

thosites in Canada, often in enormous quantities, so that it is considered as particularly characteristic of them, while in the Laurentian proper, the iron ores in the greater number of cases, contain no titanitic acid. Lacroix,<sup>1</sup> who has investigated somewhat similar inclusions which, however, are double refracting, in certain Norwegian gabbros, thinks that they are pyroxenes, especially as they frequently appear to be grouped together, forming larger grains which may be determined as belonging to this species. He says: "Les grains en question semblent avoir attiré à eux les particules pyroxéniques en suspension dans le feldspath et les avoir incorporées à leur masse." It is quite possible that these inclusions so often found in gabbros and allied rocks consist of the heavier minerals of the rock, in some cases pyroxene and in others iron ore, which were finely disseminated through the magma while the rock was crystallizing, or which, perhaps, separated out as the several constituents crystallized. My best thanks are due to Professor Judd for a small collection of thin sections of typical gabbros and peridotites from the north of Scotland which he has described and on which he has principally established his theory of "schillerization." An examination of these shows that nowhere in them are the inclusions in question so numerous and well defined as in the Canadian anorthosites. The peculiar arrangement of these inclusions in the Scotch rocks along cracks, fissures, etc., which Professor Judd has described and which especially supports his theory of their secondary origin, is not observed in these Canadian rocks. Their inclusions are on the contrary distributed thickly and pretty uniformly throughout the whole feldspar individual, generally indeed throughout the feldspar of the whole rock. They disappear as above mentioned only when it has the peculiar granulated character. This remarkable fact will be referred to again.

The uniform distribution of these inclusions does not prove that they are not schillerization products, for even

<sup>1</sup> Lacroix, Contributions à l'étude des gneiss à Pyroxène, p. 141. Bull. Soc. Min. Fr. Avril 1889.