

IRON AND STEEL IN CANADA.

After struggle of more than a century it can be said at last that the iron and steel industry of Canada has both an existence and a future. When the first furnace was established about 179 years ago, the industry secured footholds in the country, but after ten or twelve years ago the only furnace that was generally credited for Canadian iron concerns was bank-rupted. A century has since passed. In the future, as the history of the Nova Scotia Steel and Coal Company (limited) will show, but general confidence in the industry was wanting, the leading or highest minds made after long searching their way, but they became interested, and, as a consequence, the iron and steel industry, perhaps our most hopeful and important commercial enterprise. Not long ago foreigners have come in and made money "big," but because the Canadian public has awakened to a realization of the importance and value of the industry, and the need of encouraging it.

For a long time our iron ore resources were regarded as treasures of no value because ore and coal were in juxtaposition. But investigation has shown that in all the four provinces in Canada that can boast of iron ore supplies, the assembling of raw materials for iron and steel can be made at a lower cost than at Pittsburg, the cheapest cen-

tral coal regions than Chicago, where many a large United States plant is situated. It has only to bring the coal from the Connelsville or Pittsburgh district, a distance of, say, 210 miles by rail to Lorain or Cleveland. Both ports are equipped with modern coal loading plants. A short water haul equivalent to, say, 80 miles of rail haul will connect with the mines. This bush at one-fourteenth of a cent per cwt. freight cost of \$1.97, or \$1.28 lower than the Pittsburg standard.

Moving Furnaces to the Ore.

The number of arguments for assembling the raw material closer to the ore than to the coal is multiplying, because it requires only about one-half as much coke to make a ton of iron that it did some years ago. The proportion is now about two tons of iron to one of coke. If, then, either the iron or coal must be hauled, it is just half as expensive to haul the coke as the ore. For that reason it will be cheaper to have the furnaces situated near the ore mines. In every country we find the ore and coal separated, which most people do not realize; so Canada's "iron" opportunity is not so bright.

3. In the Ontario district exist ores of great promise, within reasonable distance of the coal, either the Connellsville or Puncxtawtany district. In dependent of the local supply is the Canadian lake coast. This latter part the Hamilton Steel & Iron Company are following for good results. The government is making it free, which policy works in the favor of our iron manufacturer.

Production of pig iron in Canada since 1894.—

Year.	No. of Tons.
1901	243,576
1900	36,900
1899	84,977
1898	68,766
1897	57,796
1896	60,020
1895	57,229
1894	44,721

Although the production for 1901 is about three times as large as that for the year previous, the building of new plants may in progress ensures a much larger increase this and next year. The production in Canada is only 22 per cent. of the capacity, whereas in the United States it is 50 per cent. of the capacity. For equal production, in the States is four times as great as in Canada; in the former country it is 475 lbs., in the latter it is 110 lbs. We do not yet produce nearly enough for our own wants, which are estimated at 800,000 tons a year. Not that our importations of pig iron are heavy; last year they were only 35,275 tons.

Our Steel Works.

The number of rolling mills and steel works in Canada is, eighteen completed and two building, of these one makes steel in a special Bessemer converter, one makes Tropus steel, while two standard Bessemer steel shapes, plates and sheet. Four make open-hearth steel. One open-hearth steel plant is being built. The annual capacity of the rolling plants is: Standard, Bessemer, Tropus and special Bessemer ingots and castings,

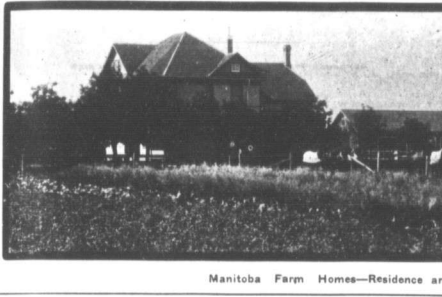
On all sides of this iron and steel industry there are unmistakable signs of progress. All eyes are on Canada, and it is not soprising that they should be—Industrial Canada.

Corn Exchange Wants Preference.

Montreal, May 19.—The Corn Exchange association met to-day to consider a bill pro quo in the matter of a preference to British goods. There were present about thirty members, who unanimously without discussion resolved: That whereas Great Britain has lately played an important part in agricultural products from her colonies, as well as from other countries, and whereas the building up of the colonies, whose loyalty has been so thoroughly proven is the surest and best means of strengthening the empire and providing for its defenses, and whereas the growth of the colonies and Canada in particular largely depends on the encouragement of their agricultural resources, the Canadian government is hereby requested to urge most strongly on the Government of Great Britain the necessity and the advisability of granting a free entry to the agricultural products of Canada and other colonies, while maintaining the duties on importations from all foreign countries.

Silver's Low Record Mark.

(Chicago Record-Herald.)
Although William J. Bryan in a recent letter declared his unalterable determination to stick by silver at the heaven born ratio of 16 to 1, the most striking feature of the silver



Manitoba Farm Homes—Residence and Barns of Fulton Bros., Portage la Prairie.

in the United States. That is a fact not fully realized yet. The first cost on the assembling of materials entering into a ton of pig made at Pittsburg \$3.25, including the charges on bringing the ore from the Lake Superior mines, the coal from the Connelsville district, and the limestone from the Tyse district. Any firm that can assemble the raw materials at a lower cost than \$3.25 can beat the United States manufacturers on the Canadian market, and if production is cheap enough, as it has proven to be more than one cent, Canada will be able to take a better place in the export trade. Both the domestic and foreign demands for iron and steel are growing faster than the supplies.

Where Do We Stand?

If one takes a map and draws a line from British Columbia on the west to the John's Newfoundland on the east, the line will run through four well developed beds of ore of large quantity and of excellent quality, all capable of being mined as cheaply as any other. They are related to the coal as follows:

1. In British Columbia coal beds in the States district, not far from Seattle and those of the Crow's Nest on the Canadian side are contiguous. In the assembling of material is here possible, but the standard we have taken. But the development has not been made yet.
2. On the northern shores of Lake Superior are large and pure beds such as the Helen Mine. They are being utilized by Mr. Clergue, by the Canadian firm, at Ottawa, and will be by the Cramp Ontario Steel Company who are erecting two coke ovens with a daily capacity of 250 tons each at Collingwood. This district is full of promise. It is nearer

4. But our crowning opportunity is in Nova Scotia where two strong companies, the Dominion Iron and Steel Company and the Nova Scotia Steel and Coal Company have economically thrived. The ore is drawn not only from Nova Scotia in close proximity to the coal, but also from the famous mines of the Connellsville district. The manufacturing is done at Sydney, and the cost of producing pig iron here is lower than that of any other place in the world. Against the Pittsburg cost of \$3.25, there is a further saving of \$2 in ton freight for export, Sydney being an ocean port. In Sydney pigs can be made for \$6 a ton, steel blooms for less than \$10 a ton and steel rails at about \$12.

Our Opportunities Unparalleled.

Our opportunities to supply both export and domestic trade are unparalleled for the continent for our home east and west coasts for foreign lands, and on lake coasts in the centre of the continent for our home trade? What more can we ask for? Canada does not become a great producer of the continent for our home producing nations go, it will be because Canadians have neither the energy nor the capital to develop their resources. But they are now recognizing their opportunity and are grasping it.

Our Pig Iron Capacity.

The number of blast furnaces in Canada to-day is 14 completed, four building and four projected. All completed furnaces, nine use coke, one uses coke and charcoal, and four use charcoal, as fuel. Two of the four building furnaces will use coke and two use charcoal. The annual capacity of built and building furnaces is 1,990,360 tons.

The following table shows the pro-

duction of gross tons, open-hearth ingots and castings, 637,900 gross tons; total ingots and castings, 838,000 tons; rolled products, 281,900 tons.

Much to Be Done.

But of manufactures of iron and steel we import enormous quantities, the 1901 value is \$1,100,000,000, 427,107,419. Much of this represents imports of steel rails, architectural shapes, plates and sheet, iron, wire, rods, machinery steel and many other lines that should and could be made in this country. Some day it must be produced in Canada, from Canadian ores and by Canadian labor.

Iron and Steel Exports.

It is only in the past year or two that Canada's iron and steel exports have been worth much consideration. But the industry has just been put upon an export basis, and the probability is that it will be pushed in this direction, both in regard to pig iron and steel. The table of exports of pig iron is as follows:

Year.	Tons.	Value.
1892	3	\$ 95
1893	259	6,202
1894	1,940	45,363
1895	2,427	65,555
1896	2,403	61,029
1897	2,188	50,767
1901	5,623	117,456

A Big Increase This Year.

In the first eight months of the present fiscal year Canada has exported 68,669 tons of pig iron, valued at \$661,521. This is to be compared with 46,000 tons of pig iron for the first eight months of last year, an increase of 48 per cent. of last year's total exports. In 1897, the value of our total exports of "iron and steel and manufactures of," was \$1,997,185; in 1901, this was \$3,717,537.

situation is that this week the price has struck the lowest figure ever quoted for silver in the history of the world. The last London quotation was 23-5-16 pence per ounce, or a trifle more than 51 cents. At this price the bullion value of the silver dollar is between 36 and 37 cents.

And the price of silver has declined during 1901 just sixty years as shown by the following table of the average London quotations every five years since 1842.

Year.	Price.
1842	41 7-16 pence
1847	54 5-16 pence
1852	36 5-16 pence
1857	55 13-16 pence
1862	51 13-16 pence
1867	44 11-16 pence
1872	39 3-16 pence
1877	27 3-16 pence
1902 (April 22)	23 5-16 pence

In the face of this fairly amazing drop in the price of silver it is an almost equally surprising fact that the production of silver last year was two and a half million ounces greater than that of any previous year.

It is a weighty testimony to the present of the world of the "Grain Trade of the World," as the grain receiving port of Europe, as the proprietors of the Times newspaper, and have acted as its author for the article on "The Grain Trade of the World," published in the "Encyclopedia Britannica." Mr. Greenhill, of Liverpool, the editor of the "Encyclopedia Britannica," is a Fellow of the Royal Agricultural Society, and is the European correspondent of the Chicago "Grain Trade," he is the author of the "Corn Trade Year Book" which is self the "Encyclopedia of the World's Grain Trade."