GEOLOGY OF STEEPROCK LAKE.

very modern look, being scarcely at all crystalline in appearance, having cherty layers in grcy limestone at somo points and black, very carbonaceous beds at others. One almost expects to discover fossils in them, but none have been found.' He makes no dissent from the ninefold subdivision of the series proposed by Smyth, and accepts the latter's interpretation of the structure.

McInnes,¹ in 1899, accepts Smyth's ninefold subdivision of the Steeprock series, and classifies the rocks of the scries with the Keewatin as forming the upper division of the latter; although they are believed to be of later age than the great bulk of the Keewatin strata.

In 1911, Van Hise and Leith² give a summary statement of the geology of Steeprock lake, in which the Steeprock series is correlated with the lower Huronian, and is said to rest unconformably upon the Laurentian and Keewatin. But the series is said to be principally exposed on the south and west shores of the lake, where, as a matter of fact, the rocks are nearly all Keewatin, so that it is evident that the areal distribution of the series given by Smyth is accepted, the unconformity upon the Keewatin being inferred from the presence of Keewatin pebbles in the basal conglomerate. Smyth's ninefold subdivision of the series is quoted; but 'Some of the greenstones and greenstone schists included by Smyth in the lower Huronian are regarded by the authors as, at least in part, Keewatin.'

During the past summer I took occasion to spend a few days at Steeprock lake for the purpose of acquainting myself with some of the features described by Smyth, and for my guidance I had a copy of his paper, and the map that accompanies it. As a result of my visit, I am happily able to confirm the most important part of his conclusions, particularly as to the existence of the series as a distinct member of the Archæan, and its unconformable relation to a granite-gneiss of the basement complex. On the other hand, the observations that I made, while by no means exhausting the field, compel me to place an interpretation upon the stratigraphy and struct...e quite different from that of Smyth, and enable me to clear up the question of the relation of the series to the Keewatin,

¹Geological Survey, Canada, Ann. Report, Vol. X, Pt. H. ²The Geology of the Lake Superior Region, U.S.G.S. Mon. LII, 1911, p. 147.

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