

Iron Ores.—The following figures taken from the "Report of Mineral Industries in the United States" at the eleventh census, 1890, will give some idea of the magnitude of the iron industry of the United States:—

In 1889 the production of iron ore in the United States, including red hematite, magnetite, brown hematite and carbonate, amounted to 14,518,041 gross tons, of a total value of \$33,351,978.

The total capital invested in the ore mines in the same year is given as \$109,766,199. This is all expended within the country on the native ores.

In addition to this, iron ore was imported in the same year from foreign countries to the extent of 853,573 tons, valued at \$1,852,392.

With reference to foreign ore imported into the United States, Mr. Birkinbine in his "Production of Iron Ore," 1892, says:—

"While the United States has large deposits of iron ore of all kinds, widely distributed throughout the various states and territories, still the low rates of wages in foreign countries, and cheap water transportation rates, have admitted considerable quantities of iron ore into this country, in spite of a specific duty of 75 cents per ton, which is collected on all iron ore imported. In the year ending December 31st, 1892, iron ore to the amount of 806,585 long tons, valued at \$1,795,644, or \$2.23 per ton, was thus imported. All of this iron, however, is consumed near the ports of entry, and much of the ore entering the port of Baltimore is unloaded direct from the vessels to the stock piles. This is also the case with one Pennsylvania furnace.

"All the iron ore imported from Cuba is taken from the mines operated by American companies. Until 1892 but one company was mining and shipping ore from Cuba, but last year a second enterprise was represented by actual shipments, and 1893 is expected to add at least one more active corporation to the list of Cuban mines."

It is significant in looking over the list of imports for 1889, to find that whereas Cuba supplied 243,255 tons, of a value of \$535,524, the Provinces of Quebec, Ontario, Manitoba and the North-West Territories combined, supplied (be it remembered under equal conditions as to tariff) only 4,091 tons, of a value of \$10,697.

Again in 1892, statistics show that whereas Cuba supplied 307,115 tons, valued at \$618,222, Quebec, Ontario, Manitoba and the North-West Territories supplied only 8,606 tons; British Columbia, 2,749 tons, a total value for all Canada of 11,355 tons, valued at \$27,340. Spain was the largest supplier of ore in 1889, sending 298,568 tons, of a value of \$621,481.

These statistics prove that up to the present time Canadians have found it impossible to compete successfully against the negro labor of Cuba, and the cheap labor of Spain, in supplying ore to the American market. The question Canadians have to ask is, whether under uniform free trade Canada can hope to improve her position as against her Cuban and Spanish competitors. This seems highly improbable. All the facts point to one conclusion, viz., that Canadians must turn their attention to smelting their own ore for the home market.

With splendid facilities for economical working, with ample capital, and many other benefits accruing from a long continued policy of protection, the American iron industry stands to-day in a perfectly safe con-

dition, the trade (aside from the ordinary periods of depression common to all industries) is bound to increase in volume the whole future of the industry linked with the life of the nation.

CONTINENTAL STATES.—Following the example of Great Britain and the United States, France, Belgium, Germany, and other Continental States, established, and still maintain, high protective duties with most beneficial results in many branches of the iron industry. Germany's case is especially worthy of mention.

On the 14th May, 1892, Bismarck, in a speech before the German Reichstag, said:—

"The success of the United States in material development is the most illustrious of modern times. The American nation has not only successfully borne and suppressed the most gigantic and expensive war in all history, but immediately afterwards disbanded its army, found employment for all its soldiers and marines, paid off most of its debt, gave labor to all the unemployed of Europe, as fast as they could arrive within its territory, and still by a system of taxation so indirect as not to be perceived, much less felt. *Because it is my deliberate judgment that the prosperity of America is mostly due to its system of protective laws, I urge that Germany has now reached that point where it is necessary to imitate the tariff system of the United States.*"

Bismarck gave to Germany a protective policy with something of a permanent character, and the result has been the building up of a great national industry in that country.

In 1834, Germany and Luxemburg, included in the Zollverein, produced only 110,000 metric tons (2,204 lbs.) of pig iron.

In 1881, Germany and the grand duchy of Luxemburg produced 2,014,009 metric tons (2,204 lbs.) In 1890 the production had increased to 4,637,239 metric tons. This increase in pig iron has been accompanied by an enormous increase in the output of coal and lignite. As an illustration showing Germany's progress in the manufacture of basic steel, in 1890 England produced 503,400 tons of basic steel; Germany, Luxemburg and Austria produced 1,695,472 tons.

CANADA.—Canada's "natural fitness" for the successful establishment of the iron industry is beyond question.

The earnest work performed by the Geological Survey of Canada, and by private prospectors, has well established the fact that throughout a very large portion of her vast territory (three and a half millions of square miles in extent) Canada is rich in iron ores of almost every variety known to metallurgy.

Commencing at the Atlantic seaboard, Canada can claim in Cape Breton extensive deposits of brown hematite, magnetite and spathic ores, lying side by side with coal fields of great magnitude.

Nova Scotia—The limonite, specular and spathic clay ironstone and hematite of Pictou County; specular ore in Guysboro County. At Londonderry an immense vein of ankerite, holding brown hematite.

Between Truro and Windsor numerous deposits of brown hematite, often highly manganiferous.

A range of ferri-ferous strata extending from Digby to Windsor, embracing red hematites and magnetites of Nictaux and Clementsport.

Throughout the whole of this district mineral fuel and fluxes occur in close proximity to the iron mines, affording exceptional facilities for economic furnace practice.