

while the other again remained undissolved. We have here probably an intergrowth parallel to the face of an octahedron or rhombohedron. A similar intergrowth has been described in the iron ore in the nephelinite of the Katzenbuckel, except that here the titaniferous iron ore occurs in the form of micaceous titaniferous iron ore, not as the coarse and opaque variety found in the above mentioned rocks.

It has been the invariable experience in Canada that the large iron ore deposits in these anorthosite rocks contain so much titaniferous acid that they cannot be profitably worked. In order to determine whether the iron ore which is disseminated in small grains throughout the whole rock was also rich in this constituent, the iron ore of three hand-specimens of the anorthosite from different parts of the area was separated and tested for titaniferous acid. In every case the mineral was but faintly magnetic and gave a strong titaniferous acid reaction.

Two specimens of iron ore from the pegmatite veins which cut through the anorthosite and the gneiss at the contact of the two formations, west of St. Faustin, and therefore do not belong to the anorthosite, showed strong magnetism and gave only a faint reaction for titaniferous acid. The iron ore bed, a short distance west of St. Jérôme, in the orthoclase gneiss also consists of magnetite and contains no titaniferous acid. We therefore find that these investigations confirm the conclusion that the iron ore of the anorthosite is very rich in titaniferous acid while the iron ore of the Laurentian gneiss generally contains no notable quantity of this substance.

PYRITE.—A few small grains of pyrite often occur in the thin sections of the anorthosite. They are generally found associated with the iron ore.

APATITE.—This mineral is seldom observed in the anorthosite. When it does occur it is in the form of more or less rounded grains. It is more frequently found in the varieties rich in iron ore in the Township of Wexford and other localities, than in the normal anorthosite.