

material may be successful. If we produced our own soda, soap, hydrochloric acid and bleaching powder, we should materially increase our home manufactures and add to the demand for Ontario salt.

THE METALS.

Turning now to the metals, we need not refer specially to lead, which has been worked in an experimental way only at a few points in the Ottawa valley; some thousand of tons of ore having been produced in all, but very little of it smelted or marketed.

IRON.

Iron is of much more importance. Ontario possesses deposits of all the chief ores of iron. The upper Laurentian of the Ottawa valley contains, especially near outcrops of crystalline limestone, many ore bodies, some of considerable dimensions, most of them magnetite but some hematite. Southern Ontario has more or less extensive areas of bog ore, and Western Ontario can boast of immense beds of magnetic ore in the Atikokan and Greenwater lake regions; and of still greater beds of hematite along the Mattawin river; while low grade siderite or carbonate of iron, has been found to the east of Port Arthur.

In the early days of the province iron ore was not only mined but also smelted in furnaces of small and antiquated forms, but producing charcoal iron of excellent quality. A good account of those primitive operations may be found in the report of the Bureau of Mines for 1892, where we find that magnetite was used in the Marmora region and bog ore on Lake Erie. Some novelties were tried, such as the use of wood for smelting in a furnace at Madoc. The iron was usually cast into stoves, potash kettles, etc., and found a ready sale in the province.

No iron has been smelted, I believe, since 1844 or 1845; though similar charcoal furnaces are working, apparently with good success, under quite similar conditions in the Province of Quebec.

These old furnaces were of course immensely protected by the difficulty of transporting such a cheap and heavy metal before railways were available. Probably only a few hundred tons of iron were produced in all, since the furnaces were of very small capacity.

Since those days a considerable amount of magnetite and also some hematite has been mined at various points in Hastings and counties to the east.