METALS AND THEIR ORES.

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ot only among of the Ottawa t in beds and orphic series of r, at times a two series of the ores of the s, containing a long the lower siderable peruenite.

nada, the first in the report ibed. A brief read by Lieut. ty of Quebec, I from ten to sin in a southls of the vein. ' upward of a n great abunpointed out; ole. In the Geological Survey Report for 1845, the ore bod at this place is stated to have a thickness of twenty feet, and to be traceable for about a mile, with a course of N.N.W. and S.S.E., and to occur on the southern half of lot eleven, concession soven of Hull, on the property of Mr. Wright, as well as on the twelfth lot of the same concession, the containing rock at this place being syenitic gneiss and crystalline limestone. The ore is described as coarse granular, and as carrying in places disseminated scales of graphite, while other portions are comparatively free from this mineral. An analysis by Dr. Hunt of an Analysis.

Magnetic oxide of iron	00.00
Silica and graphite	96,09
Netellie iron	3.18
Metallic iron	69,65

In the report for 1847 the width of this deposit is stated as 40 feet, while the scales of graphite are said to some times form a vein of an inch or two in thickness.

This bed of iron ore was opened and mined in 1854 by Messrs. Forsyth & Co., of Pittsburg, with the intention of supplying the ore to their own works. In 1855, about 5,000 tons were raised, which were forwarded by the Rideau Canal to Kingston, and thence by lake vessel to Cleveland; but the discovery of the great Newboro' ore bed, in South Croshy on the canal, from which the ore could be mined and shipped at a cheaper rate than from the Hull deposit, acted disadvantagoously to the latter, and its mining was for a time abandoned.

Subsequent exploration on the Hull bed showed it to have an entire thickness of about ninety feet, presenting a dome-shaped structure with gneiss on both sides and a mass of crystalline limestone protruding from below through the summit. The amount of iron ore taken from it up to 1858 is reported to be about 8,000 tons, containing 60.70 per cent. of metallic iron.

The Newboro' ore bed in South Crosby, was reported to have a South Crosby. thickness of 200 feet. It was mined by the Chaffey Bros., by whom some thousands of tons were extracted and forwarded to Kingston for shipment. The Hull deposit, in consequence, remained unworked for some years, but in 1867, a blast furnace was erected for the purpose of reducing the ores on the spot, which was kept in blast for a portion of 1867 and 1868. In the report by Dr. Hunt, on "The Iron Ores of Canada," in the Geological Survey Report for 1866-69, a very full account of the operations of this furnace is given.

Two kinds of ore wore obtained from the Hull bed, a black magnetite and a red hematite. The analysis of these, given by Dr. Hunt,*

* Geo. Survey Report, 1866-69, p. 255.

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