

The term "Huronian" is applied in this paper to all the rocks above the Laurentian and beneath the lowest fossiliferous strata. In this sense the expression is made to include rocks of various age and different petrographical nature, such as Logan's original Huronian, Lawson's Keewatin and Conchocling series, the Amikie and Nepigon formations, the graywacké and associated rocks of the Sudbury region and the various schists, altered eruptives and crushed granites characteristic of wide areas in northern Ontario. In the region under discussion the Huronian is represented by a great variety of schists, presumably of elastic origin, and by others of altered eruptive nature, closely associated with both acid and basic eruptives in various stages of decomposition. No limestones or sandstones occur anywhere in the region examined by the writer, although Dr. Bell reports the former rock just south of the height of land near the Montreal River, and Mr. Burwash also refers to it.

It is in regard to the various schists that the great difficulty of determination arises. To establish a fixed nomenclature for these is almost impossible, as their varieties of colour, structure and texture are practically innumerable. In a distance of twenty feet no less than seven distinct varieties were counted on one occasion. On the other hand, to pass by these rocks with a mere description is altogether unsatisfactory, as megascopic descriptions by different observers might leave considerable doubt as to the identity of similar exposures. For example, the same rock is described as "dark quartzite," "dark gray siliceous schist," "quartzose schist," etc. To the trained scientist these terms, while not petrographically synonymous, are sufficiently suggestive to recall the rock in question. In publications, however, intended for the guidance of prospectors, this method causes great uncertainty. For economic purposes, it would suffice to establish the fact that, for a particular region, a certain variety of rock was ore-bearing, leaving the question of its origin to more scientific observers; but there are too many gradations to render such a classification of any real value. It is only on the basis of origin that a satisfactory arrangement can be effected.

The petrographical peculiarities of the rocks encountered will first be described, with little or no reference to geographical position, and afterwards the great Huronian areas will be outlined and the location of particular species indicated.