

*Cambro-Silurian.*

The outcrop of these rocks along the western shore of Lake Winnipeg is continued northward and then westward, passing to the south of the chain of lakes on the upper waters of the Grass river. In the southern part of the Lake Winnipeg basin the section gives a thickness of about 270 feet of limestone belonging to the Trenton, but in following the escarpment northward the beds thin out and the lower members disappear. The basal member, a sandstone which rests upon the Archæan, appears on the shore of Reed lake, but it is evidently an equivalent of higher horizon than farther south and is immediately below beds which on Lake Winnipeg are called the Upper Mottled. The section on Reed lake is described by Mr. Tyrrell. The fossils collected by him from the sandstones belong to the middle and upper part of the Trenton. A thickness of less than a hundred feet of Trenton limestone appears above these beds, and a reddish band above these is supposed to indicate a transition to the Niagara.

*Silurian.*

Undisturbed horizontal limestones of about the horizon of the Silurian. Niagara were seen at several low outcrops on Nainew lake to the east of Cumberland lake, as well as on Cormorant, Yawningstone and Moose lakes. On Cormorant lake the sequence observed was as follows. The lowest beds exposed are of a compact reddish dolomite, above which, five or six feet of similar beds weather very rough on the surface. A thin compact dolomite up to ten feet in thickness forms the upper member. These latter beds are shown in better exposures on Moose lake near the old Indian Reserve and on an island to the north. The exposure is in a cliff about thirty feet high showing at the base only two feet of a granular dolomitic limestone and the remainder of thick beds of a lamellar dolomite apparently of coralline formation. The rock is built up in thin plates having a crumpled surface from which many saucer-shaped pieces can be broken out. These are possibly remains of stromatoporoid corals which form the mass of the rock. No fossils were found in these beds but from a few loose fragments of a lighter and more granular rock, pushed up probably by the ice from below, the following forms were observed: Fragments of a Cyathophylloid coral like *Zaphrentis*, *Favosites*, sp., *Strophomena acanthoptera*, *Conchidium decussatum*, *Murchisonia*, two species, *Enomphalus*, sp., and *Gyroceras*, sp. These fossils are all common to the Niagara rocks.