

the impression became general that extensive bodies of ore would never be found in Nova Scotia. However, development work carried on in Annapolis County by the Canada Iron Corporation seems to indicate that the deposits there are very extensive. The Corporation owns and controls seven square miles of iron ore lands of Torbrook. The ore is a red hematite, and independent engineers have estimated the quantity obtainable as high as 300,000,000 tons. The Corporation has installed a plant at the mine having a daily capacity of 1,000 tons, and shipping facilities have been provided at Port Wade, N.S., with a dock-loading capacity of 2,000 tons per hour.

The Londonderry iron range in Colchester County extends for many miles and, although the deposits are not very deep, the total quantity of ore is believed to be quite large. As stated in my description of the Londonderry Iron & Mining Company's properties in a previous article, there are a number of varieties of ore in this range, including hematite, limonite, ankerite, siderite, and specular ores. The blast furnace of the Londonderry Iron & Mining Company at Acadia Mines is about midway between the coal fields of Pictou County and the mines at Springhill in Cumberland County.

There is some reason to believe that there is an extensive ore bed at Arisaig, on the coast of Antigonish County, but as no development work has been done this is uncertain.

Except in the case of some small pockets the iron ores of Nova Scotia are too high in phosphorus to make Bessemer pig iron. They are usually low in sulphur, but Nova Scotia coal is commonly somewhat high in sulphur.

Mr. J. E. Woodman, a mining engineer who has prepared a very interesting report on the iron ores of Nova Scotia for the Dominion Department of Mines, expresses the opinion that there are scattered throughout Nova Scotia in close proximity to transportation facilities by rail or water a large number of deposits which, while not individually extensive enough to justify the erection of local smelters, could be economically mined for transportation to smelting centres. He says: "It is even an open question whether it would pay existing smelting companies to buy them up. But if, instead, the individual owners were to develop them and contract for sale of the ore to the smelters, if necessary attempting an understanding with one of the smelting companies whereby the latter supplies the tools in instances in which the owner has no capital upon which to work, even under the present market conditions a number of the isolated deposits could be profitably opened up."

If the iron ore deposits at Arisaig should prove to be extensive, of good quality, and susceptible of being cheaply mined, the ore might be conveniently carried either to the coal of Pictou County or to the coal on the west coast of Cape Breton. It is possible that blast furnaces may yet be located in the vicinity of Pictou Harbour, using Pictou coal and drawing ore supplies from Pictou County, Arisaig and perhaps New Brunswick and Newfoundland.

Mr. J. E. Woodman suggests that Parrsboro, a port on the Basin of Minas, would be a favourable location for an iron and steel plant of large size. He says that ores could be conveniently brought to Parrsboro from the whole western Cobequid. Ore from the Torbrook and Clementsport mines in Annapolis County could be shipped by water to Parrsboro, while Londonderry ores could be brought there by a short rail haul. Brookfield, he says, is but eight miles from Truro, and with

a Truro-Parrsboro railway the iron ore there would be within as easy reach of Parrsboro as of Acadia mines (Londonderry) to-day. The Hants County ores also could be taken to Parrsboro as easily as to Acadia mines. For flux limestone could be obtained from the vicinity of Windsor and anchorite could be brought from the Londonderry range. "Fuel," he says, "would come chiefly from Springhill, along the road over which most of the tonnage now goes, giving a short downgrade haul and avoiding the costly and roundabout freighting across the Cobequid Mountains, now necessary on the Intercolonial Railway. The road from Springhill mines to Parrsboro crosses the mountains by a very low pass, which involves no heavy grades. Should the buried western section of the Cumberland coal field be developed there would be one or more additional sources of fuel at close range."

The distance from the Springhill coal mines to Parrsboro by the railway referred to by Mr. Woodman is 27 miles. The distance by rail from the Torbrook iron mines to Port Wade, the shipping port, is 42 1-2 miles, while Port Wade is 77 miles by water from Parrsboro. If a short railway were constructed from Parrsboro to Truro, making connection there with the Intercolonial line to Stellarton, the coal field of Pictou County would be brought within a rail distance of about one hundred miles from Parrsboro. At present the railway distance from Stellarton to Parrsboro is 132 miles via Springhill Junction.

Iron and steel produced at Parrsboro could be conveniently distributed to all parts of Nova Scotia and New Brunswick. The distance by water from Parrsboro to St. John, N.B., is 82 miles.

It has also been suggested that the Torbrook ore might be smelted at Annapolis, to which coal or coke could be brought by water. The distance from Annapolis to Parrsboro is 87 miles. Works at either Parrsboro or Annapolis would have the advantage of not being absolutely dependent upon local raw materials as iron ore, coal and limestone could be brought by water from outside points in any emergency.

The greatest obstacle to the success of a large iron and steel plant dependent upon coal supplies from Springhill is the great frequency of coal miners' strikes in that district. If some permanent basis of settlement for labour disputes could be arrived at which would prevent strikes and assure continuous operation of the mines it would do much to promote industrial development in Nova Scotia.

The coal seams of New Brunswick so far as known are not thick enough to be of much value.

There are indications of iron in many parts of New Brunswick, but the only extensive deposits so far discovered are those of the Canada Iron Corporation in the Drummond iron range near Bathurst, in Gloucester County. The Corporation owns and controls twenty-five square miles of ore lands. The ore is a magnetic hematite and already upwards of 50,000,000 tons have been proven. This is by no means the limit of the deposit, which is estimated to contain hundreds of millions of tons. Of this mine Mr. John E. Hardman, consulting mining engineer, Montreal, says: "It is the largest body of merchantable iron ore known to me to exist in the Dominion to-day."

A railway has been constructed for a distance of seventeen miles, connecting with the Intercolonial Railway, over which ore can be carried to Newcastle, N.B., where docks having a loading capacity of 3,000 tons per hour are being constructed. The distance from the mines to Newcastle is about 56 miles. From the mines