

## GEOLOGY.

The greater part of Ontario is composed of Archean rocks, concerning which a vast amount of work yet remains to be done. The more these older rocks are investigated the more clearly is their value recognized as the bearers of useful minerals. Especially is this the case with the Huronian, which occupies great stretches of country, lying to the north of Lakes Huron and Superior and in the Rainy river district. These rocks are similar to the great iron-bearing series of northern Michigan and Minnesota, which, in several places in Ontario (as well as near Ishpeming, Michigan), have also been proved to carry gold-bearing quartz-veins. Overlying the Archean, the Cambrian, Silurian, and Devonian formations occur most extensively in the peninsula of Ontario, between Lakes Ontario and Erie on the south and Georgian Bay and Lake Huron on the north, and continued on to Great Manitoulin Island to the westward. A considerable area of these post-Archean formations occurs between the Moose and Albany rivers, to the south of James' Bay, which they fringe. Patches of Cambrian rocks of economic importance occur in the vicinity of Thunder Bay, fringing Lake Nipigon, also on Michipicoten Island, and at Point Mamainse, and a small Cambrian and Silurian area forms the extreme eastern end of the province between the Ottawa and St. Lawrence rivers.

With the exception of recent clays and gravels, no formation of greater age than the Devonian is found in the Province of Ontario.

The writer has endeavoured, by shading the above-mentioned map, to designate the geological systems or epochs, but without colouring it is not possible to conveniently designate the subdivisions or groups, a designation which, however, for the purposes of this paper is not necessary.

The geological divisions of the rocks of Ontario, in descending order, are as follows:—

Systems.	Formations.
RECENT ...	... Soils, peat, shell-marl. Lacustrine and fluvial clays, sands, etc.
PLEISTOCENE ...	... Saugeen clay, Artemesia gravel, Algoma sand. Sand, gravel, and shingle of the country north of the Great Lakes. Erie clay, calcareous and non-calcareous. Clays, north of the Great Lake. Boulder-clay, drift, or till.
DEVONIAN ...	... Chemung and Portage. Hamilton. Corniferous. Oriskany.