

NOTES ON AN OCCURRENCE OF MANGANESE AND ZINC ORE IN NOVA SCOTIA.

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These brief notes are intended only to bring to the notice of the members of the Society an occurrence of manganese in a form which is, I think, new in this Province, and of an interesting specimen of zinc ore.

In the case of the former, samples of rock were brought to me from Whitehead, in Guysboro' County, which had excited the curiosity of the discoverer by the readiness with which pieces of it fused in an ordinary fire. This ready fusibility of certain rocks is not generally known, and is usually considered a mark of the presence of some valuable metal. In this case the metal was, for some reason unknown to me, considered to be zinc. The rock, a sample of which is submitted, is light brown and grey in color, weathering to a light drab. It is hard, brittle and subgranular in texture. The sample shows a folding in the shape of the letter S, and has crevices, apparently due to the folding, filled with crystalline matter slightly darker than the surrounding rock.

The samples, although resembling in a general way the rocks called felsites, had features of novelty about them, and I sent some to Mr. Leckie, manager of the Londonderry Iron Works, and the analyst of the company, Mr. Smaill, was kind enough to make a partial analysis of it. He reports that it contained:—

Silica	70.25
Alumina	15.25
Manganese oxide	9.25
Iron oxide	Small quantity.
Lime	"
Magnesia	"
Zinc	none.

The remainder being probably moisture, with some potash, soda, carbonic acid, etc.

Having disposed of the zinc theory, the presence of manganese became interesting. Presumably the manganese present is in the form of a bi-silicate of manganese, such as rhodonite, and that the greyish red or brown color of part of the sample may be due to the partial penetration of the rock by some carbonate of lime, manganese, etc. Dana, in his Mineralogy, does not give any analyses of the varieties of the silicates in any way resembling that under consideration. Allowing for the presence of a certain amount of free silica, as is usually the case in rocks of the class under considera-