Enclosure in No. 3.

Geological Survey Office, Mineral Resources we mand do

May it please Your Excellency, St. John's, Newfoundland,
December 30, 1895.

In reporting on the iron deposits of the Island, I may state that hitherto little attention has been given to this class of ores, under the impression that their value, from an economic point of view, was infinitesimal in comparison with copper, lead, and other more valuable minerals. Not till within the last year or so, has any attempt been made to utilize these ores, if I may except the pyrites deposit of Pilley's Island, which has been mined chiefly for its high percentage of sulphur. The ore is chiefly used in the manufacture of sulphuric acid. It however yields a considerable percentage of very excellent pig iron, both for forge and foundry work.

Of this class of iron ores there is a great abundance in many parts of the Island. It occurs in all the copper mines of Nôtre Dame Bay, forming considerably more than half the bulk of the deposits. At Tilt Cove, a mass of pyrites, said to be about 200 feet thick, and containing about two or three per cent. of copper, has been worked for some time. Another enormous mass of similar ore occurs at the Terra Nova Mine, Bay Vert, which has been abandoned for a number of years. It was worked as a copper mine only, but the percentage of that metal was found to be too low to render it a paying speculation. Another large deposit of pyrites occurs in Port au Port Bay, West Coast. It has not yet been operated, but gives promise of being fully equal to that of Pilley's Island. Pyrites occur in very many localities and in almost every one of our great bays in more or less quantity. Magnetic Pyrites, Pyrrhotite, is also a pretty abundant ore. especially in association with the copper deposits, and chloritic slates and serpentines. It has been found, on analysis, almost invariably to contain a small percentage of nickel, and in this respect might well be worthy the attention of capitalists. It is from a similar class of ore in the Sudbury District of Lake Huron, Canada, that so much nickel is now derived. Arsenical Pyrites, or Mispickel, is rather a common mineral also, but not in any such proportion as the preceding.

With regard to the more generally useful ores of iron the island possesses the following: Magnetite, Chromite, Hematite of several varieties, such as Specular iron, Red Hematite, Red Ochre, Jaspery iron ore, and clay ironstone. Bog iron ore is not

infrequent in some parts of the interior.

The deposits of magnetite are sometimes enormous. One band at Union Mine, Tilt Cove, ranges from 4 to 30 feet in thickness and is of a very superior quality. Another large body of this ore occurs at Mings Bight, It is also found in many other localities, both on the coast line and in the interior, but the most extensive deposits known are found on the west coast near the Bay of St. George. One enormous mass of this ore has

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