

copper pyrites. On lot 9, range A, Orford, and near the junction of the serpentine with a diallagic diorite, six quartz veins occur in the latter rock within a breadth of twenty-five feet. Some of these are ten inches wide, and they all contain portions of yellow copper ore which is associated with a greenish serpentine-like material. On lot 22, range 1, Garthby, a large mass of iron and copper pyrites is found subordinate to the stratification of the enclosing rock, which is a calcareous serpentine.

Iron ores are also found in many places in the Townships associated with serpentine. Large loose blocks of magnetic ore, sometimes half a ton in weight, are found on the second lot of the tenth range of Leeds. They are near a band of serpentine, and probably not far removed from the parent rock.

An important deposit of magnetite is found on the west side of Nicolet Lake in serpentine.

Of chromic iron, Dr. Ells reports as follows :

"Chromic iron is found in connection with the serpentines at several places in the area under consideration" (the Eastern Townships). "A deposit on the south side of Lake Nicolet, lot 4, range 2, Ham, was open some years ago, and about ten tons extracted, but the indications were not sufficiently favorable to warrant a continuation of the work. Within the last five years, several openings have been made near Bellmina (lot 24, range 3, Wolfestown), on the crest of the serpentine ridge at this locality. The deposits are apparently of the nature of irregular pockets. From the most important of these about twenty tons were extracted from a shaft fifteen feet deep. The vein was five feet wide at the surface, but decreased to three feet at the bottom of the shaft. Two hundred yards east of this spot, a second opening was made, which produced two to three tons in pieces scattered through the serpentine. Other small deposits were also found, and in all about 25 tons were obtained."

An opening has been made by Dr. Reid in chromic iron ore lot 16, range 4 of Thetford. The mineral occurs there in pockets and very small irregular veins in an asbestos-bearing serpentine.

In the seigniory of St. Francis Beauce, there is a bed of granular iron ore, forty-five feet wide, in serpentine. This ore is composed of common magnetic oxyd of iron and ilmenite.