

IRON ORE

Active mining operations were conducted at three mines only during 1915, viz.: The "Helen" and "Magpie," in the Michipicoten district, and the "Moose Mountain," north of Sudbury. Small shipments were made from stock at two other properties.

The total shipments during the year were 398,112 tons, valued at \$774,427, as compared with 244,854 tons, valued at \$542,041, shipped in 1914. Of the total shipments in 1915, 308,382 tons were sent to blast furnaces in Canada and 89,730 tons to the United States.

The shipments included 205,989 tons of hematite, 132,906 tons of roasted siderite, and 59,217 tons of magnetite (including some ores with an admixture of hematite). Shipments in 1914 included 89,454 tons of hematite; 109,838 tons of roasted siderite, and 45,562 tons of magnetite.

All iron properties in the eastern Provinces of Nova Scotia, New Brunswick, and Quebec have been idle throughout 1914 and 1915, although small shipments were made from Bathurst mine stock of 3,683 tons in 1915 and 4,775 tons in 1914. These ores would average about 46½ per cent iron.

In Quebec, the Manitou Iron Mining Co. opened up their mine at Ivry-on-the-Lake in Terrebonne county on the 4th of December, and have undertaken to make considerable shipments of ilmenite during 1916.

In Ontario the "Helen" and "Magpie" mines were operated throughout the year by The Algoma Steel Corporation. From the "Helen" mine there was shipped to the Company's blast furnace at Sault Ste. Marie, about 205,989 tons of hematite ore averaging 52 per cent iron. This mine has to its credit the largest iron ore production of any mine in the Dominion, the shipments from the commencement of operations in 1900 to the end of 1915 having been 2,263,522 gross tons (2,535,145 short tons). In addition there was shipped from 1906 to 1915 inclusive 37,572 gross tons (42,081 short tons) of iron pyrites. The ore body has been almost completely worked over and the comparatively small tonnage extracted during recent years has come principally from caved ore and from pillars left when the ore was extracted by stoping.

Shipments from the "Magpie" mine during 1915 were 132,906 tons of roasted siderite, carrying 50 per cent iron of which a portion was sold in the United States. The roasting plant at the "Magpie" includes six rotary kilns each 8 feet in diameter and 125 feet long. Rotary cylindrical coolers convey the hot roasted ore to the stock yard. The kilns are fired with pulverized coal. All the mine equipment is operated by electricity generated at Steep Hill Falls on the Magpie river about 12 miles distant. The siderite ore has an iron content of about 35 per cent and an objectionable amount of sulphur, while the average analysis of the roasted ore (1914 shipments) was as follows in percentages: iron 50.60; silica 9.39; sulphur 0.25; phosphorus 0.011; alumina 1.02; lime 8.79; magnesia 7.05; manganese 2.71.