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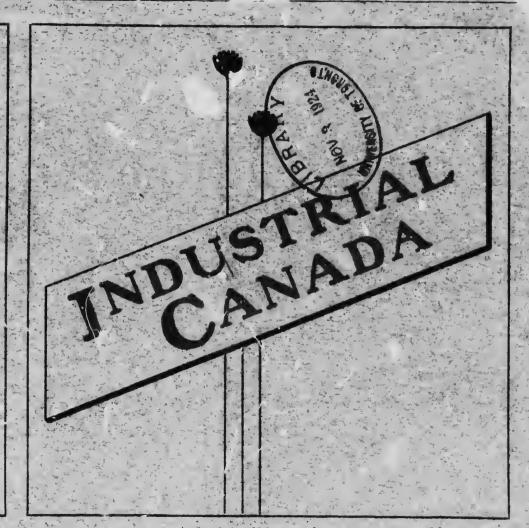
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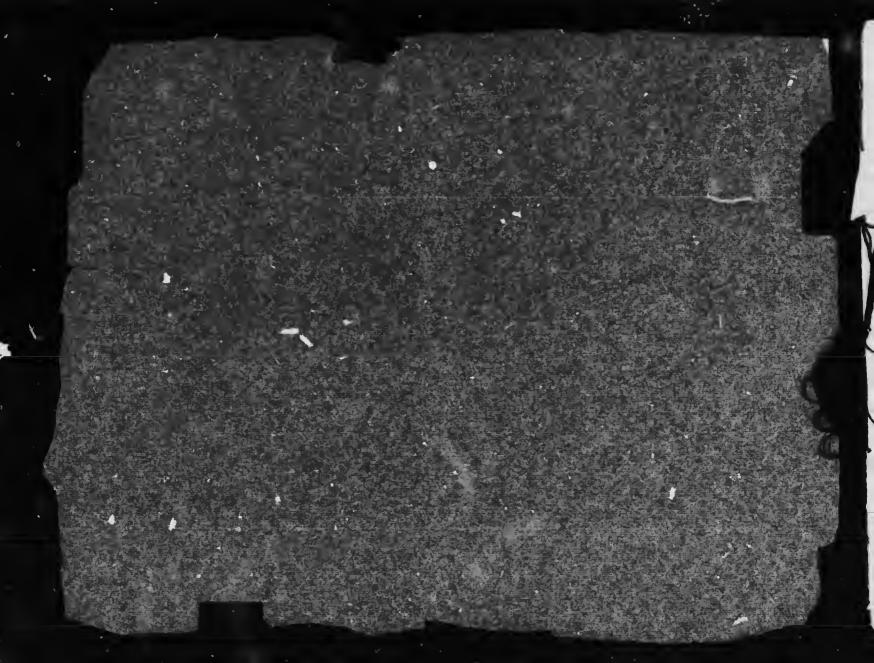
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Canadian Manufacturers Association







# In dustrial Zanada

A SURVEY OF CANADIAN INDUSTRIES

TORONTO, OCTOBER, 1901 ISSUD BY

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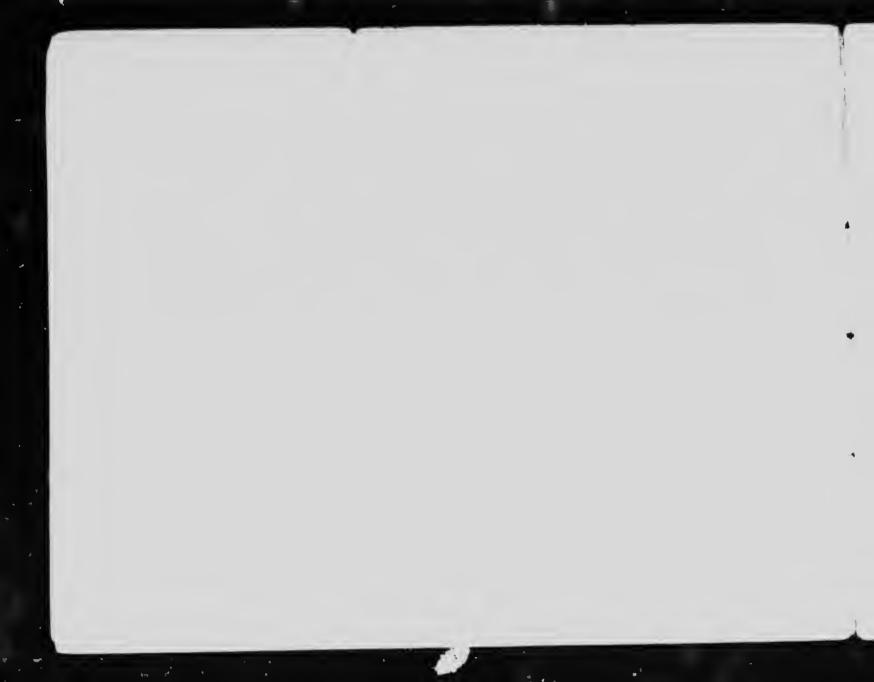
THE CANADIAN MANUFACTURIERS ACCOUNTY HIGHNESSES THE DUKE ALVO TO ALVO TO ALVO TO ALVO TO CANADA

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ARCH ERECTED BY THE MANUFACTURERS OF TORONTO IN HONOR  $^{\pm \pm}$  THE DUKE AND DUCHESS OF CORNWALL AND YORK.



# Introductory



HE Canadian Manufacturers
Association, by which the following brief sketch of
Canadian Industries is

issued, is an organization of all classes of manufacturers banded together to promote

their common interests and to advance the general industrial prosperity of Canada. One of the particular objects aimed at is the promotion of foreign trade, in which connection correspondence is solicited from all parts of the world relating to the manufacturing industry of Canada. Foreign buyers are assured that their inquiries will receive prompt attention and all information, including catalogues and price lists of particular lines of goods will be gladly sent them free of charge. Attention is also called to the following publications of the Association which contain much information of interest concerning Canadian manufacturers and their manufactures.

# "INDUSTRIAL CANADA"

The official monthly organ of the Association, published at the Head Office, Toronto.

# "CANADIAN TRADE INDEX"

A classified directory of the members of the Association, distributed free of charge to interested parties, on application.

# Industrial Canada

ANADA is fast advancing to the front rank as an industrial nation. To enable her, however, to take her full and rightful place she has need of three principal things: Capital, Population and Markets.

Capital and population are the first requisites in order to develop the rich natural resources of the Dominion, while the comparative smallness of the present home market compels Canadians to seek outlets for their surplus products in foreign fields.

Hitherto the development of this country has been handicapped by want of knowledge in foreign countries of the industrial possibilities of Canada. Even in Great Britain, with which the greater part of our foreign trade is done, much is left to be desired in this respect. It seems hard for the British public to realize that the world over no better field for investment of capital and for emigration is to be found than here, and that, as the numerous prizes to Canadians at Chicago, Paris, Buffalo and Glasgow emphasize, many lines of Canadian products are equal, if not superior, in quality to those of other competitors.

The present is particularly opportune for ealling special attention to this matter, for there is no doubt whatever that Canadians are willing and anxious to arrange for the fullest possible trade with the motherland and sister nations within the Empire. Public sentiment is alive to the fact that after all commerce is the great nation and empire builder.

The following very brief resumé of Canadian industries is presented with the hope that the few facts and figures therein contained may assist in giving a clearer knowledge of this important unit of the British Empire.

# Material Development

For the length of time over which the industrial history of Canada may be said to extend the progress made is in many respects very satisfactory. A few of the chief elements of growth may here be noted as affording a striking evidence to the substantial basis on which the prosperity of the country rests.

#### Population

First, as to the population. The following table shows the total population of Canada at decennial periods since 1831.

# Comparative Table of Population

					1	1881	1.00.1	1901
	1831	1841	1851	1861	1871	1881	1894	1.071
							4	5 998 883
Total population	1 101 685	1.562.772	2,364,419	3,176,838	c 3,635,024	4,324,810	1,855,250	19 (1919) 15 (1717)
Total population	1,101,000	.,			1			

From this table it will be seen that the population has increased five times in 70 years.

As Canada is now entering on an era of greater industrial prosperity than ever before the next decade will probably see a much more rapid increase in the population than the one which has just closed.

# Expansion of Trade

The steady expansion of Canada's foreign trade affords a strong proof of her increasing prosperity. This will be seen from the following tables of imports and exports since the Confederation of 1867.

#### Comparative Table of Exports

managenhalife to the second of	1868	1878	1888	1901
Produce of Mine	1,446,857 3,357,510 18,262,170 6,893,167 12,871,055 1,572,546 302,280 837,592 4,866,168 4,196,821 2,961,722	2,869,363 6,929,366 20,054,829 14,577,086 27,281,089 4,715,776 477,503 	4,339,488 7,871,105 22,880,291 25,620,369 20,875,435 4,616,953 897,503 17,534 3,084,322	39,982,573 10,720,382 30,003,857 55,499,527 24,977,662 16,012,502 44,642 
	57,567,888	79,323,667	90,203,000	198,018,404

#### Comparative Table of Imports

WHENCE	1868	1878	1887	1900
Great Britain	1,634,414 1,396,553 26,315,052 1,365,295 485,943 938 1,645,770	37,431,180 672,665 1,033,849 48,631,739 1,385,003 399,326 156,540 1,489,275 	44,962,233 354,342 1,942,182 45,107,066 2,073,470 3,235,449 774,987 7,189,699	44,789,750 660,678 800,499 109,844,378 4,368,502 8,383,498 2,145,096 9,811,935 

#### Railways and Canals

The settlement and material development of such a vast interior as Canada possesses receives its stimulus from the growth of transport facilities. In this respect also Canada has made rapid strides of recent years.

The first railroad was built in 1837, from St. John's to Laprairie, and was only 15 miles long. In 1849 Canada had only 50 miles, while the United States had 9,021 miles. In 1853 the first locomotives in Upper Canada (Ontario) were run over the Northern Railway from Toronto to Bradford. At the present time Canada has greater railroads, as compared with her population, than any country in the world. A glance at the following statistics will show the progress of this development:

#### Railway Progress

	1837	1849	1856	1860	1875	1885	1900
Miles	16	51	850	1880	4,856 5,190,416	15,977 9,672,599	$\frac{17,657}{21,500,175}$
Passengers	• • • •		\$6,722,666		5,670,836	14,659,271	35,946,183 \$70,740,270

Canals have always played an important part in the commerce of Canada. The opening of the Lachine Canal dates back as far as 1825. The Welland Canal was opened in 1829, and the Rideau Canal in 1832. There are now eight canals between Lake Superior and tide water, while the total expenditure on canal building up to June 30th, 1900, amounts to \$79,043,784.

The development of Canadian railways and canals by lessening the cost of transportation has had a most wonderful effect on trade and in opening new territory. The cost of living in the West is now not much higher than in the older provinces in the East, and products from the interior are being conveyed to the coasts at an ever diminishing cost.

Great improvements however are still contemplated in the present systems, and vast tracts of the Dominion have yet to be opened up. The next few years will doubtless see a large expenditure of capital in this work.

The industries of Canada fall into five leading groups: fisheries, mining, lumbering, agriculture and manufacturing. Each of these may be referred to separately.

# Canadian Fisheries

The fisheries of Canada are the most extensive in the world, embracing over 5,600 miles of sea coast besides innumerable inland lakes and rivers. The salt water area is estimated at more than 1,500 square miles, the fresh water area at no less than 72,700 square miles. In 1900, 79,863 men were employed in the fishing industry using 5,506,760 fathoms of nets and other fishing gear, representing a capital of \$10,000,000. Nearly twelve hundred schooners and tugs manned by 8,080 sailors as well as 70,893 other fishermen using over 38,000 boats found occupation in this vast industry.

Statistics are not yet to hand for 1901 or 1900, but the total value of the eatch of fish in Canada for the year 1899 amounted to \$21,861,706, being an increase of about two and a quarter million dollars over that of the preceding year.

The lobster plant alone is estimated at \$1,334.180, comprising 858 canneries, dispersed on the sea board of the Maritime Provinces. No less than 18,708 persons found employment in this branch of the fishing industry, using over 1,360,000 traps.

The salmon preserving industry of British Columbia, comprising 60 canneries and representing a capital of \$1,380,000, gives employment to 18,977 hands.

From the year 1869 to 1899 inclusive, the five principal commercial fishes yielded the following enormous total values:—

Cod						,	\$117,523.1.6
Herring,				,			00,004,910
Lobsters.							59,210,127
Salmon,							50,103,171
Mackerel,							39.583.427
Mucketer,		,					

## Forest Wealth

A source of enormous wealth to Canada is her forests. The principal woods are maple of several varieties, white and black ash, white and rock elm, hickory, red and white birch, white and red oak, beech, aspen, poplar, walnut, white and red cedar, white and red and black pine, white and black menzies and engelmann spruce, hemlock, Douglas fir and larch. The greater number of these varieties are, however, confined to a comparatively small area. In the great forests of the north, which form the main source of supply, the principal trees are cedar, balsam (fir and poplar), ben, white birch, tamarae or larch, banksian pine, and white and black spruce.

The dimensions of these northern forests are so vast that they seem almost incredible. They may be said to extend in a forest belt, the central line of which starts from the Straits of Belle Isle, and following a west, south-westerly course till it passes to the south of James Bay, turns north west and follows this course all the way to Alaska, opposite the mouth of the Mackenzic River. The total length of this belt, according to Dr. Robert Bell, the Assistant Director of the Geological Survey, is 3,700 miles, while its average width is 700 miles, giving an approximate total area of 2,590,000 square miles.

In view of the vastness of these resources, it may be safely said that no country affords a better field for investment in the lumber industry or in the manufacture of wood products.

Statistics are not available to show the value of lumber produced for home consumption, but the following table, containing values of exports for the years 1891, 1894, 1897 and 1900, shows the importance of the business in Canada:

	1891	1894	1897	1900	
Logs, elm	\$ 155,503	\$ 152,221	\$ 77,978	\$ 74,721	
Logs, pine	313,281	2,459,354	1,832,352	494,311	
Logs, apruce	158,334	107,282	102,399	63,078	
Deals, pine	2.891,798	2,751,069	3,266,087	3,276,516	
Deals, spruce and others	4,817,322	5,567,631	7,094,5 5	8,287,960	
Planks and boards	8,626,912	7,: 17,001	10,817,912	9,611,278	
Total lumber	\$17,574,840	\$18,551,518	\$23,898,562	\$23,646,761	
Shingles	438,929	754,743	1,201,366	1,131,506	
Sleepers and railroad ties	310,676	131,795	229,780	221,906	
Shooks, box	201,716	105,329	80,626	251,357	
Total timber	\$ 3,084,200	\$ 2,590,542	\$ 2,289,068	\$ 2,013,746	
Wood, blocks and other, for pulp	188,998	393,260	711,152	902,772	
Total forest	\$24,282,015	\$26,355,448	\$31,258,729	\$29,663,668	

In addition to the above are the manufactures of wood, the exports of which in 1891 were valued at \$1,024,448, in 1894 at \$1,348,199, in 1897 at \$1,652,717, and in 1900 at \$3,127,442. Of the above heavy increase a great part is due to the increased exportation of wood pulp, which leaped from a value of \$742,000 in 1897 to \$1,210,000 in 1898 and \$1,816,016 in 1900.

## The Mining Industry

Canada as a field for mining investment has been recently attracting world-wide attention. The result is a greatly increased production of minerals, especially in the Yukon, British Columbic, Northern Ordanio and Nova Scotia.

In 1906 the value per capita of the mineral income of the community based on an estimate of the population amounted to \$(1,84 as compared with about \$8.00 in 1800 and \$2.23 in 1885.

The following table will show at a glance the mineral prediction of Canada for the year 1900:

#### Mineral Production in 1900

Product	QUANTITY	Value	Problet	QUANTITY	VALCE
METALLIC Copper, !bs Gold, Yukon. Gold, all other Pig Iron, tons Lead, !bs. Nickel, !bs.		\$ 3,063,119 22,275,000 5,441,752 583,158 2,760,521 3,327,707 2,730,598	Phosphate (apatite), tons Pyrites, (ons	1 415 40,031 62,055 420 1,000	\$ 7,105 155,164 279,458 1,365 5,000 1,950
Zinc. Ibs  Total metallic  Non-Metallic— Arsenic, Ibs	212,800	9,342 \$40,391,197 \$ 22,725	Clay Pro lucis— Cement, natural rock, bbls Cement, Portland, bbls Flagstones	283,124	99,994 545,826 5,250 80,000
Assessed, tos. Asbestos and asbestic, to: Chromite, tons. Coal, tons. Coke, tons	30,541 2,335 5,332,197 157,134	763,431 27,000 12,568,475 649,140	Granite Pottery Sewer pipe Slate Terra cotta, pressed brick, etc.		200,000 231,525 12,100 259,450
Fire clay, tons	1,245	4,130 30,940 53,450 259,009	Building material, including bricks, building stone, lime, sands and gravel, tiles, etc		4,850,000
Gypsim, tons	52,966	39,332 166,000	Total structural materials and clay products Total all other non-metallic.		\$ 6,284,145 16,799,748
Baryta, tons Ochres, tons Mineral water	1,966	7,575 15,398 75,000	Total non-metallic		\$23,083,893 40,391,197 300,000
Natural gas Petroleum, bbls		$\frac{417,094}{1,152,007}$	ducts not returned		\$63,775,090

This splendid total of \$63,000,000 for 1900 compares strikingly with \$10,000,000 produced in 1886, 16,000,000 in 1890 and \$20,600,000 in 1895.

As has been said, however, the opening up of the mineral wealth of Canada has hardly more than begun. There is unto d wealth of gold in British Columbia and the Yukon with smaller deposits in other parts of the country. The coal areas are estimated at 100,000 square miles, the workable seams being in some districts 60 to 70 feet wide. Iron, nickel, copper and silver among metals and asbestos, petroleum and mica among non-metallic minerals are also found in large quantities in different parts of the Dominion.

Rich returns, therefore, await the capitalist in this direction and capital is rapidly flowing in to avail itself of them.

## Agriculture

About 45 per cent, of the population of Canada are supported by farming. In addition to these there is a large class employed in industries arising out of farming, such as flour and oatmeal milling, pork and beef packing and cheese and butter manufacturing.

Agriculture is thus the para, aount industry in Canada, which has become famous for the excellence of its agricultural products. The chief reasons for this preponderance are the fertility of the soil, the diversity of the elimate and the prevailing levelness and low attitude of the greater portion of the country.

Ace ding to the census of 1891 the total number of acres occupied was 60, 87,000; impro.ed lands, 28,537,000; under crop, 19,905,000; gardens and orchards, 465,000; pasture, 15,284,000. The census just taken will show a very large increase on these figures.

The export commerce in most of the farm products is rapidly increasing. The following comparative statement of the value of the exports of some of the farm products of Canada during the years 1897 to 1900 shows the growth in that hort period and indicates somewhat of the great possibility for expansion of this trade.

# Value of Some Canadian Farm Products Exported in Years 1897, 1898, 1899, 1900 and 1901.

(Years ending June 30th.)

	1897	1898	1890	1900	1901
Wheat	\$ 5,544,197	\$17,313,916	8-7,784,487	\$11,995,488	\$13,622,930
Flour	1,540,851	5,425,760	3,105,288	2,791,885	4,040,121
Oats	.5,130	3,041,578	3,265,388	2,143,179	3,103,575
Oatmeal	-62,949	554,757	396,568	474,991	467,807
Pease	2,352,891	1,813,792	1,955,598	2,145,471	2,684,085
Cattle	7,159,388	8,723,292	8,522,835	9,080,776	10,934,912
Cheese	14,676,239	17,572,763	16,776,765	19,856,324	21,129,870
Butter	2,089,173	2,046,686	3,700,873	5,122,156	3,355,197
Pork, Bacon and Hams	5,871,988	8,092,930	10,473,211	12,803,034	11,894,982
Eggs	078,479	1,255,304	.267,063	1,457,902	1,692,226
	\$42,331,285	865,810,778	\$57,251,076	\$67,871,206	\$72,931,705

### Manufacturing

In no industry has Canada made more striking progress than in that of manufacturing,

While the exports of products of the farm, the fisheries, the forest and the mine have increased by 253 per cent., from \$42,830,759 to \$161,184,001, since 1868, the exports of manufactured articles have increased by 918 per cent., from \$1.572,546 to \$16,012,502.

in the same period.

The census returns of 1891 show that the number of mechanical and manufacturing establishments increased from 49,722 in 1881 to 75,968 in 1891; the capital invested increased from \$165,000,000 to \$354,000,000, and the value of the product increased from \$310,000,000 to \$470,200,000. The present year's returns will no doubt show a still greater growth.

The chief advantage of Canada as a manufacturing country consists of course in its abundant supply of raw material, the four great productive industries of which have

been outlined above.

Cheap motive power is another essential for manufacturing, with which this country is particularly well equipped. In addition to extensive deposits of coal in the Eastern and Western extremities of the Dominion, almost unlimited supplies of water power are scattered throughout the older provinces, and in British Columbia. With electrical transmission of power almost an accomplished fact, the importance of these water powers would be hard to calculate.

#### Food Products

Space allows of special mention to only a few of the most important manufacturing industries. In this list that of food products, which is closely bound up with the agricultural industry, ranks very high.



GROWTH OF EXPORT MANUFACTURING IN CANAD: FROM 1868—TO 1901

Flour and Oatmeal—Although vast quantities of whe are exported from Canada, a large and ever increasing amount is converted into flou. In our huge milling establish ments. Canadian flour has won for itself a splendid name in foreign markets where on account of its excellent quality it is often mixed with flour from other countries. In 1001 the amount exported was \$4,046,121, the greater part of which went to Great Britain and Newfoundland. Oatmeal is also milled extensively, the exports last year amounting approximately to half a million dollars.

**Butter and Cheese.** The making of butter and cheese has passed from the farmers' wives into the hands of creamenes and cheese factories. A higher quality is thus produced, as better appliances are used and more expert workmen employed. The establishment of a government system of cold storage has greatly facilitated export. In 1001 the total value of butter exported was \$3,355,101, and of cheese \$21,120,870; in both cases, nearly all going to Great Britain.

Bacon and Dressed Meat. The packing industry in Canada is also conducted on a large scale. A peculiar kind of hog product is obtained which finds a ready sale in the British market. The total exports in 1901 of pork, bacon and hams amounted in value to \$11.894.982.

The value of dressed beef exported in 1901 was \$1,030,090. This is an industry which is being greatly extended at the present time. Mutton, dressed poultry and canned meats also form important items of export.

Canned Vegetables. A considerable amount of capital is employed in the canning of vegetables and fruits. The output of these goods is now more than sufficient for the home demand and Canadian canners are turning their attention to the British market. Here it is gratifying to know that they are finding a good sate as the superior excellence of their product become known.

The earning of an British Columbia is another important industry, the exports in 1901 amountii. \$2,283,930.

#### Manufactures of Wood

Statistics have already been given to show the importance of the humber industry in Canada. A few of the leading annufactures of wood may now be noted.

Wood Pulp—Chief among these is wood pulp, in the production of which about twenty million dollars are at present invested, and this amount is continually increasing. The superior quality of Canadian sprace, its unlimited quantity, and the abundant supply of water power all combine to make Canada one of the best equipped countries in the world for the manufacture of this article. The exports last year reached the sum of \$1,983,246.

Paper—Closely associated with the manufacture of wood pulp is that of paper. Up to the present time almost the entire output of Canadian paper mills has been required for home consumption; but with the greatly increased production of wood pulp the manufacture of paper has also rapidly advanced and paper is beginning to figure prominently in the list of exports. With the help of capital and skilled labor Canada is bound to become one of the most extensive producers of paper and paper wares to their many forms, such as envelopes and the various kinds of commercial and legal stationery.

Furniture The manufacture of furniture is now being carried on in Canada on a large scale. The wants of different countries are being studied and highly skilled workmen employed to produce the styles in demand. A large foreign trade is sure to develop as this is an industry peculiarly well ad to Canada owing to the value and variety of the woods available for raw material.

Agricultural Implements—Canadian implements by their superior quality have won for themselves an enviable position in the markets of the world. The growth of the industry in Canada has gone hand in hand with the agricultural progress of the country. The result is that there is hardly an important market in the world where Canadian agricultural implements are not used.

Musical Instruments Canadian organs have won the highest awards at the world's expositions and are finding a ready sale in foreign markets. The manufacture of pianos has also advanced rapidly of late year. In the year 1001 the total value of organs and pianos exported amounted to \$540,201.

Vehicles—The vehicle industry is conducted by large firms which are now branching out in export trade. Canadian carriages are noted for their elegance and strength, and have excited very favorable comment at both the Paris and the Glasgow Exhibitions. The bieyele industry, which is a branch of the vehicle industry, has assumed large dimensions. Being in control of a few large concerns, it is earried on in the most economical manner, and a high grade of bieyeles is produced. The exports in 1901 amounted to \$350,315.

Other Manufactures of Wood A few of the other important articles of manufacture from wood may be enumerated. Doors and Sash are produced in large quantities and shipped to Great Britain, South Africa and Australia. Matches are also made economically, both from paper and wood. Large factories are employed in the making of interior decorations and house-furnishings, considerable quantities of which are exported. Woodenware, such as pails and churns is a profitable line and so are wood specialties, which consist of odd ends of good lumber utilized for such purposes as skewers, handles, dowells, etc. Bent goods in the form of hubs, spokes, rims, etc., are produced both for the home market and for export trade.

#### Manufactures from Minerals

Iron and Steel Industries—At the present time many millions of Anglo-American capital are being expended in establishing iron and steel plants in Ontario and the maritime provinces, to utilize Canada's rich deposits of iron ore. The Government has been encouraging the establishing of such plants by generous bonuses on the output, a policy which has met with very encouraging results. In a recent address delivered under the auspices of the Canadian Manufacturers' Association, Mr. A. J. Moxham, General Manager of the Dominion Iron and Steel Co., pointed out that it was possible to manufacture steel in Canada at a cost two or three dollars less than in Pittsburg, which now so largely dominates the markets of the world. It has been said that industrial supremacy belongs to that country which controls the world's supply of coal and steel. If that be so, the future of Canada is exceedingly bright.

Manufactures of Iron--Canada is noted for her manufactures of heating apparatus. These comprise all classes of wood and coal stoves, hot air furnaces, and hot water and steam furnaces. Machinery is also manufactured in large quantities and exported to the United States, Australia, British East Indies, Belgium, Russia and other countries. Some of the producers are practically independent of the Canadian market altogether. Other iron and steel goods which we can only mention are, sewing machines, steel rails, engines and boilers, corrugated iron for roofing, interior metal furnishings and fire-proof fittings. The manufacture of all these articles will no doubt be greatly stimulated by the increased production of iron and steel within the Dominion.

#### Other Important Industries

Leather Goods—In 1901 Canada exported only \$2,178,604 worth of hides of skins while her import amounted to over \$4,000,000. From the latter and similar products of local supply are made the various leathers and leather goods for home consumption and for export. The total volume of leather exported in 1901 amounted to \$2,365,222, of which the greater part went to Great Britain. In boots and shoes Canada is doing a large and increasing foreign trade. Harness and saddlery is also manufactured in large quantities, the latter being the more important for export. Leather sales in England and Australia have been growing rapidly during the last few years, and the future is full of promise.

Textiles—The woollen industry occupies an important place among Canadian manufactures. About \$15,000,000 capital is represented and employment given to at least 12,000 people. Tweeds, flannels, knitted goods, cloths, carpets and underwear are among the articles manufactured.

The cotton industry is in a flourishing condition, the exports in 1901 amounting to 8654.541. Trade in Canadian cotton promises to develop very rapidly.

Tinware and Enameled Ware—The manufacture of enameled, agate and granite ware, etc., for kitchen and household utensils, is an important industry in Canada. The companies engaged in it are well established, and are now successfully catering to the foreign market. The most attractive designs and convenient patterns are used to suit the tastes of customers abroad.

Miscellaneous Other manufacturers in which the beginnings of a successful export trade are being made are rubber goods, jewellry, drugs, explosives, oil cake, soap and cordage.

In conclusion, Canadian manufacturers have grown beyond producing merely to satisfy the home market of five and a half million people. They are now looking out upon the world as their market and are equipping themselves to enter the world competition in an intelligent and progressive manner.

# Awards to Canadians at Chicago and Paris

A strong proof of the high quality of Canadian products of all kinds is afforded by the large number of prizes awarded to Canadians at the world's expositions. At Chicago the official report gives the total number of these awards as 2,126, of which 658 fell to the Department of Agriculture, 963 to Live Stock, 24 to Fisheries, 65 to Mines and Mining, 23 to Machinery, 28 to Transportation, and 121 to Manufactures. At Paris Canada received 268 awards including 31 grand prize diplomas, 63 gold medal diplomas, 90 silver medal diplomas, 52 bronze medal diplomas and 32 honorable mention diplomas. these were for manufactures. At the Glasgow and the Pan-American Exhibitions Canada has been making an excellent showing. In the department of fruit at the Pan-American, for instance, Canadian exhibits captured all the prizes awarded,

# Transportation, Shipping &c.

Reference has been made to the development of transportation facilities in Canada. Of the 165 railroads now in existence, the two most important are the Canadian Pacific and the Grand Trunk, the former stretching from ocean to ocean, the latter covering the Eastern provinces and connecting with Chicago and the Western United States. The extensive canal service also enables Canada to utilize the magnificent highway of water afforded by the inland lakes, ocean navigation for lighter bottoms being now established with Sault Ste. Marie and Chicago.

There are some 30,000 miles of telegraph line in operation, of which some 3,000 miles are controlled by the government. The telegraph accommodation afforded is equal to that of any country, Canada having a telegraph office for each group of 2,026 persons, while the United States has one for each group of 3,349. Great Britain one to

every 3.834. France one to every 3.273, and Germany one to every 2,842.

The shipping required to earry on the whole marine trade of Canada is nearly 61,000,000 tons. Formerly, quite a number of vessels were built in Canada, but owing to the change from wood to iron and steel ships the industry has fallen away materially. Now that the steel industry in Canada is coming forward, that of steel shipbuilding will in all probability follow closely after it.

The post office system of Canada is one of the most efficient in the world. In 1900 the number of post offices amounted to 9,627, and the total number of letters was over 200,000,000. It may not be amiss to recall here the fact that Canada was the first to adopt the Imperial penny postage.

#### Field for Settlement

There still remain in this country immense areas of splendid farming lands open for settlement. The allotment of these is in the hands of the Dominion and the several Provincial Governments. Under the Dominion Government regulations any person who is the sole head of a family, or any male of 18 years of age or older may obtain 160 acres of land in Manitoba or the North-West Territories on payment of a fee of \$10. Leases of grazing lands are granted 20 an annual rental of 2 cents per acre.

The vast extent of these unsettled areas may be imagined when it is learned that in Manitoba alone only about one tenth of the agricultural land is now under cultivation. Population is, however, rapidly flowing in, and a prominent western citizen has recently predicted that the day is not very far distant when Manitoba will be producing as much wheat as the entire spring crop of the United States.\* The Ontario Government is also putting forth strenuous efforts to colonize the fertile agricultural district lying in Northern Ontario.

#### Conclusion

The foregoing sketch will serve to furnish some idea, however inadequate, of the natural resources and industrial possibilities of Canada. The extent of these well warrants a belief in the continuance of the present prevailing good times as well as a much larger development in the future. As was remarked at the outset, what is required to enable Canada to work out her "manifest destiny" of a strong and prosperous member of the British Empire, is capital, population and markets, for all three of which she turns most naturally to the mother-land.

<sup>\*</sup>T. W. Thompson, general manager 2 the W. W. Ogdvæ Malling Car, Winnipeg at the opening of the Western Lair, 1901.

