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1925



THE MANUFACTURING INDUSTRIES OF CANADA.

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[Reprinted from the Canada Year Book, 1924.]

1.—Evolution of Canadian Manufactures.

Manufacture is defined as the operation of making wares from raw materials, by the hands, by tools or by machinery, thus adding, in the phraseology of the economist, new utilities and therefore additional value, to the already existing utilities and values of the raw material. Manufacture, in primitive societies and in the pioneer stages of new communities, is normally carried on within the household for the needs of the household, as was the case among the early settlers of Canada in the seventeenth and eighteenth centuries when domestic manufactures were carried on in combination with the cultivation of the soil, mainly at the times of the year when agricultural operations were suspended. At a later period in the evolution of society, small manufactures were carried on in specialized workshops for the needs of the immediate locality or neighbourhood, as was generally the case in Eastern Canada in the first half of the nineteenth century. Later still, as a consequence of the introduction of machinery operated by steam or electric power—the so-called “Industrial Revolution”—and of the cheapening of transportation, manufacture has to an ever-increasing extent been concentrated in factories, often employing hundreds and even thousands of persons and producing for a national or even for an international market. So far as Canada is concerned, this “industrial revolution” may be said to have commenced shortly before Confederation and to be still in progress.

The Earliest Manufactures.—The type of manufactures to be established in a community will in the beginning be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, probably the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were also necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need for protection. At a census of occupations taken in 1681, we find enumerated a comparatively large number of tailors and shoemakers, masons and carpenters, gunsmiths and edge-tool makers.

The earlier manufactures were necessarily of a rather crude and primitive type, concerned with the production of commodities which were too bulky to bear the heavy transportation charges of those days, when only one round trip *per annum* could be made between France and Quebec, and vessels were constantly subject to the storms of the North Atlantic and very frequently to the attacks of the English. Indeed, although the colonial policy of France under the old *régime* aimed at preventing the manufacture in Canada of any article which could be imported from the mother country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 years out of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions.

On the occasion of the English capture of a convoy in 1705, the colonists were driven to manufacture rough cloth out of whatever fibres they could obtain, such as the Canadian nettle and the inner bark of the basswood. Such events led to the introduction of sheep-raising and the manufacture of homespun woollens. The number of sheep in the colony increased from 1,820 in 1706 to 12,175 in 1720, 28,022 in 1765, 84,696 in 1784 and 829,122 in Lower Canada alone in 1827. This increase in sheep approximately measures the growth of the manufacture of homespun woollens, while in 1827, according to census records, there were in Lower Canada 13,243 spinning-wheels, and 1,153,673 French ells of home-made cloth, 808,240 French ells of home-made flannel, and 1,058,696 French ells of home-made linen were produced. In 1842 Upper Canada produced 433,527 yards of home-made cloth, 166,881 yards of home-made linen and 727,286 yards of home-made flannel, and in 1848, 624,971 yards of fulled cloth, 71,715 yards linen and 1,298,172 yards flannel. Nova Scotia in 1851 produced 119,698 yards fulled cloth, 790,104 yards non-fulled cloth, and 219,352 yards flannel. Such production of homespun goods did not materially interfere with the market for the more elaborate factory-made goods imported from the United Kingdom, but supplied the numerous daughters in the large families of the pioneers with useful work in their own homes.

In the days when ships were built of wood, a country where wood was so plentiful as in Canada possessed the raw materials for production. Pont-Gravé built two small vessels at Port Royal in 1606 and one at Tadoussac in 1608. Talon in 1666 built on his private account a ship of 120 tons, and in 1672 a vessel of 400 to 500 tons was on the stocks at Quebec. Ships were built for the French navy and for the West India trade. Under the British *régime* shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865, when 105 Quebec-built ships with a tonnage of 59,333 tons were placed on the register. Thereafter iron and steel ships gradually supplanted the wooden vessels, but the forests of Canada have since provided the raw material for the great pulp and paper industry.

The development of mines has been of comparatively recent date. Iron deposits in the St. Maurice region were worked as early as 1733 and furnaces set up there for smelting in 1737 were in fairly constant operation until 1883. The iron and steel used in manufacturing in Canada, as well as the coal which has supplied the manufacturing industries with power, has in the main been imported from the United States, chiefly because the principal manufacturing centres of the country in the St. Lawrence and Great Lakes region were fairly conveniently situated with regard to the coal and iron supplies of the United States, and far away from the coal and iron supplies of the Maritime Provinces. In recent years the shortage of coal is made up for by the increasing use of electric power, and the great bulk of the pig-iron used in Canadian manufactures is now made in domestic blast-furnaces.

The Introduction of the Factory System.—In Canada, as in the United States and in Great Britain, it was inevitable that manufactures, carried on in the household or in small adjoining work shops, should be supplanted in the leading industries of the country by manufactures carried on in factories. A factory has been defined as "an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences for labour than they could procure individually at their homes, for producing results by their combined efforts which they could not accomplish separately, and for preventing the loss occasioned by carrying articles from place to place during several processes necessary to complete their manufacture." Such factories began to exist in Canada in the sixties and the

seventies of the last century and have since that time become the dominant factor in Canadian manufacturing industry.

Encouragement of Manufactures by Protective Tariff.¹—In all new and developing countries, producing food products and raw materials in abundance, there comes to be at a certain stage a movement for working up these commodities within the country rather than exporting them in the raw state. Thus, a movement to promote a rise of manufacturing industries in Canada took place in the fifties of the last century, and in 1858 the Canadian Legislature enacted a protective tariff against which English exporters to Canada of manufactured goods vehemently protested: Canada, however, claimed the right to raise her revenue in the manner which suited herself and Great Britain did not contest the point. From that day to this, there has been an element of protection in Canadian tariff legislation. For a considerable time the protection afforded to Canadian manufacturers was described as "incidental protection" and after Confederation the tariff was reduced in deference to the low tariff sentiment prevailing in the Maritime Provinces, which were commercial rather than manufacturing communities. However, after a commercial depression which took place in the 1870's the people of Canada, at the general election of 1878, voted in favour of a higher tariff.

The policy of protection was definitely adopted in 1879, when the manufacturer was given an increase in the duty on his finished product, offset in some cases, it is true, by higher duties on his raw materials. In sugar and molasses there were some twelve tariff items, seven bearing a compound duty, the average *ad valorem* duty imposed being 26·25 p.c. On the lines of cotton goods likely to be manufactured in Canada, duties were raised from 17½ p.c. to rates, specific and *ad valorem*, equivalent on the importations of 1881 to 30 p.c. The duties on woollens, which were all in the 17½ p.c. schedule in 1878, were practically doubled. On some of the 36 iron and steel articles enumerated in the schedule the duties were specific, on some compound, but on the whole, there was an average duty of 16·17 p.c. Pig iron, previously free, was made to pay \$2 a ton. The duty on iron billets, bars and rods was increased from 5 p.c. to 10 p.c. and 17½ p.c., while manufactured iron and steel products and machinery were given 25 p.c. to 35 p.c. protection. On coal, both bituminous and anthracite, a duty of 50 cents a ton was imposed. The average *ad valorem* rate of duty on the dutiable imports in 1880 was 26·1 p.c., as compared with 21·4 p.c. in 1878. The maximum percentage was reached in 1889, when the rate was 31·9 p.c. By 1896 there was a slight drop in the rate to 30·0 p.c., and the declining trend continued until 1918 and 1919, when a rate of 21·5 p.c. was recorded. In 1924 the rate was 22·9 p.c.

Growth of Canadian Manufactures Prior to the War.—Until the later nineties the growth of Canadian manufacturing industry was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to 1897 was largely responsible for the comparatively slow growth of the values of manufactured commodities from \$221,600,000 in 1870 to \$469,800,000 in 1890. Afterwards there was a change; the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from \$368,700,000 in 1890 to \$1,166,000,000 in 1910, and to \$1,381,500,000 in 1915. The fundamental advantages of the position of Canada, her abundant raw material, her inexhaustible water power, her growing home market in the expanding West, had contributed to this result.

¹On this subject, see also the commencement of the section on External Trade.

In the present as in the past, Canadian manufacturing production has been chiefly dependent upon the use of Canadian raw material, though this is less true than formerly. Raw cotton, for example, is imported from the Southern States, hides from the Argentine, rubber from the Straits Settlements and Malay Peninsula, sugar from Cuba and the British West Indies, and wool from Australia and New Zealand, to supply the raw material for Canadian manufacturing industries.

The Influence of the War.—The influence of the war upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of product and the production at home of many commodities which had previously been imported. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war-time. The farmers of Canada bought as never before. The general result was that industry worked at high pressure, not only to produce the munitions and military supplies for the armies of the Allies, but also to make the manifold varieties of goods required for the stimulated civilian consumption. The world shortage of staple commodities, coupled with a strong domestic demand, gave the Canadian industries in general a pronounced stimulus toward greater production, and in a great number of cases the capacity of manufacturing plants was increased; this increase created a demand for greater supplies of raw material. Incidentally, factory methods became more specialized and a high degree of administrative and mechanical efficiency was attained, while Canada, partly owing to the industrial inactivity of Europe, assumed a new position as one of the leading manufacturing countries of the world.

The great boom in Canadian manufactures described above reached its height in the summer of 1920, the statistics for that year showing greatest gross and net value of products. The statistics for the year 1921, published in Table 1, show a great decline in values, which does not mean a corresponding decline in physical quantity of production, though here a certain decline undoubtedly took place. There was also some decline in 1922; 1923, the statistics for which are not yet available, was a rather better year for employment in manufactures than 1922, while 1924 has fallen off somewhat as compared with 1923. It would appear, speaking generally, that the country is recovering from the great depression of 1921, and that the rather low statistics for that year and for 1922 were not more representative of normal conditions in Canadian manufacturing industries than were the extremely high figures of 1920. During the early months of 1924 the general outlook was good, but the expectations of greater activity were not fulfilled during the second and third quarters. Later developments, including the rise in the prices of basic commodities and the improved prospects of Central Europe, have contributed to a more confident tone.

2.—Statistics of Manufactures.

1.—Historical Statistics since 1871.

The growth of large-scale production in manufactures during the past fifty years is evident from the statistics of Table 1 (though this tendency has been less marked in Canada than in more highly developed industrial communities, with larger populations able to absorb a larger amount of standardized commodities). Even so, in the electoral district of South Toronto, the most important manufacturing centre of Ontario, the census of 1911 showed that one-half of the industrial establishments

employed 90 p.c. of the workers. In the period immediately preceding the Great War many consolidations of previously independent manufacturing plants were effected, involving large economies in the purchase of materials and in selling expenses.

The historical Table 1 shows fairly well the advance of the "Industrial Revolution" (which might better be called "Evolution") in Canada. The average capital per manufacturing establishment, the average number of employees per establishment, and the average value of product per establishment, have been in trend continuously on the increase. If the consolidation of industry lessens the chances of an employee becoming a master, it must also be remembered that the amounts paid to employees in salaries and wages have also increased, so that the position of the average employee has been greatly ameliorated, though the lack of statistics on Canadian prices before 1890 prevents us from comparing the purchasing power of the average wages of the worker of 1870 and of the employee of the present.

The Censuses of Manufactures.—The comparability of the statistics of the various censuses is seriously affected by the different methods employed in census-taking. In the censuses of 1870, 1880 and 1890, all manufacturing establishments were included, the instructions to enumerators running as follows:—"An industrial establishment is a place where one or several persons are employed, in manufacturing, altering, making up or changing from one shape into another, materials for sale, use or consumption, quite irrespectively of the amount of capital employed or of the products turned out. All repairs, mending or custom work are understood to be industrial products and are to be entered accordingly, by value, in the returns of industrial establishments."

In the statistics of 1900, 1905, and 1910, however, only establishments employing five hands and upwards were included. The 1901 instructions are that no manufacturing establishment or factory will be so recognized for census purposes which does not employ at least five persons, either in the establishment itself or as piece-workers employed out of it. This, however, did not apply to cheese and butter factories nor to certain mineral products. The 1911 instructions stated that every factory in operation during the whole or part of 1910, and employing five or more persons, was to make a full report. All flour mills, saw and shingle mills, lime kilns, brick and tile works, butter and cheese factories, fish-curing plants, electric light and power plants whatsoever were nevertheless to be included. The statistics for 1915 included only establishments having an output of \$2,500 or over, irrespective of the number of persons employed, except in the case of flour and grist mills, butter and cheese factories, fish-preserving factories, saw-mills, brick and tile yards, lime kilns and electric light plants, where all plants were included.

Under the Statistics Act of 1918, the policy of including mines, fisheries, manufactures and other industrial production in the decennial census was abandoned and an annual "census of industry" substituted therefor. (See first annual report of the Dominion Statistician, pp. 30-36).

In the census of industry for 1917, the limit of output was withdrawn and all establishments reporting to the Bureau were included, the effect being an increase in the number of establishments included from 21,306 in 1915 to 34,392 in 1917—an increase due mainly to change of method, rather than to a change in the actual number of industrial establishments existing in the Dominion. In the taking of an annual canvass of the wide scope of the Canadian industrial census, it is inevitable that changes in the number of reporting industries shall be made from time to time, interfering with the comparability of the results. The statistics in regard to a large number of the custom and repair industries for 1922 were not collected,

resulting in the dropping from the compilation of the entire group of "construction, hand trades and repairs." Several custom and repair industries, such as the custom clothing industry previously included in the textile group, were eliminated from the totals for 1922. The result is that direct comparability of the statistics of 1922 with the figures of previous years was impaired. In the majority of cases in the present article special tables have been prepared for the period from 1917 to 1921, by deducting the statistics of the industries which have been entirely eliminated from the tables for 1922. In view of the large number of small establishments in the hand trade industries, the greatest divergency between the results of 1922 and of past years as previously published, is in the number of establishments.

Censuses of Manufactures in Recent Years.—The census of manufactures has since 1917 been taken annually by the Dominion Bureau of Statistics instead of quinquennially as theretofore. The last of the quinquennial censuses was taken in 1916 for the calendar year 1915, and the first annual censuses were taken in the years from 1918 to 1923 for the years 1917 to 1922.

In any comparison between the results of the 1915 quinquennial census and the subsequent annual censuses the rapid rise in prices must be borne in mind, and in comparisons between these annual censuses themselves the same factor must be taken into account. Thus, the new Canadian index number of wholesale prices compiled by the Dominion Bureau of Statistics was 248.2 in 1920 as compared with 213.2 in 1919, 207.8 in 1918, 174.6 in 1917, and 115.6 in 1915. In 1921, however, there was a great decline to 177.3 on the average of the year—a decline of approximately 28.6 p.c. from the preceding year. Under such circumstances it was inevitable that up to 1920 phenomenal advances in the money value of manufactured products should have been recorded, and that wages and salaries paid should also have greatly advanced since 1915. It was equally inevitable that in all these respects 1921 should show a great decline, due in much larger measure to the fall in values than to the decrease in physical production. In 1922 the index number showed a further decline to 152.0—a drop of 11.5 p.c. from 1921 prices. This would indicate that the comparatively small decline in the gross production of manufactured goods in 1922 is entirely due to declining values.

In Table 1 are presented statistics showing by provinces the development of Canadian manufacturing industries during the half-century from 1870 to 1922. Particularly notable is the increase in the manufactures of British Columbia from \$2,900,000 in 1880 to \$149,000,000 in 1922, and of Manitoba from \$3,400,000 in 1880 to \$94,400,000 in 1922. Saskatchewan also shows an increase from \$2,400,000 in 1905 to \$38,700,000 in 1922 and Alberta from \$5,000,000 in 1905 to \$51,500,000 in 1922. Thus the West is rapidly becoming an important contributor to Canadian manufacturing production. The tables relating to years 1917 to 1921 were adjusted to establish comparability with the results for 1922, which are exclusive of the construction industry and the hand trades. The statistics of manufactures from 1917 to 1922, classified by groups on a comparable basis, are presented in Table 2.

The statistics of manufactures for Canada and the provinces for the years 1917 to 1922 in the present edition of the Year Book are strictly comparable, but do not include the data for certain non-metallic mineral industries such as cement, brick and tile, clay sewer-pipe, firebrick and fireclay, stoneware and pottery, lime-burning and salt. It is the intention in future editions of the Year Book to include these industries in the Manufactures section, as well as dealing with their production in the Mines and Minerals section. Details regarding these industries, with special emphasis placed upon production, may be found on page 369 of the Year Book.

1.—Historical Summary of Statistics of Manufactures, by Provinces, 1870-1922.

(All establishments irrespective of the number of employees.)

Provinces.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
1870.	No.	\$	No.	\$	\$	\$	\$
Canada	41,252	77,961,020	187,942	40,821,009	121,907,846	96,709,927	221,617,773
Nova Scotia.....	4,912	6,041,906	15,595	3,176,296	5,806,257	6,531,848	12,338,105
New Brunswick....	3,479	5,976,176	18,352	3,869,360	9,431,760	7,935,927	17,367,687
Quebec.....	13,818	28,071,868	66,714	12,389,673	44,555,025	32,650,157	77,205,182
Ontario.....	19,050	37,874,010	87,281	21,415,710	65,114,804	49,591,995	114,706,799
1880.							
Canada	49,722	165,302,623	251,935	59,429,002	179,918,593	129,757,475	309,676,068
P. E. Island.....	1,617	2,085,776	5,767	807,208	1,829,210	1,570,998	3,400,208
Nova Scotia.....	5,493	10,183,060	20,300	4,098,445	10,022,030	8,553,296	18,575,326
New Brunswick....	3,005	8,425,282	19,922	3,866,011	11,060,842	7,451,810	18,512,658
Quebec.....	15,754	59,216,992	85,673	18,333,162	62,563,967	42,008,291	104,682,253
Ontario.....	23,070	80,950,847	118,308	30,604,031	91,164,156	66,825,714	157,989,870
Manitoba.....	344	1,383,331	1,921	755,507	1,924,821	1,488,205	3,413,026
British Columbia..	416	2,952,835	2,871	929,213	1,273,816	1,652,068	2,926,784
The Territories....	24	104,500	83	35,425	79,751	116,187	195,938
1890.							
Canada	75,964	333,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
P. E. Island.....	2,679	2,911,963	7,910	1,101,620	2,092,067	2,253,843	4,315,910
Nova Scotia.....	10,495	19,730,736	34,044	7,233,111	16,062,479	14,905,913	30,968,392
New Brunswick....	5,429	15,821,855	26,675	5,070,914	12,501,453	11,348,202	23,839,655
Quebec.....	23,034	116,974,615	116,753	30,461,315	80,712,496	66,747,087	147,459,583
Ontario.....	32,151	175,972,021	166,322	49,730,350	127,737,371	111,504,555	239,241,921
Manitoba.....	730	5,684,237	4,403	1,005,081	5,688,151	4,467,031	10,155,182
British Columbia..	1,071	14,404,304	11,507	3,586,897	5,119,258	6,880,670	11,099,928
The Territories....	375	1,713,179	1,081	425,150	846,017	981,293	1,827,310
1890.		(Establishments with five hands and over.)					
Canada	14,065	-	272,033	79,234,311	-	-	369,696,723
1900.							
Canada	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,653,375
P. E. Island.....	334	2,081,766	3,804	445,908	1,209,058	1,007,650	2,326,708
Nova Scotia.....	1,188	34,586,416	23,284	5,613,571	13,161,077	10,431,436	23,592,513
New Brunswick....	919	20,741,170	22,158	5,748,990	10,814,014	10,158,450	20,972,470
Quebec.....	4,845	142,403,407	110,329	36,550,055	86,679,779	71,608,215	158,287,994
Ontario.....	6,543	214,972,275	161,757	58,548,286	138,230,400	103,393,080	241,533,486
Manitoba.....	324	7,559,691	5,219	2,419,549	7,955,504	4,971,935	12,927,439
Alberta and Saskatchewan....	105	1,689,870	1,168	465,763	1,121,342	843,645	1,964,987
British Columbia..	392	22,901,892	11,454	5,456,538	7,246,684	12,201,094	19,447,778
1905.							
Canada	12,547	833,916,155	383,920	162,155,578	-	-	766,446,578
P. E. Island.....	223	1,555,916	2,770	409,915	-	-	1,699,459
Nova Scotia.....	720	24,599,538	23,254	9,139,371	-	-	31,987,449
New Brunswick....	631	26,461,664	19,170	6,497,161	-	-	21,833,564
Quebec.....	4,115	254,730,182	116,748	46,514,619	-	-	216,478,496
Ontario.....	6,163	390,875,465	184,526	89,729,889	-	-	361,372,741
Manitoba.....	280	27,070,965	10,113	5,809,707	-	-	27,857,396
Saskatchewan....	55	3,829,975	1,376	681,381	-	-	4,443,801
Alberta.....	97	5,400,371	1,983	1,129,272	-	-	4,979,932
British Columbia..	363	52,401,379	23,480	11,253,263	-	-	37,766,740
1910.							
Canada	19,218	1,247,582,609	515,263	241,098,416	601,509,018	561,166,621	1,165,975,639
P. E. Island.....	442	2,013,365	3,762	531,017	1,816,804	1,319,666	3,146,470
Nova Scotia.....	1,480	29,596,341	28,795	10,628,955	26,058,315	26,647,809	52,706,184
New Brunswick....	1,158	36,125,012	24,755	8,314,212	18,516,096	16,000,200	35,422,802
Quebec.....	6,584	326,946,925	158,207	69,432,967	184,374,053	160,527,603	350,901,656
Ontario.....	8,001	595,394,608	238,817	117,645,784	297,880,125	222,230,100	579,810,225
Manitoba.....	439	47,941,540	17,325	10,912,866	30,409,829	23,173,789	53,673,609
Saskatchewan....	173	7,019,951	3,250	1,936,284	2,747,266	3,584,866	6,332,132
Alberta.....	290	29,518,346	6,980	4,365,661	9,998,777	8,790,048	18,788,825
British Columbia..	651	123,027,521	33,312	17,240,670	29,917,753	35,286,489	65,704,236
1915.							
Canada	15,593	1,958,765,230	-	283,311,505	791,913,433	589,603,797	1,381,517,225
P. E. Island.....	261	1,841,690	-	543,954	1,490,066	1,087,757	2,586,823
Nova Scotia.....	781	25,754,562	-	17,175,818	36,194,004	33,151,815	69,315,819
New Brunswick....	630	45,870,488	-	8,767,230	21,314,643	15,989,257	37,300,900
Quebec.....	5,743	530,312,464	-	80,324,171	213,754,115	167,149,884	381,203,999
Ontario.....	6,538	946,619,114	-	140,609,691	410,670,537	304,861,302	715,531,839
Manitoba.....	499	94,690,750	-	13,389,569	38,529,886	21,952,060	60,481,446
Saskatchewan....	238	14,736,860	-	2,440,062	7,417,166	5,938,040	13,355,206
Alberta.....	282	41,168,897	-	4,791,281	20,699,967	8,716,254	29,410,221
British Columbia..	621	157,580,405	-	15,269,729	41,864,549	30,457,423	72,321,972

† These statistics are not available by provinces.

Note.—For 1915 the number of employees in establishments employing 5 hands and over has not been compiled.

1.—Historical Summary of Statistics of Manufactures, by Provinces, 1870-1922—con.
(All establishments irrespective of the number of employees.)

Provinces.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
1917.	No.	\$	No.	\$	\$	\$	\$
Canada	22,403	3,575,171,964	598,379	484,639,519	1,522,649,992	1,283,150,374	2,865,890,366
P.E. Island	416	2,205,871	1,576	678,134	3,088,718	1,804,042	4,993,300
Nova Scotia	1,344	124,038,006	24,564	18,363,919	101,321,237	56,883,110	158,204,356
New Brunswick	970	63,510,881	19,080	13,024,868	32,407,190	27,618,061	60,025,251
Quebec	7,138	746,889,147	183,189	133,117,326	381,934,380	376,673,567	758,607,947
Ontario	9,215	1,253,093,990	298,036	255,795,838	786,746,140	667,653,344	1,454,399,434
Manitoba	801	87,198,107	19,431	16,753,258	68,997,949	43,402,618	113,400,567
Saskatchewan	620	20,617,911	6,707	5,868,896	22,093,445	15,424,810	37,518,255
Alberta	706	57,597,815	9,024	9,065,530	42,725,021	25,729,400	68,454,511
British Columbia	1,173	206,380,977	34,805	31,852,949	83,309,509	67,623,937	150,933,440
Yukon	11	3,739,160	71	118,801	26,403	336,786	363,189
1918.							
Canada	22,470	3,794,064,722	586,002	544,158,418	1,790,254,315	1,384,010,372	3,174,264,687
P.E. Island	389	2,590,689	1,203	667,575	3,354,829	1,732,051	5,080,880
Nova Scotia	1,297	120,730,735	21,721	18,469,613	87,302,066	53,744,592	141,047,498
New Brunswick	891	72,325,478	17,058	12,889,040	32,824,422	31,407,760	64,304,182
Quebec	7,303	785,088,072	178,041	148,793,381	441,035,901	391,627,554	832,563,514
Ontario	9,454	1,409,276,240	297,716	290,457,603	962,711,402	734,097,784	1,607,709,160
Manitoba	709	88,042,555	19,554	18,570,128	67,436,081	43,020,428	130,536,509
Saskatchewan	570	34,425,035	6,272	6,643,641	28,391,878	15,750,804	44,151,772
Alberta	622	53,829,089	8,041	8,389,605	52,892,720	23,340,415	76,242,435
British Columbia	1,161	224,122,480	34,477	38,874,863	91,383,283	88,162,346	182,545,629
Yukon	14	3,633,729	59	102,909	20,834	230,548	257,382
1919.							
Canada	22,899	3,932,016,880	578,733	578,789,251	1,739,850,116	1,430,092,370	3,170,424,586
P.E. Island	401	2,444,485	1,202	787,407	4,005,474	2,221,124	6,226,593
Nova Scotia	1,345	117,476,930	19,826	16,986,360	68,731,453	51,009,176	119,730,629
New Brunswick	926	87,181,889	21,888	17,364,494	51,362,722	43,058,144	94,420,661
Quebec	7,212	841,457,337	177,103	160,022,502	484,024,494	416,518,197	900,542,691
Ontario	9,424	1,451,009,847	281,935	293,094,531	883,269,594	706,832,142	1,590,101,736
Manitoba	764	93,476,595	21,378	23,717,365	82,881,981	48,658,384	131,540,365
Saskatchewan	620	28,895,414	7,154	8,710,005	32,167,014	18,866,439	51,033,453
Alberta	654	58,181,028	10,503	12,498,783	52,880,167	33,469,841	86,350,008
British Columbia	1,242	248,341,007	37,621	45,548,740	89,529,791	110,203,763	190,724,554
Yukon	11	3,552,048	33	59,004	16,426	155,260	171,680
1920.							
Canada	22,942	3,208,613,715	583,112	695,216,542	2,057,415,181	1,609,765,194	3,667,180,375
P.E. Island	383	2,693,219	1,301	869,249	4,143,029	2,201,634	6,344,663
Nova Scotia	1,335	127,081,128	21,066	22,812,718	82,773,644	56,112,107	138,885,541
New Brunswick	916	105,334,372	19,312	19,271,393	60,803,649	46,433,099	107,236,748
Quebec	7,630	967,358,205	177,373	192,687,275	544,651,879	487,793,415	1,032,445,294
Ontario	9,251	1,611,192,528	292,288	358,703,805	1,064,847,183	798,661,592	1,863,508,775
Manitoba	757	104,219,157	23,399	31,826,418	90,023,943	62,112,242	153,036,185
Saskatchewan	631	39,601,085	6,988	10,056,427	34,894,105	24,184,081	59,078,188
Alberta	704	53,013,906	10,823	14,950,058	56,139,646	30,400,618	86,504,264
British Columbia	1,330	206,051,908	30,843	44,007,068	118,238,403	101,774,010	220,012,413
Yukon	5	1,368,207	19	31,171	-	92,306	92,306
1921.							
Canada	21,872	3,052,818,103	439,889	498,430,750	1,351,936,239	1,162,041,572	2,516,977,811
P.E. Island	339	2,308,216	803	522,488	2,516,415	1,356,940	3,873,355
Nova Scotia	1,186	95,874,740	12,890	12,359,107	39,893,815	32,943,481	72,837,296
New Brunswick	855	98,856,554	12,252	10,531,025	32,150,028	22,904,387	55,064,415
Quebec	7,126	927,111,817	141,459	144,432,402	385,103,845	346,191,463	781,385,308
Ontario	9,112	1,561,490,925	222,990	266,671,928	701,724,311	605,557,496	1,307,281,797
Manitoba	759	87,498,856	14,082	19,063,719	59,546,394	43,510,718	103,057,112
Saskatchewan	592	29,271,567	4,176	5,579,114	25,589,403	14,925,293	40,514,706
Alberta	689	50,306,658	7,594	9,406,256	33,812,502	24,658,303	58,570,895
British Columbia	1,205	199,032,425	23,512	29,803,235	74,396,166	69,847,427	144,243,593
Yukon	9	1,360,336	35	61,386	13,300	140,064	159,424
1922.							
Canada	22,184	3,125,772,761	462,573	497,113,554	1,280,527,079	1,159,316,687	2,439,943,766
P.E. Island	351	2,935,829	1,119	625,200	2,621,445	1,783,594	4,405,037
Nova Scotia	1,140	97,799,273	13,580	11,569,823	37,828,238	28,713,454	66,541,692
New Brunswick	885	81,789,934	14,109	12,080,840	38,058,622	26,555,515	64,614,137
Quebec	7,367	932,186,153	144,949	141,002,337	337,168,035	358,975,190	666,143,225
Ontario	9,174	1,643,187,941	237,319	268,602,730	676,725,112	597,690,690	1,274,424,802
Manitoba	768	84,662,378	13,789	17,891,064	54,619,248	39,798,360	94,417,608
Saskatchewan	606	30,268,144	4,126	5,562,145	22,450,051	16,222,777	38,672,828
Alberta	652	51,283,982	7,001	8,949,905	30,306,395	21,203,492	51,509,887
British Columbia	1,238	200,192,904	26,481	30,740,778	80,749,935	68,246,533	148,990,468
Yukon	3	1,466,223	10	28,892	-	118,082	118,082

Statistics of the construction and custom and repair industries were not collected for 1922; the figures for these industries for 1917 to 1921 have consequently been deducted from the totals as previously published. The industries excluded comprise custom clothing, dyeing and laundry work, boot, jewelry, automobile and bicycle repairing, blacksmithing, cement, brick and tile, clay sewer-pipe, stoneware and pottery, lime-burning and salt.

2.—Summary of Statistics of Manufactures, by Industrial Groups, 1917-1922.¹

(All establishments irrespective of the number of employees.)

Industrial Groups.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
	No.	\$	No.	\$	\$	\$	\$
1917.							
Total	22,403	2,575,171,961	598,379	481,639,519	1,522,649,992	1,283,150,374	2,805,800,366
Vegetable products.....	3,816	274,722,765	61,288	44,780,329	365,487,923	181,072,145	546,566,060
Animal products.....	5,486	207,165,245	46,994	35,753,133	320,302,030	124,103,990	444,406,029
Textile products.....	1,360	196,823,197	82,639	51,180,000	132,470,763	115,749,006	248,218,859
Wood and paper.....	7,255	537,731,225	153,751	115,137,384	140,927,482	248,986,564	398,914,046
Iron and its prod- ucts.....	1,404	634,042,080	142,416	140,334,255	357,688,333	334,616,810	692,305,143
Non-ferrous metals.....	290	69,421,911	18,220	15,898,890	46,443,469	41,639,351	87,484,820
Non-metallic min- erals.....	1,063	88,336,215	16,626	14,217,873	38,724,530	44,938,223	83,602,753
Chemicals and allied products.....	539	175,836,690	56,183	51,505,484	99,068,092	131,381,995	230,450,087
Miscellaneous in- dustries.....	1,184	300,401,727	20,292	15,823,111	12,530,361	61,272,202	73,802,563
1918.							
Total	22,476	2,794,661,722	586,002	511,158,418	1,790,754,315	1,384,010,372	3,174,264,687
Vegetable products.....	3,824	310,556,340	63,107	49,788,771	409,813,120	188,009,655	597,822,775
Animal products.....	5,493	225,949,731	51,085	40,970,545	348,773,348	131,220,539	479,093,887
Textile products.....	1,364	232,678,413	82,144	54,754,068	182,529,685	137,903,308	320,433,063
Wood and paper.....	7,281	599,594,273	150,732	130,348,089	168,154,574	282,110,061	450,264,635
Iron and its prod- ucts.....	1,397	631,390,223	127,240	148,361,634	393,204,670	330,388,308	723,592,978
Non-ferrous metals.....	286	78,075,726	17,741	17,635,814	40,988,990	38,406,413	79,395,403
Non-metallic min- erals.....	940	113,209,440	15,811	15,404,546	53,171,648	42,416,310	95,587,958
Chemicals and allied products.....	534	162,912,627	56,891	66,741,341	178,227,423	157,923,196	336,150,619
Miscellaneous in- dustries.....	1,321	439,697,949	21,655	20,151,810	15,300,847	75,632,582	91,023,429
1919.							
Total	22,899	2,932,916,880	578,733	578,780,251	1,739,850,116	1,430,992,470	3,170,842,586
Vegetable products.....	3,964	336,730,861	60,780	62,545,616	497,887,117	199,785,015	697,672,132
Animal products.....	5,433	242,003,094	54,372	50,709,455	401,105,903	142,322,561	543,428,464
Textile products.....	1,524	257,860,265	87,275	60,661,851	213,282,721	163,841,996	377,124,717
Wood and paper.....	7,023	707,652,570	166,176	157,240,646	216,115,868	359,322,951	574,438,819
Iron and its prod- ucts.....	1,523	611,291,790	120,157	162,103,816	249,399,965	348,540,736	597,940,701
Non-ferrous metals.....	311	80,288,911	17,108	18,338,421	33,393,739	38,113,823	71,507,582
Non-metallic min- erals.....	794	129,932,028	16,852	18,848,082	62,610,856	44,359,214	106,070,070
Chemicals and allied products.....	406	106,110,959	14,719	15,255,350	45,399,060	49,168,100	94,567,160
Miscellaneous in- dustries.....	1,321	461,646,402	23,294	24,086,014	21,654,887	85,538,074	107,192,961
1920.							
Total	22,942	3,208,612,715	583,112	695,216,542	2,057,415,181	1,609,765,184	3,667,180,375
Vegetable products.....	4,219	394,123,233	72,380	75,695,530	532,484,195	234,317,527	766,801,722
Animal products.....	4,823	221,792,457	48,687	54,291,606	400,496,354	152,995,130	553,491,484
Textile products.....	1,304	302,758,185	87,730	84,433,609	256,233,300	173,741,035	429,974,335
Wood and paper.....	7,867	772,086,812	143,731	171,010,460	308,282,232	415,784,270	724,066,508
Iron and its prod- ucts.....	1,690	642,904,322	146,204	205,414,590	349,642,666	365,473,097	715,115,763
Non-ferrous metals.....	324	100,382,033	23,162	27,895,343	48,434,120	52,847,178	101,281,298
Non-metallic min- erals.....	866	148,681,810	18,770	23,683,692	74,200,407	54,405,062	128,605,469
Chemicals and allied products.....	464	122,123,730	17,653	22,193,421	62,044,608	65,183,212	127,827,820
Miscellaneous in- dustries.....	1,386	409,761,133	24,795	29,998,282	24,997,299	95,018,677	120,015,976

¹ See note to Table 1.
94410-3

2.—Summary of Statistics of Manufactures, by Industrial Groups, 1917-1922— concluded.

(All establishments irrespective of the number of employees.)

Industrial Groups.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
	No.	\$	No.	\$	\$	\$	\$
1921.							
Total	21,872	3,052,818,103	439,889	498,430,750	1,354,936,239	1,162,041,572	2,516,977,811
Vegetable products.	3,946	360,945,194	61,161	63,130,893	364,123,395	205,448,326	569,571,721
Animal products.	5,051	200,097,527	45,726	48,124,667	267,878,165	111,534,101	379,412,266
Textile products.	1,627	260,158,327	76,379	71,321,283	164,139,109	140,773,447	304,912,556
Wood and paper.	7,152	775,207,859	111,322	131,089,861	203,856,170	283,260,565	487,116,735
Iron and its pro- ducts.	1,138	575,680,424	77,080	98,363,983	104,725,179	187,072,905	382,398,084
Non-ferrous metals.	344	104,079,490	17,936	22,692,784	31,439,989	41,149,894	72,589,883
Non-metallic min- erals.	704	126,989,134	15,982	19,801,091	67,780,080	47,776,911	115,550,991
Chemicals and al- lied products.	468	118,382,642	12,571	16,192,457	43,108,870	45,495,135	88,604,005
Miscellaneous in- dustries.	1,382	530,677,506	21,732	27,713,731	17,885,282	98,930,288	116,815,570
1922.							
Total	22,184	3,125,772,761	462,573	497,113,551	1,289,527,079	1,159,316,687	2,439,843,766
Vegetable products.	4,355	371,361,682	63,217	64,424,922	330,589,052	206,946,749	537,535,801
Animal products.	5,118	201,829,414	49,595	49,933,679	264,078,631	107,473,382	371,552,013
Textile products.	1,709	268,065,238	88,048	76,224,361	163,066,593	155,493,510	308,500,103
Wood and paper.	6,983	761,158,396	118,462	132,084,914	206,682,820	283,131,962	489,814,782
Iron and its pro- ducts.	1,040	526,109,953	74,588	90,605,157	168,282,265	163,302,638	331,584,903
Non-ferrous metals.	325	102,208,275	18,222	21,451,629	30,861,895	39,993,798	70,855,693
Non-metallic min- erals.	781	161,063,081	14,588	18,724,780	63,377,262	46,260,192	109,637,454
Chemicals and allied products.	469	118,025,483	14,082	16,770,503	47,039,926	48,904,259	95,944,185
Miscellaneous in- dustries.	1,404	615,921,239	21,771	26,893,609	16,548,635	107,810,197	124,358,832

¹ See note to Table 1.

2.—Summary of Recent Manufacturing Statistics.

[For the scheme of reports issued annually on the manufacturing industries by the Dominion Bureau of Statistics, the reader is referred to the sub-section "The Dominion Bureau of Statistics," in the 1924 Year Book, dealing with the organization of the Bureau and its publications.]

The statistics of manufactures relating to 1917 and later years, as presented in the present edition, have been revised where necessary to establish comparability. According to the census of 1922, there were in Canada 22,184 manufacturing establishments distributed throughout the nine provinces and Yukon Territory. The total number of employees was 462,573, the amount of capital invested \$3,125,772,761, and the output was valued at \$2,439,843,766. As compared with the revised statistics of 1917 there was a decrease of 22.7 p.c. in the number of employees, an increase of over 21 p.c. in the amount of capital invested and a decrease of over 13 p.c. in the value of products.

Statistics for recent years.—In Table 3 are given summary statistics of the manufactures of Canada for the three years 1920 to 1922 inclusive.

3.—Summary Statistics of Manufactures of Canada, 1920-1922.

(All establishments irrespective of the number of employees.)

Items.	1920.	1921.	Increase (+) or decrease (-) p.c., 1920-21.	1922.	Increase (+) or decrease (-) p.c., 1921-22.
Establishments..... No.	22,942	21,872	- .30	22,184	+ 1.42
Capital..... \$	3,208,613,715	3,052,818,103	- 4.85	3,125,772,761	+ 2.39
Average capital per establishment..... \$	139,858	139,577	- .20	140,902	+ .95
Employees on salaries..... No.	80,485	73,195	- 9.06	74,884	+ 2.31
Salaries..... \$	143,206,399	133,154,004	- 7.02	133,850,436	+ .52
Average salary..... \$	1,779	1,819	+ 2.25	1,787	- 1.78
Employees on wages..... No.	502,027	306,694	- 27.05	387,689	+ 5.72
Wages..... \$	552,010,143	365,276,146	- 33.83	363,263,118	- .55
Average wage..... \$	1,098	996	- 8.38	937	- 6.00
Cost of materials..... \$	2,057,415,181	1,354,936,239	- 34.14	1,280,527,079	- 5.49
Average cost of materials per establishment..... \$	89,679	61,948	- 30.92	57,723	- 6.82
Value added in manufacture. \$	1,009,765,194	1,102,041,572	- 27.81	1,159,316,687	- .23
Value of products..... \$	3,067,180,375	2,516,977,811	- 31.36	2,439,843,766	- 3.06
Average value products per establishment..... \$	159,846	115,078	- 28.00	109,982	- 4.43
Piece-workers ¹ No.	11,422	11,777	+ 3.11	6,095	- 48.25
Earnings of piece-workers.... \$	2,763,910	2,468,231	- 10.69	1,284,437	- 47.10

¹ Not included in general statistics of number of employees or earnings.

Value of Products.—The gross value of manufactured products for 1922 was reported as \$2,439,843,766; the cost of materials was \$1,280,527,079, leaving \$1,159,316,687 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufactured output, and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This value would be very much greater than the \$1,159,316,687 added by manufacture.

Consumption of Manufactured Products.—One of the beneficial results of placing the classification of the external trade and of production upon a common basis is exhibited in Table 4, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available during 1922 was \$2,499,221,674, obtained by adding the value of manufactured products in 1922 to the value of the imports of manufactured and partly manufactured goods

during the fiscal year ended March 31, 1923, and deducting the value of the corresponding exports for the same period. Vegetable products and textiles lead the other groups in the value of finished goods made available for consumption. The ascendancy of the vegetable products was due to the large production, as the imports and exports were nearly in balance. The production and imports of textiles were both important, while the exports were comparatively insignificant. The consumption of iron and steel products attained third place, the balance of trade being substantially unfavourable. It should be observed, however, that considerable duplication occurs in the value of manufactured products, where several processes are performed upon a commodity by different plants before it is ready for ultimate use.

4.—Consumption of Manufactured Products by Groups, 1922.

Groups of Industries.	Value of manufactured products.	Manufactured and partly manufactured goods.		Value of products available for consumption.
		Value of imports.	Value of exports.	
Total	\$ 2,439,843,766	\$ 574,551,323	\$ 515,173,415	\$ 2,499,221,674
Vegetable products.....	537,535,801	103,099,100	101,483,868	539,751,030
Animal products.....	371,552,013	20,296,958	81,317,173	310,531,798
Textile products.....	308,560,103	132,345,046	4,103,256	436,741,803
Wood and paper.....	489,814,782	35,108,116	212,780,800	312,232,098
Iron and its products.....	331,584,003	136,135,919	51,108,971	416,611,851
Non-ferrous metals.....	70,855,603	34,751,416	28,878,931	76,758,178
Non-metallic minerals.....	109,627,454	40,133,823	6,229,608	143,541,669
Chemicals and allied products.....	95,944,185	25,793,101	10,827,723	110,909,563
Miscellaneous industries.....	124,358,832	46,167,838	18,383,085	152,143,585

NOTE.—Statistics of manufactured products are for the calendar year 1922. Imports and exports of manufactured and partly manufactured goods are for the fiscal year ended March 31, 1923.

Production of Manufactured Goods according to the Purpose Classification.—In addition to the classification according to the component material of the chief product of value, used by the industrial census in detailed presentation, a parallel classification based on the purpose of the chief product was applied for the first time to the census returns of 1922.

In analysing the relative standing of the two purpose groups which are perhaps of greatest interest, it is noted that the gross production of the food industries was 27.6 p.c. of the output of Canadian manufacturing concerns, as compared with an output of 9.7 p.c. for the clothing industries. The greater production of the food group, however, was in part due to the higher cost of raw materials, the value added by manufacturing being 15.7 p.c. of the total for all industries in the case of the food group and 10.2 p.c. for the clothing group. The clothing industries maintained a larger payroll, in spite of the fact that a smaller output was recorded than in the food industries, this apparent anomaly being perhaps accounted for by the greater prevalence of female employment in the clothing industries. As compared with the total industrial payrolls, the employment in the clothing and food groups was 15.3 p.c. and 14.4 p.c. respectively. The standing of the manufacturing industries of Canada according to the purpose classification is shown in Table 5.

5.—Principal Statistics of the Manufacturing Industries of Canada, classified according to the Purpose of the Principal Product, 1922.

(All establishments irrespective of the number of employees.)

Purpose Headings.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
	No.	\$	No.	\$	\$	\$	\$
Total	22,184	3,125,772,761	462,573	497,113,554	1,280,527,079	1,159,316,687	2,429,843,766
Food	8,245	311,662,489	66,444	67,396,446	499,731,428	181,434,270	672,165,708
Breadstuffs.....	3,628	132,738,995	29,802	30,415,111	184,849,830	77,943,813	262,793,643
Fish.....	933	22,116,338	5,713	3,041,315	15,578,633	9,980,856	25,565,489
Nuts, fruits and vego- tables.....	304	26,918,250	4,770	3,753,740	15,639,275	10,957,008	20,596,283
Meats.....	113	57,383,901	9,975	12,606,041	115,870,403	28,733,273	144,603,676
Milk products.....	3,095	36,824,319	9,306	9,351,329	89,773,029	24,199,017	104,972,046
Oils and fats.....	7	202,251	41	44,106	153,861	173,111	326,973
Sugar.....	28	39,263,625	3,123	3,811,221	57,944,408	16,260,536	74,194,944
Infusions.....	56	12,278,485	1,746	2,085,549	12,017,775	5,032,663	18,850,428
Miscellaneous.....	81	13,036,324	1,968	2,198,034	7,004,223	7,258,093	14,262,226
Drink and tobacco	496	104,017,461	13,102	13,777,986	33,027,203	66,502,616	99,329,810
Beverages, alcoholic.....	59	50,042,259	3,170	4,369,827	0,671,740	19,500,535	29,172,275
Beverages, non-alco- holic.....	295	10,145,288	1,681	1,092,573	3,206,525	4,524,059	7,730,584
Tobacco.....	142	43,859,914	8,551	7,415,586	20,148,938	42,478,032	62,620,960
Clothing	1,279	175,076,687	70,931	65,595,519	118,749,053	117,894,140	236,553,193
Boots and shoes.....	191	44,356,619	18,329	17,633,428	27,188,590	33,025,098	60,218,688
Fur goods.....	234	9,056,387	3,328	3,451,868	7,700,317	5,946,521	13,652,838
Garments and per- sonal furnishings.....	573	67,055,059	31,195	30,239,672	55,600,218	40,760,393	105,366,611
Gloves and mitts.....	47	3,096,725	1,413	1,099,019	1,608,687	1,767,041	3,375,728
Hats and caps.....	77	4,781,217	2,262	2,380,981	3,659,108	4,381,635	8,040,743
Knitted goods.....	141	44,238,001	14,179	10,572,476	22,543,671	22,419,563	44,063,254
Waterproofs.....	16	1,592,580	225	218,075	442,462	497,860	940,331
Personal utilities	936	56,060,262	16,904	17,080,049	21,879,031	35,379,445	57,258,476
Jewelry and time- pieces.....	87	6,980,985	1,854	2,208,988	2,965,294	3,621,128	6,586,422
Recreational supplies.....	107	19,757,641	4,245	4,732,574	6,575,897	8,792,852	15,368,749
Soap and toilet articles.....	68	15,781,244	1,874	2,215,316	8,604,634	7,237,271	15,841,905
Personal utilities, n.e.s.....	674	13,551,392	8,931	7,923,171	3,733,206	15,728,194	10,401 +
House furnish- ings	600	75,168,033	18,032	19,861,883	24,956,960	34,004,090	62,961,050
Books and station- ery.....	1,557	82,240,691	28,103	36,920,804	27,190,671	71,928,898	99,118,969
Vehicles and ves- sels.....	1,116	158,708,055	26,865	33,488,604	86,057,295	67,029,630	151,077,925
Producers' materials	5,285	1,011,268,819	135,845	139,533,410	316,400,400	319,818,227	636,218,627
Farm materials.....	17	3,935,407	344	348,879	1,008,230	883,158	1,981,413
Manufacturers' materials.....	610	670,593,444	71,526	76,314,854	178,622,228	196,358,351	374,980,579
Building materials.....	4,184	255,743,600	47,887	46,501,654	108,161,090	92,195,922	200,357,021
General materials.....	474	81,086,209	16,088	16,368,023	28,518,843	30,380,766	58,809,509
Industrial equipment	2,640	1,116,579,810	85,178	102,487,463	158,571,274	259,472,307	418,043,581
Farming equipment.....	108	94,120,312	6,390	7,270,129	8,259,009	10,615,607	18,874,616
Manufacturing equip- ment.....	161	40,902,114	5,889	7,284,141	4,508,428	13,702,777	18,211,205
Trading equipment.....	163	5,767,880	1,477	2,026,612	1,222,507	4,246,326	5,468,833
Service equipment.....	190	27,116,913	4,354	5,001,526	7,486,530	12,566,256	20,052,786
Light, heat and power.....	1,260	799,281,448	37,035	47,098,695	80,167,241	154,399,384	234,566,625
General equipment.....	758	152,301,143	30,033	33,746,362	56,927,550	63,941,957	120,869,516
Miscellaneous	30	4,900,434	869	1,061,388	2,964,334	1,952,064	4,916,418

The Forty Leading Industries.—During 1921 and 1922 the flour and grist-mill products industry maintained its place as the industry with the largest gross production. The pulp and paper industry, holding third place in 1921, moved into second rank in the following year, with an increase of nearly \$8,000,000 in the gross production. The flour and grist-mill and the slaughtering and meat-packing industries, holding a very high rating in gross value of products, rank comparatively low in number of wage earners employed and in the value added by manufacture. The cost of materials represented a large proportion of the gross production in the case of the two industries in question, and the proportion distributed in salaries and wages was relatively smaller.

6.—Principal Statistics of Forty Leading Industries, 1921.

Arranged in order of the gross value of production.

Industries.	Estab- lish- ments.	Capital Invested.	Cost of Materials.	Value of Products.
	No.	\$	\$	\$
1 Flour and grist-mill products.....	582	59,234,647	153,445,024	179,632,246
2 Slaughtering and meat-packing.....	84	58,459,555	113,389,835	153,136,289
3 Pulp and paper.....	100	379,812,751	62,276,234	151,003,165
4 Saw, lath and shingle mills.....	3,126	186,019,994	57,242,686	116,891,191
5 Butter and cheese.....	3,087	27,535,634	77,797,821	97,653,426
6 Electric light and power.....	857	484,669,431	—	72,636,094
7 Sugar, refined.....	7	35,783,067	56,882,242	69,509,827
8 Automobiles.....	14	40,080,260	45,119,345	67,050,209
9 Cotton yarn and cloth.....	31	65,947,420	35,157,233	65,978,596
10 Rolling mills and steel furnaces.....	39	121,839,860	34,820,791	56,201,810
11 Printing and publishing.....	836	38,788,973	15,412,712	53,613,061
12 Tobacco, cigars and cigarettes.....	94	35,757,047	15,374,386	52,050,244
13 Petroleum, refined.....	11	55,630,864	35,850,653	51,565,403
14 Bread and other bakery products.....	1,658	23,551,215	29,202,936	51,367,917
15 Biscuits and confectionery.....	372	30,655,580	22,600,821	46,758,014
16 Boots and shoes, leather.....	177	31,644,855	23,379,183	44,665,381
17 Electrical apparatus and supplies.....	96	62,725,361	19,215,135	44,497,268
18 Clothing, men's factory.....	162	30,244,384	29,929,413	43,760,569
19 Foundries and machine shop products.....	325	62,152,439	17,291,910	42,205,275
20 Steam railway cars.....	11	52,873,569	22,910,095	40,245,831
21 Agricultural implements.....	75	94,129,064	17,946,282	36,763,160
22 Hosiery and knit goods.....	127	37,906,361	18,960,491	36,689,534
23 Clothing, women's factory.....	176	13,694,846	18,617,634	35,256,020
24 Woodworking, sash and door factories.....	758	41,239,799	18,434,190	35,186,135
25 Printing and bookbinding.....	625	28,275,937	10,853,841	33,414,432
26 Breweries.....	55	37,645,447	9,714,486	30,031,853
27 Plumbing and tin-smithing.....	2,137	12,219,038	13,777,756	28,260,326
28 Sheet metal products.....	129	27,681,041	13,219,712	26,774,036
29 Rubber goods.....	23	38,420,786	12,219,987	25,018,042
30 Furniture and upholstery.....	345	28,878,955	8,528,820	23,975,369
31 Leather tanneries.....	119	32,137,488	15,157,358	22,905,528
32 Industrial machinery.....	112	40,000,370	6,011,038	21,608,218
33 Fish-curing and packing.....	842	19,411,990	11,708,478	18,894,132
34 Gas, lighting and heating.....	50	37,097,280	9,279,697	18,772,285
35 Paints and varnishes.....	49	20,330,951	9,714,521	18,044,325
36 Furnishing goods, men's.....	82	11,800,238	10,229,398	17,946,293
37 Heating and ventilating appliances.....	54	24,159,408	4,777,045	16,119,383
38 Tobacco, chewing and smoking.....	25	11,993,928	8,064,946	14,910,006
39 Wire and wire goods.....	44	17,009,842	7,455,336	14,784,891
40 Automobile parts and accessories.....	64	15,700,288	8,229,855	14,783,017
Total for forty leading industries.....	17,560	2,473,158,310	1,100,129,327	1,993,065,707
Total for all industries.....	21,872	3,052,818,103	1,354,936,239	2,516,977,811
Percentage of forty industries to total of all industries.....	80.29	81.01	81.93	79.19

7.—Principal Statistics of Forty Leading Industries, 1922.

Arranged in order of the gross value of production.

Industries.	Estab- lish- ments.	Capital Invested.	Cost of Materials.	Value of Products.
	No.	\$	\$	\$
1 Flour and grist-mill products.....	1,304	68,453,886	136,687,078	166,881,455
2 Pulp and paper.....	104	381,006,324	64,692,722	158,950,956
3 Slaughtering and meat-packing.....	81	56,372,372	115,020,042	142,998,949
4 Saw, lath and shingle mills.....	2,922	162,835,219	60,812,017	114,324,580
5 Butter and cheese.....	3,072	30,648,068	74,714,681	95,470,701
6 Electric light and power.....	905	598,068,752	—	82,328,866
7 Automobiles.....	14	47,761,964	54,408,719	81,956,429
8 Cotton yarn and cloth.....	33	70,090,980	34,694,760	72,174,728
9 Sugar, refined.....	7	30,691,472	56,493,942	70,822,782
10 Petroleum, refined.....	13	61,253,400	38,129,880	56,495,821
11 Printing and publishing.....	746	38,972,589	11,944,412	50,993,039
12 Bread and other bakery products.....	1,865	25,551,612	24,708,136	47,845,811
13 Tobacco, cigars and cigarettes.....	108	31,482,001	12,232,348	46,060,697
14 Boots and shoes, leather.....	181	29,881,921	22,259,765	45,503,858
15 Hosiery and knit goods.....	141	44,238,091	22,543,671	44,963,254
16 Biscuits and confectionery.....	368	33,680,280	19,917,649	42,416,311
17 Clothing, women's factory.....	293	18,788,061	21,840,782	41,643,514
18 Electrical apparatus and supplies.....	101	62,436,282	17,546,839	41,208,368
19 Planing mills, sash and door factories.....	787	43,091,844	20,116,621	37,426,067
20 Foundries and machine shop products.....	275	55,288,466	13,960,752	36,507,734
21 Clothing, men's factory.....	148	25,029,072	18,481,429	35,135,395
22 Rubber goods.....	52	30,177,799	14,366,255	31,777,497
23 Printing and bookbinding.....	658	20,280,780	9,268,754	30,565,620
24 Sheet metal products.....	125	30,614,573	16,128,924	30,209,584
25 Railway cars and parts (steam).....	23	54,653,320	11,180,198	26,310,776
26 Breweries.....	53	34,788,432	8,124,304	26,875,730
27 Steel and rolled products.....	21	62,273,866	14,945,039	25,798,723
28 Fish-curing and packing.....	933	22,116,338	15,578,633	26,565,489
29 Leather tanneries.....	116	32,818,775	15,754,951	25,398,238
30 Furnishing goods, men's.....	116	17,215,063	12,643,854	23,299,716
31 Furniture and upholstered goods.....	157	28,892,791	7,970,902	22,138,742
32 Paints and varnishes.....	53	21,073,706	11,354,903	20,230,545
33 Gas, lighting and heating.....	48	30,615,765	8,580,208	19,080,170
34 Automobile supplies.....	62	16,545,041	10,674,176	19,007,824
35 Agricultural implements.....	73	92,596,904	7,997,757	18,240,381
36 Fruit and vegetable canneries.....	220	18,633,839	10,892,758	18,036,419
37 Heating and ventilating appliances.....	54	25,583,065	5,856,365	17,010,528
38 Wire and wire goods.....	48	17,327,775	9,112,850	15,616,454
39 Industrial machinery and elevators.....	106	38,047,363	4,070,072	15,418,364
40 Woollen cloths.....	64	20,846,502	7,039,177	15,410,537
Total for forty leading industries.....	16,519	2,536,705,813	1,012,667,395	1,938,019,252
Total for all industries.....	22,184	3,125,772,761	1,280,527,079	2,439,843,766
Percentage of forty industries to total of all industries.....	74.46	81.15	81.42	79.43

Establishments Classified According to Size.—The tendency of manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization.

In order to throw some light upon this subject, statistics are presented in Tables 8 and 9 of establishments grouped, first, according to value of products and secondly, according to number of employees. Of the 22,184 establishments reported as engaged in manufacturing industries in 1922, there were 410 or 1.85 p.c., whose products were valued at more than \$1,000,000 each. The corresponding figures for 1917 were 474 establishments out of a total of 34,392 or 1.38 p.c. Changes in the price level as well as in the list of industries included in the total unfortunately interfere with the exact comparability of the results.

8.—Establishments and Total Production of Canadian Manufactures by Groups of Values, 1922.

Groups of Values.	Number of Establishments.	Total Production.	Average Production.
		\$	\$
Under \$25,000.....	14,775	111,052,745	7,516
\$ 25,000 but under \$ 50,000.....	2,350	83,296,266	35,445
50,000 " 100,000.....	1,756	126,795,458	72,206
100,000 " 200,000.....	1,328	187,791,505	141,409
200,000 " 500,000.....	1,061	325,014,561	300,328
500,000 " 1,000,000.....	504	355,702,222	705,758
1,000,000 " 5,000,000.....	354	674,598,410	1,905,645
5,000,000 and over.....	56	575,592,599	10,278,439
Total.....	22,184	2,439,843,766	109,982

The best classification of establishments to bring out the feature of size is a classification according to the number of employees engaged. In 1922, 437 establishments or about 2 p.c. employed more than 200 persons each, aggregating 194,946 or 42 p.c. of the total payroll. Table 9 shows the total number of establishments in Canada during 1922, grouped according to the number of employees engaged.

9.—Number of Establishments and of Employees in Canadian Manufactures, grouped according to the number of Employees per Establishment, 1922.

Number of Employees per Establishment.	Number of Establishments.	Number of Employees.	Average Number Employed.
Fewer than 5 persons.....	14,750	26,407	1.7
5 to 20 persons.....	3,005	40,714	11.0
21 " 50 ".....	1,858	60,362	32.4
51 " 100 ".....	938	67,619	72.0
101 " 200 ".....	506	71,338	140.9
201 " 500 ".....	335	103,232	308.1
501 and over.....	102	91,714	899.1
Total.....	22,184	461,386	20.7

3.—Production by Groups and Industries.

One of the factors accelerating the progress of Canada is the possession of many natural resources favourable to industrial prosperity. It is upon the country's agricultural resources, forests, minerals and wild life, that Canada's industries are mainly based. The sea and lake fisheries, in addition, make an important contribution of raw material to the manufacturing industries of the Dominion.

However, the industrial development of Canada was a matter of small beginnings and gradual growth in the face of difficulty over a period of many years. In the pioneer days, eastern Canada, though with a sparse population, set out modestly but not less surely upon the path of progress. The comparatively small home market, restricted at the present time to a population of nine millions, a large part of it in scattered agricultural areas, is one of the difficulties of the present situation. Yet Canada is now not merely the second largest manufacturing country in the British Empire, but the exports to the other Dominions consist largely of manufactured goods. The exports of manufactured and partly manufactured goods to the United States also exceed the exports of raw material. The rate at which this movement is to continue depends almost entirely upon growth within the Dominion—upon the further development of the many-sided physical assets of the country. A classification based on the component material of the chief product of value in each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification, and the classes of industry were somewhat altered to conform with recent industrial organization.

The Vegetable Products Group.—With the exception of rubber and sugar factories, the industries of this group are dependent mainly upon domestic farm products as raw materials. The milling industry, which has existed to meet domestic needs for more than 300 years, is one of the Dominion's oldest industries, but it is only within recent times that its progress has become spectacular. The war and the demand it created gave a great impetus to this trade, and the 434 flour mills, many of them of the most modern type and highest efficiency, have now attained a capacity far in excess of Canada's demands—sufficient, indeed to produce flour for no fewer than 20 million people. During 1922, productive capacity reached 134,125 barrels per day, and during the crop year ended August 31, 1923, about 11 million barrels were exported to many countries, Great Britain and Germany receiving the largest consignments. The flour manufactured from Canadian hard spring wheat is particularly sought after in overseas markets, and this, as well as similar products, is also finding a ready sale in the far East, where bread is being consumed to a greater extent than formerly. Other industries contributing largely to food manufacture are sugar refineries and, to a lesser degree, plants engaged in the canning of fruit and vegetables.

Raw material imported from tropical countries forms the basis for an industry of a different character. Canada now stands fourth among the countries of the world as a manufacturer of rubber goods. Existing plants represent a capital of over \$50,000,000 and find employment for about 10,400 workers.

Animal Products.—Another form of food manufacture—that associated with slaughtering and meat production—has also made great strides. It comes as a surprise to many that slaughtering and meat-packing was until lately at the head of all other single industries in regard to the value of the products, and is now only surpassed by the pulp and paper and flour-milling industries. The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provide a ready supply of hides. There are large tanneries in the eastern provinces, and no fewer than 181 boot and shoe factories were in operation in 1922, chiefly in Quebec and Ontario, representing a total capital of nearly \$29,900,000, with an annual output of

\$45,504,000 and employing 13,704 men and women. The canning and preserving of fish calls for a more detailed reference. Concentrated, naturally, upon the Pacific and Atlantic coasts, this industry has become one of the most important, not, perhaps, as much from the point of view of achievement as of promise. In 1922, there were in existence 578 establishments canning lobsters, 67 canning salmon, 267 fish-curing plants and 28 dealing with catches of lesser amounts. One recent development of great possibilities is the setting up of establishments to utilize the catches from the large northern lakes of the Prairie Provinces, stocks in which are so large as to be beyond computation.

Textiles.—So far as textiles are concerned, Canada is not yet self-contained. Although production of every kind, cotton and woollen fabrics, hosiery, knitted goods, men's and women's clothing and so forth, amounted in 1922 to a total of over \$308,560,000, considerable quantities of yarns and cloth are imported. The Canadian textile factories are capable of supplying ordinary domestic needs without undertaking the production of the highest grade of materials such as are manufactured in Great Britain, where for two centuries hereditary skill has been developing. The imports of manufactured or partly manufactured textiles during the fiscal year ended March, 1923, were \$132,300,000 or 43 p.c. of the gross value of the manufactured product during the calendar year 1922.

The woollen industry may be divided into four sections, according as the chief product of value is cloth, yarn, carpets and mats or miscellaneous goods. Of the 137 plants in operation during 1922, 64 were engaged chiefly in manufacturing cloth, 17 in making yarns, 21 in making carpets and rugs and 35 in making miscellaneous woollen goods. The total value of woollen goods manufactured by the four classes of mills during 1922 amounted to \$15,400,000, as compared with \$13,696,000 in 1921. The wool clip in Canada during 1922 was 18,532,392 lbs., valued at nearly \$3,244,000. The imports were 15,900,000 lbs., while the exports of domestic and foreign production were 8,100,000 lbs. Thus the apparent consumption of wool in 1922 was 26,289,000 lbs. The quantity of wool used in the knitting and woollen mills in 1922 was 18,136,534 lbs., worth \$5,468,968. The portion used by the knitting mills was 3,411,686 lbs. In addition to the imports of raw wool valued at \$3,883,000, the following intermediate woollen and worsted goods were imported during 1922 for further manufacture in Canadian mills (values given in parentheses): noils 955,704 lbs. (\$410,649), worsted tops 8,042,304 lbs. (\$3,865,164), wool waste 271,979 lbs. (\$110,123), woollen yarn 2,862,258 lbs. (\$3,444,407), woollen and worsted yarn 593,567 lbs. (\$562,578).

A sketch of the cotton industry, which is the most important of the textile group, is given under the heading of Typical Individual Manufactures, near the end of the section.

Wood and Paper.—An outstanding feature of the general expansion of Dominion commerce since the opening of the century has been the change in the industries associated with forestry. Lumber output fluctuated greatly, and actually decreased in recent years, as a result of the post-war depression in the usual markets. For example, in 1911 the output of manufactured lumber was 4,918,000,000 board feet, valued at \$75,831,000, as compared with 3,138,598,000 feet, valued at \$84,554,172, in 1922. In contrast with this is the progress in pulp and paper production. Forty years ago, there were in existence in Canada only 36 paper and five pulp mills. In 1922, there were 104 pulp and paper mills consuming more than 2,900,000 cords of pulpwood a year, and using hydro-electric energy to the extent of over

629,000 h.p. Production of wood pulp in 1917 was 1,464,308 tons, and in 1922 2,150,251 tons. Production of newsprint in 1917 was 689,847 tons, in 1921, 805,114 tons and in 1923, 1,263,000 tons. The rate of expansion is increasing, newsprint output in the first seven months of 1924 being 788,628 tons, compared with 724,841 tons in the corresponding period of the preceding year.

Iron and Steel.—The primary production of iron and steel in Canada has always been handicapped by the fact that nowhere in Canada are workable deposits of coal and iron ore to be found in juxtaposition. The nearest approach is in Nova Scotia, where there is an abundant supply of coal, and iron ore is obtained from Newfoundland. In central Canada, particularly in Ontario where the secondary iron and steel industries are chiefly located, there are at present neither supplies of coal nor high-grade deposits of iron ore. There is a possibility, however, that high-grade bodies of ore may be found and eventually the huge reserves now known to exist, though they require an unduly expensive smelting process, will become more valuable. From the manufacturing or fabricating standpoint, conditions are much more favourable, as these areas are abundantly supplied with both hydro-electric power and the metals such as nickel, chromium, molybdenum, etc., used in the manufacture of alloy steels, which form an increasingly large part of the output from modern steel works. Many plants now specialize in the large-scale production of special steels that depend for their successful utilization on the forging and heat-treating operations to which they are submitted.

Iron ore, which was imported largely from Newfoundland and the State of Minnesota, was ultimately treated in 1922 in 25 active furnaces and rolling mills, with a capital of \$78,687,321 and a gross production valued at \$35,427,053. There were, in the last year for which complete returns are available, no fewer than 1,040 establishments handling iron and steel products, aside from the numerous custom and repair shops engaged in re-conditioning iron and steel goods. The plants represented a capital of \$526,109,953 and had a gross output valued at \$331,584,903. A great deal of this output is represented by agricultural implements, for which there is a large domestic demand, by factory equipment and commercial and passenger motor vehicles. Output of automobiles has in recent years advanced at a rapid rate, the total production in 1922 being 101,007 cars of various classes. The production of 1923 was valued at \$97,369,814, an increase of 47 p.c. over 1918; 147,582 cars were produced.

Non-Ferrous Metals.—During 1922 there were 325 plants in Canada manufacturing products from metals other than iron and steel. The depression which was general throughout this group of industries in the preceding year continued during 1922, but toward the close of the year considerable improvement was noted. The aluminium, brass and copper products, lead, tin and zinc products and miscellaneous non-ferrous metal goods industries all showed slight increases over the previous year's production, but these were more than offset by the decrease in the electrical apparatus industry. The trend in employment showed a gradual improvement from a minimum of 12,762 wage earners on the rolls in January to the maximum for the year, attained in December, when 15,563 persons were employed. It is noteworthy that primary non-ferrous metals having a value on the world's markets of \$61,601,789 were produced from Canadian ores in 1922.

The aluminium industry in America dates from 1890, when the first successful process was worked out for the economical extraction of the metal from its ores.

The lightness and ductility of the metal, and the fact that it is not readily attacked by organic acids, air or water, together with its capacity for transmitting heat readily, soon brought it into favour as a material for kitchen utensils, and in this connection it has become well known. Large quantities of aluminium wire are now used for electric transmission lines and quantities are used in the manufacture of such apparatus as cream separator parts and other light machinery. Alloyed with magnesium, it possesses great tensile strength and finds extensive use. Aluminium bronzes, too, are widely used, and during the war great quantities were utilized in the manufacture of aeroplane engines and parts.

An encouraging outlook for the electrical apparatus group is indicated by recent employment returns. About 100 plants were engaged during 1922 in manufacturing generators, motors, batteries, telephone and telegraph equipment, copper wires and cables, electric lamps, meters, vacuum cleaners and electrical fixtures of all kinds, of a total value of \$41,208,000. The development of cheap electrical power has done much to popularize the use of electrical equipment, and the future demand for such apparatus will probably only be limited by the development of adequate power.

Another industry of some importance consisted of 83 firms engaged principally in the rolling, casting and manufacturing of brass and copper, the principal products being castings and machinery fittings, brass steam fittings, plates and sheets, rods and wire cloth. The selling value of the products was \$12,254,000, while the materials were worth \$5,106,000.

Non-metallic Minerals.—The gradual recovery in business conditions since 1921 is demonstrated by developments in the non-metallic mineral group. The recent expansion is accentuated by the growth of the petroleum-refining industry, which in 1922 produced more than half of the gross value of the entire production of the group. The 13 plants were located with a view to the economy of distribution, based on the greatest accessibility to the source of supply and the proximity of the markets. The refineries on the eastern and western coasts obtain their crude petroleum from South America, Mexico and the United States by tank steamers, bringing transportation costs to a minimum. Those situated in the central part of the Dominion are necessarily supplied by rail or pipeline. The more general use of the automobile has resulted in a continually expanding demand for gasoline and lubricating oils. The installation of oil-using equipment in industrial plants for generating power and in buildings of various kinds for heating purposes, has also accelerated the consumption of fuel oil.

The illuminating and fuel gas industry of Canada is chiefly centred in the larger cities, especially in parts of the country where manufacturing predominates. Coal gas and carburetted water gas are the most important products, but pintsch gas is made at many divisional points along the railways to meet the demand for lighting purposes on passenger trains. Acetylene gas is used in several prairie towns where the size of the municipality is not sufficient to warrant a gas plant. The facility with which by-products such as coke, tar and light oils are turned out in connection with large scale production, becomes an incentive to plant expansion, providing that a demand is assured by increasing population and industrial development in the vicinity. The burning of coke in the house furnace, the necessity of enriching the soils with available nitrates, the large increase of refrigerating operations, and the extended use of tar and tar products, have prompted the larger plants to increase their output. A few plants established in

smaller towns have ceased operations because of the competition of hydro-electric power, and where the scope of the operations did not encourage the installation of equipment for the recovery of by-products. Nevertheless, gas has its particular uses in the industrial field as well as for domestic purposes, and the statistics show that the industry is gaining ground annually. The coke industry of Canada is intimately connected with the iron and steel industry or dependent upon the demand of the non-ferrous smelting plants. Coke plants are maintained at Sydney, Hamilton and Sault Ste. Marie by the three principal iron and steel companies. In the western provinces, coke is made by the International Coal and Coke Company and the Crow's Nest Pass Company for sale chiefly to the Consolidated Mining and Smelting Company at Trail, B.C. The Granby Consolidated Mining, Smelting and Power Company manufactures coke at Anyox from Vancouver Island coal.

Other industries of a varied nature included in this group are the manufacture of asbestos products, the glass industry, the manufacture of abrasives, the preparation of ornamental and monumental stone and the bottling of aerated waters.

Chemicals.—Chemical industries, associated in many phases with the use of hydro-electric power, have recorded marked growth in Canada in recent years. Owing to Canada's great water power resources and in particular to the fact that many water powers are situated near tidal waters, there is an opportunity in this country for the expansion and establishment of new chemical industries. Electric refining, at first applied to copper only, is now being extended to all the metals, and the electric current is also employed in their extraction from the ores. The production of aluminium, of cyanamide, of new refractory materials and of graphite, have already created large industries. The fixation of nitrogen, with its many subsidiary industries, such as the manufacture of nitric acid, ammonium nitrate, explosives, etc., the reduction of magnesium and the production of innumerable chemical compounds, known at present only to the special trades requiring them, are now under commercial development. Noteworthy progress has been made in the output of calcium carbide, which can be readily marketed in countries dependent for their domestic manufacture on electrical energy derived from coal. Exports of this chemical, mainly to the United States, increased in value from \$161,000 in 1914 to \$2,261,000 in 1922. The development of cheap electrical power has contributed to the advance of industries using electro-thermic reactions, the intense heat which it is possible to develop by electrical means being an especially advantageous factor. The manufacture of chemicals during the war period represented enormous figures, and even in 1922 the output reached a total value of \$95,944,000. The products include commodities of such fundamental importance as fertilizers, calcium carbide, cyanamide, soap, paints, varnishes, wood distillates and so forth.

In certain well defined fields, the production of chemicals in Canada has attained world-trade importance; in many other lines, production in competition with imported chemicals is being carried on successfully, and latterly the manufacture of specific commodities for which there is a definite and continuous demand has proved an attractive field for small concerns. Several plants have been established, each of which specializes in the production of one or more of these necessities for the chemical trade. A study of the import statistics shows that many such opportunities still exist.

Financial and employment statistics for 1922 of each of the industries engaged in Canadian manufacturing are presented in Table 10.

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of

No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
	Canada	22,184	3,125,772,761	58,769	16,175	133,850,436
	TOTALS BY GROUPS.					
1	Vegetable products	4,355	371,361,682	8,742	2,243	19,325,777
2	Animal products	5,118	201,829,414	8,758	1,719	15,627,177
3	Textile products	1,709	268,065,238	5,547	2,166	15,313,325
4	Wood and paper products	6,983	761,188,396	13,713	3,762	33,190,715
5	Iron and its products	1,040	526,109,953	9,128	2,361	21,934,583
6	Non-ferrous metals and products	325	102,208,275	3,161	1,040	7,426,358
7	Non-metallic mineral products	781	161,063,081	1,961	531	4,085,427
8	Chemicals and allied products	469	118,025,483	2,964	917	7,455,919
9	Miscellaneous industries	1,404	615,921,239	4,735	1,436	9,491,155
	TOTALS BY PROVINCES.					
1	Prince Edward Island	351	2,035,829	175	26	152,832
2	Nova Scotia	1,140	97,709,273	1,206	355	2,183,393
3	New Brunswick	885	81,789,934	1,342	323	2,682,242
4	Quebec	7,367	932,186,153	16,552	3,713	37,743,338
5	Ontario	9,174	1,643,187,941	31,675	10,099	74,145,772
6	Manitoba	768	84,662,378	2,458	682	5,718,577
7	Saskatchewan	606	30,268,144	956	169	1,814,007
8	Alberta	652	51,283,982	1,465	321	3,053,175
9	British Columbia	1,238	200,192,904	2,876	487	6,350,165
10	Yukon	3	1,466,223	4	—	6,935
	GROUP 1.—VEGETABLE PRODUCTS.					
	Total	4,355	371,361,682	8,742	2,243	19,325,777
1	Biscuits and confectionery	372	35,788,855	1,532	502	3,443,585
2	Bread and other bakery products	1,865	25,351,612	1,254	299	2,119,976
3	Breweries	53	34,788,432	472	68	1,328,356
4	Cigars and cigarettes	108	31,482,001	906	230	2,050,240
5	Cocoa and chocolate	5	4,245,916	68	21	167,940
6	Coffee and spice mills	51	8,032,569	331	63	867,810
7	Distilleries	6	15,253,827	69	2	189,307
8	Flour and grist-mill products	434	65,928,521	1,155	265	2,476,809
9	Chopping mills	930	2,525,365	—	—	—
10	Fruit and vegetable canneries	229	18,633,839	368	116	707,602
11	Ice cream cones	10	637,697	14	3	21,276
12	Lined oil and oil cake	8	2,603,241	33	5	70,274
13	Macaroni and vermicelli	8	1,054,717	37	9	66,125
14	Malt mills	6	2,183,282	32	11	125,054
15	Maple syrup and sugar	5	238,019	17	4	38,425
16	Miscellaneous food products	47	5,389,742	181	57	380,200
17	Miscellaneous vegetable products	8	2,840,892	73	10	130,260
18	Pickles and vinegar	67	5,443,510	164	30	298,284
19	Rice mills	7	1,177,531	24	3	75,068
20	Rubber footwear	10	14,474,698	438	134	875,927
21	Rubber goods	52	36,177,799	948	231	1,976,810
22	Starch and glucose	9	5,674,843	48	32	120,402
23	Sugar refineries	7	36,691,472	271	46	773,366
24	Syrups	12	214,679	33	3	36,710
25	Tobacco, chewing and smoking	34	12,377,013	218	58	859,460
26	Wines and grape juice	12	1,939,831	56	11	116,460
	GROUP 2.—ANIMAL PRODUCTS.					
	Total	5,118	201,829,414	8,758	1,719	15,627,177
1	Animal hair goods	6	776,868	18	5	60,047
2	Belted and hose, leather	6	1,384,399	45	12	95,991
3	Boot and shoe findings	7	163,120	6	2	14,162
4	Boots and shoes, leather	181	29,881,921	1,343	393	3,607,463
5	Butter and cheese	3,072	30,448,088	3,259	452	3,493,793
6	Condensed milk	23	6,170,251	100	26	218,028
7	Fish-curing and packing	933	22,110,338	553	61	682,535
8	Fur dressing	12	535,996	34	7	89,284
9	Fur goods	222	9,420,391	451	135	983,165
10	Gloves and mittens, leather	47	3,096,725	171	37	388,810
11	Harness and saddlery	331	6,016,642	251	53	326,469
12	Human hair goods	3	22,548	1	—	2,100
13	Leather goods, n.e.s.	39	1,185,219	66	27	159,853
14	Leather, tanned, etc.	116	32,818,775	275	42	823,365

Materials and Value of Products of Canadian Manufacturing Industries, 1922.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		No.
Male.	Female.	Wages.	Male.	Female.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
295,244	92,445	363,263,118	353,953	108,629	497,113,554	1,290,527,079	1,159,316,687	2,439,843,766	1
35,031	16,301	45,099,145	44,073	18,544	64,424,922	330,589,052	206,946,749	537,535,801	1
30,277	8,841	34,306,502	39,035	10,560	49,933,679	264,078,631	107,473,382	371,552,013	2
31,658	48,677	60,911,030	37,205	50,843	76,224,361	153,060,593	155,493,510	308,560,103	3
92,551	8,436	98,894,199	106,264	12,198	132,084,014	206,682,820	283,131,962	489,814,782	4
60,722	2,377	68,670,574	69,850	4,738	90,695,157	168,282,265	163,302,638	334,584,903	5
11,245	2,776	14,025,271	14,400	3,816	21,451,629	30,861,895	30,993,708	70,855,693	6
11,518	578	14,639,353	13,479	1,109	18,724,789	63,377,262	46,260,102	109,637,454	7
7,624	2,577	9,314,584	10,588	3,494	16,770,503	47,039,926	48,904,259	95,944,185	8
13,718	1,882	17,402,454	18,453	3,318	26,893,609	16,548,635	107,810,197	124,358,832	9
636	282	472,368	811	308	625,200	2,021,443	1,783,594	4,405,037	1
9,780	2,239	9,380,430	10,988	2,594	11,569,823	37,828,288	28,713,454	66,541,692	2
9,987	2,547	9,308,598	11,329	2,870	12,080,840	38,058,624	26,555,515	64,614,137	3
88,636	36,028	105,258,899	105,208	39,741	141,002,237	337,168,035	358,475,190	696,413,225	4
150,329	45,216	194,516,958	182,004	55,315	208,662,730	676,725,112	597,699,690	1,274,424,804	5
8,228	2,421	12,172,487	10,680	3,103	17,891,064	54,611,248	30,798,360	94,417,698	6
2,698	303	3,738,138	3,654	472	5,562,145	22,450,651	16,232,777	38,672,828	7
4,239	974	5,896,730	5,704	1,207	8,949,995	30,306,395	21,203,402	51,509,887	8
20,685	2,433	24,390,613	23,561	2,920	30,740,778	80,749,935	68,246,533	148,996,468	9
6	-	21,897	10	-	28,832	-	118,082	118,082	10
35,931	16,301	45,099,145	44,073	18,544	64,424,922	330,589,052	206,946,749	537,535,801	1
4,412	5,823	7,252,529	5,944	6,325	10,706,114	20,742,382	24,006,880	44,749,262	1
7,917	985	9,740,643	9,171	1,284	11,860,619	24,708,136	23,137,675	47,845,811	2
2,284	33	2,574,884	2,756	101	3,903,240	8,125,364	17,750,366	25,875,730	3
2,020	3,229	3,375,579	2,926	3,459	5,425,870	12,232,348	33,834,349	46,066,697	4
295	246	465,850	363	267	633,790	1,411,663	1,570,482	3,982,145	5
370	322	583,949	701	415	1,451,759	10,596,112	4,362,171	14,868,283	6
234	8	277,280	303	10	466,587	1,546,376	1,750,169	3,296,545	7
4,121	119	4,606,499	5,276	384	7,083,398	125,312,923	25,924,748	151,237,674	8
1,097	-	406,971	1,097	-	406,971	11,374,155	4,269,629	15,643,784	9
1,533	1,645	1,872,211	1,901	1,761	2,579,813	10,832,758	7,203,661	18,036,419	10
60	27	69,268	74	30	90,544	138,411	246,846	385,257	11
211	2	224,191	244	7	303,465	4,319,555	1,239,072	5,558,627	12
105	88	132,722	142	97	198,847	738,501	579,536	1,318,037	13
129	2	243,798	161	13	369,752	1,372,301	1,044,385	2,416,684	14
19	4	22,304	36	8	60,720	302,028	204,490	506,518	15
348	153	535,965	529	219	916,165	3,059,601	3,187,661	6,247,262	16
159	25	200,577	232	35	330,840	2,126,757	973,744	3,100,498	17
420	227	544,803	584	257	843,087	2,679,760	2,779,606	5,459,366	18
45	-	41,240	69	3	116,308	1,287,754	242,332	1,530,086	19
2,518	1,535	2,912,638	2,956	1,669	3,788,565	4,928,825	9,781,005	14,709,830	20
3,984	581	4,856,518	4,932	812	6,833,328	14,366,255	17,411,242	31,777,497	21
442	29	422,754	490	61	543,156	2,242,282	1,629,695	3,871,977	22
2,331	97	2,492,606	2,602	143	3,265,972	56,493,042	14,328,840	70,822,782	23
20	1	30,368	62	4	67,078	323,705	208,988	532,693	24
780	1,110	1,130,256	998	1,168	1,089,716	7,916,590	8,643,673	16,560,243	25
68	10	72,742	124	21	180,209	500,568	635,507	1,130,075	26
30,277	8,841	34,306,502	39,035	10,560	49,933,679	264,078,631	107,473,382	371,552,013	1
82	10	90,776	100	24	150,823	243,271	303,426	636,897	1
98	-	95,656	143	12	191,647	500,546	457,561	958,107	2
46	17	64,441	52	19	78,603	328,423	158,992	487,415	3
7,666	4,302	10,237,400	9,009	4,695	13,844,803	22,259,765	23,244,093	45,503,858	4
4,744	150	5,093,176	8,003	602	8,586,969	74,714,681	20,755,020	95,470,701	5
518	57	546,372	618	83	704,360	6,055,348	3,442,997	9,501,345	6
2,813	1,099	2,358,780	3,366	1,160	3,041,315	15,578,633	9,086,856	25,595,499	7
380	49	363,954	444	56	453,238	181,904	646,783	828,587	8
996	1,276	2,015,465	1,447	1,411	2,998,630	7,524,513	5,299,738	12,824,251	9
483	722	710,209	654	759	1,099,019	1,608,687	1,767,041	3,375,728	10
972	71	916,479	1,223	124	1,242,948	2,697,882	1,983,739	4,676,621	11
5	12	9,401	6	12	11,501	12,809	20,382	33,191	12
203	250	356,845	289	277	516,698	595,053	766,083	1,361,136	13
3,397	140	3,479,553	3,672	182	4,302,918	15,754,951	9,643,287	25,398,238	14

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of
CON

No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 2.—ANIMAL PRODUCTS—concluded.						
15	Sausage, sausage casings.....	30	673,421	36	8	94,806
16	Slaughtering and meat-packing.....	81	56,372,372	2,118	438	4,516,231
17	Tallow and animal oils.....	7	202,251	8	5	18,122
18	All other industries.....	2	338,109	23	16	52,953
GROUP 3.—TEXTILES.						
Total.....						
		1,709	268,065,238	5,547	2,166	15,313,325
1	Awnings, tents and sails.....	52	1,724,550	97	27	192,721
2	Bags, cotton and jute.....	14	5,866,588	76	24	227,441
3	Batting.....	3	690,823	9	3	35,855
4	Carpets, mats and rugs.....	21	2,951,229	68	21	186,038
5	Clothing, men's factory.....	148	25,029,072	1,058	300	2,788,085
6	Clothing, women's factory.....	203	18,788,001	1,099	577	3,494,763
7	Cordage, rope and twine.....	9	7,556,143	61	10	191,992
8	Corsets.....	10	6,021,963	207	124	501,790
9	Cotton and wool waste.....	6	872,703	11	6	39,780
10	Cotton thread.....	7	3,342,060	57	25	151,329
11	Cotton yarn and cloth.....	35	76,099,980	416	92	1,234,857
12	Dyeing, cleaning and finishing.....	620	8,740,368			
13	Furnishing goods, men's.....	110	17,215,363	632	239	1,584,531
14	Hats and caps.....	71	4,477,593	250	70	579,734
15	Hosiery and knit goods.....	141	44,238,091	690	348	1,920,123
16	Linen goods.....	5	999,671	20	4	54,954
17	Oiled and waterproof clothing.....	16	1,592,580	35	13	84,600
18	Silk and silk goods.....	7	4,618,448	205	127	490,134
19	Textiles, miscellaneous.....	13	3,020,980	183	25	584,113
20	Woollen cloth.....	64	20,846,502	244	64	684,678
21	Woollen goods, miscellaneous.....	35	6,458,140	82	33	268,614
22	Woollen yarns.....	17	6,846,505	43	24	146,338
23	All other industries.....	2	67,395	4	1	10,446
GROUP 4.—WOOD AND PAPER PRODUCTS.						
Total.....						
		6,983	761,188,396	18,713	3,762	33,190,745
1	Baskets and crates.....	28	1,029,751	30	10	65,652
2	Blue prints.....	11	85,655	7	—	13,445
3	Bobbins and spools.....	4	694,793	15	—	55,647
4	Boot and shoe findings.....	7	197,903	17	1	30,229
5	Boxes and packing cases.....	93	5,955,582	199	10	402,920
6	Boxes, cigar.....	4	672,488	18	10	41,300
7	Boxes, paper.....	86	12,153,682	380	92	1,035,491
8	Box shooks.....	8	457,353	7	2	18,398
9	Canoes, row-boats and launches.....	99	1,655,151	47	11	102,604
10	Carriages, wagons and sleighs.....	591	11,148,178	240	44	470,178
11	Carriages and sleds (children's).....	6	467,930	25	8	55,487
12	Carriage and wagon materials.....	15	1,474,645	31	10	95,512
13	Clothes pins.....	3	196,937	6	—	9,506
14	Coffins and caskets.....	34	2,850,526	71	18	175,039
15	Cooperage.....	100	1,886,696	40	7	84,716
16	Cork products.....	8	942,224	19	9	53,586
17	Fly paper.....	3	94,830	4	1	9,300
18	Foundry patterns.....	34	177,514	14	3	23,772
19	Furniture, other than wickerware.....	157	28,892,791	787	236	1,861,552
20	Furniture upholstering and repairing.....	185	1,638,975	99	26	182,161
21	Handles, wooden.....	16	595,634	18	3	36,382
22	Ladders and other wooden products.....	3	439,645	8	5	28,354
23	Nails, screws and bolts.....	12	1,092,216	34	7	94,095
24	Lithographing and engraving.....	104	9,533,413	483	205	1,495,011
25	Paper goods, n.e.s.....	10	241,950	22	5	33,966
26	Paper patterns.....	6	854,145	27	34	71,456
27	Printing and book-binding.....	658	29,280,780	1,416	479	3,893,516
28	Printing and publishing.....	746	38,972,589	3,682	1,550	8,326,681
29	Pulp and paper.....	104	381,006,324	2,237	371	6,326,635
30	Pumps, wooden.....	32	1,519,691	52	18	84,000
31	Saw, lathe and shingle mills.....	2,922	162,835,219	1,944	190	3,956,981
32	Show cases and store fixtures.....	15	1,272,993	51	4	126,616
33	Spinning wheels.....	3	10,140	—	—	—
34	Stationery and envelopes.....	16	3,505,028	180	83	445,453
35	Stereotyping and electrotyping.....	12	621,276	41	17	119,200
36	Wall board, building paper, etc.....	13	5,901,306	179	39	486,606
37	Wall paper.....	41	2,499,834	128	27	403,783

Materials and Value of Products of Canadian Manufacturing Industries, 1922—
tinued.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		Σ
Male.	Female.	Wages.	Male.	Female.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
138	8	159,810	174	16	254,616	715,878	473,105	1,188,983	15
6,710	466	7,771,081	8,828	904	12,287,312	115,020,042	27,978,907	142,998,949	16
22	6	25,984	30	11	44,106	153,862	173,111	326,973	17
8	6	11,160	31	22	64,113	134,483	281,261	415,744	18
31,658	48,677	60,911,636	37,205	50,843	76,224,361	153,056,593	155,193,510	308,560,103	
178	224	329,085	275	251	521,806	879,451	791,681	1,671,135	1
313	505	635,998	389	529	863,439	8,701,562	2,208,662	10,970,224	2
62	8	62,521	71	11	98,376	254,609	260,638	515,247	3
574	239	792,047	642	260	978,085	1,468,725	2,001,677	3,470,402	4
3,813	4,607	7,863,109	4,871	4,907	10,651,194	18,481,429	16,653,966	35,135,395	5
2,555	8,485	9,342,695	3,654	9,062	12,837,458	21,840,782	19,812,732	41,653,514	6
776	236	882,573	837	255	1,074,565	2,934,410	2,846,721	5,781,161	7
95	1,307	684,531	302	1,431	1,246,321	2,634,153	2,650,833	5,281,986	8
73	15	66,385	84	21	106,174	201,666	429,890	1,331,562	9
148	511	514,747	205	536	666,076	2,011,236	2,340,105	4,357,341	10
10,140	8,355	12,529,766	10,565	8,447	13,764,623	34,694,760	37,479,908	72,174,728	11
3,341	4,149	6,538,832	3,341	4,149	6,538,832	1,733,273	12,916,453	14,649,720	12
958	5,139	3,920,168	1,590	5,378	5,594,699	12,643,864	10,648,962	23,292,716	13
862	804	1,652,368	1,112	964	2,232,162	3,517,048	4,167,492	7,624,450	14
3,699	9,442	8,652,353	4,380	9,790	10,572,476	22,543,671	22,419,583	44,963,251	15
42	187	146,863	62	101	201,817	260,441	382,689	642,530	16
82	95	133,475	117	108	218,075	442,462	407,800	840,331	17
281	854	745,906	486	981	1,236,130	2,267,259	2,407,955	4,675,205	18
188	220	295,799	371	245	670,912	2,392,018	1,314,558	3,706,575	19
2,464	2,163	3,559,881	2,708	2,217	4,244,550	7,039,177	8,371,366	15,410,537	20
462	363	683,531	544	396	952,345	2,027,729	2,363,739	4,331,468	21
536	680	869,017	679	704	1,015,555	3,324,348	2,525,996	5,850,344	22
7	9	9,296	11	10	19,742	72,506	54,767	127,273	23
92,551	8,436	98,894,199	106,264	12,198	132,654,914	206,682,826	283,131,962	489,814,782	
353	5	350,707	383	15	414,359	412,910	670,514	1,083,424	1
30	6	27,805	37	6	41,259	98,447	89,558	118,005	2
169	13	141,805	184	13	195,452	162,797	283,950	446,747	3
48	40	52,652	65	41	82,881	126,683	138,335	265,018	4
1,697	37	1,622,468	1,890	53	2,025,388	3,008,295	3,042,803	6,051,188	5
176	53	160,608	184	63	201,908	379,305	366,956	746,261	6
1,154	1,851	2,134,284	1,534	1,943	3,157,775	5,090,901	6,142,842	11,233,443	7
129	—	129,198	136	2	147,596	455,572	249,547	705,119	8
450	—	469,874	506	11	572,478	383,091	916,881	1,290,972	9
1,875	14	1,800,382	2,115	58	2,270,560	2,543,600	3,836,235	6,070,835	10
185	9	169,090	210	17	234,577	204,414	353,250	557,673	11
192	3	180,155	223	13	284,667	374,439	613,149	987,588	12
80	25	76,322	95	25	85,828	49,095	142,081	192,176	13
409	68	527,834	570	86	762,893	1,030,174	1,142,951	2,173,125	14
457	1	417,064	407	8	501,780	1,213,342	995,391	2,208,733	15
125	60	159,458	144	69	213,044	472,221	642,908	1,115,129	16
80	7	11,533	11	8	20,533	43,857	143,952	187,800	17
80	—	112,021	103	3	135,793	31,208	201,860	233,068	18
6,504	257	6,249,754	7,291	493	8,111,306	7,970,902	14,167,840	22,173,742	19
565	49	680,886	664	75	863,047	507,776	1,450,229	1,938,005	20
162	5	128,661	180	8	165,043	197,541	402,678	600,219	21
58	11	65,310	66	16	93,664	117,004	160,625	277,712	22
241	15	251,065	275	22	346,060	467,517	567,039	734,556	23
1,898	589	3,175,709	2,379	704	4,670,739	3,264,608	8,221,441	11,486,049	24
52	8	55,437	74	13	89,403	132,388	212,506	344,894	25
55	76	120,046	82	110	191,502	171,351	1,154,767	1,326,118	26
5,545	2,818	8,736,062	6,961	2,707	12,619,578	9,268,754	21,290,866	30,565,620	27
7,115	1,361	9,624,433	10,767	2,911	17,951,114	11,944,627	39,048,627	50,993,639	28
22,403	810	26,592,320	24,040	1,190	32,918,955	64,692,722	94,238,234	158,950,956	29
95	—	67,462	147	18	181,462	282,721	332,196	614,917	30
29,758	—	23,664,710	31,702	190	27,621,691	60,812,017	53,502,563	114,324,580	31
247	—	311,613	298	4	438,226	439,977	756,528	1,100,505	32
2	—	1,500	2	—	1,500	973	3,887	4,860	33
338	509	735,369	518	592	1,180,822	2,469,227	2,407,335	4,876,562	34
156	—	248,717	197	17	367,917	82,235	652,565	734,800	35
499	—	571,079	678	39	1,058,585	3,410,931	3,154,919	6,565,850	36
3271	76	351,919	453	103	755,702	823,860	1,660,923	2,484,783	37

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of con

No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 4.—WOOD AND PAPER PRODUCTS—concluded.						
38	Waxed and oiled paper.....	7	1,417,219	44	26	144,111
39	Wickerware.....	10	55,454	6	—	8,782
40	Woodenware.....	10	1,116,262	21	5	54,844
41	Wood preserving.....	5	2,018,085	10	2	20,545
42	Wood-working, sash and door factories.....	787	43,091,844	1,040	181	2,160,859
43	All other industries.....	12	627,745	26	7	101,424
GROUP 5.—IRON AND ITS PRODUCTS.						
	Total¹.....	1,010	526,109,933	9,128	2,361	21,934,383
1	Agricultural implements.....	73	92,566,264	1,077	271	2,282,890
2	Automobiles.....	14	47,761,964	1,007	334	2,810,397
3	Automobile supplies.....	62	16,545,641	310	87	797,227
4	Bicycles and motorcycles.....	6	1,076,701	56	1	91,925
5	Boilers and engines.....	43	10,370,771	247	62	632,262
6	Foundries and machine shop products.....	275	55,288,466	1,142	249	2,951,586
7	Hardware and tools.....	111	36,729,088	557	195	1,379,340
8	Heating and ventilating appliances.....	54	25,583,965	714	208	1,663,784
9	Industrial machinery and elevators.....	106	38,047,363	915	283	2,165,738
10	Iron and steel fabrication.....	47	8,471,681	354	57	843,778
11	Office and household machinery.....	29	12,384,360	387	118	897,313
12	Pig iron and ferro-alloys.....	4	16,413,455	30	4	88,991
13	Railway cars and parts.....	23	54,651,320	860	132	1,853,668
14	Sheet metal products.....	125	30,414,573	776	221	1,793,517
15	Steel and rolled products.....	21	62,273,866	373	40	900,725
16	Wire and wire goods.....	48	17,327,775	323	99	786,442
GROUP 6.—NON-FERROUS METALS AND PRODUCTS.						
	Total.....	325	402,208,275	3,161	1,040	7,426,358
1	Aluminium and its products.....	9	7,652,722	84	16	175,062
2	Brass and copper products.....	83	17,698,876	535	135	1,225,184
3	Electrical apparatus and supplies.....	101	62,436,282	2,025	650	4,624,396
4	Lead, tin and zinc products.....	19	5,213,867	122	49	260,705
5	Miscellaneous non-ferrous metal products.....	16	661,070	27	5	59,614
6	Precious metal products.....	81	6,804,140	227	113	610,445
7	Silverware and silver-plated ware.....	16	3,849,318	143	72	470,052
GROUP 7.—NON-METALLIC MINERAL PRODUCTS.						
	Total.....	781	161,063,081	1,961	531	4,085,427
1	Abrasive products.....	6	1,199,891	18	6	53,027
2	Abrasives, artificial.....	5	3,756,845	28	3	57,500
3	Acid and mineral waters.....	283	8,205,457	424	69	775,182
4	Asbestos and magnesite packing.....	7	666,770	15	6	32,927
5	Asbestos products.....	4	943,927	21	5	58,871
6	Cement products.....	124	1,553,160	71	8	81,965
7	Coke.....	6	20,363,785	38	—	99,585
8	Gas, illuminating and fuel.....	48	39,615,765	506	255	943,424
9	Glass plate, cut and ornamental.....	34	1,772,292	113	29	184,880
10	Glass, pressed and blown.....	11	13,281,035	132	39	385,072
11	Lubricating oils and greases.....	6	800,629	30	3	79,101
12	Metal-trimming.....	10	433,374	10	7	20,260
13	Petroleum-refining.....	13	61,253,400	298	64	753,834
14	Sand, lime and brick.....	11	1,224,808	22	2	54,418
15	Stone, ornamental and monumental.....	208	5,027,935	212	24	459,896
16	All other industries.....	5	971,005	23	11	45,168
GROUP 8.—CHEMICALS AND ALLIED PRODUCTS.						
	Total.....	469	118,025,483	2,964	917	7,455,919
1	Acids, alkalis and salts.....	21	30,811,922	316	45	650,918
2	Adhesives.....	17	2,108,688	44	10	115,637
3	Ammunition.....	3	3,202,561	43	2	84,786
4	Baking powder.....	6	1,037,770	94	72	218,776
5	Boiler compound.....	5	175,122	13	5	44,702
6	Cellulose products.....	10	1,746,117	34	10	80,162
7	Chemical products, n.e.s.....	6	123,514	12	2	22,821

¹ A revision, by which five establishments were added to the "railway cars and parts" industry and other changes effected, accounts for the difference between the figures given here and those in the report "Iron and Steel and Their Products in Canada, 1921 and 1922."

Materials and Value of Products of Canadian Manufacturing Industries, 1922—
tinued.

Wage Earners.			Total Employees.			Cost of	Value of Products.		No.
Male.	Fe- male.	Wages.	Male.	Fe- male.	Salaries and Wages.	Materials.	Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
143	50	220,233	187	76	304,344	1,221,095	882,211	2,103,306	28
35	5	38,092	41	5	46,874	31,735	70,097	110,832	39
370	41	327,232	391	46	382,070	422,011	713,335	1,135,346	10
167	-	125,806	177	2	146,351	1,737,605	746,931	2,484,530	41
7,987	48	7,870,153	9,027	220	10,031,012	20,116,621	17,310,046	37,426,667	42
96	7	107,471	122	14	208,895	395,096	305,312	701,008	43
60,772	2,377	68,676,574	69,840	4,738	90,605,157	168,282,265	163,302,638	331,584,903	
4,810	63	4,892,057	5,887	334	7,084,947	7,967,557	10,272,614	18,249,381	1
5,827	217	8,463,246	6,834	551	11,273,643	54,408,719	27,547,710	81,856,420	2
2,598	178	3,499,327	2,908	265	4,296,554	10,674,176	8,333,648	19,067,824	3
342	23	298,380	368	24	390,305	475,555	484,720	959,295	4
1,306	1	1,413,450	1,553	63	2,045,712	2,036,213	2,868,400	4,904,613	5
9,080	214	9,552,003	10,222	463	12,503,589	13,960,752	22,546,982	36,507,734	6
4,000	580	4,155,089	4,557	775	5,534,420	4,884,397	10,084,102	14,978,409	7
4,802	75	5,216,523	5,516	283	6,880,307	5,856,365	12,054,163	17,910,528	8
3,990	38	4,351,019	4,905	321	6,510,757	4,020,072	11,398,292	15,418,364	9
1,428	33	1,680,438	1,782	96	2,513,216	3,089,721	4,037,671	7,127,392	10
1,529	108	1,524,863	1,916	226	2,422,176	2,131,337	4,878,729	7,010,066	11
521	-	685,593	551	4	769,584	7,410,250	2,248,081	9,628,331	12
8,295	10	9,034,704	9,155	142	10,888,372	11,180,198	15,130,578	26,310,776	13
4,790	647	5,312,068	5,566	868	7,105,585	16,128,924	14,080,661	30,269,584	14
4,913	5	6,154,977	5,286	45	7,055,702	14,945,039	10,853,684	25,798,723	15
2,521	185	2,537,837	2,844	284	3,324,279	9,112,850	6,593,604	15,616,454	16
11,245	2,776	14,025,271	14,406	3,816	21,451,629	30,861,895	39,993,798	70,835,693	
5,539	50	642,262	643	66	817,864	1,097,488	1,854,437	3,851,925	1
2,491	296	2,851,341	3,026	431	4,079,825	5,106,224	7,147,467	12,253,631	2
5,903	1,962	7,538,211	8,018	2,612	12,162,607	17,546,839	23,661,529	41,208,508	3
351	12	467,737	473	61	728,692	2,048,431	1,070,014	3,118,445	4
91	46	138,604	118	96	198,218	256,797	379,770	607,567	5
1,131	300	1,518,688	1,358	419	2,129,133	2,926,455	3,506,501	6,432,956	6
629	104	865,428	772	176	1,335,480	999,661	2,383,080	3,382,741	7
11,518	578	14,639,353	13,479	1,169	18,724,790	63,377,262	46,260,192	109,637,454	
65	3	73,597	83	71	126,624	98,014	186,657	284,071	1
250	1	286,863	278	253	341,372	758,944	786,386	1,545,317	2
980	63	1,028,182	1,404	132	1,803,364	2,705,957	3,888,552	6,594,509	3
36	7	41,380	51	13	74,313	169,066	121,406	290,532	4
65	1	55,875	86	6	114,746	102,683	221,945	324,628	5
312	-	290,303	383	8	372,268	533,335	747,609	1,281,004	6
495	-	617,028	533	-	716,503	6,130,628	1,205,999	7,336,627	7
2,343	2	3,031,271	2,849	257	3,974,705	8,580,208	10,508,962	19,080,170	8
355	54	436,450	468	83	621,345	770,255	814,707	1,584,962	9
2,144	126	2,363,437	2,276	165	2,748,509	2,516,836	4,740,790	7,257,626	10
17	6	22,207	47	0	101,398	283,311	256,431	539,742	11
19	288	68,927	29	295	80,196	180,257	126,703	300,960	12
3,114	21	4,637,451	3,412	85	5,391,285	38,129,880	18,365,941	56,495,821	13
200	-	233,287	222	27	287,705	291,903	566,904	858,807	14
1,033	3	1,349,548	1,245	27	1,800,414	1,844,548	3,123,930	4,968,487	15
80	3	103,445	113	14	148,613	281,450	603,741	885,191	16
7,623	2,577	9,314,584	10,588	3,494	16,770,503	47,039,926	48,904,259	95,944,185	
1,463	56	1,786,926	1,779	101	2,437,844	5,885,803	9,085,195	14,970,998	1
462	11	236,487	506	21	352,124	643,917	893,732	1,537,649	2
377	169	502,644	420	171	587,630	1,329,824	1,378,518	2,708,342	3
137	108	202,814	231	178	421,590	869,608	1,843,286	2,712,894	4
11	-	10,774	24	5	55,476	53,368	159,855	213,223	5
198	91	250,237	232	101	330,399	915,571	878,824	1,794,395	6
71	2	9,405	19	4	32,286	72,646	69,791	142,437	7

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of
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No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 8.—CHEMICALS AND ALLIED PRODUCTS—concluded.						
8	Coal tar distillation.....	3	1,122,029	10	1	24,118
9	Disinfectants.....	5	115,048	7	6	22,852
10	Dyes and colours.....	6	409,780	22	6	67,979
11	Explosives.....	9	6,826,543	80	5	154,336
12	Fertilizer.....	17	3,035,467	77	17	148,214
13	Fireworks.....	4	147,417	11	2	38,884
14	Flavouring extracts.....	19	1,233,969	113	41	240,051
15	Gases, compressed.....	25	4,351,232	139	40	300,071
16	Inks, printing.....	12	1,521,956	68	16	294,547
17	Inks, writing.....	8	215,217	15	11	40,672
18	Insecticides.....	12	450,721	21	3	42,951
19	Matches.....	4	2,168,775	78	4	86,367
20	Medicinal and pharmaceutical preparations.....	109	13,095,461	536	274	1,517,488
21	Paints and varnishes.....	53	21,078,706	638	193	1,899,135
22	Polishes and dressings.....	31	1,521,563	122	30	251,245
23	Soaps.....	32	13,881,099	342	83	776,877
24	Sweeping compounds.....	4	74,779	12	1	34,915
25	Toilet preparations.....	23	1,625,485	61	31	174,602
26	Washing compounds.....	13	274,000	21	4	75,966
27	Wood distillation.....	11	3,241,389	33	3	45,708
28	All other industries.....	1	24,403	2	—	1,039
GROUP 9.—MISCELLANEOUS INDUSTRIES.						
Total.....		1,404	615,921,239	4,735	1,436	9,491,155
1	Advertising and other novelties.....	8	84,290	10	6	25,313
2	Artificial feathers and flowers.....	6	303,624	25	7	52,608
3	Brooms, brushes and mops.....	71	3,546,516	183	68	445,758
4	Buttons.....	21	1,363,340	50	18	141,974
5	Candles and tapers.....	7	99,691	7	—	14,000
6	Electric light and power.....	905	568,068,752	3,456	908	6,382,340
7	Fountain pens.....	3	1,528,932	31	8	55,200
8	Ice, artificial.....	23	2,244,904	44	14	103,119
9	Jewel cases and silverware cabinets.....	6	185,845	16	1	23,289
10	Mattresses and springs.....	48	4,789,332	181	35	461,548
11	Musical instruments.....	68	13,776,790	251	84	668,493
12	Pipes, tobacco.....	4	55,772	3	—	6,243
13	Refrigerators.....	13	2,307,219	59	20	142,826
14	Regalia and society emblems.....	9	170,066	13	9	32,123
15	Scientific and professional equipment.....	24	9,790,138	169	90	360,012
16	Signs.....	110	1,660,530	—	—	—
17	Sporting and athletic goods.....	30	2,474,784	61	25	118,380
18	Statuary and art goods.....	16	304,314	25	8	54,645
19	Trunks and valises.....	14	1,958,458	65	27	181,081
20	Typewriters and supplies.....	5	409,969	29	5	73,952
21	Umbrellas and parasols.....	7	392,101	30	5	75,962
22	All other industries.....	6	396,872	27	10	72,219

4.—Capital Employed.

In a retrospective study of capital employed in Canadian manufactures since 1900, the remarkable increase denotes rapid growth in the industrial operations. From 1900 to 1905, the capital increased from \$446,900,000 to \$833,900,000, and advanced to \$1,958,700,000 in 1915. During this period returns were received from establishments with five hands and over, and while the rise of wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital used during 1922 in all establishments, irrespective of the number of employees, was \$3,125,773,000, compared with \$3,052,818,000 in 1921, an increase of 2.4 p.c. Price levels were lower in 1922 than in 1921, but it should be remembered that a considerable part of the industrial capital of the country was inactive in 1921 and was consequently not included in the statistics collected.

Materials and Value of Products of Canadian Manufacturing Industries, 1922—cluded.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		No.
Male.	Female.	Wages.	Male.	Female.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
51	—	53,503	61	1	77,621	269,146	523,777	792,023	8
13	3	9,553	20	9	32,405	44,195	49,240	93,435	9
20	24	30,186	42	30	98,165	227,581	303,888	531,469	10
409	4	498,059	489	9	652,395	6,076,366	1,886,889	7,963,225	11
248	2	200,663	325	19	348,879	1,098,230	883,188	1,981,418	12
21	13	28,292	32	15	67,174	68,535	124,558	193,093	13
49	06	77,072	162	107	317,123	832,732	597,361	1,430,093	14
130	—	179,446	269	40	479,547	280,606	1,627,603	1,908,269	15
179	—	197,474	247	16	492,021	703,942	1,192,663	1,896,605	16
39	24	37,861	45	35	78,533	138,764	189,168	327,932	17
71	5	47,302	92	8	90,253	293,911	242,363	536,274	18
462	442	637,311	540	446	723,078	1,419,015	1,504,983	2,923,998	19
645	846	1,235,192	1,181	1,120	2,752,680	4,145,298	7,387,238	11,532,536	20
1,421	190	1,522,082	2,059	392	3,421,217	11,354,903	8,875,642	20,230,543	21
80	58	119,594	202	88	379,930	736,517	933,770	1,670,293	22
774	249	975,539	1,116	332	1,752,416	7,534,475	5,597,815	13,132,290	23
7	—	8,094	19	1	43,009	42,087	65,904	107,991	24
50	190	164,621	120	221	339,223	945,534	1,409,753	2,355,287	25
43	17	47,711	64	21	128,677	124,625	229,703	354,328	26
255	—	242,104	288	3	287,812	932,276	960,645	1,892,911	27
2	—	3,378	4	—	4,417	391	8,941	9,332	28
13,718	1,882	17,492,454	18,453	3,318	26,893,609	16,548,635	107,810,197	121,558,832	
19	42	44,116	20	48	69,429	91,224	112,076	205,300	1
15	139	96,271	40	146	148,879	142,060	274,233	419,293	2
710	223	708,949	893	291	1,154,707	1,654,235	2,255,135	3,909,370	3
209	247	356,182	259	263	498,156	360,643	833,597	1,203,240	4
18	13	16,674	25	13	30,674	38,084	69,352	107,436	5
6,230	—	8,112,910	9,086	998	14,405,250	—	82,328,866	82,328,866	6
131	73	150,090	162	81	205,380	230,453	621,856	952,309	7
224	—	312,463	268	14	415,582	53,827	1,004,194	1,058,021	8
32	28	56,566	48	29	79,855	38,839	114,627	154,466	9
928	146	1,103,610	1,109	181	1,565,158	3,350,301	3,512,182	6,871,483	10
2,444	181	2,750,327	2,695	265	3,418,820	4,238,370	5,681,001	9,919,371	11
27	1	22,243	30	1	28,486	42,161	51,836	93,997	12
424	3	443,222	483	23	586,048	1,038,350	1,329,914	2,368,264	13
19	38	49,496	32	47	81,619	105,551	139,792	245,343	14
491	409	999,205	660	490	1,359,247	2,095,095	3,661,973	5,757,068	15
700	—	939,167	700	—	939,167	351,832	2,081,812	2,433,644	16
408	110	460,333	469	135	578,713	861,981	1,454,676	2,316,757	17
126	44	152,312	151	52	206,957	162,048	310,154	472,172	18
454	82	424,991	519	109	606,072	854,315	1,153,788	2,008,103	19
30	17	51,338	59	22	125,290	238,073	215,929	454,002	20
27	73	72,209	57	78	148,171	311,466	281,690	593,126	21
52	13	79,780	70	23	151,999	170,657	320,544	491,201	22

The provincial distribution of the manufactures of Canada is illustrated by the capital invested in the operation of the plants. Capital employed in Ontario during 1920 was 49.5 p.c. of the total, increasing to 51.1 p.c. in 1921 and 52.6 p.c. in 1922. The proportion of the total capital employed in the plants of Quebec was 30 p.c. in 1920, 30.4 p.c. in 1921 and 29.8 p.c. in 1922. British Columbia held third place, with a capital of 6.5 p.c. of the total in 1922, while Nova Scotia, New Brunswick and Manitoba followed in the order named, with proportions of between 2 p.c. and 4 p.c. each.

In a survey of the industrial groups in which the capital of the country is invested, it appears that the wood and paper group led in 1922, with an investment of 24.3 p.c. of the total. The iron and steel group was third, with 16.8 p.c. In 1921, the wood and paper group employed 25.4 p.c. and the iron and steel group 18.8 p.c. of the total capital. The proportion of the capital employed by the mis-

cellaneous group, including the electric power industry, increased from 17.4 p.c. in 1921 to 19.7 p.c. in 1922.

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1921, lands, buildings and machinery constituted 60 p.c. of the total capital, while in 1922 the proportion increased to 63 p.c. Fixed assets increased from \$1,831,000,000 to \$1,968,000,000, while quick assets, including the materials on hand, stock in process, cash and sundries, declined from \$1,199,000,000 to \$1,158,000,000. These results indicate that the value of real property utilized in manufactures continued to increase, while writing down of inventories and a decline of working capital were characteristic of the period.

11.—Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces, 1915, 1917-1922.

Provinces.	1915.	1917.	1918.	1919.	1920.	1921.	1922.
Prince Edward Island.....	.1	.1	.1	.1	.1	.1	.1
Nova Scotia.....	6.4	4.9	4.4	4.1	4.3	3.1	3.1
New Brunswick.....	2.3	2.4	2.4	2.8	3.2	3.2	2.6
Quebec.....	27.5	29.6	28.3	29.0	30.0	30.4	29.8
Ontario.....	48.0	47.9	49.7	49.0	49.5	51.1	52.6
Manitoba.....	4.8	3.6	3.5	3.4	3.4	2.9	2.7
Saskatchewan.....	.8	1.2	1.3	1.1	1.2	1.0	1.0
Alberta.....	2.1	2.3	2.0	2.1	1.8	1.6	1.6
British Columbia.....	8.0	7.9	8.1	8.3	6.5	6.6	6.5
Yukon.....	—	.1	.2	.1	—	—	—
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

12.—Capital Employed in the Manufacturing Industries of Canada, by Industrial Groups, 1921 and 1922.

Industrial Groups.	1921.		1922.	
	Amount.	Percentage.	Amount.	Percentage.
	\$		\$	
Vegetable products.....	360,945,194	11.8	371,361,682	11.9
Animal products.....	200,697,527	6.0	201,829,414	6.4
Textile products.....	260,158,327	8.5	268,065,238	8.6
Wood and paper.....	775,207,859	25.4	781,188,396	24.3
Iron and its products.....	575,680,424	18.8	526,109,953	16.8
Non-ferrous metals.....	104,079,400	3.4	102,208,275	3.3
Non-metallic minerals.....	126,989,134	4.2	161,063,081	5.2
Chemicals and allied products.....	118,382,642	3.9	118,025,483	3.8
Miscellaneous industries.....	530,677,506	17.4	615,921,239	19.7
Total for Canada.....	3,052,818,163	100.0	3,125,772,761	100.0

NOTE.—A revision designed to place the statistics of 1921 on a comparable basis with those of 1922, accounts for the difference between the figures as previously published and as given here in Tables 11, 12 and 13.

13.—Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1921.

(A) By Provinces.

Description.	Number of establishments.	Fixed Capital.		Working Capital.		Total capital.
		Land, buildings and fixtures.	Machinery and tools.	Materials on hand, stocks in process and miscellaneous supplies.	Cash, trading and operating accounts and bills receivable.	
		\$	\$	\$	\$	\$
Canada	21,872	1,013,661,016	817,632,624	675,460,778	523,640,911	3,052,818,103
Prince Edward Island.....	339	616,865	820,766	453,449	333,702	2,308,216
Nova Scotia.....	1,186	41,733,785	25,200,210	15,672,556	12,917,586	95,874,749
New Brunswick.....	855	35,474,093	25,668,251	26,485,617	11,493,571	98,856,554
Quebec.....	7,126	323,216,709	238,132,901	203,079,517	158,092,503	927,111,817
Ontario.....	9,112	475,796,578	415,236,571	367,417,360	288,566,491	1,561,190,925
Manitoba.....	759	29,307,509	26,982,769	16,505,614	13,042,012	87,498,856
Saskatchewan.....	592	9,732,409	10,378,637	4,960,269	3,747,778	29,271,567
Alberta.....	680	17,680,574	15,486,190	7,768,000	8,783,797	50,306,658
British Columbia and Yukon.....	1,214	80,102,912	60,326,329	33,118,396	25,853,381	200,392,761

(B) By Industrial Groups.

Vegetable products.....	3,940	122,007,515	78,557,907	91,050,599	66,736,618	360,945,194
Animal products.....	5,051	56,455,522	32,902,430	63,591,106	47,748,460	200,697,527
Textile products.....	1,027	55,700,983	57,810,132	73,335,844	65,469,713	260,158,327
Wood and paper.....	7,152	269,603,940	202,893,117	188,346,020	103,621,022	775,307,859
Iron and its products.....	1,138	154,414,781	154,590,441	146,873,123	109,892,079	555,680,424
Non-ferrous metals.....	344	23,884,191	23,987,862	30,592,485	25,614,952	104,079,490
Non-metallic minerals.....	764	77,876,836	12,602,365	27,469,201	8,089,732	126,988,134
Chemicals and allied products.....	408	47,661,936	17,484,515	30,515,002	22,721,169	118,382,642
Miscellaneous industries.....	1,382	205,965,721	236,743,765	23,707,398	62,955,157	530,677,506

14.—Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1922.

(A) By Provinces.

Description.	Number of establishments.	Fixed Capital.		Working Capital.		Total capital.
		Land, buildings and fixtures.	Machinery and tools.	Materials on hand, stocks in process and miscellaneous supplies.	Cash, trading and operating accounts and bills receivable.	
		\$	\$	\$	\$	\$
Canada	22,181	1,156,973,691	810,672,427	623,723,342	534,403,301	3,125,772,761
Prince Edward Island.....	351	752,334	948,295	522,269	712,931	2,935,829
Nova Scotia.....	1,140	43,194,810	28,143,131	15,159,508	11,301,824	97,799,273
New Brunswick.....	885	28,937,678	10,627,761	21,467,898	14,756,597	81,789,934
Quebec.....	7,367	366,499,553	229,828,634	177,183,329	158,674,017	932,186,153
Ontario.....	9,174	582,086,073	420,767,463	343,453,806	296,889,599	1,643,187,941
Manitoba.....	768	27,535,947	29,053,502	14,516,992	13,556,937	84,662,378
Saskatchewan.....	600	10,841,143	10,687,092	5,458,891	3,281,048	30,268,144
Alberta.....	652	18,979,880	16,761,122	8,397,009	7,235,971	51,280,982
British Columbia and Yukon.....	1,231	78,146,273	57,855,407	37,653,070	28,003,777	201,659,127

(B) By Industrial Groups.

Vegetable products.....	4,355	124,062,994	84,162,512	90,074,693	72,501,483	371,361,682
Animal products.....	5,118	60,471,822	35,792,043	62,516,548	43,139,001	201,829,414
Textile products.....	1,709	60,432,077	66,404,740	73,650,835	67,571,586	268,065,238
Wood and paper.....	6,983	321,735,284	160,650,509	163,018,464	115,784,070	761,188,396
Iron and its products.....	1,040	134,443,377	154,742,535	125,371,316	111,552,725	526,109,953
Non-ferrous metals.....	325	26,973,740	24,689,187	28,213,775	22,331,573	102,298,275
Non-metallic minerals.....	781	103,982,988	16,602,502	29,505,378	10,972,253	161,063,081
Chemicals and allied products.....	409	46,896,159	17,563,321	27,065,509	25,060,494	118,025,483
Miscellaneous industries.....	1,404	277,375,250	250,155,018	23,800,864	64,590,107	615,921,239

5.—Employment.

The total number of persons engaged in the manufacturing industries of Canada in 1922 was 462,573, as compared with 439,889 in 1921 and 583,112 in 1920. The employees consisted in 1922 of 74,884 persons on salaries and 387,689 wage earners. This latter figure, representing the average number of wage earners employed during the entire year, was ascertained by dividing twelve into the sum of the numbers on the payrolls on the 15th of each month.

A comparison of the average number of wage earners is an excellent measure of industrial activity. In Table 15 index numbers, based on data for 1917 equalling 100, are given to show the variation in employment. The index numbers of the volume of products, obtained by dividing the index numbers of the gross value of production by the index numbers of wholesale prices, both series being referred to 1917 as a base, are also inserted for comparative purposes. Aside from the considerable drop in 1921, the indices of employment indicate less violent change than those of production. As compared with the record of the preceding year, the index of employment in 1922 increased 4 points, while the index of the volume of production increased 7.5 points. In 1922 the number of wage earners was 27 p.c. less than in 1917 and production was 13.7 p.c. less.

15.—Wage Earners in Manufacturing Industries, 1917-1922.

Years.	Average Number of Wage Earners. ¹	Index Numbers.	
		Average Number of Wage Earners.	Volume of Manufactured Products.
1917.....	531,466	100.0	100.0
1918.....	517,704	97.4	85.7
1919.....	498,557	94.0	81.5
1920.....	502,627	94.6	81.0
1921.....	366,604	69.0	78.8
1922.....	387,689	73.0	86.3

¹Exclusive of outside piece-workers.

Employment by Provinces.—The concentration of manufacturing establishments in the provinces of Ontario and Quebec is shown by the fact that in 1922 the employees in the former province were 58.9 p.c. and in the latter 31.3 p.c. of the total. The proportions in the other provinces were 5.7 p.c. in British Columbia, 3 p.c. in Manitoba and 2.9 p.c. in Nova Scotia, the employment in the remaining provinces ranging from 0.24 p.c. to slightly more than 3 p.c. The average employment throughout Canada of workers of all ranks, exclusive of outside piece-workers, was 439,889 in 1921, which increased by 5.0 p.c. to 462,573 in 1922.

Sex Distribution of Employees.—In Ontario the ratio of the number of female wage earners employed in factories to the number of males during 1915 was 22.7 p.c., while in 1922 the ratio increased to 30.4 p.c. In Quebec the ratio was 27.1 p.c. in 1915 and 37.6 p.c. in 1922. The more rapid increase of female employment was largely due to the special conditions arising out of the war. The employment of women was, however, largely confined to a few trades, the expansion of the textile and clothing industries being a chief cause of the increase in female employment. In addition, the preparation of food, book-binding and other light factory work were specifically regarded as women's trades. From 1921 to 1922, the male wage earners of Canada increased 3.5 p.c., while the female workers increased 11.1 p.c.

Earnings of Employees.—The total amount paid to the employees in industrial plants during 1922 was \$497,100,000, as compared with \$484,600,000 in 1917. The wage payments in 1922 were \$363,300,000, while the salaried employees received a remuneration of \$133,900,000. The average yearly wage of the wage earner was \$937 in 1922 as compared with \$748 in 1917, an increase of 25.2 p.c. in average earnings. When the index number representing the average yearly wages with 1917 as a base is divided by the index number of the cost of living with the same base, it is seen that real wages advanced by about 12 p.c. in the five-year interval. The details of the computation are given in Table 16.

16.—Average Yearly Earnings and Real Wages of Wage Earners in Manufacturing Industries, 1917-1922.

Years.	Amount of Wages paid.	Average Number of Wage Earners.	Average Yearly Earnings.	Index Numbers.		
				Average Yearly Earnings.	Retail Prices.	Real value of Average Yearly Earnings.
	\$		\$			
1917.....	397,738,544	531,466	748	100.0	100.0	100.0
1918.....	446,275,099	517,764	862	112.7	113.9	98.9
1919.....	461,431,773	499,557	924	123.5	125.5	98.4
1920.....	552,010,143	502,627	1,098	146.8	143.1	102.6
1921.....	365,276,140	366,694	996	133.1	120.4	110.5
1922.....	363,263,118	387,680	937	125.2	111.7	112.1

Summary statistics of the number of salaried and wage-earning employees of manufacturing industries, with the amount of salaries and wages paid in 1921 and 1922, are given by provinces in Tables 17 and 18, the statistics for 1921 having been revised for the purpose of comparability.

17.—Male and Female Employees on Salaries and Wages, by Provinces and Groups of Industries, 1921.

Provinces and Groups.	Employees on Salaries.		Salaries.	Employees on Wages.		Wages.
	Males.	Females.		Males.	Females.	
	No.	No.	\$	No.	No.	\$
(A) PROVINCES.						
Prince Edward Island.....	150	11	120,861	519	213	401,627
Nova Scotia.....	1,268	356	2,493,529	9,336	1,930	9,865,668
New Brunswick.....	1,213	289	2,426,954	8,425	2,325	8,104,071
Quebec.....	15,763	3,589	36,865,461	89,087	33,020	107,566,941
Ontario.....	31,583	9,621	74,002,551	143,008	38,784	192,669,377
Manitoba.....	2,531	671	5,965,141	8,538	2,342	13,098,578
Saskatchewan.....	893	151	1,703,873	2,880	272	3,875,241
Alberta.....	1,427	288	3,036,752	4,373	1,506	6,369,504
British Columbia and Yukon.....	2,038	453	6,530,482	18,182	1,974	23,325,130
Total.....	57,766	15,429	133,154,604	284,328	82,366	365,276,146
(B) INDUSTRIAL GROUPS.						
Vegetable products.....	8,258	2,155	18,509,048	35,193	15,555	44,621,845
Animal products.....	8,744	1,610	15,722,980	27,130	8,233	32,401,687
Textile products.....	5,445	2,068	15,425,563	28,090	40,776	55,895,720
Wood and paper.....	13,104	3,467	31,076,579	86,752	7,999	99,113,282
Iron and its products.....	9,650	2,193	22,965,454	62,771	2,406	75,398,529
Non-ferrous metals.....	3,010	1,091	7,529,546	11,062	2,773	15,165,938
Non-metallic minerals.....	1,733	494	3,858,940	13,143	612	15,942,151
Chemicals and allied products.....	2,826	902	7,084,639	6,619	2,224	9,107,818
Miscellaneous industries.....	4,096	1,449	10,084,555	13,550	1,728	17,629,176

18.—Male and Female Employees on Salaries and Wages, by Provinces and Groups of Industries, 1922.

Provinces and Groups.	Employees on Salaries.		Salaries.	Employees on Wages.		Wages.
	Male.	Female.		Male.	Female.	
	No.	No.		No.	No.	
(A) PROVINCES.						
Prince Edward Island.....	175	26	152,832	636	282	472,368
Nova Scotia.....	1,206	355	2,183,393	9,780	2,239	9,386,430
New Brunswick.....	1,342	323	2,682,242	9,987	2,547	9,398,598
Quebec.....	16,552	3,713	37,743,338	88,656	36,028	103,258,899
Ontario.....	31,075	10,099	74,145,772	150,329	45,216	194,516,958
Manitoba.....	2,458	682	5,718,577	8,228	2,421	12,172,487
Saskatchewan.....	956	169	1,814,007	2,698	303	3,748,138
Alberta.....	1,465	321	3,053,175	4,239	976	5,896,730
British Columbia.....	2,876	487	6,350,165	20,685	2,433	24,390,613
Yukon.....	4	6,935	6	21,897
Total.....	58,709	16,175	133,850,436	295,244	92,445	363,263,118
(B) INDUSTRIAL GROUPS.						
Vegetable products.....	8,742	2,243	19,325,777	35,931	16,301	45,099,145
Animal products.....	8,758	1,719	15,627,177	30,277	8,841	34,306,502
Textile products.....	5,547	2,166	15,313,325	31,658	48,677	60,911,036
Wood and paper.....	13,713	3,762	33,190,715	92,551	8,436	98,894,199
Iron and its products.....	9,128	2,361	21,934,583	60,722	2,377	68,670,574
Non-ferrous metals.....	3,161	1,040	7,426,358	11,245	2,776	14,025,271
Non-metallic minerals.....	1,961	531	4,085,497	11,518	578	14,639,353
Chemicals and allied products.....	2,964	917	7,455,919	7,624	2,577	9,314,584
Miscellaneous industries.....	4,735	1,436	9,491,155	13,718	1,882	17,402,454

Days in Operation and Hours Worked.—Assuming that the year consisted of 304 working days, each plant on the average operated full time 220.6 days, and worked part time 10.4 days. The average day was 8.7 hours and the average week was 49.7 hours. The time in operation and the average number of hours worked are shown by provinces and industrial groups in Table 19. The number of piece-workers and their earnings are given in Table 20.

19.—Number of Days in Operation and of Hours Worked per Shift and per Week in the Manufactures of Canada, 1922.

Provinces and Groups.	Number of Establishments.	Time in Operation—Number of Days.			Average Number of Hours Worked.	
		Full time.	Part time	Idle.	Per shift.	Per week.
PROVINCES.						
Prince Edward Island.....	351	42,170	1,261	6,480	8.9	52.1
Nova Scotia.....	1,140	209,720	5,765	18,831	8.9	52.7
New Brunswick.....	885	159,317	3,168	12,910	8.8	51.5
Quebec.....	7,367	1,402,455	58,458	105,105	8.9	51.9
Ontario.....	9,174	2,204,063	129,419	164,264	8.8	48.2
Manitoba.....	308	197,027	10,234	11,961	8.4	48.7
Saskatchewan.....	806	165,953	4,876	9,479	7.1	41.8
Alberta.....	652	170,229	7,039	11,114	8.4	48.8
British Columbia and Yukon.....	1,241	299,594	9,608	15,861	10.2	59.7
Total.....	22,184	4,892,528	229,828	336,005	8.7	49.7
INDUSTRIAL GROUPS.						
Vegetable products.....	4,355	1,018,763	63,493	125,812	9.1	52.0
Animal products.....	5,118	1,033,978	26,448	17,190	8.4	48.4
Textile products.....	1,709	451,079	26,639	26,553	8.7	48.7
Wood and paper.....	6,983	1,314,330	53,569	109,277	8.5	51.2
Iron and its products.....	1,040	272,832	25,760	18,238	9.4	50.0
Non-ferrous metals.....	325	84,874	8,294	4,367	8.3	45.1
Non-metallic minerals.....	781	150,297	14,491	32,210	8.6	51.5
Chemicals and allied products.....	460	114,785	3,186	12,717	8.4	48.6
Miscellaneous industries.....	1,404	461,590	7,948	9,641	8.8	51.0

20.—Number of Piece-workers and their Earnings, by Provinces and Industrial Groups, 1922.

Provinces and Groups.	Outside Piece-workers.			
	Male.	Earnings.	Female.	Earnings.
	No.	\$	No.	\$
PROVINCES.				
Prince Edward Island.....	—	—	—	—
Nova Scotia.....	11	6,526	29	2,849
New Brunswick.....	27	1,331	9	2,050
Quebec.....	310	261,254	1,691	219,292
Ontario.....	686	405,874	2,691	330,068
Manitoba.....	483	10,570	43	8,866
Saskatchewan.....	30	2,803	2	48
Alberta.....	16	10,465	4	132
British Columbia and Yukon.....	34	7,244	29	6,065
Total.....	1,597	715,067	4,498	569,370
INDUSTRIAL GROUPS.				
Vegetable products.....	150	18,031	844	42,003
Animal products.....	179	130,319	173	36,614
Textile products.....	104	457,070	2,659	432,191
Wood and paper.....	876	42,656	126	18,402
Iron and its products.....	16	4,817	1	30
Non-ferrous metals.....	49	17,435	3	487
Non-metallic minerals.....	45	18,237	547	13,275
Chemicals and allied products.....	28	9,006	5	413
Miscellaneous industries.....	60	17,496	140	25,055

6.—Power and Fuel.

Power.—The statistics of the use of mechanical power in manufacturing establishments bring into relief another phase of industrial development in Canada. The total h.p. used has been computed for the years 1921 and 1922. The power produced by steam and internal combustion engines, by water wheels and motors and other unspecified units, as well as the electric power generated in the establishment and purchased from outside concerns, was included in the total. On account of the recovery in manufacturing activity during 1922, the power used increased to 4,774,511 h.p., as compared with 4,181,969 h.p. in the preceding year. The power developed by electric motors in 1922 was 1,162,649 h.p., as compared with 1,014,216 h.p. in 1921.

The total h.p. used in the factories of Ontario in 1922 was 2,056,018, Quebec following with 1,663,801 h.p. Third came British Columbia, with a h.p. of 477,386. The total electrical power used in Ontario was 580,913 h.p., and in Quebec 402,319. Aside from the miscellaneous group, which includes the central electric stations, the wood and paper group used most power in 1922. This group used 1,282,695 h.p., which may be compared with 339,200 h.p., used by the iron and steel products group. The vegetable products group, including the flour-milling industry, held fourth place, using 274,822 h.p.

21.—Power used in the Manufacturing Industries of Canada, by Provinces and Groups of Industries, 1921 and 1922.

Provinces and Groups.	Steam Engines and Turbines.	Gas Engines.	Oil and Gasoline Engines.	Hydraulic Turbines and Water Wheels.	Electric Motors.	Other Power.	Total.
1921. ¹	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
PROVINCES.							
Prince Edward Island.....	1,451	14	1,673	1,920	173	44	5,275
Nova Scotia.....	48,273	2,170	3,017	25,826	22,070	975	102,331
New Brunswick.....	57,893	541	2,650	20,157	34,578	351	116,170
Quebec.....	104,048	1,217	4,543	876,198	339,511	6,161	1,391,678
Ontario.....	249,443	15,308	4,984	1,011,346	495,721	19,208	1,796,070
Manitoba.....	21,666	102	1,755	82,747	24,066	739	131,106
Saskatchewan.....	51,604	59	7,865	2	6,924	75	66,529
Alberta.....	58,500	1,141	2,355	32,444	12,117	26	107,643
British Columbia and Yukon.....	111,787	274	3,898	268,225	78,026	2,957	465,167
Total.....	764,725	20,826	32,741	2,318,865	1,611,216	30,596	4,181,969
INDUSTRIAL GROUPS.							
Vegetable products.....	52,941	2,121	3,959	47,325	147,862	3,028	257,236
Animal products.....	23,847	494	3,490	1,578	50,501	800	80,710
Textile products.....	21,652	1,127	215	26,383	77,762	1,168	128,307
Wood and paper.....	318,752	5,837	5,851	402,397	390,757	17,887	1,141,481
Iron and its products.....	37,149	9,065	699	4,440	208,207	3,359	263,919
Non-ferrous metals.....	6,617	8	31	2,525	44,820	1,381	53,388
Non-metallic minerals.....	15,941	1,243	1,703	10	28,942	2,742	50,581
Chemicals and allied products.....	13,511	25	864	7,850	55,707	146	78,103
Miscellaneous industries.....	274,315	6	15,929	1,826,357	12,652	85	2,129,344
1922.							
PROVINCES.							
Prince Edward Island.....	1,754	17	1,350	1,703	243	—	5,067
Nova Scotia.....	65,238	414	3,318	38,888	25,471	—	133,329
New Brunswick.....	60,670	1,823	2,403	21,858	26,060	—	112,823
Quebec.....	180,103	4,418	13,052	1,063,909	402,319	—	1,663,801
Ontario.....	283,698	34,307	4,713	1,152,387	580,913	—	2,056,018
Manitoba.....	23,914	761	1,484	89,680	26,109	—	142,004
Saskatchewan.....	40,856	146	8,258	44	7,711	—	66,015
Alberta.....	60,596	1,021	2,439	32,599	14,509	—	118,064
British Columbia and Yukon.....	101,918	2,051	4,147	290,016	79,251	—	477,386
Total.....	833,756	45,858	41,164	2,691,084	1,162,649	—	4,774,511
INDUSTRIAL GROUPS.							
Vegetable products.....	59,763	5,491	4,579	47,819	157,170	—	274,822
Animal products.....	26,290	1,711	2,795	1,722	57,418	—	89,936
Textile products.....	23,373	995	221	17,295	89,008	—	130,952
Wood and paper.....	325,027	10,035	14,731	443,573	489,329	—	1,282,695
Iron and its products.....	81,415	26,265	432	5,979	225,109	—	339,200
Non-ferrous metals.....	6,837	133	27	55,455	49,250	—	111,702
Non-metallic minerals.....	11,910	1,022	1,508	80	34,450	—	48,670
Chemicals and allied products.....	14,421	469	61	6,810	41,580	—	63,041
Miscellaneous industries.....	284,720	37	16,810	2,112,351	19,275	—	2,433,193

¹ The statistics of power used during 1921, as published in the 1922-23 edition of the Year Book, have been revised to include additional data, and to effect comparability with the figures of 1922.

Fuel.—The fuel used in industrial establishments in 1922 included 4,101,463 tons of bituminous coal, valued at \$29,915,000, constituting 61.1 p.c. of the total fuel cost. The other chief fuels in order of value were fuel oil, comprising 11.5 p.c., anthracite coal 7.3 p.c. and coke 6.7 p.c. Out of a fuel account of over \$48,900,000, Ontario expended \$22,700,000 or 46 p.c. of the total. The manufacturing concerns of Quebec expended \$14,000,000 and those of Nova Scotia \$3,300,000.

The groups of industry in which fuel was most extensively used in 1922 were wood and paper, \$15,445,000, iron and steel, \$7,664,000, vegetable products, \$7,453,000 and non-metallic minerals \$5,873,000. Fuel is used quite generally throughout

the industrial field for the generation of power by means of internal-combustion and steam engines. The principal industries where fuel is used as a material that enters into the actual composition of the product, are the manufactures of coke and gas. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast-furnaces and steel mills, non-ferrous metal smelting, brick and tile, lime and cement-making, petroleum-refining and the glass industry.

22.—Fuel used in the Manufacturing Industries of Canada, by Provinces and Groups, 1921 and 1922.

Provinces and Groups.	Bituminous Coal.		Anthracite Coal.	Lignite Coal.	Coke.	Gasoline.	Oil.	Total. ¹
1921. ²	Tons.	\$	\$	\$	\$	\$	\$	\$
PROVINCES.								
Prince Edward Island...	5,051	52,542	9,831	2,566	510	7,419	912	89,613
Nova Scotia.....	417,321	2,013,480	92,433	7,831	236,283	35,847	956,703	3,395,637
New Brunswick.....	237,147	1,957,610	53,101	2,558	13,311	13,579	24,131	2,158,467
Quebec.....	1,025,507	10,835,041	1,335,676	84,693	532,951	177,289	1,453,832	15,431,364
Ontario.....	2,025,480	17,333,515	1,121,308	63,054	1,474,306	294,631	1,913,041	23,956,861
Manitoba.....	64,586	585,526	121,458	201,214	123,547	39,593	50,199	1,251,884
Saskatchewan.....	49,724	416,430	75,010	579,540	13,029	60,430	69,594	1,680,471
Alberta.....	120,105	390,841	59,670	375,087	26,089	41,821	482	943,458
British Columbia and Yukon.....	158,141	1,171,661	47,169	10,013	77,374	59,622	942,006	2,727,057
Total.....	5,103,671	34,752,681	2,915,752	1,336,456	2,497,490	729,941	5,417,806	51,646,912
GROUPS.								
Vegetable products.....	559,279	4,634,807	893,686	238,244	346,538	106,761	572,532	7,455,321
Animal products.....	302,168	2,354,006	260,330	157,636	30,165	156,892	71,635	3,760,990
Textile products.....	282,265	2,765,296	235,097	46,021	51,755	16,241	11,912	3,185,176
Wood and paper.....	1,295,814	12,467,581	763,121	33,412	21,537	132,551	405,812	14,870,515
Iron and its products.....	830,006	5,835,331	338,315	50,990	1,400,717	122,390	1,300,487	9,621,669
Non-ferrous metals.....	73,913	642,713	92,556	5,516	82,678	44,049	139,962	1,113,970
Non-metallic minerals.....	255,894	2,307,018	41,320	4,012	437,724	49,527	2,699,194	6,183,707
Chemicals and allied products.....	189,568	1,642,952	98,304	27,584	115,608	20,034	62,854	2,030,889
Miscellaneous industries.....	314,164	2,102,977	193,023	762,441	4,648	81,493	147,382	3,418,675
1922.								
PROVINCES.								
Prince Edward Island...	3,790	40,670	40,371	—	1,450	4,601	809	106,979
Nova Scotia.....	203,127	762,580	392,895	479	806,458	23,274	1,053,920	3,327,075
New Brunswick.....	243,133	1,745,603	273,753	1,085	19,744	20,285	21,836	2,195,175
Quebec.....	1,145,002	9,138,039	1,236,116	42,433	566,408	141,388	1,598,778	14,259,612
Ontario.....	2,028,291	15,936,240	1,323,611	47,159	1,546,492	307,134	1,471,951	22,087,123
Manitoba.....	60,548	437,270	237,329	117,589	119,604	32,830	49,050	1,123,265
Saskatchewan.....	13,617	114,636	11,039	813,892	8,328	61,282	619,368	1,739,584
Alberta.....	243,069	637,368	19,837	97,149	21,681	35,169	4,199	898,351
British Columbia and Yukon.....	160,886	1,102,179	81,243	7,177	118,851	80,812	828,254	2,583,311
Total.....	4,101,463	29,914,585	3,616,185	1,126,963	3,299,016	706,841	5,649,071	48,929,505
GROUPS.								
Vegetable products.....	612,375	4,499,960	662,434	272,238	431,120	91,706	683,347	7,452,987
Animal products.....	330,959	2,258,929	211,750	111,456	29,888	185,009	49,016	3,539,108
Textile products.....	311,986	2,493,023	184,754	37,892	32,879	14,603	9,717	2,887,769
Wood and paper.....	1,518,272	12,375,108	855,498	17,652	29,505	106,092	596,054	15,445,158
Iron and its products.....	551,428	3,584,052	293,948	30,030	2,196,970	156,531	1,022,771	7,664,478
Non-ferrous metals.....	81,277	635,955	83,453	4,146	82,991	23,245	160,980	1,148,641
Non-metallic minerals.....	259,210	1,769,807	34,684	6,675	358,290	31,971	2,909,002	5,873,372
Chemicals and allied products.....	207,524	1,541,787	52,597	7,433	122,802	13,675	28,059	1,828,673
Miscellaneous industries.....	228,432	755,964	1,237,087	639,441	14,564	84,009	190,095	3,080,319

¹ Includes other varieties of fuel to the total value of \$4,000,882 in 1921 and \$4,607,844 in 1922.

² The statistics of fuel used in 1921 as published in the 1922-23 Year Book were revised to effect comparability with the figures of 1922.

7.—Localization of Manufacturing Industries.

The prosperity of most of the cities and large towns of Canada is intimately connected with their manufacturing industries. Statistics of the manufacturing industries in all cities, towns and villages of over 1,000 population throughout the country, as in 1921 and 1922, are given in Table 23. As a consequence of the gradual recovery from the post-war depression, the figures for 1922 in many cases show considerable increases over those of 1921, as in the cases of Toronto, Ottawa, London and Dartmouth. Cities having a gross manufacturing production of over \$100,000 each in 1922, in the order of the value of their products, were Montreal, Toronto and Hamilton. Winnipeg and Vancouver, the only cities in the \$50,000,000 to \$100,000,000 class in 1922, produced manufactures to the gross value of \$66,925,000 and \$63,173,000 respectively. Other important manufacturing cities producing goods to a gross value of between \$20,000,000 and \$50,000,000 in 1922 were, in the order of value of products, Ottawa, Oshawa, London, Kitchener, Quebec, St. John, Walkerville, Peterborough, Brantford, Sarnia, Sault Ste. Marie and Dartmouth. For details the reader is referred to Table 23.

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Prince Edward Island—						
Charlottetown.....	1921 24	1,234,977	327	272,309	1,153,333	1,839,840
	1922 34	1,759,272	383	313,526	923,787	1,739,329
Summerside.....	1921 14	189,754	48	34,557	82,997	159,040
	1922 13	214,677	76	41,045	87,263	197,602
Nova Scotia—						
Amherst.....	1921 22	7,247,208	1,154	959,855	999,328	4,094,846
	1922 28	6,803,119	776	737,924	1,255,503	2,587,308
Annapolis Royal.....	1921 5	106,065	42	31,405	55,669	109,203
	1922 7	106,358	35	28,136	75,739	138,582
Antigonish.....	1921 7	91,675	32	24,375	60,118	117,377
	1922 6	97,773	28	24,926	50,745	100,868
Bridgetown.....	1921 8	338,451	74	60,831	82,190	199,321
	1922 14	343,003	137	97,431	117,717	278,052
Bridgewater.....	1921 14	699,249	98	132,605	346,742	834,888
	1922 13	670,173	77	51,669	367,923	487,284
Canso.....	1921 11	522,466	135	105,494	245,217	445,099
	1922 9	402,719	210	103,910	308,267	584,077
Clark's Harbour.....	1921 9	62,987	64	32,921	168,756	265,128
	1922 7	36,426	85	18,407	144,892	108,821
Dartmouth.....	1921 16	19,169,930	1,593	2,204,095	10,936,890	17,078,996
	1922 18	22,720,844	1,458	1,796,870	14,541,169	21,021,421
Digby.....	1921 5	182,640	62	39,272	101,150	190,590
	1922 7	233,915	94	50,097	184,556	288,444
Glace Bay.....	1921 9	212,567	55	62,852	44,194	188,005
	1922 9	284,080	66	83,087	62,485	247,427
Inulifax.....	1921 98	9,816,321	2,444	2,430,132	3,438,121	9,309,850
	1922 96	12,198,324	2,548	2,406,787	3,228,037	9,420,745
Kentville.....	1921 11	138,441	53	44,486	28,074	118,329
	1922 11	135,294	36	34,472	30,394	109,697
Liverpool.....	1921 11	3,250,306	129	80,391	172,776	343,209
	1922 11	3,288,193	188	121,152	307,689	763,038
Lockeport.....	1921 4	517,103	108	69,489	220,908	438,313
	1922 4	537,621	130	61,918	157,660	267,203
Louisburg.....	1921 4	17,043	1	500	21,195	33,900
	1922 5	51,422	10	3,277	43,001	56,848
Lunenburg.....	1921 11	240,520	72	54,640	87,685	181,370
	1922 13	343,973	128	88,896	92,622	250,209
Mahone Bay.....	1921 9	61,972	26	14,251	18,986	66,514
	1922 11	66,056	22	9,604	26,638	61,929
Middleton.....	1921 6	78,690	24	13,499	10,659	40,386
	1922 7	164,347	36	34,206	58,044	115,985
New Glasgow.....	1921 20	5,230,424	794	684,631	2,091,982	3,157,669
	1922 21	1,159,408	478	517,583	523,668	1,194,094

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Nova Scotia—concluded.						
North Sydney.....	1921 6	113,056	59	52,084	41,129	106,783
	1922 10	157,941	113	56,787	69,595	152,225
Oxford.....	1921 6	159,347	49	44,501	71,265	148,673
	1922 10	227,101	59	36,920	80,552	168,400
Parrsboro.....	1921 7	121,307	27	10,366	53,762	99,350
	1922 5	89,532	23	10,536	33,270	62,022
Pictou.....	1921 8	370,648	206	116,333	207,880	434,430
	1922 9	330,866	149	98,341	172,375	355,142
Port Hawkesbury.....	1921 6	412,392	76	62,090	235,832	554,780
	1922 7	713,798	166	77,629	312,970	462,558
Shelburne.....	1921 8	125,032	23	17,558	30,837	75,308
	1922 10	151,615	33	24,761	42,378	96,626
Springhill.....	1921 3	61,924	14	14,721	17,827	57,174
	1922 3	57,776	23	18,342	4,275	35,662
Stellarton.....	1921 6	443,940	39	37,923	76,970	246,327
	1922 5	449,415	40	39,169	63,891	258,038
Sydney.....	1921 27	20,418,268	1,032	1,440,414	8,445,986	13,606,231
	1922 28	27,467,282	1,863	2,055,630	8,118,914	12,407,273
Sydney Mines.....	1921 6	116,376	17	15,403	52,993	91,797
	1922 6	112,416	14	11,024	30,963	75,060
Truro.....	1921 16	3,169,195	543	386,784	1,178,131	2,467,808
	1922 20	3,335,713	724	730,721	1,323,132	2,727,687
Westville.....	1921 3	18,265	13	9,328	15,530	29,755
	1922 5	13,577	10	7,232	6,366	20,775
Windsor.....	1921 15	1,732,674	200	181,653	534,477	936,721
	1922 14	1,529,495	250	193,577	262,669	616,867
Wolfville.....	1921 5	74,367	18	12,707	77,399	120,269
	1922 6	100,143	25	21,054	97,904	166,105
Yarmouth.....	1921 31	3,435,067	581	469,624	891,881	1,983,298
	1922 30	3,396,341	731	526,202	1,280,604	2,259,534
New Brunswick—						
Bathurst.....	1921 9	9,603,407	405	353,431	687,607	1,261,418
	1922 16	12,527,181	639	426,729	851,637	1,539,964
Campbellton.....	1921 10	5,231,609	334	308,886	592,118	1,325,935
	1922 16	4,541,522	720	594,844	1,325,862	2,307,926
Chatham.....	1921 12	1,954,621	186	97,365	277,496	547,653
	1922 14	2,317,582	378	301,451	347,303	740,440
Dalhousie.....	1921 4	2,517,188	130	116,547	248,669	512,386
	1922 4	990,048	116	71,215	211,102	383,728
Edmundston.....	1921 8	10,823,561	357	426,132	1,018,074	2,370,454
	1922 7	4,544,871	374	406,700	1,495,108	2,752,249
Fredericton.....	1921 24	3,643,446	482	459,074	967,489	2,047,660
	1922 25	2,706,807	486	467,090	849,849	1,774,203
Grand Falls.....	1921 6	463,969	137	124,686	177,600	359,954
	1922 8	505,918	172	120,950	260,397	446,791
Hartland.....	1921 3	318,311	35	31,270	20,224	117,649
	1922 5	298,334	53	71,677	66,691	135,548
Moncton.....	1921 32	2,742,992	769	678,627	936,242	2,508,775
	1922 40	2,738,300	851	723,243	1,140,456	2,606,182
Newcastle.....	1921 10	4,162,534	191	148,449	457,127	762,542
	1922 15	4,703,769	325	211,108	847,043	1,257,644
Richibucto.....	1921 5	117,211	20	13,400	38,526	63,942
	1922 7	107,055	103	7,769	46,996	71,029
Sackville.....	1921 7	416,900	215	150,559	148,526	427,117
	1922 13	954,081	256	234,013	275,402	734,243
St. Andrews.....	1921 7	45,186	19	10,623	42,278	82,851
	1922 8	80,690	44	15,748	55,019	97,214
St. George.....	1921 4	722,153	135	119,583	103,020	318,124
	1922 6	855,982	144	151,353	156,396	454,171
St. John.....	1921 121	26,964,189	3,470	3,527,058	17,022,084	24,440,588
	1922 128	26,732,734	3,487	3,527,100	19,790,990	27,927,086
St. Leonard.....	1921 3	9,615	8	1,685	13,163	24,359
	1922 4	10,064	10	2,590	10,572	18,916
St. Stephen.....	1921 18	2,580,396	710	675,766	1,170,378	2,168,715
	1922 20	3,640,578	759	734,181	2,273,223	3,914,450
Shediac.....	1921 5	119,790	18	13,251	27,455	76,050
	1922 4	60,379	25	11,425	16,439	42,433
Sussex.....	1921 15	1,456,435	192	160,169	376,037	787,429
	1922 14	440,371	107	126,244	279,816	519,119
Woodstock.....	1921 12	425,631	88	76,182	118,144	269,122
	1922 15	432,126	104	92,856	107,877	276,072

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
		No. \$	No. \$	\$	\$	\$
Quebec—						
Actonville.....	1921	8 95,792	27	14,583	72,300	139,588
	1922	9 96,366	47	26,353	65,641	161,890
Arthabaska.....	1921	6 152,087	60	42,623	84,982	188,562
	1922	8 179,200	80	46,330	95,563	193,580
Asbestos.....	1921	5 24,826	6	4,493	15,021	52,410
	1922	3 9,352	3	2,600	7,575	19,081
Bagotville.....	1921	7 51,080	12	9,046	15,280	73,954
	1922	5 37,050	8	5,741	24,114	35,392
Baie St. Paul.....	1921	16 611,779	33	19,506	44,509	105,355
	1922	14 90,671	14	7,872	21,333	42,648
Beauceville.....	1921	6 34,450	10	6,330	12,764	43,310
	1922	6 92,675	19	18,890	32,462	81,660
Beauharnois.....	1921	7 2,306,317	373	352,830	732,684	1,602,385
	1922	7 2,485,802	385	447,814	841,898	1,734,374
Bedford.....	1921	7 1,049,834	176	138,238	60,375	265,451
	1922	9 845,212	193	139,588	85,644	351,435
Bélair.....	1921	7 1,448,051	157	215,069	932,336	1,760,634
	1922	7 1,865,262	228	295,035	948,563	1,960,350
Berthier.....	1921	8 448,524	79	70,942	71,089	213,951
	1922	6 1,413,458	228	209,873	535,174	1,245,871
Black Lake.....	1921	3 28,160	7	6,023	10,470	19,850
	1922	3 29,800	6	4,210	11,272	18,736
Bromptonville.....	1921	6 401,806	69	96,772	280,425	573,047
	1922	3 4,020,806	254	185,612	671,807	967,280
Buckingham.....	1921	14 2,927,863	330	317,018	754,416	1,806,938
	1922	14 2,613,625	383	355,496	875,272	2,104,512
Chicoutimi.....	1921	24 9,549,014	832	946,075	970,841	4,255,540
	1922	13 5,561,867	689	710,636	1,368,712	2,468,524
Couticook.....	1921	22 2,076,142	456	412,543	700,955	1,697,993
	1922	22 1,673,570	585	404,585	898,033	1,869,374
Cookshire.....	1921	9 458,545	61	62,830	116,704	333,353
	1922	8 421,593	34	38,546	72,147	166,543
Cowansville.....	1921	8 603,301	185	164,172	197,522	531,247
	1922	9 774,258	255	229,667	292,706	660,439
Danville.....	1921	8 53,412	10	6,425	7,626	65,554
	1922	10 1,841,176	103	103,648	164,460	389,938
Deschailhons.....	1921	3 75,388	25	15,781	10,391	35,412
	1922	6 25,588	24	4,986	18,647	39,053
Disraeli.....	1921	7 685,835	79	75,662	102,863	307,938
	1922	6 680,036	54	56,457	67,227	223,741
Drummondville.....	1921	14 4,203,892	427	377,741	926,644	1,898,123
	1922	12 4,488,844	628	523,311	1,845,702	2,844,762
Farnham.....	1921	10 640,737	236	131,948	228,638	580,664
	1922	13 678,617	295	152,424	402,881	800,306
Fraserville.....	1921	12 1,583,058	156	111,123	116,681	333,862
	1922	17 781,031	135	101,139	88,668	257,842
Granby.....	1921	16 4,244,974	1,484	1,043,066	1,095,578	3,877,773
	1922	21 4,399,430	1,454	1,195,879	1,487,615	4,553,271
Grande Baie.....	1921	3 17,900	5	3,225	7,535	13,895
	1922	4 26,120	5	2,500	6,875	12,383
Grand'Mère.....	1921	11 41,044,663	1,749	2,760,024	4,464,868	10,629,885
	1922	12 51,297,487	1,378	2,014,287	2,389,202	9,517,192
Hull.....	1921	24 13,246,727	2,251	2,311,472	5,734,054	10,347,699
	1922	28 11,942,967	2,837	2,447,933	5,118,344	10,642,532
Huntingdon.....	1921	10 251,161	85	60,888	143,195	853,230
	1922	9 144,536	34	30,575	115,594	173,481
Iberville.....	1921	10 321,381	91	79,327	114,840	255,869
	1922	11 424,791	145	130,331	224,035	396,318
Joliette.....	1921	28 1,427,404	585	410,040	1,160,504	2,089,982
	1922	28 2,223,200	732	443,997	1,028,974	2,158,946
Jonquière.....	1921	14 2,011,210	218	284,490	456,063	1,442,941
	1922	9 1,690,190	230	263,438	455,763	1,266,261
Lachute.....	1921	13 3,178,022	339	281,241	631,575	1,449,442
	1922	13 3,284,016	352	309,938	579,729	1,538,013
Lachine.....	1921	19 7,633,906	841	1,054,109	1,625,555	6,554,041
	1922	23 8,398,513	1,015	1,207,969	1,365,116	4,891,403
Laprairie.....	1921	4 35,250	4	2,345	3,364	15,770
	1922	3 31,528	5	2,464	922	12,308
L'Assomption.....	1921	5 122,068	26	10,574	22,226	80,742
	1922	6 132,603	31	25,120	62,907	86,104
La Tuque.....	1921	7 8,465,846	783	993,888	1,387,847	3,350,056
	1922	8 8,277,659	709	1,008,707	1,694,918	3,949,509
Lauzon.....	1921	3 970,789	84	60,701	41,534	215,488
	1922	3 1,040,905	97	68,794	47,571	224,444

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—con.						
Lennoxville.....	1921 5	158,446	42	53,809	82,847	187,985
	1922 5	171,545	56	51,057	64,820	193,892
Lévis.....	1921 12	561,948	145	111,923	113,958	332,545
	1922 15	642,402	137	112,173	108,782	366,075
Longueuil.....	1921 3	47,219	17	15,484	32,385	62,114
	1922 4	35,952	12	11,160	24,941	44,481
Loretteville.....	1921 22	1,239,715	862	244,832	522,797	897,855
	1922 26	797,184	363	199,676	306,421	656,199
Louiseville.....	1921 12	1,078,368	369	261,707	705,961	1,158,747
	1922 9	787,630	247	211,931	328,044	617,807
Magog.....	1921 13	4,632,550	1,307	1,025,454	4,901,778	7,039,807
	1922 16	5,685,744	1,587	976,609	5,562,682	8,999,790
Marieville.....	1921 13	927,780	365	255,819	490,593	1,030,817
	1922 9	963,799	274	274,289	675,400	1,191,273
Mégantic.....	1921 4	358,839	44	65,532	21,134	173,477
	1922 5	232,567	36	43,982	31,870	101,480
Mont Joli.....	1921 8	475,847	67	53,549	154,363	289,729
	1922 7	261,413	67	53,711	66,012	154,873
Mont Laurier.....	1921 9	260,303	97	73,569	111,220	261,121
	1922 9	229,332	46	24,638	76,454	119,904
Montmagny.....	1921 14	2,496,337	235	205,840	379,363	1,012,729
	1922 13	1,450,983	64	42,085	38,064	646,098
Montreal.....	1921 1,326	437,159,896	74,320	81,799,864	212,796,714	413,475,166
	1922 1,468	456,898,909	79,096	83,973,965	200,918,219	406,846,230
Nicolet.....	1921 14	144,011	56	41,642	55,867	181,950
	1922 10	139,755	48	32,248	60,010	107,203
Pierreville.....	1921 10	24,750	14	16,432	17,269	81,024
	1922 10	43,828	24	14,468	50,771	94,485
Plessisville.....	1921 10	1,293,862	237	222,517	506,786	1,057,034
	1922 14	1,182,220	232	160,650	463,856	810,405
Quebec.....	1921 244	32,493,551	9,033	11,913,975	11,864,456	29,569,845
	1922 229	33,232,439	8,922	7,135,407	13,357,023	28,470,352
Richmond.....	1921 4	247,498	56	33,128	27,429	91,961
	1922 5	265,236	40	42,039	30,242	103,664
Rimouski.....	1921 13	1,946,397	314	178,670	350,320	726,820
	1922 11	1,373,958	210	178,271	246,317	559,098
Roberval.....	1921 14	171,913	59	34,277	63,439	125,689
	1922 19	279,407	72	52,540	96,018	276,383
Shawinigan Falls.....	1921 21	32,481,758	2,018	2,211,453	4,626,100	11,541,526
	1922 26	17,836,600	1,767	2,185,863	5,247,478	12,171,429
Sherbrooke.....	1921 61	18,905,118	3,447	3,267,650	3,898,448	11,256,117
	1922 58	20,463,578	2,800	2,953,200	5,363,803	13,320,473
Sorel.....	1921 21	1,625,810	529	188,443	390,995	869,117
	1922 13	1,112,179	288	208,236	270,878	622,209
Ste. Agathe des Monts.....	1921 9	540,756	116	120,051	201,260	430,362
	1922 5	312,749	76	67,259	199,611	337,109
Ste. Anne de Bellevue.....	1921 5	76,262	14	11,282	8,991	58,088
	1922 4	51,838	13	11,305	11,630	60,698
St. Eustache.....	1921 8	34,367	8	2,409	37,509	64,769
	1922 8	30,106	12	9,842	41,793	64,222
St. Gabriel de Brandon.....	1921 10	98,700	61	47,841	109,558	212,842
	1922 12	97,053	69	62,709	142,461	210,697
St. George.....	1921 6	52,570	10	5,125	8,910	17,635
	1922 6	276,850	35	25,342	47,571	143,920
St. Hyacinthe.....	1921 46	7,049,449	2,124	1,498,672	3,767,727	7,135,741
	1922 39	6,333,546	1,724	1,298,127	2,688,724	4,705,745
St. Jean.....	1921 23	6,137,886	1,903	1,675,854	2,670,907	5,519,780
	1922 23	5,852,928	1,916	1,612,516	1,918,472	4,630,362
St. Jérôme.....	1921 22	3,798,593	1,247	951,444	1,520,084	4,125,531
	1922 25	6,197,898	900	1,253,639	1,278,187	2,880,309
St. Joseph (Beauce Co.).....	1921 10	21,685	12	4,285	21,590	42,024
	1922 16	109,750	41	16,162	8,756	74,798
St. Lambert.....	1921 11	1,758,028	295	274,778	435,440	1,067,616
	1922 11	1,661,855	413	444,543	512,453	1,341,439
St. Laurent.....	1921 6	1,062,094	317	373,600	312,803	870,440
	1922 5	857,519	292	347,616	349,583	777,790
St. Raymond.....	1921 16	2,002,043	185	160,196	325,864	878,933
	1922 18	2,246,780	204	210,373	373,353	1,061,774
St. Rémi.....	1921 14	506,623	118	85,170	631,505	981,461
	1922 10	551,148	89	86,213	571,124	951,094
Ste. Thérèse.....	1921 14	876,098	202	169,526	366,288	683,851
	1922 12	848,417	226	161,334	356,290	620,864
St. Tite.....	1921 10	266,566	119	70,803	120,973	216,316
	1922 15	243,007	97	49,565	117,992	239,990

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—concluded.						
Terrebonne.....	1921 10	1,456,967	254	213,834	226,530	528,549
	1922 12	1,512,889	383	283,320	318,668	777,145
Thetford Mines.....	1921 12	318,105	94	72,980	99,089	240,821
	1922 13	373,431	113	122,415	108,845	530,055
Three Rivers.....	1921 44	44,665,790	4,160	4,124,347	7,303,303	19,315,504
	1922 51	40,161,468	3,884	3,719,817	7,860,571	15,955,894
Valleyfield.....	1921 20	11,404,107	2,551	1,806,415	3,085,049	9,663,530
	1922 24	10,539,690	1,161	909,497	2,996,413	9,219,310
Verdun.....	1921 3	868,796	563	423,049	518,862	1,072,410
	1922 4	949,780	201	213,345	520,985	911,464
Victoriaville.....	1921 19	2,732,681	488	349,859	454,252	1,758,732
	1922 22	2,728,163	327	260,591	357,363	1,527,913
Waterloo.....	1921 11	249,440	105	81,862	121,133	215,948
	1922 10	281,502	159	118,364	193,296	420,165
Windsor.....	1921 8	2,199,042	426	512,035	780,106	1,885,319
	1922 12	2,539,006	518	626,654	712,565	2,245,512
Ontario—						
Acton.....	1921 14	2,413,098	412	382,291	1,915,348	2,232,020
	1922 11	3,038,037	434	368,081	1,313,449	2,185,758
Alexandria.....	1921 16	855,650	111	100,781	336,142	641,496
	1922 18	721,800	147	105,640	308,686	553,083
Alliston.....	1921 12	103,028	28	19,533	127,208	216,339
	1922 12	165,617	31	21,847	37,728	333,583
Almonte.....	1921 18	1,650,854	376	321,699	645,525	1,413,896
	1922 14	1,030,506	402	341,462	614,803	1,354,673
Amherstburg.....	1921 9	6,581,304	289	579,402	190,158	1,165,648
	1922 9	6,452,540	247	416,921	123,421	1,373,706
Arnprior.....	1921 14	4,300,234	322	324,610	509,282	1,073,652
	1922 17	5,237,494	505	384,102	744,146	7,615,032
Arthur.....	1921 10	82,111	26	22,525	275,502	366,963
	1922 7	26,834	26	17,193	174,299	257,622
Aurora.....	1921 7	945,196	334	307,395	1,278,356	2,114,454
	1922 8	1,031,187	310	303,551	1,081,081	1,813,880
Aylmer.....	1921 10	784,552	133	105,481	733,612	1,179,593
	1922 10	861,144	159	135,695	663,379	1,530,063
Barrie.....	1921 20	1,270,452	195	200,729	582,898	1,003,772
	1922 20	1,299,122	241	245,175	650,220	1,119,309
Beamsville.....	1921 10	412,265	74	82,697	184,922	351,595
	1922 8	359,068	63	51,221	134,175	269,694
Beaverton.....	1921 6	84,060	11	10,586	38,776	67,344
	1922 4	45,508	7	5,083	20,573	49,423
Belleville.....	1921 47	2,065,714	640	632,284	702,159	1,856,912
	1922 52	2,743,452	755	744,186	983,619	2,679,179
Blenheim.....	1921 5	221,960	30	30,729	532,691	618,694
	1922 6	123,997	25	16,669	37,172	91,471
Blind River.....	1921 3	615,249	107	101,975	249,916	537,409
	1922 4	464,895	99	102,093	332,715	589,314
Bobcaygeon.....	1921 6	39,157	11	5,377	23,270	39,410
	1922 6	45,943	9	4,173	22,715	43,621
Bowmanville.....	1921 17	3,633,828	316	355,568	916,503	1,731,666
	1922 20	2,997,592	491	370,226	956,288	2,162,067
Bracebridge.....	1921 16	4,445,380	331	284,722	1,640,415	2,192,568
	1922 15	1,688,617	220	163,944	305,845	597,317
Brampton.....	1921 14	2,147,269	540	627,602	1,096,085	3,210,370
	1922 20	2,441,686	765	917,917	1,468,756	2,983,211
Brantford.....	1921 99	49,823,282	5,050	6,578,502	14,998,393	28,104,005
	1922 117	50,060,770	5,778	6,127,567	12,043,365	23,521,571
Brockville.....	1921 34	5,604,908	913	987,122	2,528,338	4,477,214
	1922 47	5,579,495	888	971,738	2,098,829	3,815,461
Bridgeburg.....	1921 13	1,127,218	149	191,992	828,418	1,475,036
	1922 18	1,127,072	171	213,465	923,387	1,614,431
Brighton.....	1921 20	493,270	123	101,675	223,297	420,152
	1922 19	281,693	97	53,027	206,335	352,100
Burlington.....	1921 11	541,414	96	79,458	294,670	518,712
	1922 14	515,788	111	98,782	338,410	527,841
Caledonia.....	1921 11	238,167	65	66,461	525,918	689,834
	1922 11	298,658	91	94,811	601,471	876,822
Campbellford.....	1921 31	2,043,591	413	364,908	1,222,894	2,077,644
	1922 26	2,111,993	491	428,540	1,237,606	2,127,703
Cardinal.....	1921 5	2,622,662	277	317,038	811,039	1,350,651
	1922 5	2,894,210	294	314,310	1,406,423	2,278,192
Carleton Place.....	1921 21	2,570,895	565	588,775	1,132,281	2,072,179
	1922 23	2,758,736	690	671,846	974,839	2,495,393

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Chatham.....	1921 56	12,463,115	2,065	2,274,171	12,444,301	20,618,655
	1922 59	12,645,964	2,004	2,163,951	7,830,116	13,361,770
Chesley.....	1921 12	895,007	240	242,498	401,381	996,516
	1922 13	902,285	318	272,378	476,661	929,041
Clinton.....	1921 12	638,145	166	132,652	501,551	689,010
	1922 16	684,094	181	136,963	386,750	671,268
Cobalt.....	1921 11	12,926,327	155	217,733	57,555	760,023
	1922 10	13,063,630	151	235,548	47,782	847,430
Cobourg.....	1921 25	2,503,313	409	379,704	998,906	2,135,594
	1922 31	2,837,866	570	620,770	998,388	2,339,144
Cochrane.....	1921 6	139,960	22	22,232	30,445	113,438
	1922 6	115,801	22	13,785	10,797	120,136
Collingwood.....	1921 19	467,453	116	94,942	544,165	791,138
	1922 30	671,137	151	121,809	1,906,164	1,844,456
Cornwall.....	1921 42	11,031,169	1,985	1,761,544	2,468,775	6,590,458
	1922 41	11,280,468	2,327	1,887,900	4,050,834	8,589,390
Deseronto.....	1921 8	165,246	71	37,167	137,836	221,250
	1922 11	192,462	242	186,189	517,831	1,042,331
Dresden.....	1921 9	227,230	58	73,499	160,925	434,263
	1922 9	275,519	63	63,449	248,028	437,172
Dundas.....	1921 24	4,168,620	684	957,824	1,095,975	2,371,295
	1922 24	5,002,981	701	749,098	1,039,181	2,118,322
Dunnville.....	1921 20	2,087,466	434	444,154	1,070,916	1,739,807
	1922 16	2,672,259	493	483,651	924,606	2,426,703
Durham.....	1921 12	721,590	102	185,046	582,453	909,658
	1922 11	714,280	187	172,770	399,495	691,082
Eastview.....	1921 3	56,762	6	5,000	89,010	110,050
	1922 4	54,684	10	10,484	40,182	64,766
Eganville.....	1921 5	137,797	23	18,115	146,241	102,296
	1922 6	150,676	20	15,854	104,409	145,988
Elmira.....	1921 16	1,508,297	320	288,665	665,203	1,420,227
	1922 17	1,763,763	349	352,367	813,582	1,883,360
Elora.....	1921 8	567,067	125	138,258	195,298	411,108
	1922 10	547,917	102	167,121	223,650	499,163
Essex.....	1921 8	135,440	28	28,243	102,103	280,609
	1922 12	200,803	29	33,042	132,163	235,169
Fénelon Falls.....	1921 7	56,458	10	7,172	88,132	122,252
	1922 9	106,147	18	12,251	89,901	146,175
Fergus.....	1921 13	1,336,061	295	292,770	1,199,410	1,987,983
	1922 13	1,339,250	289	280,940	959,818	1,633,346
Forest.....	1921 10	313,653	80	75,481	313,412	548,750
	1922 10	238,716	79	72,870	180,188	340,895
Fort Frances.....	1921 8	6,246,107	558	770,258	2,177,029	5,288,537
	1922 9	4,186,911	626	944,027	2,866,378	6,775,662
Fort William.....	1921 39	23,040,048	1,872	1,598,423	8,667,900	12,440,009
	1922 42	21,837,755	944	1,174,064	4,185,809	7,710,375
Galt.....	1921 83	14,115,736	3,132	3,235,558	5,805,351	12,108,170
	1922 75	13,645,483	2,903	2,859,874	3,836,314	18,012,176
Gananoque.....	1921 27	4,000,185	631	582,582	1,067,079	2,379,414
	1922 25	2,711,793	453	440,772	660,629	1,519,501
Georgetown.....	1921 14	2,268,169	309	377,197	1,323,022	2,134,420
	1922 19	3,057,790	419	447,651	1,362,366	2,137,592
Goderich.....	1921 19	1,768,131	291	269,209	5,429,391	6,826,414
	1922 21	1,534,346	291	245,329	3,942,880	5,073,070
Gravenhurst.....	1921 8	587,949	117	104,348	157,072	329,639
	1922 9	587,515	116	95,989	162,653	373,328
Grimsbay.....	1921 17	625,369	181	168,716	323,249	768,126
	1922 12	609,734	206	176,322	448,968	817,258
Guelph.....	1921 87	14,188,698	3,118	3,604,083	4,767,530	9,592,823
	1922 94	13,236,761	3,710	3,731,743	6,881,762	14,918,221
Hagersville.....	1921 8	210,771	28	36,227	1,053,137	1,164,617
	1922 6	192,606	29	38,473	765,091	913,071
Haileybury.....	1921 7	62,840	11	0,950	24,861	55,261
	1922 3	513,339	14	21,593	5,645	22,478
Hamilton.....	1921 399	142,006,725	28,192	28,062,463	53,074,110	109,803,883
	1922 437	143,168,098	23,476	26,256,140	50,844,910	100,280,131
Hanover.....	1921 14	2,197,330	361	402,507	731,180	1,440,411
	1922 17	2,602,520	563	556,587	883,985	1,905,052
Harriston.....	1921 0	187,200	52	61,438	175,879	325,060
	1922 10	181,538	42	30,190	121,274	238,824
Havelock.....	1921 5	60,206	13	4,323	44,445	61,780
	1922 6	64,723	11	6,657	39,236	60,205
Hawkesbury.....	1921 12	6,853,282	422	398,085	993,328	2,063,881
	1922 12	6,028,282	536	447,173	1,868,027	3,235,042

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Hespeler.....	1921 15	5,112,798	985	875,626	1,093,715	3,241,241
	1922 20	5,295,939	1,118	1,013,514	1,800,479	3,799,127
Huntsville.....	1921 12	4,312,144	332	311,863	1,172,908	1,619,437
	1922 11	5,303,589	342	283,014	2,164,334	3,120,330
Iroquois.....	1921 13	291,560	25	19,018	124,566	195,081
	1922 18	336,154	57	11,749	204,858	317,064
Ingersoll.....	1921 27	4,237,420	577	687,263	1,642,307	2,907,829
	1922 28	4,121,669	688	634,657	2,675,506	3,936,292
Keewatin.....	1921 4	4,951,639	788	1,106,508	14,664,858	17,979,314
	1922 4	4,481,603	446	700,538	11,377,063	13,597,116
Kemptville.....	1921 16	183,295	60	47,347	196,842	296,189
	1922 11	231,303	44	38,650	248,428	351,926
Kenora.....	1921 11	2,605,243	109	121,316	1,136,159	1,577,450
	1922 10	3,097,456	102	122,228	2,824,117	3,455,432
Kincardine.....	1921 18	1,000,050	307	317,353	407,337	988,300
	1922 14	922,545	328	281,768	405,928	1,068,224
Kingston.....	1921 52	11,679,847	1,267	1,223,953	2,387,657	5,377,261
	1922 66	11,513,370	1,259	2,215,747	2,026,223	5,161,528
Kingsville.....	1921 9	490,016	36	45,974	517,943	656,540
	1922 9	756,496	71	96,776	779,575	1,008,455
Kitchener.....	1921 121	30,137,112	7,080	6,417,437	13,312,932	27,688,420
	1922 130	30,456,512	6,712	6,901,892	13,924,576	29,587,561
Lakefield.....	1921 6	97,868	20	15,231	56,867	108,517
	1922 6	89,726	16	12,793	64,520	105,072
Leamington.....	1921 14	1,590,895	354	278,682	1,062,308	2,083,933
	1922 20	1,587,788	292	180,495	1,194,360	2,220,142
Lindsay.....	1921 31	2,440,684	472	481,800	1,159,466	2,414,149
	1922 31	1,087,147	338	333,970	817,125	1,474,600
Listowel.....	1921 17	540,630	208	190,114	744,406	1,203,092
	1922 21	1,103,474	302	269,145	737,343	1,254,335
London.....	1921 222	33,698,288	7,384	8,437,581	16,633,765	34,988,354
	1922 232	37,032,875	8,535	9,013,889	10,472,501	35,487,957
L'Orignal.....	1921 4	189,839	14	15,813	8,744	55,991
	1922 7	110,325	53	43,582	111,049	237,260
Madoc.....	1921 10	30,872	18	10,080	93,087	117,450
	1922 8	50,644	16	8,000	72,975	105,996
Markham.....	1921 5	58,093	13	9,597	39,072	69,763
	1922 6	64,204	18	13,410	54,329	116,070
Mattawa.....	1921 4	38,530	5	3,905	8,902	20,398
	1922 4	38,851	8	7,350	8,824	21,385
Meaford.....	1921 11	1,367,306	285	313,039	748,036	1,302,900
	1922 12	1,084,061	332	332,944	797,269	1,423,625
Merriton.....	1921 12	6,892,567	823	878,655	1,525,215	3,430,892
	1922 9	4,013,624	442	703,775	1,287,286	3,015,191
Midland.....	1921 15	2,115,854	250	331,490	637,377	1,035,415
	1922 16	3,448,777	433	439,637	1,833,582	2,689,165
Milton.....	1921 10	491,617	83	80,793	273,217	496,384
	1922 9	650,234	143	126,825	409,287	724,883
Mitchell.....	1921 11	521,010	117	116,804	189,707	519,486
	1922 11	602,158	180	156,610	175,796	577,688
Mount Forest.....	1921 13	534,605	109	101,445	454,841	707,544
	1922 13	460,367	70	56,271	388,749	458,634
Morrisburg.....	1921 9	169,626	46	30,253	52,016	118,035
	1922 11	175,203	40	33,416	92,904	169,820
Napanee.....	1921 19	805,013	199	193,000	580,928	1,030,659
	1922 22	791,634	199	188,034	579,779	1,044,116
New Hamburg.....	1921 13	786,860	174	152,272	281,857	571,653
	1922 15	902,582	203	175,923	377,119	714,423
New Liskeard.....	1921 11	1,110,624	254	272,352	498,257	1,001,338
	1922 8	371,318	91	91,872	129,981	335,707
Newmarket.....	1921 14	2,078,760	334	589,629	1,445,044	3,536,813
	1922 13	2,460,641	683	635,376	1,630,320	3,233,562
New Toronto.....	1921 7	15,152,742	951	1,326,992	3,094,957	6,436,736
	1922 10	12,422,005	1,494	1,613,634	5,576,789	10,402,993
Niagara.....	1921 6	238,176	51	49,973	71,270	171,796
	1922 6	219,881	52	35,357	93,654	204,592
Niagara Falls.....	1921 58	26,164,130	2,121	2,177,253	6,365,553	14,541,865
	1922 60	28,330,980	2,305	2,841,083	7,788,155	18,013,805
North Bay.....	1921 16	792,738	159	156,536	288,743	801,583
	1922 16	652,611	165	173,047	323,764	764,344
Norwich.....	1921 11	593,988	134	136,188	1,139,686	1,547,973
	1922 11	579,708	115	122,104	669,595	1,024,719
Oakville.....	1921 19	2,051,702	397	466,430	860,143	1,844,186
	1922 40	2,053,674	459	555,962	1,092,127	2,128,888

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

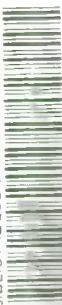
Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Orangeville.....	1921 10	692,772	78	77,714	145,304	364,765
	1922 11	520,767	103	75,730	223,946	399,173
Orillia.....	1921 35	4,793,893	772	858,508	939,691	2,510,453
	1922 39	5,420,732	898	890,017	1,161,152	2,593,166
Oshawa.....	1921 28	17,444,828	2,890	3,418,396	18,990,616	27,801,398
	1922 34	20,658,430	4,052	4,883,478	28,535,248	40,131,834
Ottawa.....	1921 181	38,184,743	5,841	7,254,469	27,851,285	41,919,894
	1922 203	38,530,758	6,667	7,742,794	34,581,220	49,202,680
Owen Sound.....	1921 51	6,654,133	1,560	2,703,936	1,922,845	4,748,791
	1922 53	6,937,267	1,643	1,591,944	1,920,430	4,681,518
Palmerston.....	1921 8	134,268	32	25,509	299,111	420,007
	1922 9	204,795	54	44,484	193,336	420,529
Paris.....	1921 15	4,023,373	795	531,006	1,390,354	3,392,064
	1922 16	4,180,474	1,035	830,204	2,500,058	4,319,023
Parkhill.....	1921 6	131,761	24	23,936	79,755	142,977
	1922 6	155,018	23	21,235	134,493	198,169
Parry Sound.....	1921 15	1,000,516	130	113,827	245,809	514,378
	1922 11	705,688	58	58,154	111,504	278,934
Pembroke.....	1921 37	4,833,238	911	905,051	1,662,083	3,660,241
	1922 41	5,677,427	1,345	1,078,151	2,529,777	5,662,830
Penetanguishene.....	1921 15	2,365,633	417	482,484	1,061,195	2,387,777
	1922 17	3,243,541	513	421,937	1,049,936	2,077,632
Porth.....	1921 28	3,863,062	633	624,362	1,116,977	2,445,803
	1922 27	3,772,143	653	708,737	975,202	2,524,367
Peterboro.....	1921 78	18,220,497	3,897	3,712,801	10,040,383	28,214,091
	1922 77	22,481,704	3,053	3,807,655	10,014,313	24,387,583
Petrolia.....	1921 15	1,903,792	243	300,155	2,207,345	3,151,265
	1922 17	1,965,208	185	210,619	1,881,702	2,928,622
Pieton.....	1921 22	821,433	220	109,950	623,593	978,550
	1922 29	873,734	300	181,491	798,776	1,332,412
Port Arthur.....	1921 18	4,020,361	383	501,831	891,351	2,440,819
	1922 18	5,831,838	520	528,005	706,267	2,305,207
Port Colborne.....	1921 9	6,485,796	322	435,654	9,058,557	10,373,457
	1922 8	4,639,053	306	483,860	11,477,047	13,580,633
Port Dalhousie.....	1921 5	808,302	150	76,881	156,845	310,020
	1922 3	121,155	53	28,623	70,153	111,221
Port Dover.....	1921 7	201,766	51	32,463	273,043	390,022
	1922 9	244,535	55	34,337	267,452	359,028
Port Elgin.....	1921 8	479,193	184	177,077	338,763	548,896
	1922 7	430,802	173	160,813	255,244	503,140
Port Hope.....	1921 30	2,494,569	514	546,948	522,777	1,565,621
	1922 35	2,763,252	577	616,731	653,198	1,935,318
Port Perry.....	1921 12	204,912	42	30,585	225,292	290,946
	1922 14	190,204	48	36,405	232,843	334,886
Prescott.....	1921 10	1,578,296	171	195,717	361,176	802,780
	1922 12	768,943	193	185,944	481,218	902,376
Preston.....	1921 35	5,370,189	1,383	1,672,090	2,515,734	5,672,088
	1922 38	5,627,076	1,034	1,773,440	2,510,261	5,724,077
Renfrew.....	1921 22	4,189,803	406	480,473	1,779,295	2,984,036
	1922 21	3,730,880	444	507,893	1,495,143	2,579,356
Ridgetown.....	1921 11	272,532	74	46,702	235,993	398,926
	1922 12	283,982	79	57,501	206,570	375,624
Rockland.....	1921 4	36,150	8	5,423	49,404	60,119
	1922 5	105,369	434	349,690	939,776	1,453,922
Sarnia.....	1921 35	24,361,832	2,286	3,448,932	14,500,248	20,916,723
	1922 41	23,498,739	2,467	3,386,413	14,240,707	23,101,080
Sandwich.....	1921 10	1,623,695	201	292,731	407,615	1,114,751
	1922 8	1,785,323	287	447,915	376,406	1,230,466
Sault Ste. Marie.....	1921 42	69,849,824	3,013	4,475,490	17,351,584	30,743,864
	1922 39	45,924,176	1,960	2,973,642	13,086,596	21,203,622
Seaforth.....	1921 15	305,035	105	75,878	473,224	722,567
	1922 16	234,811	75	60,917	215,223	386,113
Shelburne.....	1921 8	92,356	21	21,554	162,231	227,557
	1922 10	131,427	27	25,233	132,419	200,264
Simcoe.....	1921 26	1,880,769	295	278,922	1,002,352	1,878,753
	1922 28	1,888,594	478	372,753	1,500,552	2,520,068
Smith's Falls.....	1921 16	3,825,411	490	547,365	1,074,807	1,978,172
	1922 23	3,711,055	491	495,631	622,210	1,481,394
Southampton.....	1921 5	538,552	136	146,287	200,620	451,456
	1922 5	639,929	166	162,774	152,477	375,063
Stratford.....	1921 57	6,084,355	1,702	1,837,505	4,565,889	8,325,589
	1922 54	6,224,338	1,697	1,721,446	3,698,365	7,003,824
Strathroy.....	1921 18	1,206,355	173	162,545	434,519	833,694
	1922 16	1,209,250	227	199,157	417,146	980,629

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—concluded.						
Stouffville.....	1921 8	75,615	23	14,779	139,731	188,348
	1922 9	116,638	20	15,126	121,210	180,861
Sturgeon Falls.....	1921 8	7,532,874	454	715,265	1,368,924	3,256,345
	1922 10	7,288,434	479	692,270	1,661,119	3,610,446
Sudbury.....	1921 23	2,580,373	235	317,581	543,003	1,418,952
	1922 25	3,002,380	292	320,603	965,352	1,907,848
St. Catharines.....	1921 90	15,975,141	3,051	3,486,306	4,922,860	11,647,843
	1922 102	16,827,175	3,033	3,524,559	4,733,505	11,789,451
St. Thomas.....	1921 56	3,903,740	950	1,011,302	3,488,302	6,166,643
	1922 54	4,332,366	990	1,027,527	3,139,216	5,756,070
St. Marys.....	1921 21	1,510,744	423	336,990	1,184,921	2,173,829
	1922 20	1,079,029	312	262,027	504,292	1,088,368
Tavistock.....	1921 12	537,088	140	133,341	1,143,511	1,470,691
	1922 14	492,232	157	128,679	806,850	1,095,379
Thessalon.....	1921 7	509,345	156	159,287	694,145	1,501,703
	1922 8	372,270	169	195,468	608,392	930,671
Thorold.....	1921 14	17,475,807	1,727	2,707,471	5,648,865	12,736,498
	1922 17	18,252,046	1,493	2,087,136	5,678,500	12,037,964
Tilbury.....	1921 8	428,034	121	105,011	375,222	581,702
	1922 6	222,407	35	28,087	79,718	145,983
Tilsonburg.....	1921 19	1,252,407	284	263,842	829,830	1,379,835
	1922 21	1,316,808	343	318,334	729,692	1,307,979
Toronto.....	1921 1,706	370,426,285	60,708	81,147,050	192,588,233	371,000,034
	1922 1,811	392,460,184	78,333	92,930,816	205,568,765	394,065,052
Trenton.....	1921 20	4,117,191	325	273,803	1,029,957	1,658,473
	1922 25	4,591,778	409	351,587	1,124,368	1,330,793
Tweed.....	1921 11	151,900	42	32,811	142,298	214,866
	1922 15	237,056	92	74,432	276,487	435,166
Vankleek Hill.....	1921 12	98,457	25	12,372	157,345	207,270
	1922 10	135,480	30	19,616	171,319	222,546
Victoria Harbour.....	1921 3	1,381,322	167	213,037	338,204	718,835
	1922 3	1,454,842	167	156,853	356,288	831,105
Walkerton.....	1921 21	1,146,364	254	255,304	815,525	1,422,155
	1922 19	939,246	311	275,345	851,425	1,407,550
Walkerville.....	1921 46	24,053,683	2,704	4,108,369	13,548,920	25,942,611
	1922 43	26,789,572	3,042	5,146,662	16,305,860	27,322,381
Wallaceburg.....	1921 18	2,660,237	915	890,868	3,092,340	5,886,635
	1922 20	3,276,011	858	953,076	4,992,487	7,282,784
Waterford.....	1921 10	383,780	72	50,429	237,114	404,303
	1922 10	437,107	103	63,300	262,151	462,950
Waterloo.....	1921 37	6,569,573	1,016	1,181,575	2,586,105	4,963,159
	1922 40	11,312,221	1,213	1,369,745	2,355,780	5,241,789
Watford.....	1921 10	254,743	64	64,578	171,395	343,302
	1922 13	293,360	73	59,004	196,823	389,161
Welland.....	1921 39	19,885,253	2,127	2,538,140	7,935,411	14,571,857
	1922 44	24,154,457	2,426	2,531,363	6,171,119	11,748,039
Weston.....	1921 9	4,774,204	477	512,352	991,173	1,828,735
	1922 8	3,826,180	604	678,938	856,252	1,974,878
Whitby.....	1921 6	534,269	164	207,950	211,267	522,478
	1922 5	283,050	162	155,972	85,522	328,075
Warton.....	1921 16	475,374	100	79,092	191,442	363,921
	1922 10	403,650	74	60,708	118,409	251,706
Winchester.....	1921 9	255,197	50	47,548	154,533	256,264
	1922 14	256,201	58	53,287	180,803	291,454
Windsor.....	1921 118	17,570,621	2,848	4,886,880	6,848,062	16,113,891
	1922 111	15,361,990	2,802	4,002,199	7,381,047	16,561,621
Wingham.....	1921 23	888,139	250	205,511	623,332	1,175,530
	1922 23	953,680	282	205,186	522,780	1,049,618
Woodstock.....	1921 65	9,179,455	1,801	1,837,028	4,065,246	7,910,258
	1922 70	9,276,886	1,930	1,907,257	3,883,740	7,277,329
Manitoba—						
Brandon.....	1921 36	3,848,221	497	577,493	2,937,203	4,294,006
	1922 39	3,068,801	453	599,047	2,427,696	4,005,610
Carmar.....	1921 5	51,814	12	9,253	32,655	59,551
	1922 5	9,584	11	8,083	43,920	50,936
Dauphin.....	1921 10	332,112	60	66,094	214,960	404,188
	1922 8	203,048	46	47,673	146,765	250,132
Minnedosa.....	1921 3	119,794	8	9,369	6,451	39,992
	1922 5	22,589	7	6,951	10,405	34,292
Morden.....	1921 4	474,460	7	5,732	32,632	60,957
	1922 4	15,794	7	6,833	35,620	68,059
Neepawa.....	1921 7	179,988	20	35,572	82,286	170,008
	1922 6	121,067	22	22,579	85,940	134,256

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Manitoba—concluded.						
Portage la Prairie.....	1921 12	704,418	173	221,308	3,017,570	3,663,976
	1922 14	506,632	141	193,133	1,911,667	2,403,651
Selkirk.....	1921 7	1,361,084	127	157,729	198,001	937,627
	1922 7	1,543,808	226	291,667	430,480	1,117,108
Souris.....	1921 5	512,600	33	34,921	299,952	385,798
	1922 7	510,487	31	30,779	193,294	266,467
St. Boniface.....	1921 19	5,129,178	890	1,236,335	0,565,681	12,804,665
	1922 24	5,585,732	875	1,119,092	9,330,133	11,394,288
Stonewall.....	1921 3	30,036	23	7,892	7,892	20,207
	1922 3	31,700	12	7,626	18,017	26,524
Pas.....	1921 5	1,783,503	235	146,551	402,908	856,347
	1922 4	1,399,184	271	286,437	498,185	986,430
Winnipeg.....	1921 419	67,354,844	11,046	15,521,375	39,701,865	75,186,330
	1922 456	46,251,208	10,679	13,858,116	38,766,668	66,925,332
Saskatchewan—						
Battleford.....	1921 7	102,062	13	14,100	75,972	159,337
	1922 8	186,591	25	29,722	134,633	231,894
Biggar.....	1921 5	47,435	9	10,940	26,205	46,432
	1922 7	59,939	14	14,310	21,412	59,011
Canora.....	1921 4	67,000	6	8,946	18,559	44,325
	1922 3	62,590	6	7,045	13,020	30,596
Estevan.....	1921 7	180,553	31	33,955	128,431	236,087
	1922 8	223,178	39	40,410	125,084	256,608
Humboldt.....	1921 6	182,173	35	38,125	141,338	226,466
	1922 5	175,826	29	30,264	112,511	234,098
Indian Head.....	1921 4	78,998	14	16,319	27,182	88,907
	1922 5	73,107	11	12,900	21,370	62,323
Kamsack.....	1921 3	93,226	13	15,632	6,583	50,577
	1922 3	89,642	10	10,512	6,402	49,371
Maple Creek.....	1921 4	113,532	13	13,490	67,373	91,689
	1922 5	122,632	15	13,686	85,944	135,020
Melville.....	1921 5	187,838	18	24,754	63,404	127,297
	1922 6	202,566	19	24,298	79,989	154,907
Melfort.....	1921 7	201,492	24	28,357	44,753	117,577
	1922 8	117,468	24	23,943	55,950	139,885
Moose Jaw.....	1921 29	2,525,994	607	846,256	7,659,715	10,186,081
	1922 37	2,804,479	641	922,347	6,033,484	8,760,133
Moosomin.....	1921 6	56,146	11	8,215	35,864	61,787
	1922 5	57,121	8	7,038	30,703	54,118
North Battleford.....	1921 13	519,014	88	96,487	292,051	535,388
	1922 13	522,470	85	99,264	231,042	463,008
Prince Albert.....	1921 17	1,498,287	290	397,700	1,492,234	2,268,617
	1922 18	1,408,527	250	356,700	1,113,039	1,801,379
Regina.....	1921 43	11,690,695	1,211	1,909,788	7,322,783	13,022,448
	1922 53	12,580,823	1,313	1,907,618	7,616,947	14,228,413
Rosthern.....	1921 4	96,150	8	19,665	145,587	232,273
	1922 4	86,710	8	8,474	35,118	68,401
Saskatoon.....	1921 46	6,608,873	611	1,246,625	5,153,350	7,073,702
	1922 47	6,195,767	935	1,256,729	4,225,847	7,272,562
Shaunavon.....	1921 5	105,387	11	15,525	24,455	58,708
	1922 7	98,707	16	20,382	40,812	97,518
Swift Current.....	1921 9	519,718	60	82,898	93,641	351,207
	1922 8	528,178	55	67,550	104,894	306,848
Weyburn.....	1921 11	431,387	62	76,973	294,945	463,090
	1922 12	514,835	69	84,069	223,673	419,427
Yorkton.....	1921 9	588,153	65	59,924	171,876	348,287
	1922 10	726,874	70	67,854	230,616	482,854
Alberta—						
Blairmore.....	1921 4	168,003	42	63,982	92,704	268,804
	1922 5	328,670	48	80,145	77,606	228,672
Calgary.....	1921 149	11,367,762	2,516	3,783,086	11,448,027	19,879,151
	1922 149	20,267,183	2,694	3,819,995	9,332,646	17,827,702
Camrose.....	1921 0	117,876	30	46,097	160,124	269,048
	1922 8	146,820	38	42,124	172,800	283,373
Cardston.....	1921 5	128,515	16	9,913	63,901	89,415
	1922 6	131,730	15	13,212	48,841	84,974
Edmonton.....	1921 135	14,444,532	3,271	3,307,792	10,147,036	17,661,036
	1922 124	12,508,091	2,657	3,180,017	10,679,348	17,386,618
High River.....	1921 6	81,929	12	17,401	11,067	57,970
	1922 5	71,238	9	9,884	10,131	47,712
Lacombe.....	1921 5	83,087	12	14,339	80,033	130,471
	1922 5	79,545	12	13,329	78,362	144,503



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23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—concluded.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-employees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Alberta—concluded.						
Lethbridge.....1921	30	2,959,646	361	527,023	1,061,717	3,546,128
1922	28	3,122,551	290	392,619	894,317	2,077,028
Macleod.....1921	3	91,945	15	18,959	7,858	58,119
1922	3	96,570	13	11,731	21,462	59,652
Medicine Hat.....1921	25	3,785,502	434	556,884	7,233,433	9,137,185
1922	27	4,528,421	480	562,009	5,639,647	7,305,998
Red Deer.....1921	12	241,903	52	74,623	171,935	311,898
1922	8	257,060	40	56,555	171,983	303,782
Stettler.....1921	5	64,558	19	21,053	124,278	202,342
1922	4	36,649	6	9,266	19,111	61,979
Taber.....1921	3	51,630	8	20,555	3,778	24,846
1922	3	54,678	8	15,724	6,424	25,869
Wegreville.....1921	4	65,490	13	17,413	30,538	82,593
1922	6	85,947	20	20,556	89,799	176,051
Wetaskiwin.....1921	8	199,150	32	33,894	167,399	265,270
1922	5	188,346	29	30,585	172,001	282,172
British Columbia—						
Cranbrook.....1921	8	99,084	18	24,642	24,471	99,590
1922	7	106,848	16	21,127	24,142	91,462
Chilliwack.....1921	4	12,051	6	5,734	14,984	26,561
1922	6	25,074	13	13,004	17,706	42,310
Cumberland.....1921	6	133,618	53	65,517	70,717	268,139
1922	4	183,745	27	39,664	44,140	252,030
Fernie.....1921	8	879,343	76	119,965	304,294	611,744
1922	10	2,883,631	119	156,875	124,814	579,381
Grand Forks.....1921	5	69,662	17	15,712	38,203	72,298
1922	5	89,292	22	24,164	45,287	122,463
Kamloops.....1921	12	409,462	69	95,371	135,143	275,405
1922	11	735,187	95	128,065	324,956	865,359
Kelowna.....1921	11	704,487	150	157,244	455,521	809,630
1922	12	814,557	162	172,171	506,268	867,940
Ladysmith.....1921	6	94,427	40	76,980	65,447	198,201
1922	5	64,082	94	53,684	70,654	151,730
Nanaimo.....1921	29	762,104	187	146,060	281,376	640,410
1922	35	781,609	413	182,316	427,774	830,066
Nelson.....1921	22	821,797	143	175,030	218,402	600,000
1922	23	985,764	215	247,403	253,442	768,730
New Westminster.....1921	47	6,122,145	1,430	1,553,691	4,431,455	7,669,620
1922	49	4,932,479	1,034	1,203,444	4,236,522	6,561,061
North Vancouver.....1921	8	160,393	79	75,671	80,000	211,476
1922	8	489,428	73	104,584	173,490	345,025
Prince Rupert.....1921	19	2,896,713	379	461,685	1,546,268	2,494,253
1922	17	2,008,098	297	392,309	1,376,603	2,093,713
Revelstoke.....1921	10	292,657	30	39,869	36,219	211,432
1922	10	299,790	35	31,634	32,431	140,871
Rossland.....1921	5	5,137,397	66	133,431	75,487	806,257
1922	7	5,430,697	67	115,229	2,725	734,619
Trail.....1921	3	25,306	9	11,490	5,937	26,047
1922	5	31,473	8	5,910	13,259	32,134
Vancouver.....1921	441	72,063,439	10,438	12,446,231	35,287,999	65,035,973
1922	485	75,030,953	10,598	10,579,482	35,507,418	63,172,964
Vernon.....1921	12	508,750	164	118,299	154,293	376,789
1922	12	687,406	132	117,590	167,874	385,381
Victoria.....1921	130	13,936,778	1,702	2,185,696	2,968,160	8,025,914
1922	135	13,972,398	2,000	2,430,588	3,614,954	8,777,622