

# MARITIME MINING RECORD

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## THE IRON ISLAND.

One with a knack of vivid description says of Wabana: "Set like a jewel amid the heaving waters of Conception Bay, on the extreme eastern coast of Newfoundland lies rugged and picturesque Bell Island." It might have been better perhaps had the word heaving been qualified by "gently" for it is not to be understood that there are rolling billows on the Bay sufficiently big to interfere with regular ore shipments. A hyper critic might take exception to the word lonely in the following sentence. "On this lonely little Island are situated the Wabana iron mines the chief mining industry of the Ancient Colony." The Island may be a little dreary in mid-winter but it cannot well be lonely in the summer with huge iron ore carrying steamers arriving and leaving daily if not hourly. Of course were our poetical sense more highly developed we might glory in the adverbs, but then you see we are practical, and probably at times prosy. With what follows no one, who has visited Wabana, can be other than satisfied.

"With a deposit of ore the limits of which are as little known now as when work began on it 15 years ago, a geographical position that commands the markets of the world and the cheapest possible water transportation, the Wabana ore properties are in an unique position. There are larger deposits worked. There are deposits in operation that have a higher percentage of iron in the ore. It is doubtful, however, if there exists in the world any deposit that so combines the advantages of good ore, easy mining, excellent location, and cheap transportation.

Forty years ago attention was attracted to this ore by outcroppings at two different spots on the island. Not until twenty-five years had elapsed, however, was the ore worked. The development carried on since has shown that the deposits on the land are merely the fringes of great beds of ore that extend far out under Conception Bay. The main seam has been followed for more than three miles until it dipped into the sea again at each shore of the island; and the workings have shown that this ore extends for at least two miles to the dip of the seam.

While these explorations have proven that an immense body of ore exists there, no one has attempted to define exactly its limits. Experts have estimated that these beds contain from ten to twenty times as much as mineral as has been absolutely proven to exist; but the accuracy of these assertions can be determined only by future work. Enough has been shown, however, to prove that there is ore enough in this deposit to last for at least another century at the present rate of working.

Two companies operate these deposits, the Nova Scotia Steel & Coal Company, which was the pioneer company in this field, and the Dominion Iron & Steel Company. The latter company utilizes the ore only for

the operation of its blast furnaces at Sydney, in Cape Breton, about four hundred miles away. The Scotia Company, as the Nova Scotia Steel & Coal Company is generally known, in addition to supplying its own iron and steel works at Sydney Mines, a few miles away from the Dominion Steel plant, also exports large quantities to Great Britain, the United States, and Germany.

Fifteen years ago, Bell Island was inhabited by a few hundred farmers and fishermen. On the south of the island there were some scattered farms, while the northern side was nothing but a dense forest. Tremendous changes have been wrought in the island since. The population has increased very rapidly. On the southern side are two big loading piers at which ore steamers are nearly always lying during the shipping season, while on the northern side are to be seen the half dozen mines operated by the two companies.

"Wabana" is an Indian name, meaning "the place where the light first shines." This is literally true, for these mines are situated on almost the most easterly land in America. Conception Bay, so called by Cartier, the Portuguese explorer who followed Sebastian and John Cabot in exploring Newfoundland, is an inlet in the Avalon peninsula on the northeast coast of the Colony, a few miles from St. John's, its capital. This arm of the sea runs inland for about thirty miles, and in places is thirteen miles wide. Near the southeastern side of the Bay there are three little islands, the largest of which, about twelve miles in extent, is Bell Island.

Bell Island's cliffs rise perpendicularly for several hundred feet and in many cases they overhang, the incessant ravages of the sea having worn away at the base. Geologists assert that the island is a remnant of an immense syncline or trough of sediments deposited in Cambrian times. The general outline of Conception Bay was then the same but larger. It is supposed that it was the estuary of a large river that flowed down from the higher land to the west, and a series of ripple marks found on the island strengthens this belief. Enormous quantities of sediment were evidently carried into the estuary, and the bay began to fill up. There was a continual re-adjustment of pressure and eventually this whole portion of Newfoundland was gradually lifted above sea level.

As a result of this re-adjustment, the bay exists today where the estuary was situated formerly, and there is now visible only the upper-most beds on Bell Island which contain the ore seams. Weathering and ice action have removed a great portion of the ore beds that formerly extended farther south than the present outcrops. The north side of Bell Island contains a number of seams of red hematite iron ore, three only of which are economically important at present. These seams or beds are interstratified with the sandstone and shales of the formation with a common dip and strike, the for-