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MINE TIMBERING IN SECTION 16 OF THE LAKE SUPERIOR MINING COMPANY, MICHIGAN.

(By C. G. CAMPBELL, S. Can. Soc. C. E.)

(Read before the Mining Section on 25th February, 1904.)

In the following paper it will be necessary to depart somewhat from the subject proper and give a brief description of the location of the mine, the method of mining the ore, the management, etc.

Section 16 is essentially a hard ore iron mine, situated three-quarters of a mile from Ishpeming, a town fifteen miles from Marquette, on the south shore of Lake Superior.

The mine is worked chiefly for hard ore, there being three large lenses, each of a different grade, according to the percentages of iron and phosphorus contained. There are also two "pockets" of soft ore, which is locally known as "Haematite," but after mining these "pockets" for some time, it was found that the ore was too high in phosphorus to compete with the soft ores of the surrounding mines. So, for the present, at least, the mining of it has ceased.

The hard ore is found with a foot wall of decomposed Diorite, resembling soapstone, and a hanging wall of quartzite or jasper. A great dyke of Diorite cuts across the deposit and makes the formation somewhat irregular. The three lenses dip at average of 70° with the horizontal. They have an east to west strike and vary very much in their dimensions; ranging from 10' to 700' long.