GEOLOGICAL SURVEY, CANADA.

series of rocks hitherto unrecognized in the Archæan of that part of Canada. This fact has attracted a number of geologists to Steeprock lake, and several references to the series are to be found in the literature of the region. The general question raised in all of these is the relation of the Steeprock series to the Keewatin. Smyth made perfectly clear that the Steeprock series rested unconformably upon his basement complex with a basal conglomerate reposing upon an croded surface. But in that basement complex he recognized no Kecwatin, but only those granites and gneisses which are usually referred to as Laurentian. The areal limits of the Steeprock series to the south and southwest were left unde-In these directions, however, the rocks of the series are fined. continuous with and indistinguishable from the Keewatin, and to any geologist who became familiar with this fact the whole implication of Smyth's interpretation of the geology was that the series was in part a local facies of the Keewatin and in part a normal facies, and that the Keewatin was, therefore, unconformable upon rocks of the Laurentian type and habitus.

Mr. W. H. C. Smyth,' after an exemination of the series, accepted Smyth's descriptions and classification, saying: 'The work done by the writer in connexion with the rocks of this series suggests no important modification of them.' But he expressed the opinion that the Steeprock series was later than the Keewatin; a question upon which H. L. Smyth was silent. He did not, however, locate the contact of the Steeprock and Keewatin: 'The unconformity above the Keewatin schists of the Seine river to the southwest is not at all obvious. Lithologically the green traps and schists of the two series are strikingly similar and could not probably be separated by the most careful study.'

Coleman,^{*} in 1897, regarded the Steeprock series as part of the Kecwatin. He says: 'The water-formed clastics of the Keewatin are of great variety, including limestones, quartzites, slates, grits, graywackes, breccias, and pebble and boulder conglomerates. The limestones are, however, of limited extent, being found in any thickness only at Steeprock lake, 70 miles east of Rainy lake, where there is a small area differing both petrographically and structurally from the rest of the region. These limestones have a

8

¹ Bull, G.S.A., Vol. 4, 1893, pp. 344-347. ² Bull, G.S.A., Vol. 9, p. 225. Also Rept. Bureau of Mines, Ontario, Vol. VII, Pt. II, 1898, p. 152.