

The following is the synonymy of the groups of the systems developed in this region, according to the nomenclatures adopted in the reports of the different surveys.

New York and Lake Superior. | Pennsylvania and Virginia. | Ohio Iowa and Wisconsin.

AZOIC SYSTEM.

AZOIC SYSTEM,
(Not classified in New York.)

AZOIC SCHISTOSE SERIES.

METAMORPHIC ROCKS.
(Wanting in Ohio and Iowa.)

SILURIAN SYSTEM.

Potsdam Sandstone.

{ Primal Sandstone, or Formation No. I.

{ Lower Sandstone, or Formation 1, wanting in Ohio.

Calcareous Sandstone.

{ Lower part of the Matinal Series, or part of No. II.

{ Lower Magnesian Limestone, F. 2, wanting in Ohio.

Trenton Group (including Chazy, Birds-eye, and Black-river Limestone.)

{ Middle part of Matinal Series, or part of No. II.

{ Fossiliferous Limestone, No. 3. Blue Limestone and Marls of the West.

Galena Limestone (not recognized in New York.)

{ Not recognized in Pennsylvania and Virginia.

{ Erroneously regarded as the equivalent of the Cliff, or Upper Magnesian Limestone.

Hudson-river Group.

Matinal Shales, or No. III.

{ Associated with No. 3, or the Blue Limestone and Marls of Ohio.

Medina Sandstone and Clinton Group.

{ Part of the Levant Series, or part of No. V.

Not recognized at the West.

Niagara Group.

{ Part of the Levant Series, or part of No. V.

{ Cliff Limestone of Ohio and Indiana. Upper Magnesian Limestone.

Onondaga Salt Group.

{ Summit of the Levant Series.

DEVONIAN SYSTEM.

Upper Helderberg Limestone.

{ Upper portion of the Cliff Limestone.

EXPLANATION OF THE MAP.

Accompanying this report, will be found a general Geological Map of the region over which our observations have extended, on which we have attempted to delineate by a system of colors, so far as practicable, the boundaries of the several groups of rocks embraced in the above table. Although we have succeeded in recognizing most of the minor groups, such as the Chazy, Birds-eye, Black-river limestones, and also the Medina sandstone and Clinton groups, not only by their lithological characters, but by their fossil contents, yet their geographical range is so limited that they cannot well be represented on a map of this contracted scale. By adopting a set of symbols, we have endeavored to represent minor phenomena, such as the bearing and inclination of the strata, and in many instances their mineral associations.

In preparing the geology of the northern coast of Lake Superior, we have availed ourselves of the labors of Mr. Logan, the distinguished Provincial Geologist of Canada. We have had less reluctance in presenting