The first Government battery was erected in 1897. Since that date Government batteries have crushed 247,316 tons of ore for 136,386 oz. of gold.

Up to the end of 1947, tailings aggregating 25,530,394 tons had been treated by the cyanide and other processes, and 1,611,907 oz. of gold had been won therefrom.

Since the inception of mechanical dredge and sluice mining 2,158,079 oz. of gold have been won by these systems.

Mining district gold yields. The yield of gold (given in gross ounces) for 1946 and 1947 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) 1946 AND 1947.

Mining District.			1946.		1947.			
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.		
		oz.	oz.	oz. (gross)	oz.	oz.	oz. (gross)	
Ararat and Stawell		11	159	170	11	107	118	
Ballarat		1,705	2,351	4,056	1,037	3,149	4,186	
Beechworth		5,178	36,880	42,058	9,393	41,984	51,377	
Bendigo		423	32,417	32,840	566	19,943	20,509	
Castlemaine		3,290	10,379	13,669	968	11,875	12,843	
Gippsland		83	3,309	3,392	38	3,971	4,009	
Maryborough	• •	119	2,053	2,172	101	2,164	2,265	
Total		10,809	87,548	98,357	12,114	83,193	95,307	

Bituminous coal was mined during 1947 at Jumbunna, 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 The average annual production and value per ton of black coal, brown coal, and the production of briquettes and briquettes. up to the end of 1947 are given in the following table:—

VICTORIA—COAL PRODUCTION AND VALUE PER TON.

		Black	Coal.	1	Brown Coal.	
Period.		Annual Production.	Value per Ton at Pit's Mouth.	Annual Production.	Cost of Production per Ton at Mine.	Briquettes Annual Production
		tons.	s. d.	tons.	s. d.	tons.
Prior to 1892		77,914	18 8]	1	
1892-1900		184,517*	9 11	1		
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
1926-30		668,176*	22 - 7	1,515,591*	2 8	135,184
1931-35		472,029*	12 5	2,445,214*	2 3	311,019*
1936-40		324,903*	12 10	3,609,111*	2 2	400,353*
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
1947		173,683	33 2	6,140,140	3 2	513,891

^{*} Average annual production. † Total production to 1916 ‡ 1,392 tons in 1924, 76,553 tons in 1925.

The number of men employed in coal mining during the last five years was as follows:—

MEN EMPLOYED IN COAL MINING.

	Year	•		Black Coal.	Brown Coal.	Total.
			-			
1943				1,263	630	1,893
1944				1,196	613	1,809
$1945 \dots$				1,016	584	1,600
1946				924	655	1,579
1947				860	594	1,454

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.
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	15 ,751
1947		 11,708,414	1,883,414	193,351*	730,506	167,140
		·		·		

^{*} Sub-bituminous,

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, 1947, was 18,590 tons, valued at £1,281,204. 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.

Accidents.

The numbers of fatal and of non-fatal accidents which occurred in gold and coal mines and quarries 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.

		Gold	Mines.	Coal	Mines,	Qua	rries.
	Year.	 Fatal Accidents.	Serious Accidents.	Fatal Accidents.	Serious Accidents.	Fatal Accidents.	Serious Accidents.
		No.	No.	No.	No.	No.	No.
1943		 	4	1	12	2	4
1944		 		2	9	3	1
1945		 • •	2	3	4		1
1946			7	1	7	1	8
1947		 2	9		11	4	15

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, 1942–43 TO 1946–47.

	_		Mair	n Kinds of St	tone Extrac	ted.	Approximate Value
Year end June		Number of Returns.	Bluestone.	Sand- stone.	Granite.	Limestone.	of Stone Raised.
			cub. yds.	cub. yds.	tons.	tons.	£
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	• •	100	652,696	7,832	39,200	327,840	549,318
1947	••	113	967,899	15,332	66,674	395,130	759,465

^{*} 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 Departmenthave furnished returns from which the following table has been compiled.

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

Material.	Munic	ipalities.	Rail	ways.	Country Bo	y Roads ard.
Diametria.	1945–46.	1946-47.	1945–46.	1946–47.	1945–46.	1946-47.
Bluestone, basal	cub. yds.	cub. yds. 404,683	eub. yds. 82,941	cub. yds.	eub. yds. 52,804	cub. yds.
Salamander	8,574	7,923	••		••	500
Scoria	. 57,229	65,711			3,296	9,190
Sandstone	. 32,639	46,005			48,560	210,100
Limestone .	. 243,526	321,138*			44,373	46,117
Quartzite-Quartz .	. 30,610	30,830	••		17,585	35,440
Toscanite .		5,000	• •			
Ironstone .	. 22,656	49,420	• •		••	
Shale	. 3,555	9,660	••		1,000	500
Schist	. 6,186	1,648	• •			
Granite	. 28,236	32,304	3,511	3,960	300	370
Other stone .	. 26,470	10,718	••		• •	
Gravel	. 583,803	855,750	22,149	24,321	49,801	178,140
Sand	. 155,688	235,503	• • •		49,998	124,822
Total .	. 1,464,141	2,076,293	108,601	142,651	267,717	753,227

^{*} Includes limestone rubble, 146,580 cub. yds. in 1945-46, and 173,963 cub. yds. in 1946-47.

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.

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. However

with the rehabilitation of servicemen and women practically completed in 1946–47, there was considerable expansion in industrial activity when the net value of production amounted to £131,496,150 as compared with £120,250,487 in the previous year and the average number of employees was 265,757 as compared with 256,249.

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 1927–28 to 1946–47 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.
			£	£	£	£
1928	8,245 8,197 8,199 8,204 8,612 8,896 9,160 9,165 9,241 9,250 9,215 9,121 8,918 8,738 9,317 9,669 10,195 10,949	160,357 156,568 151,009 126,016 128,265 144,428 156,334 169,691 183,390 191,383 201,789 201,831 212,461 237,636 258,400 262,357 261,299 257,683 256,249 266,757	67,507,020 69,909,370 72,011,020 70,990,071 68,350,575 67,827,428 68,834,279 70,591,677 71,872,906 75,161,894 77,207,830 80,596,625 84,558,699 92,050,326 98,157,370 104,605,310 110,520,701 116,379,925 118,802,347 121,877,270	32,087,851 31,533,586 30,517,535 23,279,689 21,258,590 23,096,512 24,819,143 27,318,815 30,593,707 33,192,904 37,228,543 38,305,885 41,920,726 52,294,673 67,158,613 76,033,111 77,400,688 74,227,245 70,499,214 77,993,765	69,637,778 70,100,456 66,770,302 50,380,110 51,727,685 56,757,681 59,776,270 63,387,061 74,568,265 78,233,032 85,926,478 80,721,680 93,390,751 112,024,332 136,058,136 144,778,354 149,189,244 152,761,198 154,224,950 170,223,745	128,465,317 127,897,463 122,811,009 93,425,795 93,388,617 102,085,429 108,496,310 117,182,857 134,043,170 142,692,192 157,050,725 152,967,611 174,304,401 209,348,845 257,281,080 284,647,914 287,422,311 286,989,408 315,437,679

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

Factories and Wages Board Legislation. 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 Act 1922.

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 wool-scouring 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, 1947.

VICTORIA—VALUE ADDED BY PROCESS OF MANUFACTURE, 1946–47.

Class of Industry.	Average Number of Persons Employed.	Value Added.	Value Added per Person Employed.
1. Treatment of non-metalliferous mine and quarry products	3,467	2,189,299	631
2. Bricks, pottery, glass, &c	4,091	1,885,997	461
3. Chemicals, dyes, explosives, paint, oils, and grease	11,363	8,208,219	722
4. Industrial metals, machines, implements, and conveyances	83,408	37,583,815	451
5. Precious metals, jewellery, and plate	2,307	1,043,977	453
6. Textiles and textile goods (not dress)	31,896	14,349,870	450
7. Skins and leather (not clothing or footwear)	5,621	3,252,208	579
8. Clothing	42,847	15,860,211	370
9. Food, drink, and tobacco	35,375	22,329,643	631
10. Woodworking and basketware	11,145	5,089,663	457
11. Furniture, bedding, &c	4,643	2,134,539	460
12. Paper, stationery, printing, bookbinding, &c	15,526	8,566,396	552
13. Rubber	4,024	2,541,975	632
14. Musical instruments	105	40,466	385
15. Miscellaneous products	6,803	3,386,162	498
16. Heat, light, and power	3,136	3,033,710	967
Total	265,757	131,496,150	495*

^{*} 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 end 30th Jun	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.
	£	£	£		£
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	 286,989,408	166,738,921	120,250,487	256,249	469
1947	 315,437,679	183,941,529	131,496,150	265,757	495

^{* &}quot;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

Production of The classification of industries, as adopted in 1930, different is set out in the next table. The data shown were 1946-1947. compiled from returns rendered compulsorily by all factory proprietors in Victoria. It should, however, be noted that, where a factory, engaged in the production of such goods as would entitle it to classification in more than one sub-class of industry, is unable to give separate production costs, &c., in respect thereof, it is classified according to the predominant product of such factory

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

VICTORIAN FACTORIES—POWER, WORKERS, MANUFAC

Nature of Industry.	Factories.	Rated Horse- power	Average Empl	Number loyed.	Salaries and
		of Engines.	Males.	Females.	Wages Paid.
Olega 4 New modelliferrous Mine and	No.	H.P.	No.	No.	£
Class 1.—Non-metalliferous Mine and Quarry Products	218	38,799	3,313	154	1 107 150
Briquetting	1 1	22,950	355	7	1,127,152 171,425
Lime, Plaster, and Asphalt	21	2,487	250	16	91,978
Fibrous Plaster and Products	84	467	772	30	245,833
Marble, Slate, &c	42 52	1,724	353	13	109,811
Other	18	$9,752 \\ 1,419$	$1,337 \\ 246$	31 57	411,180 96,925
Class 2.—Bricks, Pottery, Glass, &c.	114	19,872	3,747	344	1,277,724
Bricks, tiles, and firebricks	55	12,629	1,878	34	622,878
Earthenware, china, and porcelain	30	2,363	1,016	221	365,900
Glass, including bottles	28	4,879	847	89	287,310
Other	1	1	6		1,636
Class 3.—Chemicals, Dyes, Explosives, Paint, Oils, and Grease Industrial and heavy chemicals, and	274	61,849	8,763	2,600	3,783,849
acids	49	11,149	1,436	184	613,669
Pharmaceutical and toilet prepara- tions	45	2,450	748	1,031	449,363
Explosives (including fireworks)	9	23,349	2,364	467	976,908
White lead, paints, and varnish	44	2,598	576	142	238,455
Oils, vegetable (including oilcake) Oils, mineral	4	637	79	5	32,256
Oils, animal	17 5	$\frac{1,464}{1,788}$	388 157	27 16	147,033 63,895
Boiling down, tallow refining	27	3,062	414	4	150,111
Soap and candles	18	2,227	568	157	221,445
Chemical fertilizers	8	10,334	1,266	43	511,989
Inks and polishes Other	41 7	1,108 1,683	313 454	224 300	167,041 211,684
Class 4.—Industrial Metals.					
Machines, Implements, and					
Conveyances Smelting, converting, refining of	3,204	197,270	75,190	8,218	26,519,368
iron and steel	10	5,547	645	31	251,344
Foundries (ferrous)	218	5,895	2,078	75	669,355
Plant equipment and machinery Other engineering	328 405	40,885	11,892	978	4,216,303
Extracting and refining of other	400	15,422	5,603	. 394	1,881,134
Extracting and refining of other metals: Alloys	17	486	168	. 22	63,316
Electrical machinery, cables and	107	0.440	# A.A		
apparatus Tramcars and rolling stock (Govern-	197	8,418	5,018	1,224	1,831,612
ment) Motor vehicles—	25	14,888	7,073	26	2,214,270
Construction and assembly	17	2,938	2,433	353	1,067,266
Repairs	1,097	5,889	7,160	576	1,994,003
Motor bodies	91 41	7,467	3,764	167	1,320,962
Motor accessories	41	216 4,879	$\frac{200}{1,793}$	5 519	50,421 742,558
Aircraft	21	5,799	6,229	680	2,398,993
Cycles (foot and hand driven), and accessories	24	629	394	114	152,691
Ship and boat building-		1			1
Government	$\begin{array}{c c} & 4 \\ 21 \end{array}$	5,627	1,343	57	474,388 237,999
Cutlery and small hand tools	42 42	$\frac{1,497}{5,269}$	$\frac{618}{1,289}$	8 195	493,910
	**	1		100	290,910
Agricultural machines and imple-			0.055	214	1,466,847
ments	60	13,268	3,975	417	1,400,047
ments Non-ferrous metals—rolling and					1 .
ments Non-ferrous metals—rolling and extrusion Founding, casting, &c.	60 5 130	13,268 2,739 4,138	3,975 212 2,099	17 202	84,523 712,786
ments Non-ferrous metals—rolling and extrusion	5	2,739	212	17	84,523

TURING COSTS AND VALUE OF PRODUCTION, 1946-47.

Fuel and Light Used.	Lubricat- ing Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery
£	£	£	£	£	£	£	£
271,464	20,950	140,755	1,849,087	4,471,555	2,189,299	1,096,187	1,565,384
78,754	10,260	21,206	157,098	535,350	268,032	329,146	677,402
$\frac{34,251}{1,907}$	1,644 885	19,370 7,409	414,712 357,938	737,158 773,009	267,181 404,870	67,757 127,604	73,898 32,240
4,117	935	5,528	70,221	267,189	186,388	54,396	40,508
$\substack{141,912 \\ 10,523}$	6,664 562	73,993 13,249	675,121 173,997	1,775,789 383,060	878,099 184,729	470,022 47,262	705,195 36,141
427,585	22,050	165,960	662,067	3,163,659	1,885,997	841,439 346,715	821,134
$185,180 \\ 59,554$	11,876	61,816 24,251	$\begin{array}{c c} 101,295 \\ 104,031 \end{array}$	$\begin{array}{c} 1,249,353 \\ 747,361 \end{array}$	889,186 557,626	203,990	400,482 148,724
182,846 5	8,253	79,889	456,481	1,164,606	437,137	286,234 4,500	271,628
9	22	4	260	2,339	2,048	4,500	300
502,922	57,495	440,184	13,157,359	22,366,179	8,208,219	5,584,479	6,051,661
133,715	12,861	102,484	1,526,006	3,135,860	1,360,794	545,949	863,120
18,153	3,453	37,065	1,722,042	3,200,753	1,420,040	426,553	303,893
$82,498 \\ 12,646$	12,674 1,433	79,532 $21,688$	904,469 1,507,158	2,514,832 2,318,618	1,435,659 775,693	3,054,293 247,650	3,394,322 148,535
5,809	438	4,109	403,520	456,640	42,764	33,495	26,037
17,587	2,316 4,027	14,631	1,017,939	1,579,786	527,313	84,987 98,895	93,278 83,805
$\frac{22,707}{49,167}$	3,422	$8,385 \\ 21,265$	180,833 362,461	296,463 729,808	80,511 293,493	154,216	162,207
70.902	3,502	47,456	883,845	1,723,064	717,359	154,216 187,049	153,142
64,728	9,943 955	86,966 7,750	$2,938,575 \\ 835,520$	3,887,029 1,278,036	786,817 426,597	465,614 161,375	644,395 57,977
64,728 7,214 17,796	2,471	8,853	874,991	1,245,290	341,179	124,403	120,950
				ľ	í	ſ	ĺ
986,271	115,704	1,422,696	30,103,372	70,211,858	37,583,815	18,148,615	14,694,019
45,451	1,521	35,931	170,503	574,593	321,187	181,566	237,739
45,451 65,337	$1,521 \\ 4,459$	35,931 37,077	170,503 530,364	574,593 1,630,764	321,187 993,527	181,566 517,959	237,739 345,222
45,451	1,521	35,931	170,503	574,593	321,187	181,566	237,739
45,451 65,337 158,216	1,521 4,459 21,889	35,931 37,077 255,343	170,503 530,364 5,096,979	574,593 1,630,764 11,639,011	321,187 993,527 6,106,584	181,566 517,959 2,563,820	237,739 345,222 2,542,404
45,451 65,337 158,216 54,467	1,521 4,459 21,889 9,454	35,931 37,077 255,343 89,453	170,503 530,364 5,096,979 1,919,590	574,593 1,630,764 11,639,011 4,886,827	321,187 993,527 6,106,584 2,813,863	181,566 517,959 2,563,820 1,310,036	237,739 345,222 2,542,404 1,061,717 21,396 680,667
45,451 65,337 158,216 54,467 10,952 56,237 57,430	1,521 4,459 21,889 9,454 178 5,503 2,309	35,931 37,077 255,343 89,453 5,094 87,130 80,473	170,503 530,364 5,096,979 1,919,590 598,288	574,593 1,630,764 11,639,011 4,886,827 762,318	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 248	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 248 4,061	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,701	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126 38,585 6,794	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 2,48 4,061 7,438	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174 66,003 12,108	170,503 580,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876 1,261,354 246,914	574,593 1,690,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988 4,021,591 485,132	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,701 2,648,211 216,568	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900 1,338,141	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269 856,618
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126 38,585 6,794 10,129 4,735	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 2,48 4,061 7,438 2,748	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174 66,003 12,108	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876 1,261,354 246,914 201,600 128,399	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988 4,021,591 485,132 748,466 501,985	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,701 2,648,211 216,568 509,769 355,942	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900 1,338,141 95,257 410,428 84,561	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269 856,618 31,343 310,035 62,644
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126 38,585 6,794 10,129 4,735 30,759	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 2,48 4,061 7,438 2,748 2,748 2,534 894 3,754	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174 66,003 12,108 24,434 12,015 33,516	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876 1,261,354 246,914 201,600 128,399 532,581	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988 4,021,591 485,132 748,466 501,985 1,522,890	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,700 2,648,211 216,568 509,769 355,942 922,280	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900 1,338,141 95,257 410,428 84,561 225,859	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269 856,618 31,343 310,035 62,644 256,009
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126 38,585 6,794 10,129 4,735 30,759	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 248 4,061 7,438 2,748 2,534 894 3,754	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174 66,003 12,108 24,434 12,015 33,516	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876 1,261,354 246,914 201,600 128,399 532,581 1,334,378	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988 4,021,591 485,132 748,466 501,985 1,522,890 3,440,499	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,701 2,648,211 216,568 509,769 355,942 922,280 1,913,203	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900 1,338,141 95,257 410,428 84,561 225,859 624,340	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269 856,618 31,343 310,035 62,644 256,009 665,761
45,451 65,337 158,216 54,467 10,952 56,237 57,430 25,320 56,453 30,713 1,802 26,126 38,585 6,794 10,129 4,735 30,759	1,521 4,459 21,889 9,454 178 5,503 2,309 4,053 11,223 4,500 2,48 4,061 7,438 2,748 2,748 2,534 894 3,754	35,931 37,077 255,343 89,453 5,094 87,130 80,473 50,599 83,662 78,888 1,841 46,174 66,003 12,108 24,434 12,015 33,516	170,503 530,364 5,096,979 1,919,590 598,288 2,668,902 1,338,850 160,688 1,718,394 1,429,764 31,814 700,876 1,261,354 246,914 201,600 128,399 532,581	574,593 1,630,764 11,639,011 4,886,827 762,318 5,751,665 4,054,844 1,143,143 4,984,280 3,587,582 116,665 1,936,988 4,021,591 485,132 748,466 501,985 1,522,890	321,187 993,527 6,106,584 2,813,863 147,806 2,933,893 2,575,782 902,483 3,114,548 2,043,717 80,960 1,159,700 2,648,211 216,568 509,769 355,942 922,280	181,566 517,959 2,563,820 1,310,036 59,292 1,013,508 1,389,019 522,842 2,322,421 842,078 54,538 416,900 1,338,141 95,257 410,428 84,561 225,859	237,739 345,222 2,542,404 1,061,717 21,396 680,667 364,280 130,622 619,044 222,902 11,799 325,269 856,618 31,343 310,035 62,644 256,009

VICTORIAN FACTORIES—POWER, WORKERS, MANUFACTURING

		Rated Horse-		Number oyed.	Salaries and
Nature of Industry.	Factories.	power of Engines.	Males.	Females.	Wages Paid.
	No.	H.P.	No.	No.	£
Class 4—continued.	1 .				
Wire and wireworking (including		2,386	997	101	0.40.700
nails)	33 18	2,380	660	$\frac{121}{82}$	349,109
Gas fittings and meters	1 4	2,048	223	1	272,532 78,917
Lead mills	6	664	109	30	39,605
	8	162	113	8	37,962
Sewing machines Arms, ammunition Wireless and amplifying apparatus	4	26,324	1,680	135	601,467
Wireless and amplifying apparatus Other metal works	22 99	1,058 1,097	1,387 834	435 100	536,038 261,180
Class 5.—Precious Metals, Jewellery,					
and Plate	150	3,058	1,961	346	665,280
Jewellery	55	488	757	185	264,217
Watches and clocks Gold, silver, and electroplate	16 79	$\begin{array}{c} 324 \\ 2,246 \end{array}$	$\frac{357}{847}$	123 38	141,322
· ·	19	2,240	041	. 30	259,741
Class 6.—Textiles and Textile Goods (not dress)	506	63.035	15,064	16,832	8,423,059
Cotton spinning and weaving Wool, worsted, spinning and weav-	37	9,842	1,432	1,363	794,415
ing, &c.	68	31,642	6,398	4,947	3,193,537
Hosiery and other knitted goods	267	7,594	4,156	8,906	3,104,940
Silk, natural Rayon, nylon, and other synthetic	3	906	154	229	100,013
fibres	7	533	82	148	59,746
Flax mills	14	1.889	585	77	199,516
D 3 3	12	6,595	1,243	576	530,785
Canvas goods, tents, &c. Bags and sacks	33	167	260	179	114,516
Other	21 44	290 3,577	$\begin{array}{c} 146 \\ 608 \end{array}$	52 355	54,429 271,162
Class 7.—Skins and Leather (not		• .	•		
Clothing or Footwear) Furriers and fur dressing	239	14,694	4,583	1,038	1,815,271
Furriers and fur dressing Fellmongery	60 28	$\frac{471}{3,646}$	$\frac{352}{937}$	217 13	151,013
Tanning and leather dressing	43	9,410	2,397	81	151,013 332,771 907,733 37,281
Saddlery, harness, and whips	9	78	103	43	37.281
Machine belting	8	600	114	16	42,764
Bags and trunks	79	386	566	528	278,464
Other leather goods	12	103	114	140	65,245
Class 8.—Clothing Tailoring and ready-made clothing	2,009 375	1 6,939 1,557	13,171 2,408	29,676 5,921	9,902,519 1,886,718
Waterproof and oilskin clothing	8	501	89	241	97,628
Dressmaking	523	1,614	1,125	9,910	2,172,177
Millinery	73	698	258	1,112	313,265
Shirts, collars, and underclothing. Stays and corsets	123 19	$^{1,201}_{422}$	474 141	3,471 897	830,797
Handkerchiefs, ties, and scarves	17	47	55	275	244,821 81,256
Hats and caps	21	1,161	454	265	216,322
Gloves	27	132	152	542	150,371
Boots and shoes	210	5,229	5,609	5,143	2,923,519
Boot repairing	463 18	586 256	788 100	28 161	90,213 56,902
Umbrellas and walking sticks	18	256	100	23	8,622
Dyeworks and cleaning	99	3,339	1,393	1,139	700,271
Other	30	189	114	548	129,637
Glass 9.—Food, Drink, and Tobacco Grain milling	1,753 40	1 22,182 9,799	25,815 1,154	9,560 56	10,601,210 426,400
Cereal foods and starch	22	5,669	801	455	370,257
Cattle and poultry foods	8	793	137	14	56,406
Chaff-cutting and corn-crushing Bakeries	84 805	2,217	393	23 905	110,532
Bakeries Biscuits	12	$3,792 \\ 1,782$	$\frac{3,505}{572}$	564	1,082,345 294,647
Confectionery	84	7,723	1,223		655,463

Costs and Value of Production, 1946-47—continued.

Fuel and Light Used.	Lubricat- ing Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done,	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
14,325	2,597	28,284	629,486	1,216,671	541,979	282,789	217,361
28,765	1,808	16,026	252,766	656,649	357,284	142,162	161,939
1,517	73	823	34,618	139,139	102,108	28,381	6,173
4,856	235	8,395	139,970	213,644	60,188	33,551	24,205
436	20	2,767	13,858	68,907	51,826	29,575	3,493
26,030	3,620	16,556	1,382,061	2,182,665	754,398	1,631,635	2,900,971
10,922	979	46,927	1,306,151	2,239,773	874,794	219,802	123,998
7,308	852	7,394	219,371	704,647	469,722	225,350	100,352
21,393 4,009 2,205 15,179	1,952	30,699	1,032,164	2,130,185	1,043,977	439,965	171,206
	550	15,762	597,825	1,049,926	431,780	167,415	47,832
	271	3,474	193,577	373,873	174,346	80,985	39,879
	1,131	11,463	240,762	706,386	437,851	191,565	83,495
661,534 75,064	65,560 7,231	7 44,437 75,803	18,611,361 2,067,882	34,432,762 3,694,333	14,349,870 1,468,353	5,104,804 737,341	4,195,679 890,820
$\substack{341,251 \\ 145,620 \\ 5,244}$	32,662	297,428	7,149,370	13,317,719	5,497,008	1,697,417	1,501,309
	15,342	254,475	5,309,933	10,815,971	5,090,601	1,622,449	995,814
	300	4,303	216,118	391,523	165,558	75,995	95,479
3,307	1,455	4,322	147,849	255,198	98,265	36,128	21,885
9,773	2,158	9,402	415,050	623,242	186,859	172,211	214,561
33,117	3,565	61,796	1,148,293	2,097,157	850,386	308,305	264,606
1,749	398	2,598	486,368	773,166	282,053	129,103	12,191
2,537	493	3,879	247,862	394,401	139,630	44,223	19,286
43,872	1,956	30,431	1,422,636	2,070,052	571,157	281,632	179,728
167,071	33,279	165,285	5,415,687	9,033,530	3,252,208	1,340,169	629,638
3,846	672	5,009	440,010	809,384	359,847	172,016	28,154
98,568	16,952	52,847	1,608,315	2,383,758	607,076	318,514	167,215
58,019	14,656	96,097	2,522,959	4,234,473	1,542,742	533,781	343,572
499	114	358	61,754	118,200	55,475	27,908	3,332
1,799	183	2,471	130,869	228,591	93,269	45,055	40,422
3,542	572	6,068	545,263	1,052,436	496,991	208,825	35,218
798	130	2,435	106,517	206,688	96,808	34,070	11,775
262,463 40,016 4,783 33,983 8,917 14,836 2,510 1,074 15,728 1,770 41,316 3,809 1,613 95 89,280 2,733	19,888 2,033 2286 1,356 7,54 1,442 499 63 965 32 4,147 280 144 17,786 150	357,484 41,458 2,912 41,775 10,963 22,409 10,896 1,002 10,524 5,284 146,862 1,920 8,607 163 49,003 3,756	18,448,076 3,944,181 179,587 4,108,536 472,288 2,550,029 538,372 472,899 176,251 247,059 4,832,669 142,518 176,016 284,504 315,531	34,948,122 7,168,305 342,428 342,428 1,000,521 3,889,533 969,952 706,638 495,588 9,193,925 408,531 326,187 27,432 1,572,249 593,911	15,860,211 3,140,617 154,910 3,523,214 507,599 1,300,817 422,675 231,600 241,493 4,168,931 260,004 139,807 1,41,676 271,741	5,858,432 1,070,343 63,443 1,540,338 2,54,823 582,157 262,146 72,870 89,820 70,838 835,395 480,338 34,531 13,890 375,366 112,134	1,997,677 253,508 21,380 239,269 40,729 162,871 85,181 4,232 41,541 30,614 676,422 43,603 14,414 342 363,921 19,650
1,446,660	149,213	1,010,060	54,711,271	79,646,847	22,329,643	12,527,624	8,257,114
83,589	8,257	49,350	4,882,267	5,888,438	864,975	724,818	504,767
66,973	7,703	45,155	1,489,677	2,378,150	768,642	450,175	456,686
4,808	607	7,067	461,633	590,521	116,406	72,646	49,478
9,573	1,265	5,504	740,602	991,402	234,458	106,506	50,601
152,816	8,492	74,111	3,210,602	5,789,351	2,343,330	1,998,185	543,278
29,464	1,858	11,280	562,466	1,296,232	691,164	226,057	114,066
68,551	4,091	50,647	1,739,684	3,362,248	1,499,275	536,487	482,041

VICTORIAN FACTORIES-POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse- power	Average Empl	Salaries and Wages	
natur of mustry.	T accordes.	of Engines.	Males.	Females.	Paid.
	No.	H.P.	No.	No.	£
Class 9- continued.					
Jam, fruit, and vegetable canning	36	8,035	2,324	1,625	1,117,637
Pickles, sauces, and vinegar Bacon curing	18 20	$1,571 \\ 4,251$	404 658	245 67	188,711 $228,359$
Butter and cheese factories. &c.	147	21,356	3,662	623	1,471,367
Margerine and butterine	10	415	98	16	38,653
Meat and fish preserving, meat extracts	14	2,201	589	365	312,079
Condiments, coffee, spices, &c	76	3,618	834	765	429,389
Ice and refrigerating	103	24,265	2,752 910	$\frac{259}{172}$	939,859 315,627
Aerated waters, cordials, &c Breweries	93	$\frac{1,763}{6,592}$	1,632	32	702,171
Distilleries	9	1,490	246	29	98,936
Winemaking Cider and Perry	28	425	$\frac{146}{28}$	7 6	34,035 9,801
Cider and Perry Malting	17	$\begin{array}{c} 15 \\ 1,524 \end{array}$	495	11	195,142
Bottling	19	403	273	54	110,689
Tobacco, cigars, cigarettes	15 33	2,048	$969 \\ 644$	$1,406 \\ 236$	621,095 250,841
Dried fruits and vegetables Ice cream	23	$\frac{2,371}{1,828}$	209	129	103.054
Sausage skins	12	151	315	40 ′	126,450
Other	14	6,085	842	179	311,265
		ļ			
Class 10.—Woodworking and Basket- ware	897	60,450	10,671	474	3,259,069
Sawmills	383	35,972	4,957	111	1,492,266
Plywood mills (including veneers)	3	386	135	11	44,817
Joinery	261 10	7,216 575	$^{2,370}_{229}$	88 1	729,499 86,295
Boxes and cases	108	12,820	1,867	67	561,590
Woodturning, woodcarving, &c	96	3,235	834	150	261,800
Basket, wicker, bamboo, &c	· 11	46 109	$\begin{array}{c} 74 \\ 179 \end{array}$	3 42	19,700 56,586
Other	7	91	26	1	6,516
Class 11.—Furniture, Bedding, &c.	440	9,756	3,967	676	1,196,841
Cabinet and furniture making Bedding and mattresses	352 34	8,793 734	$3,425 \\ 298$	$\frac{149}{227}$	932,468 141,262
Furnishing drapery	36	110	140	256	87,092
Picture frames	8	33	39	15	14,074
Blinds, window, verandah, &c	10	86	65	29	21,945
Class 12.—Paper, Stationery,					
Printing, Bookbinding, &c	631	67,123	11,568	3,958	4,865,052
Newspapers, &c. Printing—Government, &c.	116	6,489	2,362	231	949,990
General printing, &c	3 378	940 6,911	718 4,327	320 1,554	$306,100 \\ 1,709,917$
Stationery and paper products	31	1,646	511	497	264,866
Stereotyping and electrotyping	. 8	179	85	10	31,468
Process and photo engraving Cardboard boxes, cartons, &c	14 36	$\frac{168}{2,165}$	333 888	32 785	124,642 441,107
Paper bags	. 14	314	126	207	85,563
Other paper and printing	31	. 48,311	2,218	322	951,399
Alexandra Bullium	465	24 222	2 24 -	700	1 400 F40
Class 13.—Rubber Rubber goods (including tyres made)	100 26	31,262 30,474	3,315 2,919	709 681	1,400,549 1,279,670
Tyre retreading and repairing	74	788	396	28	120,879
Class 14.—Musical Instruments	. 14	101	103	2	36,896
Pianos, player and organs Other	10	40 61	68 35	1	$25,610 \\ 11,286$

Costs and Value of Production, 1946-47—continued.

Fuel Lig Us	ght	Lubricat- ing Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
	£	£	£	£	£	£	£	£
17 29 363	3,867 7,415 9,818 3,432 4,174	14,695 4,156 4,879 . 25,618 1,403	104,212 20,592 11,581 173,806 4,112	4,923,595 935,910 2,073,770 16,356,296 254,553	7,561,996 1,475,115 2,467,962 19,638,430 374,036	2,442,627 497,042 347,914 2,719,278 109,794	823,214 211,360 244,082 1,628,180 22,042	$\begin{array}{r} 738,631 \\ 125,751 \\ 100,211 \\ 1,395,350 \\ 14,925 \end{array}$
43 132 16 96 48 2 44 3 19 12 13	3,852 3,462 2,385 5,127 5,943 3,241 2,412 4,40 1,574 3,842 9,349 1,032 1,032 1,083 3,729	5,225 7,400 8,592 1,769 20,061 5,764 408 34 4,787 747 2,086 1,162 1,521 1,478 5,205	28,448 31,929 144,685 28,499 93,808 614 14,576 4,231 24,198 13,349 12,728 7,481 27,970	1,922,096 2,136,137 282,684 986,773 1,389,077 453,452 86,111 13,248 959,031 286,555 4,317,003 281,879 426,448 170,140 3,419,587	2,716,064 3,373,842 1,998,782 1,699,458 3,056,715 1,000,846 169,604 32,927 1,388,480 488,718 5,676,453 915,732 406,251 4,233,835	731,443 1,154,914 1,430,436 716,290 1,456,826 475,768 78,567 18,596 365,562 193,343 1,313,817 366,860 461,903 223,069 707,344	209,259 530,914 1,445,246 306,688 745,043 157,188 157,189 10,990 422,292 167,764 440,051 178,870 167,322 50,805 574,460	144,386 255,770 724,197 153,590 821,634 196,834 45,363 5,023 166,416 16,411 319,428 152,132 163,225 16,200 620,720
82 16 1 24	5,677 2,352 956 5,703 ,,691 1,240 8,533 418 683 101	28,915 21,772 225 2,165 609 3,224 784 11 92 33	260,452 145,528 2,096 20,372 5,991 68,587 13,585 777 3,190 326	6,217,235 3,224,268 103,826 1,106,947 87,174 1,202,797 299,505 32,866 149,240 10,612	11,731,942 5,919,130 173,589 2,225,247 204,979 2,087,244 767,641 78,611 249,914 25,587	5,089,663 2,445,210 66,486 1,079,060 109,514 788,396 445,234 44,539 96,709 14,515	1,601,343 576,149 26,203 474,610 23,677 261,620 172,023 17,213 44,274 5,574	1,455,019 950,416 12,400 179,265 25,188 187,835 88,873 2,667 7,170 1,205
20	1,294 1,223 2,478 954 215 424	2,561 2,103 239 146 25 48	38,359 30,083 5,685 2,040 171 380	2,338,773 1,458,523 584,689 192,035 17,647 85,879	4,538,526 3,107,827 896,654 341,852 44,328 147,865	2,134,539 1,596,895 303,563 146,677 26,270 61,134	1,164,196 891,668 149,433 82,466 18,430 22,199	284,093 230,413 36,599 9,761 1,427 5,893
27 6 37 7 1 2 16	,907 ,662 ,329 ,075 ,235 ,226 ,464 ,921 ,657 2,338	32,339 5,712 778 6,625 672 13 331 2,292 457 15,459	319,753 42,647 6,350 81,636 16,650 1,741 2,841 24,193 4,763 138,932	9,099,439 1,829,623 242,344 2,527,995 675,857 21,798 39,095 1,123,201 417,701 2,221,825	18,520,834 3,261,834 670,987 5,541,641 1,253,528 85,193 250,095 2,148,721 579,942 4,728,893	8,566,396 1,356,190 415,186 2,888,310 553,114 60,415 205,364 982,114 155,364 1,950,339	3,928,939 776,798 204,400 1,455,361 262,898 33,001 86,745 320,146 106,890 682,700	2,909,583 439,626 54,684 948,370 176,236 19,800 26,025 215,696 67,010 962,136
240	, 732),737 2,995	18,014 17,267 747	200,077 184,360 15,717	4,084,929 3,844,683 240,246	7,098,727 6,564,711 534,016	2,541,975 2,277,664 264,311	761,569 604,740 156,829	650,135 565,939 84,196
	724 276 448	68 43 25	1,293 348 945	14,120 4,898 9,222	56,671 - 31,099 25,572	40,466 25,534 14,932	36,902 27,9 4 7 8,955	12,562 2,259 10,303

VICTORIAN FACTORIES-POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse- power	Average Empl	Salaries and Wages		
		of Engines.	Males.	Females.	Paid.	
	No.	H.P.	No.	No.	£	
Class 15.—Miscellaneous Products	294	12,028	4,414	2,389	1,924,388	
Plastic moulding and products	54	4,643	1,296	665	572,108	
Brooms and brushes	22	618	409	149	160,505	
Optical instruments and appliances	31	183	295	23	91,200	
Surgical instruments and appliances Photographic material (including	40	644	504	101	178,630	
developing, &c.)	26	1,415	501	559	313,555	
Toys, games and sports requisites	54	1,155	623	306	240,868	
Artificial flowers	8	41	40	257	58,361	
Other	59	3,329	746	329	309,161	
Class 16.—Heat, Light and Power Electric light and power—	106	720,054	3,113	23	1,195,538	
(i) Government	11	655,724	1,398	14	578,205	
(ii) Local authority	32	52,679	436		157,439	
(iii) Companies	24	3,044	56	2	17,176	
Gas works—	_				1	
(i) Local authority	9	167	120	1	38,173	
(ii) Companies	30	8,440	1,103	6	404,545	
Total all Classes	10,949	1,438,472	188,758	76,999	77,993,765	

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 1937-38 and the past five years are given in the following table:—

VICTORIA—TANNERIES.

	Year ended 30th June—								
Item.	1938.	1943.	1944.	1945.	1946.	1947.			
Number of establishments Number of persons engaged Value of plant and machinery £ Value of land and buildings £ Salaries and wages paid £ Fuel, light, and power £ Value of materials used £ Value of output £ Value of output £ Value of output £ Value of output £ Materials treated— Cow and ox hides No. Calf hides tons Tanning extract (vegetable)	40 2,316 8,057 241,226 420,363 514,937 40,056 1,622,917 2,436,346 730,246 895,171 1,035,055 10,209	2,025 7,879 211,704 419,424 694,263 47,366 1,936,067 3,050,951 1,006,287 985,410 549,558 1,042,824 6,395	2,040 8,166 213,672 408,453 718,260 53,830 1,961,361 3,119,392 1,038,157 975,565 557,206 1,382,600 6,028	2,071 8,363 246,288 425,878 728,817 50,212 1,895,069 3,093,589 1,072,469 926,381 542,036 1,308,882 5,296	2,257 9,227 298,080 497,837 778,865 46,577 2,055,072 3,430,200 1,227,409 916,071 699,480 1,199,211 5,739	2,478 9,410 343,572 533,781 907,733 58,019 2,522,959 4,234,473 1,542,742 1,051,829 551,125 1,604,892 6,358			
Sole leather produced lb.	13,030,832	9,974 14,767,165		8,536 $13,225,297$		8,137 14,179,838			

^{*} Not available.

COSTS AND VALUE OF PRODUCTION, 1946-47—continued.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Iucluding Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
92,072	11,696	136,494	3,036,277	6,662,701	3,386,162	1.210.955	861,362
37,100	6,408	65,018	947,102	2,097,627	1,041,999	289,978	416,294
2,842	560	5,717	380,666	668,070	278,285	69,789	52,991
2,056	242	3,213	140,537	295,174	149,126	102,720	38,014
3,605	657	8,487	190,199	459,389	256,441	124,039	66,117
15,497	1,544	1.784	391,349	879,856	469,682	229,770	82,557
7,646	618	12,168	297,416	760,126	442,278	137,687	61,704
537	26	2,553	32,955	128,934	92,863	32,358	6,247
22,789	1,641	37,554	656,053	1,373,525	655,488	224,614	137,438
1,444,637	53,932	448,774	1,442,528	6,423,581	3,033,710	3,106,850	14,568,486
1,245,195	8,314	291,672	1,985	3,533,485	1,986,319	2,411,438	9,673,776
172,904	12,572	22,404	791	434,671	226,000	235,551	744,317
14,526	3,518	2,633	425	57,565	36,463	10,918	66,324
1,853	1,044	5,075	71,661	128,101	48,468	27,897	118,958
10,159	28,484	126,990	1,367,666	2,269,759	736,460	421,046	3,965,111
7,201,406	633,616	5,882,762	170,223,745	315,437,679	131,496,150	62,752,468	59,124,802

The value of leather and leather manufactures and substitutes therefor imported into Victoria from oversea countries during the year ended 30th June, 1947, was £55,044, whilst the value exported overseas for the same period amounted to £1,276,901.

The manufacture of soap was also one of the earliest

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.

VICTORIA—SOAP FACTORIES.

Item.		Y	ear ended	30th June-	-	
	1938.	1943.	1944.	1945.	1946.	1947.
Number of establishments	18	15	. 15	16	16	18
Number of persons engaged	723	728	683	712	738	725
Horsepower of engines used	1,356	2,459	2,475	2,607	2,117	2,227
Value of plant and machinery £	255,201	175,289	162,651	151,571	151,597	153,142
Value of land and buildings £	206,326	196,480	191,689	188,752	185,865	187,049
Salaries and wages paid £	143,482	211,493	206,954	209,025	213,617	221,445
Fuel, light, and power £	33,443	64,662	62,839	57,482	54,884	70,902
Value of materials used £	576,483	710,018	697,825	798,995	858,989	883,845
Value of output £	1,323,103	1,678,004	1,442,045	1,571,168	1,613,919	1,723,064
Value added to materials £	673,282	856,816	634,201	668,479	649,520	717,359
Materials used—	1		1 '	/	1	
Tallow cwt.	206,349	363,189	284,786	312,548	285,674	284,053
Alkali ,,	101,216	66,768	49,995	58,767	59,292	65,525
Coconut oil ,,	49,382	28,034	25,160	26,146	30,540	21,492
Soda ash ,,	*	52,516	38,611	38,300	49,141	52,408
Output—	i	1 . ,	.′	′	_ ′	1
Soap, Household cwt.	185,886	189,860	118,622	139,373	141,287	158,486
"Sand "	35,342	36,619	26,536	19,733	19,266	18,534
,, Toilet ,,	20,705	36,523	39,406	30,983	30,466	31,755
,, Extracts and powders,,	*	153,355	117,042	159,689	179,110	208,670
" All other "	*	53,744	64,779	61,707	48,964	60,565
Soda crystals ,,	36,829	18,479	12,165	11,538	10,237	10,012

Items of manufacture not specified above include soft, industrial, and flake soaps, candles, glycerine, &c.

Imports from oversea countries into Victorian ports in the year ended 30th June, 1947, included 35,948 lb. of soap, and 168,307 lb. of soap substitutes valued at £1,814 and £10,075 respectively.

Bricks, pottery, pipes, 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							
Item.	1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments	81	58	51	65	79	85		
Number of persons engaged	3,166	1,670	1,518	1,725	2,468	3,149		
Horsepower of engines used	13,780	9,868	7,059	10,326	13,987	14,992		
Value of plant and machinery £	566,624	410,785	346,442	395,997	527,321	549,206		
Value of land and buildings £	564.158	318,255	337,654	421,513	530,133	550,705		
Salaries and wages paid £	607,613	464,923	415,919	471,066	672,346	988,778		
Fuel, light, and power £	217,217	113,838	97,958	114,887	174,908	244,734		
Value of materials used £	153,200	108,135	89,928	105,267	146.593	205,326		
Value of output £	1,381,198	885,007	756,175	895,080	1,322,688	1,996,714		
Value added to materials £	934,428	624,547	535,811	635,711	927,143	1,446,812		
Production—	301,120	024,541	000,011	000,111	021,110	1,110,012		
Bricks, common (1,000)	190,666	40,018	26,741	37,839	83,018	134,538		
TR (-1 (1'000)	4,631	6,247	6.026	5,697	5,784	6,171		
D = 0 C = + 1 = (1 000)	12,069	$\frac{0,247}{1,402}$	505	2,882	5,422	10,182		
		25,402		79,226	142,571	228.769		
	196,357	63,406	68,352					
Other earthenware china, &c. £	297,211	418,378	382,120	409,342	335,873	531,699		

Sawmills. Detailed information in regard to the sawmills of the State for the five years 1942-43 to 1946-47 is given in the table which follows:—

VICTORIA—SAWMILLS.

Year Ended Numb		Number	Value of Land and Buildings,	Persons	Salaries and Wages	Rough-Sawn Timber Produced.		
30th	June,	of Mills.	Machinery and Plant in Use.	Employed.	Paid.	Quantity.	Value.	
			£		£	super ft.	£	
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	
1947		383	1,526,565	5,068	1,492,266	226,471,660	3,276,764	

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

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 514 other factories which comprise the wood working group will be found on pages 542 and 543.

Firewood. Sawmills in the year 1946–47 was 391,304 tons, valued at the sawmills at £578,418. 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 1946–47, 740,771 tons of firewood, which cost £819,680, 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.

	Year ended 30th June								
Item.		1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments		80	57	55	54	57	60		
Number of persons employee	i	4,539	4,673	4,401	4,637	4,905	4,189		
Horse-power of engines used		8,721	12,480	12,312	12,517	12,861	13,268		
Value of land and buildings	£	405,089	612,708	578,798	571,230	609,043	624,340		
Value of plant and machinery	£	401,625	697,089	698,962	838,582	719,690	665,761		
Salaries and wages paid	£	1,045,214	1,613,970	1,490,003	1,512,731	1,584,777	1,466,847		
Value of materials used	£	1,135,453	1,319,980	1,304,551	1,446,242	1,461,788	1,334,378		
Fuel, light, and power used	£	64,475	134,433	124,894	112,466	112,480	90,518		
Value of output	£	2,691,479	3,583,298	3,435,008	3,658,935	3,747,487	3,440,499		

Bacon curing. In the following table particulars of bacon and ham curing establishments are given for the year 1938 and the past five years.

VICTORIA—BACON FACTORIES.

	Year ended 30th June→								
Item.	1938,	1943.	1944.	1945.	1946.	1947.			
Number of establishments	19	16	18	20	20	20			
Number of persons employed	545		578			725			
Horse-power of engines used	3,783					4,251			
Value of land, buildings, plant,		,.	.,	· '	′ ′	,			
&c £	361,933	311,600	313,956	349,366	346,579	344,293			
Salaries and wages paid £	124,020					228,359			
Value of materials used £	800,605	1,362,182	1,479,040	2,130,269	1,808,682	2,073,770			
Value of fuel and light £	16.510	22,806	24,967	30,063	27,092	29,818			
Value of output £	1,040,253	1,652,468	1,778,395	2,570,889	2,256,837	2,467,962			
Pigs slaughtered for curing No.	172,535	186,912	201,019	247,147	206,054	223,386			
Bacon and ham cured lb.	16,006,409	19,334,343	21,198,255	26,609,925	20,961,254	24,592,389			
	20,000,200	20,002,020	-2,100,200		,	,,			

Butter and cheese factories.

The number of butter, cheese, and kindred factories in 1946–47 was 147. Of these 110 were making butter, 31 cheese, 2 concentrated milk, 4 condensed milk, 11 powdered milk (full cream and skim), 15 dried butter milk, 12 casein, and 1 milk sugar. The following table gives some indication of the value of this industry to the State:—

VICTORIA—BUTTER AND CHEESE FACTORIES, ETC.

74			Year ended 3	0th June—		
Item.	1938.	1943.	1944.	1945.	1946.	1947.
Number of establishments	172	159	152	148	148	147
Number of persons em-						
ployed	3,017	3,870	3,804	3,748	3,874	4,285
Horse-power of engines	13,652	17,523				
Value of plant and			'			<i>'</i>
machinery £	1,183,201	1,386,617	1,367,977	1,332,534	1,344,427	1,395,350
Value of land and	, ,	_,,	_,,	_ , ,	_,,,	_,,
buildings £	1,157,183	1,405,563	1,448,699	1,454,364	1,525,425	1.628,180
Salaries and wages paid £	694,356		1,168,650		1,235,307	
Fuel, light, and power £	156,479		311,100			
Value of materials used £	9,842,143	12,441,760	11,803,840			16,356,296
Value of output £	12,407,723	15,262,179	14,475,120			19,638,430
Added value £	2,315,991	2,367,199	2,208,267			
Articles produced—	_,010,001	2,001,200	2,200,201	_,,	_,101,100	_,,,,,,,,
Butter lb.	137,016,414	122,864,673	109,456,751	104.832.382	112,180,169	133.027.174
Cheese lb.	16,032,366		26,583,732			
Condensed milk lb.	31,108,304	69,115,568	73,784,738	76.126,884		
Powdered milk, &c. (all	02,200,001	00,110,000	10,.01,.00	10,220,002	00,010,001	, 1,0,0,010
kinds) lb.	20,833,340	32.397.697	33,551,215	32,915,162	36,244,293	43,168,944
Casein lb.	5,094,630		2,740,393			
	2,232,000	2,550,000	_,,10,000	0,130,200	_,000,000	0,101,011

Further particulars relating to butter and cheese factories will be found on page 94.

Bakeries (including bread, pastry and cakes). The statistical definition of a factory (see page 535) excludes from enumeration many small bakeries. Particulars relating to 1946–47 include 805 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-							
	1938.	1943.	1944.	1945.	1946.	1947.		
Number of factories	549	592	728	728	746	805		
Number of persons employed	3,213	3,245	3,632	3,712	4,112	4,410		
Horse-power of engines used	2,502	2,866	3,318	3,393	3,568	3,792		
Value of land and buildings £	1,184,892	1,264,463	1,490,583	1,556,972	1,667,986	1,998,185		
Value of plant and machinery ${\mathfrak L}$	376,595	432,115	464,268	455,041	477,092	543,278		
Salaries and wages paid £	657,061	859,536	995,382	1,031,434	930,304	1,082,345		
Value of materials used \pounds	1,920,579	2,494,883	2,838,305	2,903,301	2,981,031	3,210,602		
Fuel, light, and power used $\mathfrak L$	81,127	115,766	133,539	136,110	139,311	152,816		
Repairs, oil and water used £	33,056	44,295	54,027	60,349	93,500	82,603		
Total output \dots £	3,235,506	4,290,071	4,887,909	4,944,910	5,247,154	5,789,351		
Value added \dots £	1,200,744	1,635,127	1,862,038	1,845,150	2,033,312	2,343,330		
Value added per worker £	374	504	513	497	494	531		
Flour used—tons (2,000 lb.)	92,191	109,892	124,941	125,679	111,560	129,248		
Bread made—4-lb. loaves	55,485,924	64,200,620	76,747,278	76,398,458	70,080,082	79,238,257		
Cakes, pastry, pies £	1,522,674	2,246,428	2,548,761	2,673,367	2,635,193	3,130,947		

Meat and fish preserving industry for 1937–38 and the past five years are given hereunder—

VICTORIA-MEAT AND FISH PRESERVING WORKS.

Item.	Year ended 30th June—							
roem.	1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments	8	12	12	12	12	14		
Number of persons engaged	255	1,229	1,127	1,338	1,089	954		
Horse-power of engines used	410	958	1,340	2,031	2,128	2,201		
Value of plant and machinery £	24,143	93,219	86,612	130,491	139,945	144,386		
Value of land and buildings £	64,043	111,730	143,325	187,171	190,646	209,259		
Salaries and wages paid £	37,979	332,937	341,376	377,323	310,686	312,079		
Fuel, light, and power £	2,839	24,148	27,118	27,643	27,654	28,852		
Value of materials used £	238,218	2,185,066	2,279,190	2,882,204	2,154,730	1,922,096		
Value of output £	342,400	2,973,694	3,311,797	3,879,890	2,963,365	2,716,064		
Value added to materials £	94,932	725,683	959,907	934,922	747,857	731,443		
Canned meat produced cwt.	52,740	496,390	511,236	509,624	318,386	322,300		
Meat extracts cwt.	870	4,428	5,680	5,509	5,669	3,471		
Fish (all kinds) ewt.		6,165	3,853	6,663	11,593	25,607		

^{*} Not available.

One hundred and three establishments were included Refrigeration. under the industrial Sub-class "Ice and Refrigeration" during 1946–47. There were 3,011 persons employed and the total horsepower of machinery used was 24,265. The value of Land &c. and Plant &c. was £2,169,443 and the value of output £1,998,782. 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.

The following statement shows the imports from 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, 1947:—

VICTORIA—MEAT IMPORTED AND EXPORTED OVERSEA, 1946-47

	Import	s.	Exports.			
Meats.	Quantity.	Value.	Quantity.	Value.		
				4 2 14		
Decreed he sold process		£		£		
Preserved by cold process—	•		17 18 000 001	447.040		
Beef	••	•••	lb. 17,909,891	445,946		
Lamb	••.		,, 79,827,160	2,576,358		
Mutton			,, 29,936,686	486,341		
Pork			,, 4,013,637	169,480		
Poultry				221,147		
Rabbits and hares		• •	prs. 4,528,137	528,825		
Veal			lb. 200,717	4,532		
Other	lb. 134,509	21,760		133,381		
Bacon and hams			lb. 1,697,648	180,920		
Potted and concentrated	lb. 6,532	2,012	lb. 114,300	32,960		
Meat and vegetables preserved	l İ			1		
in tins, &c	lb. 21,011	1,624	,, 35,444,231	2,061,345		
Sausage casings	ewt. 3,190	80,168	ewt. 10,437	271,727		
Other	. `	22		5,435		
Total value		105,586		7,118,397		

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 1937–38 and for the past five years.

VICTORIA—FLOUR MILLS.

Item.	Year Ended 30th June—							
100111	1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments	38	35	38	38	40	40		
Number of persons engaged	1,101	895		1,056	1,021	1,210		
Horse-power of engines used	7,115	8,867	9,537	9,845	9,561	9,799		
Value of plant and machinery £	493,838			482,344	497,473	504,767		
Value of land and buildings £	543,861	627,288	661,696			724,818		
Salaries and wages paid £	274,725		370,666	361,232	343,275	426,400		
Fuel, light, and power £	55,543	57,436	79,436	76,398	63,155			
Value of materials used £ Value of output £	4,814,257	3,016,400	4,344,715	4,093,174				
	5,409,048	3,677,949	5,170,202	4,902,557	4,222,476	5,888,438		
Value added to materials £	510,315							
Wheat ground into flour, bushels	20,175,007							
Flour produced tons (2,000 lb.)	424,177	286,946	409,190	393,036	315,525	449,170		
Bran produced ,,	86,275	57,079	84,562	76,925	66,177	89,517		
Pollard produced ,,	91,910		80,456		64,659			
Wheatmeal produced cwt.	139,200	404,100				382,357		

During the year ended 30th June, 1947, 221,476 tons of flour, valued at £7,025,624 were exported from Victorian ports to countries beyond Australia.

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 1937–38 and for the past five years.

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

Item.	Year Ended 30th June—							
	1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments	46		51					
Number of persons engaged	3,225		5,005					
Horse-power of engines used	3,797		7,552		8,891	9,606		
Value of plant and machinery £	354,841					864,382		
Value of land and buildings £	682,800							
Salaries and wages paid £	580,312							
Fuel, light, and power used £	37,055							
Value of materials used £	2,297,776		5,630,492					
Value of output £	3,533,091		8,238,373					
Fresh fruit used cwt.	1,089,549		1,184,103					
Sugar used ,, Output of—	326,180	509,384	538,268	503,914	536,890	533,496		
Jams and jellies cwt.	275,086	609,320	630,314	568,502	584,972	600,061		
Fruit preserved in liquid ,,	913,796	671,133	717,900	695,947				
Fruit pulp "	88,591	80,814			140,403			
Sauce pints	9,895,651	12,617,134		18,837,150	16,252,192	10,366,986		
Pickles and chutney ,,	2,949,428		4,240,797			2,447,263		

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 I	Ended 30tl	ı June.	Area.	Beet Yield.	Sugar Content.	Sugar Produced
		· · ·	acres.	tons.	%	tons.
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	$15 \cdot 82$	2,769
1943			955	5,997	17.13	678
1944			836	6,975	$16 \cdot 11$	704
1945			485	3,200	/20 10	11
1946			108	975	(For F	odder only)
1947			753	9,170	15 95	1,014

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 during each of the past five years, in which sugar was produced, were as follows:—1940-41, 44s.; 1941-42, 43s.; 1942-43, 48s.; 1943-44, 50s.; and 1946-47, 59s.

After a lapse of two years sugar was again produced in 1946-47.

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 Particulars regarding breweries and distilleries for the year 1937–38 and for the past five years are set forth in the succeeding tables.

VICTORIA—BREWERIES.

Item.	Year ended 30th June-						
	1938.	1943.	1944.	1945.	1946.	1947.	
Number of breweries	. 9	8	8	. 8	8		
Number of persons engaged	1,420		1,374	1,385	1,526		
Horse-power of engines	6,860		6,597		6,612		
Value of plant and machinery £	840,581		830,740	818,950	815,857	821,63	
Value of land and buildings £	769,562						
Salaries and wages paid £	495,493						
Fuel, light, and power used £	60,587		78,402				
Value of materials used £	1,243,561		1,338,428			1,389,07	
Value of output £	2,891,604		2,621,378	2,718,027	3,013,132		
Value added to materials £	1,467,503	1,113,814	1,139,842	1,200,780	1,447,937	1,456,820	
Materials used—							
Sugar cwt.	121,427						
Malt bush.	992,860						
_ Hops lb.	854,087						
Beer and stout made gals.	30,570,063	31,644,186	30,743,871	31,787,067	35,484,347	35,993,71	

VICTORIA—DISTILLERIES.

Item.	Year ended 30th June—							
	1938.	1943.	1944.	1945.	1946.	1947.		
Number of distilleries	7	9	9	9	9	g		
Number of persons engaged	74	181	189	175	238	275		
Horse-power of engines	403		1,293	1,429	1,443	1,490		
Value of plant and machinery £	106,043							
Value of land and buildings £	186,494	227,333						
Salaries and wages paid £	18,667							
Fuel, light, and power £	7,242							
Value of materials used £	69,913	410,181						
Value of output £	192,227	759,823	777,796	636,728	887,862	1,000,846		
Materials used								
Wine gals.	1,181,601							
Malt bush.	57,008							
Other grain bush.	97,325							
Molasses lb.	1,447,040			16,815,792		28,717,920		
Raw sugar, sugar, &c. lb.	*	56,984,144	43,761,088	18,617,536	22,543,136	7,138,992		
pirits distilled in distilleries								
proof gals.	745,063	6,103,442	5 016 770	3,501,376	3,720,276	3,827,672		
proof gais.	749,000	0,103,442	3,510,775	3,001,070	3,720,270	3,027,072		
pirits distilled by vinegrowers	. 5.1					-		
proof gals.	38,882	9,164	12,048	12,262	12,328	13,485		
proof gais.	00,002	0,104	,040	12,202	14,940	10,400		

^{*} Not available.

The fifteen establishments engaged in the manufacture of tobacco, cigars, and cigarettes during 1946-47 which conformed to the statistical definition of a factory gave employment to 2,375 persons, who were paid £621,095 in wages and who used machinery, plant, land, and buildings valued at £759,479. 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	Leaf Operated on.		Production.	
30th June.	Australian. Imported.	Tobacco.	Cigars.	Cigarettes.
	1b. 1b.	lb.	No.	No.
1938	1,565,159 4,727,731	5,229,385	23,076,385	837,549,346
1939 1940	F,592,449 5,093,062 1,753,752 5,069,611	5,296,000 5,043,425	22,797,977 $21,654,357$	1,032,768,141 $1,219,518,315$
1941	1,842,953 5,432,331	5,131,890	25,273,046	1,419,168,642
1942 1943	$ \begin{array}{c cccc} 1,927,629 & 5,922,807 \\ 1,973,027 & 5,722,124 \end{array} $	5,538,393 5,829,487	27,107,268 19,914,219	1,515,517,910 1,350,087,444
1944	1,838,650 5,815,429	5,864,285	14,802,342	1,333,952,191
1945 1946	1,799,295 5,769,847 1,698,514 6,051,854	5,841,035 $5,988,762$	14,320,780 13,446,593	1,293,700,665 1,316,541,823
1947	1,363,490 7,336,030	6,778,174	13,550,760	1,419,855,646

Wootlen Wills. 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 1946–47, was £2,157,926.

VICTORIA-WOOLLEN MILLS.

Item.	Year Ended 30th June—							
I OGIM.	1938.	1943.	1944.	1945.	1946.	1947.		
Number of establishments	52	65	64	67	65.	68		
Number of persons employed	9,813	12,051			11,094	11,34		
Horse-power of engines	26,767	32,244				31,64		
Value of plant and machinery £	1,777,059	1,529,782	1,468,274	1,459,495				
Value of land and buildings £	1,284,491	1,499,939	1,517,095	1,594,797				
Salaries and wages paid £	1,437,060	2,992,594	2,955,664	2,817,138				
Fuel, light, and power £	168,709	314,501	319,429	292,667				
Value of materials used £ Value of output £	3,879,806	7,664,482	7,238,085					
Value of output £		13,267,842	12,534,481	11,823,664	11,752,967	13,317,71		
Added value £	2,130,844	4,917,482	4,526,808	4,496,264	4,900,275	5,497,00		
Scoured wool used lb.	17,894,590		41,732,978	36,737,722	33,956,769	36,130,73		
Cotton used lb.	848,040	81,403						
Tweed and cloth made sq. yds.	12,973,069	18,870,925				18,630,02		
Flannel made sq. yds.	1,791,011							
Blankets pairs								
Rugs and shawls No.	92,588	43,190	1,797	11,911	23,332	40,16		

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 1938 and the past five years:—

VICTORIA—HOSIERY AND KNITTING.

Item.	Year ended 30th June—					
	1938.	1943.	1944.	1945.	1946.	1947.
Number of establishments Number of persons employed—	216	226	231	250	255	267
Male	3,959	2,406	2,443	2,818	3,336	4,156
Female	8,432		7,935			8,906
Salaries and wages paid £	1,643,609			2,328,847		3,104,940
Value of land and buildings £	1,157,824					1,622,449
Value of plant and machinery £	1,265,179	964,452				995,814
	2,790,791		4,590,545			5,309,933
Fuel, light, and power £	74,879					145,620
Value of output £	5,655,022			8,288,324	8,615,732	10,815,971
Added value £	2,674,686	3,563,102	3,720,254			5,090,601
Yarn used—	' '	1 1	1 1	-,,		
Woollen lb.	3,858,639	8,227,663	8,033,891	7,713,200	5,763,239	6,715,598
Cotton lb.	2,649,711	5,187,578	4,056,866	3,794,826	3,189,953	4,505,276
Silk lb.	1,154,939	21,012	2,250			73,988
Rayon lb.	2,993,386		2,558,304			2,843,600
Stockings madedoz. pair	*1,550,154	*1,025,915	*993,525	*823,517	*929,484	*1,158,269
Socks madedoz. pair	+1,094,752	†1,382,673	†1,387,592	11,347,054	+1,191,592	+1,306,35
Garments made number	17,915,280					

^{*} Women's socks and stockings only.

[†] Includes men's socks and stockings, doz. pair—1937-38, 836,222; 1942-43, 1,164,919; 1943-44, 1,084,442; 1944-45, 1,067,046; 1945-46, 841,957; 1946-47, 968,562. Children's socks and stockings, doz. pair—1937-38, 258,530; 1942-43, 217,754; 1943-44, 303,150; 1944-45, 280,008; 1945-46, 349,635; 1946-47, 337,795.

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

VICTORIA—BOOTS AND SHOES.

Item.			Year ended	l 30th Jun	e 	
Toom.	1938.	1943.	1944.	1945.	1946.	1947.
Number of establishments .	. 162	167	177	182	195	210
Number of persons employed	9,497	8,534	8,423	8,704	9,464	10,752
Horse-power of engines used	3,440	4,985	5,993	6,219	5,337	5,229
Value of plant, machinery, land and buildings	1,057,287	1,067,950	1,203,014	1,307,608	1,373,385	1,511,817
Salaries and wages paid	1,515,390	2,150,133	2,162,210	2,205,611	2,353,753	2,923,519
Fuel, light, and power	27,406	33,457	34,255	37,414	37,505	41,316
Value of materials used	2,477,930	4,045,432	4,092,681	4,260,161	4,020,905	4,832,669
Value of output	4,603,609	7,357,218	7,376,946	8,234,686	7,765,401	9,193,925
Boots and shoes made pair	7,877,630	8,432,500	8,160,178	7,864,401	7,031,105	7,302,844
Slippers made pair	4,378,935	2,786,762	2,833,633	2,882,816	3,246,022	4,833,405

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:—

VICTORIA—DRESS (EXCLUSIVE OF BOOT) FACTORIES.

Year end 30th June		Number of		ber of Pe Employed		Salaries and Wages	Value of Materials	Value of Output.
Som June		Factories.	Males.	Females.	Total.	Paid Used.		Output.
1938		1,479	9,231	32,225	41,456	£ 5,352,401	£ 9,700,508	£ 18,027,49 6
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	٠.	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
1947		1,216	5,270	23,182	28,452	6,122,992	12,999,733	23,419,798

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

VICTORIA—ELECTRIC LIGHT AND POWER WORKS.

	Year ended 30th June— Number							Wages Paid.	Electricity Generated.	Value of Output.	
							,000				
			*	£	!	£	kilowatt hours.	£			
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			
1947			67	10,484,117	1,906	752,820	1,838,893	4,025,721			

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:—1942–43, 128,466; 1943–44, 106,024; 1944–45, 102,584; 1945–46, 100,996; and 1946–47, 163,174.

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 terminal stations at Richmond and Yarraville. Terminal stations at Thomastown and Brunswick receive electricity from the Sugarloaf-Rubicon (installed 26,415 kW.) and the Kiewa hydro-electric stations (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.). These generating stations, together with the Melbourne City Council's station at Spencer-street (installed 37,000 kW.), are electrically inter-connected. A regional station is operated at Hamilton (1,837 kW.).

The Kiewa scheme to provide by economic instalments ultimately 117,000 kW. (enlarged scheme recommended totals 289,000 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 90,000 kW. to the station capacity. Two 50,000 kW. turbo-generators (to replace six 12,500 kW. sets) at Yallourn are on order.

There are seven terminal stations (total kVA. 421,250) and two switching stations (18,000 kVA.), in addition to which there are 35 main metropolitan sub-stations (aggregating 486,250 kVA.), four distribution sub-stations at line voltage (aggregating 16,500 kVA.), and 5,089 metropolitan and rural sub-stations (aggregating 482,856 kVA.)—grand total, 1,424,856 kVA. High and low tension lines aggregate 6,294 and 5,164 route miles respectively, excluding 677 cable miles of underground cables.

The Commission retails direct in 22 of the metropolitan municipalities, and bulk supply is given to 11 metropolitan municipalities for subsequent distribution. Rural centres supplied by the Commission at the 30th June, 1947, totalled 622, of which 525 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 1946–47 amounted to 490,338 tons. The plant includes 8 steam presses and 11 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 8 million kWh. was generated at the briquette factory during 1946–47.

A proposal to establish, at Morwell, an open cut and two briquette factories with a combined capacity of 1,300,000 tons of briquettes per annum has been submitted to the Government.

Gasworks.

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

VICTORIA—GASWORKS.

Ye end 30th J	led.	Number of Works.	Persons Em- ployed.	Wages Paid,	Coal Used.	Oil Used.	Gas Made,	Coke Produced.	Value of Output.
				£	Tons.	Gals.	'000 cubic feet.	Tons.	£
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
1947	• •	39	1,230	442,718	622,232	1,561,098	10,903,505	343,022	2,397,860

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.

<u></u>		I OILIAN.			
Class of Industry.		Year e	ended 30th J	une	
	1943.	1944.	1945.	1946.	1947.
1. Treatment of non-metalli- ferous mine and quarry	£	£	£	£	£
products 2. Bricks, pottery, glass, &c. 3. Chemicals, dyes, ex-	2,550,795 2,050,168	2,565,401 2,037,535	2,624,954 2,176,842	3,315,588 2,718,311	4,471,555 3,163,659
plosives, paint, oils, and grease 4. Industrial metals, ma- chines, implements,	28,116,873	22,779,005	21,554,314	20,260,798	22,366,179
and conveyances	82,765,045	86,834,407	83,422,824	77,243,145	70,211,858
5. Precious metals, jewellery, and plate 6. Textiles and textile goods	890,369	951,237	957,425	1,349,056	2,130,185
(not dress) 7. Skins and leather (not	29,342,465	30,461,302	29,284,607	29,183,535	34,432,762
clothing or footwear)	5,828,842	5,781,860	5,631,579	6,469,308	9,033,530
8. Clothing 9. Food, drink, and tobacco 10. Woodworking and basket	24,600,217 62,873,996	25,855,930 67,351,533	28,260,412 70,649,023	28,928,234 70,538,377	34,948,122 79,646,847
ware 11. Furniture, bedding, &c. 12. Paper, stationery, print-	7,864,039 2,981,944	8,785,451 2,452,199	9,077,021 2,528,483	9,518,189 3,418,440	11,731,942 4,538,526
ing, bookbinding, &c.	12,717,878	13,356,139	14,544,374	15,423,419	18,520,834
13. Rubber 14. Musical instruments	5,321,366 20,865	$\begin{array}{c c} 5,491,770 \\ 22,768 \end{array}$	5,618,711 32,376	6,131,232 46,238	7,098,727 56,671
15. Miscellaneous products 16. Heat, light, and power	3,793,133 5,960,945	3,841,669 6,079,708	4,572,797 6,486,569	5,842,021 6,603,517	6,662,701 6,423,581
Total	277,678,940	284,647,914	287,422,311	286,989,408	315,437,679

Employment in The average number of persons employed over the matter whole year in each class of industry is shown below. The table of monthly employment in factories (see page 580) is designed to show seasonal employment.

VICTORIA—AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

		Year en	ded 30th	June—	
Class of Industry.	1943.	1944.	1945.	1946.	1947.
			· ·		
1. Treatment of non-metalliferous mine and quarry products	1,964	1,897	2,025	2,659	3,467
2. Bricks, pottery, glass, &c	2,676	2,508	2,644	3,574	4,091
3. Chemicals, dyes, explosives, paint, oils, and grease	25,615	18,385	15,207	11,961	11,363
4. Industrial metals, machines, implements, and conveyances	99,220	102,607	97,022	88,421	83,408
5. Precious metals, jewellery, and plate	1,217	1,164	1,149	1,602	2,307
6. Textiles and textile goods (not dress)	29,078	29,858	29,686	30,215	31,896
7. Skins and leather (not clothing or footwear)	4,449	4,456	4,419	4,558	5,621
8. Clothing	33,640	33,451	35,899	38,552	42,847
9. Food, drink, and tobacco	30,549	32,622	33,991	33,811	35,375
10. Woodworking and basketware	8,457	8,847	8,999	10,139	11,145
11. Furniture, bedding, &c	2,978	2,542	2,595	3,724	4,643
12. Paper, stationery, printing, bookbinding, &c	12,091	12,130	12,552	13,723	15,526
13. Rubber	2,911	3,132	3,231	3,644	4,024
14. Musical instruments	46	43	53	83	105
15. Miscellaneous products	4,995	5,110	5,520	6,570	6,803
16. Heat, light, and power	2,471	2,547	2,641	3,013	3,136
Total	262,357	261,299	257,633	256,249	265,757

Particulars in the following table show that by comparison with the previous year substantial increases in the number of factories and the persons employed therein were recorded in practically all size groups. Only in one size group—over 100 hands—was there a decrease in the number of employees.

VICTORIA—FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

	Showin	g Ann	ual Perce	ntage	Increase	or De	crease (Y	ear end	led 30th	June ;
		-								
· ——	1943.	Increase.	1944.	Increase.	1945.	Increase.	1946.	Increase.	1947.	Increase.
						%		%		%
Under 4 hands-		, ,		, ,				ĺ		
Number of—								İ		
Factories	2,933		3,213	9 · 5	3,232	0.6	3,065	$-5\cdot 2$	3,087	0.7
Employees	5,522	-0.3	6,147	11.3	6,108	-0.6	6,025	-1.4	6,185	2.7
4 hands—										
Number of—										
Factories	655	-0.6	745	13.9	760	2.0	785	3 · 3	874	11.3
Employees	2,620	-0.6	2,980	13.7	3,040	2.0	3,140	3 · 3	3,496	11.3
5 to 10 hands-	1									
Number of—										
Factories	2,016	-3.6	2,087	3.5	2,205	5 · 7	2,520	14 · 3	2,792	10.8
Employees	13,995	-6.5	14,605	4 · 4	15,404	5 5	17,632	14.5	19,087	8.3
11 to 20 hands-										
Number of-										
Factories	1,234	-0.2	1,316	6.6	1,393	5.9	1,584	13.7	1,718	8.4
Employees	18,105	1 · 0	19,359	6.9	20,552	6.2	23,521	14.4	25,047	6:5
21 to 50 hands-	1									
Number of-										
Factories	1,034	-7.3	1,066	3.1	1,159	8.7	1,287	11.0	1,464	8.8
Employees	33,040	-7.3	34,105	3.2	36,796	7.9	40,876	11.1	45,711	11.8
51 to 100 hands—	1									
Number of-	1									
Factories	406	-4.5	416	$2 \cdot 5$	453	8.9	490	8.2	546	11.4
Employees	28,180	-4.5	28,803	$2 \cdot 2$	31,458	9.2	34,314	9.1	38,112	11 4
Over 100 hands-										
Number of-						·				
Factories	460	0.7	474	3.0	467	-1.5	461	-0.7	468	0.8
Employees	161,892	5.6	156,312	$-3 \cdot 4$	145,215	-7.1	132,285	-8.9	128,911	-2.6

Note.—Minus sign indicates decrease.

VICTORIA—PROPORTION OF FACTORIES OF DIFFERENT SIZES.

		P	ercenta	ge to T	otal (Y	ear end	ed 30th	June)	-	
	1943. 1944			44.	1945.		1946.		1947.	
Size of Factory.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.
Under 4 hands 4 5 to 10 "	33.6 7.5 23.1 14.1 11.8 4.6 5.3 100.0	2·1 1·0 5·3 ··6;9 ·12·5 10·7 61·5 100·0	34·5 8·0 22·4 14·1 11·4 4·5 5·1 100·0	$ \begin{array}{r} 2 \cdot 3 \\ 1 \cdot 1 \\ 5 \cdot 6 \\ 7 \cdot 4 \\ 13 \cdot 0 \\ 11 \cdot 0 \\ 59 \cdot 6 \\ \hline 100 \cdot 0 \end{array} $	33·4 7·9 22·8 14·4 12·0 4·7 4·8 100·0	2·4 1·2 5·9 7·9 14·2 12·2 56·2	$ \begin{array}{r} 30 \cdot 1 \\ 7 \cdot 7 \\ 24 \cdot 7 \\ 15 \cdot 5 \\ 12 \cdot 6 \\ 4 \cdot 8 \\ 4 \cdot 6 \\ \hline 100 \cdot 0 \end{array} $	2·3 1·2 6·9 9·1 15·9 13·3 51·3	28 · 2 8 · 0 25 · 5 15 · 7 13 · 4 4 · 9 4 · 3 100 · 0	2·3 1·3 7·2 9·4 17·2 14·3 48·3

Occupations in factories are grouped according to their occupational status:—

VICTORIA—OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

		Year ended 30th June—							
Occupations.		1943.	1944.	1945.	1946.	1947.			
	No.	7,180	7,906	8,223	8,089	9,045			
Managers, overseers Accountants, clerks Chemists, draftsmen, resea	,, ,,	9,444 17,504	9,776	10,145 19,549	24,236	25,519			
staff, &c	No.				3,255	3,027			
Engine-drivers, firemen	,,	2,047	2,011	2,135		• •			
Foremen and overseers	,,		١	1	9,139				
Workers in factory or works	,,	223,759	220,187	214,876	208,725	215,273			
Outworkers Carters, messengers, others	"	$\begin{array}{c} 196 \\ 2,227 \end{array}$	287 2,253	389 2,316	2,505	2,271			
Total		262,357	261,299	257,633	256,249	265,757			

Particulars relating to 1945-46 and 1946-47 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.

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.

The average numbers of males and of females distribution employed in factories, and their proportions to the male and female populations, for each of the years, 1937-38 to 1946-47, were as follows:—

VICTORIA—EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

Year I		Males.		Fen	nales.	Total.			
30th J		Number.	Average per 10,000 of Male Population.	Number,	Average per 10,000 of Female Population.	Number.	Average, per 10,000 of Total Population		
1938		136,160	1,481	65,629	697	201,789	1,084		
1939		136,218	1,470	65,613	692	201,831	1,0.6		
1940		143,238	1.533	69,223	724	212,461	1,124		
1941		161,880	1,745	75,756	781	237,636	1,252		
942		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		
946		178,951	1,798	77,298	758	256,249	1,271		
947		188,758	1,875	76,999	745	265,757	1,303		

Of the total persons employed, males formed 67 per cent. in 1937-38 and 71 per cent. in 1946-47. As compared with the year 1937-38, the number of males employed increased by 52,598 or 39 per cent. and the number of females employed by 11,370 or 17 per cent.

Of the total number of females in factories, 60 per cent. were engaged in the textile and clothing groups of industries, 11 per cent. in the industrial metals, machines, &c., and 12 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, 1946-47.

Industry	7 .			Number 1	Employed,	Females per
			Males.	Females.	100 Males.	
Pharmaceutical and toilet p	oreparati	ions		748	1,031	138
Inks—polishes	•			313	224	72
Watches and clocks (includ	ing repa	irs)		357	123	34
Cotton				1,432	1,363	95
		• • .		6,398	4,947	7.7
Hosiery and knitting .				$4,\!156$	8,906	214
Silk, natural				154	229	149
Rayon, nylon and other sy	nthetic	fibres		82	148	180
Canvas goods, &c			\	260	179	69
Furriers and fur dressing .	•			352	217	62
Bags, trunks, &c.				566	528	93
Tailoring and ready-made of	clothing	• • *		$2,\!408$	5,921	246
Clothing, waterproof .	•			89	241	271
Dressmaking, hemstitching.				1,125	9,910	881
Millinery				258	1,112	431
Shirts, collars, underclothin	g			474	3,471	732
Stays and corsets .			\	141	897	636
				55	275	500
Hats and caps				454	265	58
	•*			152	542	357
				5,609	5,143	93
Boot accessories				100	161	161
	•			1,393	1,139	82
				801	455	57
)	572	564	99
Confectionery				1,223	1,277	104
Jams, fruit and vegetable	canning			$2,\!324$	1,625	70
Pickles, sauces, vinegar .				404	245	61
Meat and fish preserving, &			• •	589	365	62
Condiments, coffee, spices.		• •	• •	8 34	765	92
			• •	969	1,406	145
Bedding mattresses (not wi	ire)			298	227	76
_ 0, 1 ,			• •	140	256	183
			•,•	511	497	97
Cardboard boxes, cartons .	•	• •	• •	888	785	88
				126	207	164
		• •		501	559	111
		• •		40	257	643
All other factories .	•	• •	. ••	151,462	20,537	14
Total			••	188,758	76,999	41

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.

		Ma	ales.		}	F	emales.	
Year.	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.	Tota Females.
June 15th, 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
,, ,, 1947	2,938	20,091	161,232	184,261	2,801	16,943	56,824	76,568
				centage				
	To	Total Mo	tles Emplo	ryed	To T	otal Femo	ales Empl	oyed
June 15th, 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
" " 1947	1.60	10.90	87.50	100.00	3.66	22 · 13	74.21	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, 1937–38 to 1946–47. 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.	
				•	£	
1938			8,655	858,216	36,868,289	
1939		• •	8,761	862,221	38,570,380	
1940	•		8,741	997,768	40,849,523	
l941			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	
l946			9,851	1,413,958	58,537,394	
1947			10.563	1,438,472	59,124,802	

^{*} 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.

Veer end	led 30th J	1170-	Number of Factories with Engines Operated by-					
Tear che		<u> </u>	Steam.	Gas.	Electricity.	Oil.	Water.	Labour
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
1947			$\begin{vmatrix} \overline{211} \end{vmatrix}$	41	9,897	405	9	386

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.

VICTORIA—HORSE-POWER OF ENGINES IN FACTORIES, 1946–47.

Clas	Ingine.	Electric Generating Stations (Maximum Load).	Other Factories.	Total.			
Steam-			-				
Reciprocating					545	26,425	26,970
Turbine					607,285	32,138	639,423
Internal Combustion—							
Gas					1,160	2,761	3,921
Petrol or other light	oils				22	4,980	5,002
Heavy oils					10,406	10,420	20,826
Water	••	••			66,985	1,317	68,302
Total	al				686,403	82,041	764,444
Electric motors driven							
(a) Electricity generated		own wo	rks		25,044	36,807	61,851
(b) Purchased electri	icitv					607,022	607,022

Reserve or idle horse-power capacity amounted to 100,337, exclusive of that in generating stations.

Wages in Factories.

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		Drawin Working I (excluding	Proprietors		Paid to and Clerks.	Wages Paid Factory	Total Salaries and Wages		
Jun	ie.	Males.	Females.	Males.	Females.	Males.	Females.	Paid.	
		,		Aggregate	Amounts.	1			
		£	£	£	£	£	£ 1	£	
1938		2,126,948	140,684	4,075,295	757,828	24,165,763		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		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	6,728,962	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		
1944		3,229,601	209,894	8,584,082	2,295,621	50,026,632	13,054,858		
1945		3,417,682	248,642	8,878,188	2,342,123	47,237,597	12,103,013		
1946		*	*	8,415,206	2,157,676	48,357,567	11,568,765	70,499,214*	
1947		*	*	9,492,106	2,224,201	53,543,120	12,734,338	77,993,765*	
				Average 1	Amounts.				
		£ s. d.	£ $s. d.$	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
1938	٠	297 18 8	180 7 3	349 13 10			100 8 4	180 12 10*	
1939		305 12 3	183 19 8	355 14 3			105 3 1	185 12 9*	
1940		315 5 6	189 4 10	359 10 4	142 8 8		110 13 11	193 6 2*	
1941		343 0 6	202 4 6	376 1 0	146 13 6		123 1 3	216 9 1*	
1942		393 17 10	224 19 9	433 1 4	162 10 6		146 18 4	256 8 6*	
1943	•• •	434 10 9	253 7 5	467 17 7	189 1 2			286 4 4*	
1944		451 15 1	277 5 5	492 11 6			175 15 9	291 17 8*	
1945	• •	460 0 11	313 3 0	486 6 4	204 15 4		170 10 3	282 18 3*	
1946	••	•••	• •	495 13 1	205 4 9		175 2 7	284 1 9*	
1947	••	••	• • •	520 9 9	215 15 1	330 0 10	193 2 9	303 16 5*	
						<u> </u>			

^{*} 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 £19 14s. 8d. in 1946-47.

Cost and value of production and the value of the output in each class of manufacturing industry during the year 1946–47 are given in the subjoined statement:—

VICTORIA—FACTORY COSTS AND OUTPUT, 1946-47.

		Cost	of—		
Class of Industry.	Raw Materials Used (including Containers).	Fuel, Light, and Power Used.	Salaries and Wages Paid.	Tools Replaced, Repairs to Plant, Oil and Water Used.	Value of Output.
	1.	2.	3,	4.	5.
Treatment of non-metalli- ferous mine and quarry	£	£	£	£	£
products	1,849,087	271,464	1,127,152	161,705	4,471,555
2. Bricks, pottery, glass, &c.	662,067	427,585	1,277,724	188,010	3,163,659
3. Chemicals, dyes, explosives, paint, oils, and grease	13,157,359	502,922	3,783,849	497,679	22,366,179
4. Industrial metals, machines, implements, and conveyances	30,103,372	986,271	26,519,368	1,538,400	70,211,858
5. Precious metals, jewellery, and plate	1,032,164	21,393	665,280	32,651	2,130,185
6. Textiles and textile goods (not dress)	18,611,361	661,534	8,423,059	809,997	34,432,762
7. Skins and leather (not clothing or footwear)	5,415,687	167,071	1,815,271	198,564	9,033,530
8. Clothing	18,448,076	262,463	9,902,519	377,372	34,948,122
9. Food, drink, and tobacco	54,711,271	1,446,660	10,601,210	1,159,273	79,646,847
10. Woodworking and basketware	6,217,235	135,677	3,259,069	289,367	11,731,942
11. Furniture, bedding, &c.	2,338,773	24,294	1,196,841	40,920	4,538,526
12. Paper, stationery, printing, bookbinding, &c.	9,099,439	502,907	4,865,052	352,092	18,520,834
13. Rubber	4,084,929	253,732	1,400,549	218,091	7,098,727
14. Musical instruments	14,120	724	36,896	1,361	56,671
15. Miscellaneous products	3,036,277	92,072	1,924,388	148,190	6,662,701
16. Heat, light, and power	1,442,528	1,444,637	1,195,538	502,706	6,423,581
Total	170,223,745	7,201,406	77,993,765	6,516,378	315,437,679

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, 1946-47.

•	Percent	age of Costs	s, &c., to Tot	tal Value of	Output.
Class of Industry.	Materials Used, Including Containers.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All Other Expendi- ture, Interest, and Profit.
1. Treatment of non-meta		%	%	%	%
ferous mine and quar products	41·4	$6 \cdot 1$	25 · 2	3.6	23 7
2. Bricks, pottery, glass, a	&c. 20·9	13.5	40 · 4	5:9	19.3
3. Chemicals, dyes, explosive paint, oils, and great	ves, se 58·8	2 · 2	16.9	2 2	19.9
4. Industrial metals, n chines, implements, a conveyances	nd 42·9	1 4	37.8	$2\cdot 2$	15 7
5. Precious metals, jeweller and plate	ry, 48·5	1.0	31.2	1.5	17.8
6. Textiles and textile good (not dress)	ods 54·1	1.9	24 5	2.4	17 · 1
7. Skins and leather (r clothing or footwear)		1.8	20 1	2 · 2	15 9
8. Clothing	52.8	0.8	28 3	1.1	17.0
9. Food, drink, and tobac	eo 68·7	1.8	13 · 3	1.5	14 7
10. Woodworking and basks ware	et- 53·0	1 2	27.8	2.5	15 5
11. Furniture, bedding, &c.	51.5	0.2	26 · 4	0.9	20.7
 Paper, stationery, printing, bookbinding, &c 	nt- 49·1	2.7	26 3	1.9	20.0
13. Rubber	57.5	$3 \cdot 6$	19.7	3.1	16.1
14. Musical instruments	24.9	1.3	65.1	2.4	6.3
15. Miscellaneous products	45.6	1.4	28 9	2.2	21.9
16. Heat, light, and power	22.5	22.5	18.6	7.8	28:6
Total	54.0	2 · 3	24.7	2.1	16.9

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 40.4 per cent. and the cost of raw materials 20.9 per cent. of the value of the finished article, whilst, in class nine, the expenditure on wages amounts to 13.3 per cent. and that on raw materials to 68.7 per cent. of the value of the output.

In the next table the cost of production, the value of Production: the output of factories, and the balance available for profit and miscellaneous expenses are compared for each of the years 1937–38 to 1946–47.

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

		Spe	ecified Costs	of Production	n.	2		
Year ended 30th June—		Materials, Including Containers.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Costs, &c.	Total Value of Output.	
		£	£	£	£	£	£	
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	70,499,214	6,208,244	49,751,273	286,989,408	
1947		170,223,745	7,201,406	77,993,765	6,516,378	53,502,385	315,437,679	

^{*} 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.						
			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.	Total.	
.000			%	%	%	%	%	%	
1938	• •	• •	54.5	$2 \cdot 3$	23.6	1.7	17.9	100.0	
1939	• •	• •	52.8	$2 \cdot 3$	25.1	1.7	18.1	100 · 0	
1940	• •	• •	53.6	$2 \cdot 2$	24.1	1.7	18.4	100 (
1941	• •	• •	53.5	$2 \cdot 2$	25.0	1.8	17.5	100.0	
1942	••		52.9	$2 \cdot 2$	26.1	1.8	17.0	100	
1943			52.1	$2 \cdot 2$	27.4	2.0	16.3	100.0	
1944			52.4	$2 \cdot 2$	27.2	2.1	16.1	100	
945			53.1	$2 \cdot 2$	25.8	$2 \cdot 1$	16.8	100	
946			53.7	$\overline{2\cdot 2}$	24.6	$2 \cdot \overline{2}$	17.3	100	
947	•••	• • •	54.0	$\overline{2} \cdot \overline{3}$	24.7	$2 \cdot \overline{1}$	16.9	100	

The ratio of cost of materials to the value of the output of factories was 53.0 per cent. on the average of the last five years, as against 53.5 per cent. in the period 1937-38 to 1941-42. The ratio of salaries and wages to output averaged 25.9 per cent. over the last five years, as against 25.0 per cent. over the period 1937-38 to 1941-42. The proportionate outlay on fuel, light, and power was 2.2 per cent. in each 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 14s. 3d. in every £100 of the total output value in the period 1942-43 to 1946-47, as compared with £17 13s. 3d. in the preceding five-year period.

In 1946-47, wages and salaries took 59.4 per cent. of the value added in manufacturing (see page 536), leaving 40.6 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 1946-47.

VICTORIA—VALUE OF MACHINERY AND PLANT, LAND AND BUILDINGS, 1946-47.

Class of Industry.	Value of Land and Buildings.	Value of Machinery and Plant.
	£	£
1. Treatment of non-metalliferous mine and quarry products	1,096,187	1,565,384
2. Bricks, pottery, glass, &c	841,439	821,134
3. Chemicals, dyes, explosives, paint, oils, and grease	5,584,479	6,051,66
4. Industrial metals, machines, implements, and conveyances	18,148,615	14,694,019
5. Precious metals, jewellery, and plate	439,965	171,206
6. Textiles and textile goods (not dress)	5,104,804	4,195,679
7. Skins and leather (not clothing or footwear)	1,340,169	629,688
8. Clothing	5,858,432	1,997,67
9. Food, drink, and tobacco	12,527,624	8,257,11
O. Woodworking and basketware	1,601,343	1,455,019
1. Furniture, bedding, &c	1,164,196	284,09
2. Paper, stationery, printing, bookbinding, &c	3,928,939	2,909,588
3. Rubber	761,569	650,136
4. Musical instruments	36,902	12,569
5. Miscellaneous products	1,210,955	861,362
6. Heat, light, and power	3,106,850	14,568,486
Total	62,752,468	59,124,80

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 £71,302,708, 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 1942–43 to 1946–47. 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.

					Land and B	uildings.	Machinery and Plant.	
	Year end	led 30t	h Jun	e	Value at end of Year.	Depre- ciation allowed during Year.	Value at end of Year.	Depre- ciation allowed during Year.
			_		£	£	£	£
1943					52,642,052	676,241	51,963,258	4,762,144
1944					55,062,982	817,039	55,457,719	4,946,224
945					57,808,861	768,690	58,571,064	4,674,06
946				· . [60,264,953	719,383	58,537,394	4.156.92
1947					62,752,468	748,102	59,124,802	4,634,21

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	TNT	FACTORIES.
VIUTURIA—	AUCHDENIS	LIN	PAUTURIES.

		Year.	-	Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1938			 	184,509	2,374	$1 \cdot 286$
1939			 	187,690	2,505	1.334
1940			 	196,263	3,534	1.801
1941			 	224,347	5,592	$2 \cdot 493$
1942	٠.	• •	 	$215,\!456$	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	$2 \cdot 642$
1947			 	256,867	7,104	2.766

The foregoing tables do not include particulars relating to work of various kinds done at the Pentridge Penal Department and Blind Institute. 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 on:-Wire-netting, textile, tailoring, clothing, footwear, brushware, coir-matting, wood and metal working, knitting, printing, bookbinding, and photography. The estimated value of the output for 1946-47 was £65,043 and, of the materials used, £31,218. 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 employment to 125 persons (115 males and 10 females). and gives value of the articles produced for the period under review was £67,729.

Factory Although approximately 70 per cent. of the factories statistics by 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 1946–47.

Factories, Fisheries, Mines, &

VICTORIA—FACTORY STATISTICS BY MUNICIPALITIES, 1946-47.

			Persons I	Employed.	Salaries			Value of	Value of
Municipality.		Number of Factories.	Males.	les. Females.	and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Materials Used (including Containers).	Articles Produced or
			No.	No.	£	£	£	£	£
felbourne		2.449	34,542	22,110	16,161,377	13,832,469	8,170,216	34,684,921	69 976 60
Brunswick		461	7,425	4,707	3 297 072	2,128,338	1,393,411	6,196,269	63,376,684
Essendon		161	2,394	444	$\begin{array}{c} 3,297,072 \\ 902,483 \end{array}$	460,625	256,915	1 900 466	12,200,279
oburg]	120	2,033	1.434	927.867	507,179	306,745	1,280,466 $1,659,746$	2,523,206
reston		131	2,410	550	927,867 933,069	868,754	406,714	1,851,507	3,444,219
Torthcote		164	1,669	599	624,768	449,669	297,262		3,348,31
itzroy		385	6,627	3,682	2,903,532	1,932,708	1,238,386	$\begin{array}{c} 951,\!104 \\ 5,\!520,\!856 \end{array}$	2,078,689
ollingwood		469	12,363	7,240	5,747,229	2 969 651	2,291,816	10,912,050	10,660,83
Cew		42	135	132	59,297	$2,969,651 \\ 81,406$	25,174		21,215,93
amberwell		131	917	841	400,436	305,227	129,606	$112,921 \\ 550,765$	232,49 1,280,78
Iawthorn		185	1,613	931	701,795	536,245	324,546	350,763	1,280,78
Richmond	1	391	11,667	5,359	5 074 065	3 506 484	2,527,637	1,168,890 $10,158,499$	2,554,43 $19,675,15$
rahran		382	4,186	3,005	5,074,065 1,934,803	$3,596,484 \\ 1,345,851$	629,506	10,158,499	19,675,150
falvern		175	1,288	631	481,619	440 101	029,000	5,097,002	8,870,04 1,633,49 1,312,20 1,003,84
aulfield	/	198	1,029	543	356 944	$440,191 \\ 347,365$	235,706	785,974	1,633,49
akleigh	٠ ا	60	935	162	356,944 312,224	216,688	165,888 206,976	637,257	1,312,20
andringham		. 55	347	284	147 577	137,712	66,588	445,961	1,003,84
Brighton	/	113	1,088	563	453 755	332,785	00,000	261,804	591,64 1,765,33
t. Kilda		154	1,111	563	$\begin{array}{c} 312,224 \\ 147,577 \\ 453,755 \\ 434,760 \\ 6,704,107 \\ 3,399,343 \\ 4,772,317 \\ 3,399,343 \\ 4,773,317 \\ 3,399,343 \\ 4,773,317 \\ 3,399,343 \\ 4,773,317 \\ 3,399,343 \\ 4,773,317 \\ 3,399,343 \\ 4,773,317 \\ 3,399,343 \\ 4,773,317 \\ 4,773,3$	409,025	313,241 169,357	$\begin{array}{r} 201,334\\ 918,012\\ 746,249\\ 13,349,131\\ \end{array}$	1,765,33
outh Melbourne		482	16,317	4,392	6 704 107	4 540 199	109,337	746,249	1,626,58
ort Melbourne	1	109 (8.625	1,500	3 300 343	4,540,123 $2,369,711$	3,134,067	13,349,131	25,390,19
Cootscray	1	262	$8,625 \\ 12,476$	2,889	4 973 621	4 910 809	1,661,515	4,548,057	10,207,38
Villiamstown		110	8,873	549	4,973,621 3,016,534	$4,210,892 \\ 3,055,617$	5,609,799	10,467,552	1,626,58 $25,390,19$ $10,207,38$ $25,952,05$
Braybrook	[90	7,670	1,064	3,052,669	3 068 840	$4,274,245 \\ 4,913,693$	15,349,151 4,548,057 16,467,552 4,121,906 6,068,227 1,335,253 272,915	9,270,84 11,757,67
Ieidelberg		83	1,156	346	479,946	$3,968,849 \\ 426,301$	4,910,090	6,068,227	11,757,67
Box Hill		48	606	121	914 840	154 400	291,684	1,335,253	2,551,41
Ioorabbin		69	1,266	$4\overline{25}$	214,840 519,770	$154,486 \\ 358,302$	$324,516 \\ 545,125$	272,915	599,01
Iordialloc		36	365	290	152,425	000,00Z	045,125	970,449	2,046,86
heisea		17	136	. 12	44,563	68,077 36,956	79,910	256,816	486,86 146,17 507,72
Junawading		38	594	97	205,200	100,900	15,075	65,948	146,17
lingwood		18	138	161	64,619	120,831	119,087	129,573	507,72
ther Municipalities		18	193	9.0	65,334	34,716	32,941	123,201	253,75
- · · · ·					00,334	48,340	38,071	163,808	283,64
Total Metropolitan		7,606	. 152,194	65,654	64,738,643	50,291,573	40,195,418	131,813,089	

		Persons I	Imployed.	Salaries	Value of	Value of	Value of Materials	Value of Articles
Municipality.	Number of Factories.	Males.	Females.	and Wages Paid.	Land and Buildings.	Plant and Machinery.	Used (including Containers).	Produced or Work Done
		No. 241	No.	£	£	£	£	£
Werribee	29	241	85	83,982	129,429	69,034	557,535	1,063,119
Dandenong	48	1,010	311	391,961	249,057	224,841	1,051,501	1,697,806
Bacchus Marsh	16	186	28	73,837	24,372	34,616	405,875	577,808
*Geelong	278	7,522	2,185	2,907,629	2,428,132	2,138,211	5,440,120	10,999,689
Korumburra	28	202	86	83,096	73,733	65,595	621,952	758,710
Alexandra	18	166	19	64,191	169,165	776,213	83,267	467,716
Kyneton	39	339	97	104,277	54,017	46,881	218,648	419,491
Castlemaine	39	841	210	301,326	114,259	224,165	357,339	857,123
Maryborough	41	675	317	$256,033 \\ 1,382,903$	79,539 $1,152,054$	67,436 1,226,688	$\substack{486,534 \\ 2,270,714}$	898,251 4,582,667
†Ballarat (including Sebastopol)	249	3,734	$1,591 \\ 163$	223,728	1,152,054	130,456		1,464,527
†Colac	71 51	617 447	103	158,156	119,212	108,599	991,258	1,404,527
Hampden	70		436	515,310	502,231	456,647	$\begin{array}{c c} 880,721 \\ 2.154,119 \end{array}$	3,241,547
†Warrnambool	38	$\frac{1,349}{349}$	202	142,832	139,723	112,808	176.363	455,200
†Ararat	56	346	59	104,730	95,502	76,985	299,277	496,566
Hamilton	47	458	29	144,573	98,451	137,337	340,066	613,674
†Portland	47	309	109	100,611	149,209	90,582	292,708	490,318
Horsham	43	425	176	156,624	95,879	89,937	443,011	773,694
†Stawell	102	1,044	$\begin{array}{c} 170 \\ 256 \end{array}$	361,967	275,620	357,373	549,527	1,203,037
†Mildura	56	321	80	93,688	92.189	107,705	271.949	479,791
†Swan Hill	16	159	11	57,583	159,241	65,701	491,743	601,883
Cohuna Bendigo (including Eaglehawk)	150	1.673	831	629,727	982,957	1,902,836	1,727,863	2,932,925
	5	606	41	204,932	235,639	81,667	343,355	614,786
	32	190	28	54.587	41,450	29,512	267,110	370,697
	44	426	336	191,819	259,562	278,028	1,095,552	1,636,360
†Shepparton	67	728	223	274,646	224,320	185,189	1,288,433	1,935,187
Benalla	39	254	135	83,654	71,345	59,512	293,037	456,499
†Wangaratta	52	414	161	132,724	109,971	128,972	570,765	810,074
Bairnsdale	44	$2\overline{17}$	35	64.419	64,765	42,717	240,258	356,717
Sale	34	247	108	85,225	62,843	44,142	307,744	510,523
Maffra	18	487	88	192,158	144,468	271,978	1,569,164	1,956,180
Woorayl	17	108	46	42,161	55,995	43,701	507,407	609,441
Morwell	31	1.995	239	886,285	1,531,628	5,741,108	1,304,467	5,050,976
Narraean	44	394	. 100	142,062	55,937	136,623	525,140	771.822
Warragul	24	231	65	80,490	64,414	67,757	394,964	563,143
Buln Buln	22	366	18	132,984	87.351	112,347	637,559	894,393
Other Municipalities	1,338	7,420	2,319	2,348,212	2,092,075	3,195,485	8,953,611	13,733,886
Total Country	3,343	36,564	11,345	13,255,122	12,460,895	18,929,384	38,410,656	66,589,888
Total State	10,949	188,758	76,999	77,993,765	62,752,468	59,124,802	170,223,745	315,437,679

^{*}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	f Indus	try.		Year	ended 30th J	une	
			1943.	1944.	1945.	1946.	1947.
			£	£	£	£	£
Agriculture		••	28,333,943	25,027,101	23,911,774	33,156,746	41,055,961
Pastoral			27,716,439	29,148,380	27,409,567	20,753,083	32,426,683
Dairying			16,026,887†	16,997,685†	17,864,037†	18,866,694†	21,525,932
Poultry and	Bees		7,041,842	7,334,746	7,455,981	7,506,706	7,617,341
Trapping			1,521,598	2,864,377	2,553,735	3,271,866	3,175,171
Forestry			2,449,484	2,602,467	2,884,556	3,127,887	3,840,530
Fisheries			448,546	409,143	400,720	548,081	624,094
Mining			2,542,880	2,179,766	2,176,539	2,506,043	3,026,554
Manufacturi	ıg*	•••	121,379,747	123,330,518	122,377,307	122,406,082	131,496,150
Total			207,461,366	209,894,183	207,034,216	212,143,188	244,788,416

^{*} 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; 1946-47, £2,867,670.

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—								
		1943.	1944.	1945.	1946.	1947					
		£	£	£	£	£					
Agriculture		24,419,285	22,213,552	21,598,093	29,315,445	36,438,799					
Barley		225,905	217,952	206,589	408,369	695,393					
Maize		89,904	53,379	59,805	112,558	129,029					
Oats	• • • • • • • • • • • • • • • • • • • •	721.571	430,497	535,928	1.129,836	1,239,044					
Wheat		7,518,405	3,753,315	1,896,500	8,621,711	17,581,748					
Onions		458,075	403,342	697,289	585,789	396,417					
Potatoes		1,697,700	2,160,192	3,064,501	2,377,434	2,210,471					
Hay and Straw		4,280,428	4.309.087	4,650,837	5,704,774	3,875,362					
Fruit—	• • •	4,200,420	4,000,001	4,000,001	0,101,111	0,010,002					
Orchards		2,077,431	2.904.019	2,700,113	2,550,527	2,667,005					
Y72	• •	2,494,337	2,887,618	2,096,206	2,751,473	2,742,418					
Other Crops		4,855,529	5,094,151	5,690,325	5,072,974	4,901,912					
other crops	• •	1,000,020	0,001,101	0,000,020	0,012,011	±,001,012					
Pastoral		25,739,840	27,097,113	25,457,318	19,348,301	29,990,974					
Wool		13,399,024	12,510,938	11,149,746	8,955,354	17,336,538					
Sheep, slaughtered		6,124,362	7,844,181	7,533,893	4,736,249	5,958,346					
Cattle, slaughtered	•	6,188,942	6,741,994	6,773,679	5,656,698	6,696,090					
Horses		27,512	•••	.,	****	•,,					
Dairying		15,395,512*	16,379,834*	17,237,829*	18,232,630*	20,676,900					
Dairying	• •	15,355,512	10,319,634	17,237,829	10,232,030*	20,010,900					
Cream for butter		6,957,188	6,484,915	6,099,988	7,203,179	9.098,464					
Milk for cheese		819,703	792,856	862,385	1,306,779	1,448,104					
Milk for condensing,	con-	015,705	102,000	002,000	1,500,178	1, 110, 104					
centrating, &c.		1.176.508	1,308,796	1,454,077	1,563,341	1.769,089					
Whole milk consumed		2,789,756	2,832,099	2,823,019	3,006,575	3,297,225					
Diec		2,789,730	2,463,764	2,771,740	2,005,756	2,196,348					
rigs	• •	2,910,002	4,400,704	4,771,740	4,000,700	4,190,348					

^{*}Inclusive of Subsidy—1942-43, £675,695; 1943-44, £2,497,404; 1944-45, £3,226,620; 1945-46, £3,147,000; 1946-47, £2,867,670.

VALUE AT THE PLACE OF PRODUCTION—continued.

Produce		Value in	Year ended 3	0th June-	
	1943.	1944.	1945.	1946.	1947.
		,		£	£
	£	£	£	±.	at.
Poultry and Bees	6,473,203	6,680,036	6,889,068	6,936,341	7,029,677
Eggs	4,616,822	5,097,787	5,317,338	5,208,664	5,285,687
Poultry Honey and beeswax	1,725,973 130,408	1,509,385 72,864	1,450,606 121,124	1,612,496 115,181	1,488,245 255,745
Trapping, &c	1,462,031	2,771,645	2,451,538	3,174,158	3,036,896
Rabbits and hares Rabbit and hare skins, &c.	209,296 1,252,735	229,524 2,542,121	325,131 2,126,407	279,220 2,894,938	657,116 2,379,780
Forestry	2,162,594	2,294,547	2,565,264	2,826,229	3,450,103
Sawmills	1,068,824	1,124,452	1,340,415	1,675,443	1,947,902
Firewood	1,056,457	1,142,655	1,178,753	1,118,180	1,437,924
Bark for tanning	37,313	27,440	46,096	32,606	64,277
Fisheries	377,418	345,749	339,043	465,625	534,828
Fish	373,113	342,195	336,392	461,846	528,033
Crayfish	3,731	2,875	1,947	3,613	6,628
Oysters	574	679	704	166	167
Mining	2,419,006	2,060,048	2,037,838	2,345,366	2.814.424
A.Va	k 1 1	1			
Coal—	1,056,639	588,189	566,211	658,850	932,643
Black	384,479	400,255	377,624	468,096	386,362
Brown	468,868	526,530	565,055	641,069	706,462
Other Metals and Minerals	123,443	136,621	153,077	120,206	153,908
Quarrying	385,577	408,453,	375,871	457,145	635,049
49					
Total Primary	78,448,889	79,842,524	78,575,991	82,644,095	103,972,601
Manufacturing	121,379,747	123,330,518	122,377,307	122,406,082	131,496,150
Grand Total	199,828,636	203,173,042	200,953,298	205,050,177	235,468,751

The value of production of the various classes of industry, as they appear in the previous table for the year 1946–47, 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, 1946-47.

Industry.		Value at Place of Production.	Cost of Production.*	Net Value.	Net Value per Head of Population.		
		£	£	£	£ s. d.		
Agriculture		36,438,799	7,173,146	29,265,653	14 6 11		
Pastoral		29,990,974	1,352,431	28,638,543	14 0 9		
Dairying		20,676,900	2,638,824	18,038,076	8 16 10		
Poultry and Bees		7,029,677	1,415,572	5,614,105	2 15 1		
Trapping, Forestry,	and						
Fisheries		7,021,827	504,209†	6,517,618	3 3 11		
Mining		2,814,424	760,578	2,053,846	1 0 2		
Manufacturing		131,496,150	••	131,496,150	64 9 3		
Total		235,468,751	13,844,760	221,623,991	108 12 11		

^{*} 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.

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.		1942-43.	1943-44.	1944–45.	1945-46.	1946-47.	1947-48.	1948-49.
July		1,851	1,863	1,832	1,805	1,887	1,952	1,965
August		1,845	1,857	1,829	1,803	1,898	1,961	1,971
September	٠.	1,853	1,860	1,825	1,771	1,911	1,957	1,974
October	٠.	1,861	1,866	1,827	1,749	1,913	1,963	1,979
November	٠.	1,867	1,862	1,826	1,747	1,865	1,971	1,987
December	٠.	1,872	1,865	1,826	1,747	1,811	1,959	
January		1,878	1,867	1,813	1,752	1,812	1,959	
February		1,882	1,869	1,830	1,797	1,861	1,973	
March	٠.	1,894	1,864	1,838	1,826	1,858	1,983	
April	٠.	1,892	1,845	1.825	1,847	1,854	1,997	, .
Mav	٠.	1,869	1.828	1,812	1,860	1,893	1,993	
June	٠.	1,862	1,823	1,808	1,864	1,907	1,996	

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.)

M	onth.		1941–42.	1944–45.	1945–46.	1946-47.	1947–48.	1948–49.
July	٠	• •	1,000	801	828	987	1,052	1,107
August	•••		987	804	836	994	1,050	1,100
September	••		993	802	854	1,004	1,058*	1,104
October	••	••	996	804	859	1,014	1,070	1,106
November	••	••	1,004	824	907	1,053	1,096	1,137
December	••	••	1,038	835	925	1,069	1,120	••
January	•	•••	964	817	914	1,046	1,085	••
February		••	954	818	933	1,048	1,090	
March	• •	• ••	949	824	936	1,045	1,093	••
April	••.	••	935	825	956	1,050	1,097	••
May		••	907	826	968	1,044	1,099	
June	••		895	829	974	1,048	1,103	

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

					
				Avera	ge Numbe
Industry.					,
		July.	August.	Septem- ber.	October.
Aerated waters		911	884	948	969
Agricultural implements		4,962	4,993	5,023	4.524
Aircraft		6,540	6,588	6,696	6.682
Arms		1,932	1,873	1,845	1,822
Artificial flowers		235	235	266	289
Bacon curing	• •	716	700	701	715
Bags and sacks	٠.	167	174	172	178
Bags, trunks, &c.	• •	1.003	1.020	1.025	1,024
Bakeries	• •	3,450	3,436	3,478	3,492
-	• •	57	58	62	62
Basketware	• •	511	503	503	490
		1.158	1.149	1,155	1,101
Blinds	• •	76	81	78	83
	• •	412	420	416	416
Boiling down, tallow, &c	• •	266	$\frac{420}{275}$	262	270
Boot accessories	• •	200 350	349	350	354
Boot repairing	• •	000		10,463	10,576
Boots and shoes	• •	10,231	10,313	325	327
Bottling	• •	328	332		1.816
Boxes and cases	• •	1,825	1,818	1,812	
Breweries	• •	1,684	1,669	1,673	1,670 1.879
Bricks, tiles, firebricks	• •	1,743	1,757	1,799	, ,
Brooms and brushware	• •	528	528	535	545
Butter and cheese	• •	4,035	4,100	4,330	4,576
Cabinet and furniture making		3,118	3,178	$3,154 \\ 394$	$3,171 \\ 402$
Canvas goods, tents, &c	• •	388	402		
Cement, cement and asbestos goods	• •	1,478	1,496	1,521	1,542
Cereal foods	• •	1,293	1,290	1,245	1,216
Chaffeutting	• •	372	362	373	372
Chemical fertilizers	• •	1,240	1,189	1,176	1,135
Chemicals (heavy)	• •	1,557	1,560	1,564	1,578
" pharmaceutical	٠.	1,811	1,800	1,793	1,840
Condiments, coffee	• •	1,608	1,578	1,569	1,560
Confectionery		2,388	2,402	2,382	2,402
Cooperage	• •	215	220	218	218
Corsets, stays		1,007	988	1,012	992
Cotton		2,748	2,747	2,743	2,736
Cutlery and small tools	• •	1,620	1,647	1,691	1,671
Cycles (foot and hand driven)		616	613	637	588
Dehydrated fruit and vegetables		928	892	728	650
Distilleries		277	273	273	277
Dressmaking		10,600	10,620	10,555	10,570
Dyeworks and cleaning		2,275	2,278	2,408	2,419
Earthenware, china, &c		1,124	1,154	1,191	1,188
Electric light—Government		1,367	1,377	1,381	1,397

messengers and all others engaged in work connected with manufacturing.

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

IN FACTORIES, 1946-47.

of Employees in-

November.	December.	January.	February.	March.	April.	Мау.	June.
982	1.034	1.108	1,129	1,075	1,026	950	906
3.332	2,915	3.483	3,923	3,972	3,899	4,210	4.337
6,719	6,961	6,968	7,172	7,232	7.198	7,077	6.987
1,809	1,779	1,774	1,771	1,781	1,787	1,790	1,785
309	320	294	290	288	309	310	305
728	741	675	695	713	739	727	710
192	194	188	188	188	186	183	177
1,032	1,024	967	992	1.019	1.049	1.042	1,042
3,537	3.554	3,576	3,600	3,641	3,666	3,683	3,700
64	75	75	67	69	68	69	69
504	516	499	512	504	508	513	503
1,131	1,161	910	1,112	1,194	1,174	1,162	1,156
84	84	84	80	80	80	75	75
417	423	422	418	370	385	394	400
274	222	199	214	212	209	240	274
350	351	362	363	359	358	356	356
10,601	10.590	10,333	10,451	10,568	10,602	10,514	10,501
334	338	324	3.3	310	302	300	307
1,853	1,855	1,858	1,843	1.868	1.852	1.843	1,810
1,677	1.685	1,679	1,682	1,674	1.626	1,605	1,627
1,894	1,889	1.921	1,952	1,955	1.944	1,965	1,925
553	549	533	537	548	545	547	543
4,678	4,635	4.497	4.259	4.092	4.052	4.047	4,054
3,227	3,241	3,201	3,269	3,276	3.305	3.300	3,330
417	418	415	439	436	421	399	392
1,578	1,707	1.758	1.789	1.784	1.888	1,868	1,751
1,229	1,223	1,198	1,254	1.278	1.255	1.252	1.222
367	346	347	370	367	381	381	354
1,134	1,130	1.302	1.402	1.526	1.543	1.544	1.353
1,602	1,613	1,593	1.638	1,612	1,613	1,620	1,610
1,866	1,858	1,769	1,701	1,646	1.645	1,651	1,654
1,545	1,578	1,547	1,554	1.535	1,554	1,566	1,620
2,455	2,446	2.282	2,345	2,393	2,408	2,521	2,577
218	217	212	220	225	2,403	234	231
1.011	1.036	1,013	1.036	1.047	1.059	1.065	1.061
2,737	2,753	2,803	2,790	2,779	2,777	2,818	2,790
1,571	1,098	1,139	1,241	1,256	1,307	1.396	1,471
570	318	322	373	372	407	487	556
594	560	653	697	957	1,306	1.344	1.135
278	272	$\frac{033}{272}$	266	269	286	$\frac{1,344}{276}$	$\frac{1,135}{276}$
10,531	10,423	10,158	10,464	10,579	10.468	10,520	10.509
2,468	2,478	2.487	2.552	2,556	2.520	2,505	2.483
1,209	1,215	1,251	1,272	1,267	1,234	1,206	$\frac{2,483}{1.215}$
1.380	1.435	1,231 $1,432$	1,450	1,465	1,234	1,200	1,215

VICTORIA-MONTHLY EMPLOYMENT IN

			Avera	ge Number
Industry.	July.	August.	Septem- ber.	October.
Tale A 1. 1. M. T 1 Ale	439	436	436	431
Electric light—Local authority	59	59	54	54
" Companies	6.672	6.693	6.755	6,718
Electrical apparatus	720	756	773	793
Electroplating (gold, silver, chromium, &c.)	76	81	78	83
Electrotyping and stereotyping	6,263	6,276	6,304	6,258
Engineering (general)		14,941	14,893	14,788
Engineering, plant equipment and machinery	14,801	2,968	2,934	2,909
Explosives	2,920		185	191
Extracting and refining—other metals	185	185 683	688	678
Fibrous plaster and products	670		766	732
Flax mills	774	788		1,085
Flour milling	1,143	1,109	1,089	2,505
Foundries—Ferrous	2,521	2,488	2,547	378
Furnishing, drapery	351	358	370	496
Furriers	463	478	497	
Galvanized iron working and tinsmithing	6,596	6,590	6,606	6,554 233
Gas fittings and meters	233	232	231	119
Gasworks—Local authorities	119	120	119	
" Companies	1,168	1,169	1,160	1,157
Glass, &c	1,146	936	1,102	1,150
Gloves	648	667	668	658
Handkerchiefs, ties, scarves	309	314	319	319
Hats and caps	690	677	698	694
Horse-drawn vehicles	154	157	161	156
Hosiery and other knitted goods	12,096	12,253	12,394	12,585
Ice and refrigerating	2,741	2,545	2,672	3,323
Ice cream	240	284	314	339
Inks, polishes, &c	532	542	515	518
Jam, fruit, and vegetable canning	3,144	3,198	3,187	3,102
Jewellery	749	784	859	874
Joinery	2,167	2,214	2,253	2,267
Lime, plaster of paris, asphalt	264	253	260	259
Machine belting (leather or other)	121	128	131	131
Malting	511	518	503	504
Margarine	102	112	110	110
Marble, slate, &c.	315.	321	320	307
Meat and fish preserving	1,044	995	996	792
Millinery	1,260	1,283	1,303	1,326
Motor accessories	2,729	2,747	2,770	2,744
Motor bodies	3,549	3,860	3,994	3,970
Motor vehicles construction and assembly	2,076	2,220	2,453	2,687
Motor vehicles repairs	6,382	6,501	6,559	6,639
Musical instruments	98	103	105	104
Newspapers and periodicals	2,485	2,494	2,418	2,456
Non-ferrous metals—Rolling, founding, &c.	2,803	2,829	2,824	2,779
Oils, mineral	351	347	351	345
Oils, vegetable	97	96	95	77
Paper, paper bags, and cardboard boxes	4,031	4,096	4,081	4,067
Perambulators (including pushers and				00:
strollers)	186	189	193	201
Process and photo engraving	326	336	340	342

FACTORIES, 1946-47—continued.

of Employees in-

November.	December.	January.	February.	March.	April.	May.	June.
	-						
435	445	425	439	453	412	451	45
54	54	54	53	53	52	53	5
6,010	4,802	5,229	5,890	5,928	6,001	6,228	6.37
789	763	784	777	755	789	835	83
84	84	84	80	80	80	75	7
5,303	4,925	4,802	5,122	5,034	5,036	5,825	6,05
13,016	10,165	10,326	10,610	10,579	10,511	12,739	13.54
2,897	2,714	2,887	2,838	2,710	2,701	2,749	2,75
188	190	173	174	174	170	175	17
683	709	693	725	739	735	725	72
684	625	633	585	588	578	581	58
1,091	1,154	1,263	1,295	1,262	1,277	1,262	1,22
1,616	1,486	1,472	1,500	1,504	1,492	1,932	2,21
371	373	366	374	382	379	384	38
497	503	496	516	523	503	493	49
6,405	5,694	5,910	6,124	6,129	6,179	6,188	6,17
234	235	94	236	240	237	240	23
118	118	99	123	117	125	124	12
1,170	1,074	514	1,154	1,163	1,168	1,181	1,19
1,156	768	769	766	763	756	762	99
659	682	657	674	670	644	655	66
313	319	312	316	322	316	315	32
692	700	694	707	705	707	722	73
162	165	163	158	163	158	159	15
12,652	12,772	12,760	13,039	13,129	13,126	13,235	13,30
3,608	3,760	2,948	2,763	2,219	2,242	2,261	2,34
363	363	366	402	352	307	264	26
515	511	499	504	513	507	507	. 50
3,087	3,176	4,576	5,728	5,872	4,930	3,378	3,08
870	906	887	902	901	924	922	95
2,277	2,249	2,265	2,317	2,320	2,339	2,335	2,31
257	246	257	266	270	260	251	25
128	129	123	123	123	130	130	13
509	520	482	493	506	542	493	49
111	113	114	114	110	114	112	11
317	329	322	339	338	344	332	32
789	898	916	952	918	999	1,001	96
1,326	1,323	1,217	1,323	1,351	1,357	1,371	1,36
2,401	2,151	1,945	1,841	1,810	1,700	2,188	2,39
3,974	3,909	4,081	4,178	3,479	3,597	3,628	3,93
2,816	2,944	3,189	3,159	2,934	2,974	3,063	3,16
6,687	6,712	6,779	6,785	6,774	6,553	6,944	6,97
106	113	113	108	108	107	106	10
2,488	2,509	2,499	2,524	2,525	2,542	2,564	2,56
2,632	1,940	1,957	2,007	1,979	2,008	2,302	2,51
407	418	430	438	445	449	456	46
78	82	90	87	80	79	74	. 6
4,045	4,094	4,026	4,011	4,019	4,047	4,042	4,04
212	203	196	200	204	201	196	19
339	342	345	360	362	360	363	37
4563/4	8.— 28						

VICTORIA-MONTHLY EMPLOYMENT IN

			Average Number		
Industry.	July.	August.	Septem- ber.	October.	
Photographic material	987	1,002	1,007	1,030	
Pickles, sauces, vinegar	629	605	584	601	
Picture frames	52	49	52	54	
Pipes, tubes, and fittings	324	206	212	215	
Plastic moulding and products	2,037	2,069	2,045	2,069	
Printing, general (including bookbinding)	5,373	5,441	5,565	5,478	
Rayon, nylon and other synthetic fibres	204	198	198	217	
Rope and cordage	1.734	1,790	1.800	1,784	
Rubber goods (incluing tires made)	3,719	3,688	3,657	3,571	
Saddlery, harness, and whips	137	125	137	137	
Sausage skins	384	372	368	363	
Sawmills	4,544	4,504	4,448	4,584	
Ship and boat building	2,216	2,185	2,170	2,148	
Shirts, collars, underclothing	3,733	3.806	3,831	3.846	
Silk, natural	365	358	364	388	
Smelting, converting, refining, rolling of	300	000	001		
iron and steel	1,094	1,091	1,103	1,099	
Soap and candles	737	701	717	72	
Stationery	967	957	977	972	
Stoves, ovens, and ranges	977	956	971	970	
	583	605	615	620	
Surgical and scientific instruments Tailoring and ready-made clothing	7,858	7.847	7.956	7,949	
Tanning, currying, and leather dressing	2,343	2,413	2.403	2,430	
Tobacco, cigars, cigarettes, and snuff	2,343	2,348	2,387	2,36	
	827	840	854	87	
	7,173	7,196	7,152	7,11	
	380	383	375	36	
Tire retreading and repairing Umbrellas and walking sticks	27	25	25	2	
	501	499	471	45	
Watches and clocks (including repairs)	307	311	321	320	
Waterproof and oilskin clothing	696	702	689	68	
White lead, paints, varnishes	1.838	1,833	1,834	1,79	
Wireless and amplifying apparatus	1,195	1,220	1.211	1,73	
Wire and wire working (including nails)	891	889	898	91	
Woodturning, woodcarving, &c.	933	903	958	87	
Wool scouring and fellmongery	11,165	11,225	11,293	11.25	
Wool, carding, spinning, weaving	8,215	8,555	8,464	8,40	
Other factories	0,419	0,555	0,404	0,±0	
All Industries—Total	258,111	259,627	261,470	261,67	

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, 1946-47—continued.

of Employees in-

							-
November.	December.	January.	February.	March.	April.	May.	June.
1,029	1,060	1,058	1,070	1.079	1,083	1,106	1,10
614	610	677	731	724	666	603	61
52	53	51	50	52	53	53	5
147	140	137	179	175	183	200	20
1,755	1,506	1,687	1,853	1,923	1,973	2.045	2,07
5.501	5,547	5,517	5,548	5,597	5,574	5,620	5,58
220	216	227	235	255	258	261	26
1,774	1.826	1,806	1,820	1,796	1,890	1,896	1,79
3,553	3,575	3,522	3,461	3,523	3,551	3,627	3,59
142	146	147	138	137	138	130	12
351	357	357	358	292	319	329	34
4,628	4.711	4.675	4,820	4.821	4,727	4,827	4.79
2,045	1,836	1,826	1,938	1,911	1,830	1,973	2.04
3,882	3.910	3,803	3,861	3,875	3,918	3,967	3,97
373	380	380	396	411	375	407	39
521	423	369	265	266	261	655	87
712	713	706	723	$\frac{230}{738}$	698	699	65
978	988	980	1.003	999	992	985	98
426	413	360	638	650	645	773	91
592	553	563	562	567	570	569	56
8.012	7.944	7,852	8,051	8,186	8.146	8.137	8.18
2,409	2,467	2,445	2,532	2.525	2,512	2,527	2,40
2,358	2,325	2,113 $2,274$	$\frac{2,352}{2,265}$	$\frac{2,325}{2,238}$	2,466	$\frac{2,527}{2,559}$	$\begin{array}{c c} 2,40 \\ 2.55 \end{array}$
. 890	902	886	870	880	871	908	88
7,077	7,158	7,234	7,112	7,200	6.979	6.932	6,90
359	364	364	371	372	378	374	36
26	27	$\frac{304}{26}$	26	40	48	50	50
449	441	429	441	453	473	483	49
334	343	328	329	338	337	356	35
687	682	677	687	680	675	681	66
1,831	1,776	1,788	1,789	1,796	1,743	1,813	1.85
1,193	899	921	983	1.018	1,025	1,145	1,18
911	889	872	863	848	854	870	86
866	900	862	800	756	777	788	77
11,329	11,387	11,297	11,302	11,286	11.391	11,363	
8,467	8,567	8,567	8,630	8,714	8,913	8,851	11,25 8,74
255,155	247,753	247,834	254,594	254,135	253,610	258,932	260,82

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-							
		1943.	1944.	1945.	1946.	1947.			
Number of returns*		431	392	545	2,005	2,451			
		£	£	£	£	£			
New buildings Repairs and additions Other construction	::	3,629,904 1,214,273 796,750	3,172,545 1,245,465 354,800	3,068,482 1,537,395 430,420	6,616,030 2,426,110 657,345	12,597,215 2,882,118 785,605			
Total		5,640,927	4,772,810	5,036,297	9,699,485	16,264,938			

^{* &}quot;Number of returns" means the number of returns received from builders who were actually operating in the period.

Returns received in respect of 1946-47 show that the number of persons employed in the industry (exclusive of sub-contractors and their employees) was as follows:—Working proprietors, 2,120; managers, 298; clerks, male 151; clerks, female 146; other workers, 10,434. The total salaries and wages paid (exclusive of the drawings of working proprietors) was £3,720,798.

VICTORIA—PAYMENTS TO SUB-CONTRACTORS, 1946-47.

£					£
 760,818	Bricklayers				297,188
 594,874	Tilers				386,416
 314,844	Others	••		••	4 87,7 66
 241,771					
 337,547		Total			3,421, 224
	760,818 594,874 814,844 241,771	760,818 Bricklayers 594,874 Tilers 314,844 Others 241,771	760,818 Bricklayers 594,874 Tilers 314,844 Others 241,771	760,818 Bricklayers	760,818 Bricklayers

The term "Others" in this statement includes sub-contractors for excavations, concreting, asphalting, &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 (Year ended 30th June)-Materials. 1943 1944. 1945. 1946. 1947. £ £. £. £ Timber and Joinery 1,030,499 824,723 983,634 1,728,159 2,856,471 157,673 317,127 19,118 126,405 371,236 318,016 183,082 666,095 Iron and Steel ... 255,692٠. 243,578 749,538 21,633 210,594Tiles 79,406 308,688 Tiles ... Cement, Lime, and Sand 36,686 186,006 296,089 194,994 387,918 Other Materials 509,727 466,549 500,532 908,746 1,542,471* Total 2,330,233 1,905,596 2,142,506 3,714,251 6,388,499

VALUE OF MATERIALS USED.

During 1946–47 the following individual items were also collected:—Structural iron and steel, £695,915 (incl. above); corrugated roofing—iron, £53,623 (incl. above); corrugated roofing, fibro-cement, £51,281; fibro-cement sheets, £96,975; fibro-plaster sheets, £151,106; wall-boards (incl. plywood), £39,996; sand (incl. above), £115,270; crushed stone, £121,797; prefabricated housing units, £925,853.

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 £156,996 in 1942–43, £158,825 in 1943–44, £155,045 in 1944–45, £304,285 in 1945–46, and £544,236 in 1946–47.

Capital invested in plant and machinery amounted to £143,995 in 1942–43, £167,201 in 1943–44, £177,507 in 1944–45, £341,474 in 1945–46, and £481,972 in 1946–47; capital invested in land and buildings used as workshops amounted to £120,663 in 1942–43, £133,058 in 1943–44, £153,664 in 1944–45, £260,199 in 1945–46, and £352,580 in 1946–47.

The following table is an analysis of the buildings completed during the years 1943-44 to 1946-47. 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.

Prior to 1944-45 the 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, and in 1945-46 particulars regarding concrete houses were collected for the first time.

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

VICTORIA—VALUE COMPLETED. OF BUILDINGS 1942 - 43TO 1946-47.

*		Year ended 30th June-							
		1943.	1944.	1945.	1946.†	1947.			
Business premises Other buildings	::	£ 780,175 3,138,989	£ 1,081,013 2,015,291	£ 883,338 948,392	£ 939,693 993,454	£ 693,897 1,052,063			
Dwellings— Brick Brick veneer ‡ Wood Concrete §		126,353* 63,715	39,457* 94,338	201,275* 119,626 355,509	909,236 970,404 1,097,078 167,162	1,758,589 2,839,120 2,597,022 166,460			
Total value		4,109,232	3,230,099	2,508,140	5,077,027	9,107,151			

^{*} 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.

Particulars of dwellings constructed classified according to nature and size of dwelling are summarized hereunder:-

VICTORIA—DWELLINGS CONSTRUCTED, 1946-47.

Number of Rooms.	Dwellings											
	Brick,			В.	rick Venee	r.	Other Wood-framed.					
	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.			
Three Four Six Seven Eight	33 241 610 158 11 5	£ 35,480 316,194 921,866 298,998 29,307 15,450	£ 1,075 1,312 1,511 1,892 2,664 3,090 	23 410 1,297 169 15 4 	£ 20,528 518,652 1,914,093 296,094 28,979 9,825 2,000	£ 893 1,265 1,476 1,752 1,932 2,456 2,000	302 718 1,159 195 23 4 1	$\begin{bmatrix} 684,422 \\ 1,397,362 \\ 259,408 \end{bmatrix}$	£ 563 953 1,206 1,330 1,551 2,452 2,987			
Total	1,058	1,617,295	1,529	1,919	2,790,171	1,454	2,402	2,559,771	1,066			

The total number of concrete houses erected was 146 valued at £166,460.

The value of flats, semi-detached houses, and maisonettes erected during the year was as follows: -Brick, £141,294; brick veneer, £48,949; and wood, £37,251. This represented approximately 200 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".