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sist of pyrrhotite, chalcopyrite and pentlandite, with minute grains of magnetite disseminated through them. Several diabase dykes cut the orebody and the largest of these, as shown on the geological section (Fig. 1), exhibits a striking feature. The breaks in its continuity are not caused by faulting, but are due to the form assumed at the time of intrusion. This curious phenomenon is sometimes seen in small dykes that offset a flort distance on coming to a soft bed lying between tougher ones.

Many writers have discussed the origin of the ore. The various theories may be divided into two classes: (1) magmatic segregation and (2) deposition from solution along zones of erushing and faulting. Both, in their various modifications, have had ardent supporters since the beginning of investigation down to the present time. Geological work at the mine has disclosed facts that indicate the origin of the ore by its intrusion in molten condition along a plane of shearing in the footwall rocks adjacent to the norite, after the latter had solidified. The most interesting evider a is offered by a dyke of comparatively fresh younger norite that intrudes the main body of norite and its footwall rocks. It is itself intruded by the ore, and also altered by it. The alter-



Photo by British & Colonial Press, Toronto. Plate II.—Collar of No. 3 shaft, showing skips and man-cage.

6