

SUMMARY.

As a petrographical series most of the rocks of these various regions may be described as altered eruptives, both acid and basic, which have, for the most part, been subjected to intense metamorphism. Mixed with them are other schists of elastic origin consisting very largely of quartz. The whole complex shows evidence of much dynamic metamorphism and represents a more or less constant schistose structure, with the laminae dipping at high angles. While a great similarity exists between the different areas there are, in a general way, some peculiarities belonging to each. The first or great area is, on the whole, more basic than the second, the most important rock being diorite with its derivatives diorite schist and greenschist. These basic rocks seem to form the centre of the area and the more acid representatives, quartzose schists, altered porphyries, etc., appear to be distributed more towards the borders.

The second area is decidedly more acid with a preponderance of crushed granites, felsites, altered quartz porphyries and acid schists.

The third division shows considerable diorite of a somewhat massive nature, frequently forming hills, which are flanked by the same series of schists as in the other regions.

The Huronian area of the Abitibi canyon is quite different from any of these and must be regarded as a large eruptive dyke composed principally of augite syenite passing into gabbro.

The schistose areas seem to be comparable to Lawson's Keewatin series, at least in part. They may also be compared to the greenstone schist area of Marquette. Their origin is probably similar to that of the regions mentioned and will not be discussed here; the reader is referred to Bulletins 62 (1890) and 86 (1892) of the U. S. Geological Survey, and to the Report of the Geological Survey of Canada, Part F, 1888.

The sketch map accompanying this paper is compiled largely from Dr. Bell's map of the region, corrected in places by the more recent determinations on the base and meridian lines of Alexander Niven, O.L.S., as well as by the compass surveys conducted by the writer of this paper along most of the canoe routes. It cannot claim any great accuracy but will serve to indicate, in a general way, the distribution of the rocks in question. Owing to the small scale it was thought advisable to introduce but few names other than those mentioned in the text.