

X.

THE GREAT NORTHERN BASIN.

This great basin, of which the Laurentides form the southern limit is very little known. Among the Laurentian rocks at lakes Nipissing, Saint Jean, and des Allumettes, small areas of lower silurian rocks are met with, which are to be regarded as detached portions of the southern basin. The last of these localities occurs on the Ottawa at the mouth of the Mattawa, and sixty miles further north, after having passed the great Laurentian axis, we reach the valley of lake Temiscaming, which belongs to the northern basin. Here Mr. Logan found a series of chloritic schists, sometimes conglomerate in character, nearly horizontal in their attitude, and having a thickness of about a thousand feet. To these schists succeed 500 feet of massive greenish white sandstones, overlaid by a calcareous formation 300 feet thick, and composed of strong beds of yellowish and grayish limestones intercolated with calcareous shales. The whole filled with the characteristic fossils of the upper silurian period.

The chloritic schists probably correspond to the Huronian rocks, but it is difficult to fix the age of the sandstones which are destitute of fossils. In all the collections brought from this northern region, there have as yet been found no fossils more ancient than those of lake Temiscaming; the numerous fossils found in the diluvium on the shores of lake Superior, also help to show that the lower silurian system is entirely wanting in the vast basin to the north of the Laurentides; from which fact Mr. Logan concludes, that these mountains from the coast of Labrador to the Arctic Ocean formed the limits of an ancient silurian sea.