

tact of the Animikie, on the wagon trail about midway between Green point and Wild Goose point.

At Silver harbor, farther up the north side of Thunder bay, there is a strip of the Animikie consisting of 15 to 20 feet of flat slates and cherty beds, capped by 50 feet of trap, from beneath which on the north, across a narrow strip of swamp, rises the Archean surface in well-defined *roches moutonnées*.

Contacts between the Nipigon and Older Rocks.—In the vicinity of Loon lake the basal beds of the Nipigon series overlap the northern edge of the Animikie and rest in undisturbed attitudes directly upon the Laurentian. On the north side of Loon lake and eastward to the vicinity of Pearl river the Laurentian rises from beneath the Nipigon sandstones and conglomerates in prominent hummocky hills. These conglomerates are made up very largely of boulders and rounded pebbles of the Laurentian, which are indistinguishable in general aspect from the more rounded erratics in the glacial drift.

In the bed of the creek at the tank of Pearl river station a low, rounded hummock of Laurentian gneiss appears from beneath the Nipigon sandstones; and at the first rock cut east of the station, 200 or 300 yards distant, the sandstones may be seen in the vertical section of the cutting, resting upon the slope of a hummock of Archean schists and dipping away from it to the east at an angle of 15° . Here the schists are rotted in places, leaving a few harder nuclei or boulders of disintegration *in situ*. Half a mile farther east along the track prominent, lumpy knobs of Laurentian rise above the level of the Nipigon sandstones to a height of over 100 feet, and on the east side of these, in a rock cut of the railway, the sandstones may be seen reposing directly upon their slopes, as an outlying patch.

About ten miles east of Nipigon, on the Canadian Pacific railway, there is a prominent bluff of Nipigon sandstone, capped with a thick sheet of vertically columnar trap, the whole presenting escarped faces which rise on three sides precipitously for several hundred feet above the hummocky plain of Laurentian rocks upon which it rests. The bare Laurentian basement is traceable up to the talus at the bases of the cliffs, and presents the appearance of passing under the column of superincumbent strata in the same hummocky condition as that which it has beyond the cliffs.

About ten miles east of Mazokuma station on the Canadian Pacific railway a prominent point runs out into the lake, the core of which consists of hummocky Laurentian gneiss, and the outer margin or shore of superimposed Nipigon sandstones and conglomerates. Here again the Laurentian appears to pass under the Nipigon with its characteristically hummocky surface, the country being well bared; and that it does so is proved beyond question by the fact that scattered over the Laurentian area, away from the edge of the Nipigon rocks, there are numerous outlying patches of the basal