

ore, quite sufficiently free from impurities as to be within the Bessemer limit, to supply ore for such a plant."

As to the supply of iron ore, we as yet have no idea of the extent of this, but it will be seen from the following pages that we have, on the authority of mining engineers employed by the Dominion and Provincial Governments, a supply of actual ore and favorable indication of possible reserves. A great deal of this ore is extremely favorably situated for transportation, being on or very near the water. Most of it is magnetite, but the practical experience of the Irondale furnace is sufficient to prove that it can be treated in a satisfactory manner, and that it produces iron of a high Bessemer quality.

In regard to the supposed inaccessibility of the known deposits of hematite, some of these are reported within 100 miles of salt water transportation, while in Sweden the magnetite ores in many cases are brought 200 miles by rail and 800 miles by water with a further short rail journey at the other end, and it is not unusual for the charcoal to be brought 300 miles.

There are large supplies of flux available on the Coast, including large and valuable deposits of magnesite, situated so that the cost of transportation is very low.

The price of coal seems to make the question of the coke supply rather a serious one, but it will be seen on looking at page 13 of the Atlas of Canada, prepared by the Department of the Interior, 1915, that coal is in many cases very near to where the iron is found, and in cases where it is not, there is an abundance of coking coal at or near the sea. There are other coals on the mainland not far from the Coast which are richer in by-products. If by-product coking were developed at the Coast, it would probably pay to freight these interior coals and so obtain a higher grade of coke at a reduced cost.

There is also the water power to be taken into consideration, especially in regard to the development of electro-thermic smelting to which particular reference was made by the Dominion's Royal Commission in their report on the establishment of an iron industry in British Columbia which will be found on page 38 of this Bulletin. And here it may be well to quote the following reference to electric smelting from the Monthly Commercial Letter issued by the Canadian Bank of Commerce in December, 1917, in dealing with the output of pig iron in Canada: