

In Pontiac county in the province of Quebec, Mr. A. S. Cochrane obtained specimens of a gray shaly sandstone, chloritic, and hydro-mica schists along with dark green schistose diorite which have since been classified in the Huronian. In the districts of Nipissing and Algoma, we have classic ground for the student of Huronian geology. It was on the north shore of Lake Huron that the original Huronian rocks, as described by Sir Wm. Logan, Alexander Murray, Dr. Bell and other Canadian geologists were first studied. The Huronian is very extensively developed, and forms numerous, wide, more or less interrupted bands between Lake Huron and James's bay. It is in this region that the Huronian system attains its greatest development. The Huronian is well described by Dr. G. M. Dawson in his summary on the Archaean of Canada, read before the British Association for the Advancement of Science, Toronto Meeting, 1897, in which he writes:

"The Huronian comprises felspathic sandstone or greywacke, more or less tuffaceous in origin, quartzites, and arkoses passing into quartzose conglomerates and breccia conglomerates, often with large fragments of many different varieties of granite, syenite, etc., diorite, diabase, limestones, and shales or slates changing to phyllites in contact with the numerous associated igneous masses. Over wide areas altered greenstones and their associated tuffs preponderate, often with micaceous, chloritic, sericitic and other schists, many of which are of pyroclastic origin, although some may represent ordinary aqueous deposits, and all have been affected by subsequent dynamic metamorphism."

It will thus be seen that the Huronian system is partly sedimentary, and partly igneous.

In the Nipissing and Lake Temiscaming regions just recently described by Dr. Barlow, the Huronian rocks were found to be widely developed, especially in the north-western part of the region. They consist of the basal series made up of "breccia-conglomerate, containing pebbles and fragments often angular though usually subangular or rounded in outline, of granitite, diabase, diorite, etc., embedded in a matrix composed of the same materials in a finer state of division, while the more minute interstices are filled up with scales and flakes of chlorite and sericite."

This fragmental rock passes up and into a greywacke which in turn merges above into an exceedingly compact and fine grained rock of similar composition which gradually assumes a banded and slaty character. The latter forms the slate or shale division of the series. Superimposed upon these directly, a quartzite grit made up chiefly of granitic quartz and feldspar, resembling arkose, are found.