

As in New York state, these follow each other in regular succession. There is no evidence of a *Lower Helderberg* fauna or formation in the province of Ontario. The *Medina formation* consists for the most part of conglomerates and sandstones, with marls, red in colour, holding but few fossils, whilst the *Clinton shales*, calcareous and arenaceous, with a few dolomitic bands, and red or iron ore bands, such as may be readily seen in the Niagara gorge and escarpments near Hamilton, are followed by limestones and dolomites, compact and cherty, abounding in fossil remains belonging to the *Niagara formation*.

The *Guelph formation* with its light cream-coloured dolomites forms a not unimportant formation which is highly fossiliferous, and its fauna has been carefully and elaborately described by Hall, Billings and Whiteaves. In many localities in Canada the *Medina*, *Clinton*, *Niagara* and *Guelph formations* yield natural gas. The *Salina*, *Onondaga* and *Water-Lime formations* from which the salt, gypsum and cement stones of Ontario are derived, consist for the most part of light yellowish-gray compact dolomite which assumes a lithographic aspect in Welland county.

*Interior Continental Plain.*—At Cross lake rapids, and near the foot of the Grand rapids, on the lower Saskatchewan, as well as on the east side of Lake Winnipegosis, in portions of the province of Manitoba, as well as in the district of Saskatchewan, light yellowish-gray limestones, and cream-coloured dolomites sometimes porous, underlie the rocks of Devonian age. Their geological as well as palaeontological characters have recently been made known by Messrs. Tyrrell, Dowling and Dr. Whiteaves and are referable in part to the *Niagara formation*. *Pentamerus decussatus* is a characteristic species from this horizon.

*The Cordilleran Region.*—In the Rocky mountain belt, in British Columbia, Mr. McConnell and Prof. A. P. Coleman, have examined a number of limited areas, probably referable to this system; notably along the Kicking Horse river, near the Glen Ogle slate quarries, and near the head-waters of the Columbia and Saskatchewan rivers. These localities have afforded fine examples of the genus *Halysites* (probably *H. catenulatus*) usually characteristic of the Silurian.

#### THE DEVONIAN SYSTEM.

*The Acadian Region.*—In Nova Scotia and New Brunswick, where the sedimentary formations of the palaeozoic were being deposited along a more or less sinuous and broken coast line similar to that of the present day, many varieties of sediments occur. The only marine Devonian known in Nova Scotia to date is found in Annapolis county in the vicin-