

with that which to the north cut off the limestone and lay unconformably upon the Grenville series.

Instead of this, we have in reality the Grenville series throughout the entire area broken through in places by anorthosite masses which often follow the strike of the gneiss and appear to be interstratified with it.

Although at many points on the boundary between the anorthosite of the Morin area and the surrounding gneiss, both rocks come in contact without any alteration of the gneiss being visible, yet at a few places, especially between Shawbridge and Chertsey, a dark heavy and somewhat massive rock rich in bisilicates and often containing a little quartz and some unstriated feldspar appears at the contact of the anorthosite, and may possibly be a contact product. The boundary of the typical anorthosite against this rock is generally quite distinct, whereas the latter passes gradually into the gneiss of the district, so that it is difficult to decide whether it represents a distinct and abnormal variety of the gneiss, or a contact product of the gabbro. The same rock, or at least a very similar one occurs largely developed, at the northwest corner of the area, between the typical anorthosite and the gneiss, and appears here to be a peculiar variety of gabbro since it is nearly or quite massive and often shows a distinct "schlieren" structure. It cuts through the gneiss but seems to be continuous with the anorthosite. Continuous outcrops of the two rocks which would make it possible to determine their relationship have as yet nowhere been found, but there is evidence to prove that it is a part of the anorthosite mass, and not a separate intrusion, although the transition is a rather sudden one.

The anorthosite mass is cut through in many places by coarse pegmatite veins. These are especially abundant about the edge of the area where they break through the gneiss as well as the anorthosite. In mapping the anorthosite, it was frequently possible to surmise an approach to the limits of the area from the appearance of numerous pegmatite veins. They are, of course, by no means exclu-