

which were soon to be followed by a more or less general disruption. We may generally distinguish, therefore, some calcareous shales constituting the uppermost beds of a group; and, in rare instances, the disturbance proceeded so far before the extinction of the faunas that the uppermost beds have been rendered finely fragmental. To illustrate and confirm these generalizations, I introduce the following table:

	Coarse-fragmental.	Fine-fragmental.	Calcareous.	Calcareo-fragmental.
Lower Silur.	Potsdam sandstone.	Calciferous and Chazy formations.	Trenton Group.	Cincinnati Group.
Upper Silurian.	Oneida conglomerate. Medina sandstone.	Clinton Group. Niagara shale.	Niagara limestone.	Salina Group.
Devonian.	Oriskany sandstone.	Schoharie Grit.	Corniferous limestone.	Hamilton Group, followed by Chemung.
Lower Carb.	Waverly sandstone (Marshall phase).	Waverly sandstone (Chouteau phase).	Mountain limestone.	False coal-measures.
Upper Carb.	Parma conglomerate.	Coal-measures (broken into many short epochs).	Laramie limestone.	Permian Group.

In this exhibit I take no account of the St. John's Group, since we know so little of its lithological characters. It thus appears that the recognized succession of strata in each of the great divisions of Paleozoic time is wonderfully similar in lithological characters. In each great group is a great limestone mass, which stands out conspicuously in the geology of the region underlain by the group. These limestone masses are prominent landmarks in the progress of the ages. They mark the successive culminations of the geological periods. Each mass outcrops in a protruding belt, sweeping from east to west over a wide extent of country. The oldest is the more northern, and the others follow in regular succession. The Trenton mass sweeps across along the north of Lake Ontario and to Georgian Bay. The Niagara mass lies to the south of Lake Ontario