

Deposits of Isolated Glaciers.—After the final retreat of the general continental glacier, relatively small névés remained on the tops of some of the higher elevations that had previously been overridden, and small glaciers flowed outwards from them down valleys of various depths. The Duck mountain shows many evidences of having passed this intermediate stage of local glaciation. It is a high table-land, the summit of which rises 2,700 feet above the sea, or 2,000 feet above Lake Winnipeg, and consists entirely of Cretaceous clays overlain by a great thickness of unstratified till and transported boulders, most of the latter being Archean gneisses and schists. From the summit of the mountains several large valleys carry the superfluous drainage outwards to the various surrounding waterways. The stratified deposits in these valleys are in many cases overlain by unstratified till. The valleys are also blocked by small local moraines, behind which in some cases the valleys are terraced as high as the tops of the moraines, while in others the rivers that formerly occupied them have been permanently diverted into other channels.

Thus we would appear to have in this area three distinct boulder clays, two formed by the continental glacier moving southward, and the third or upper formed by local glaciers existing at the same time that the great post-glacial lakes filled all the adjacent depressions.

Drumlins.—Over the great portion of the plains drumlins have not been recognized, possibly in part because in the press of other work they have not been looked for sufficiently; but in the northern portion of Lake Winnipegosis many excellent examples are to be seen. They here form groups of narrow, very much elongated elevations in the till, rising in islands a few feet above the surface of the lake, and are generally thickly covered with transported boulders of gneiss and limestone. A very casual glance at these groups of islands will serve to show that they are structurally different from neighboring ones underlain by rock and on which the boulders have been shoved by the ice. There is no sign of any rock in place and the stones are not all of constant lithological character, as is generally the case where the rock is close to the surface, but they are true transported boulders, differing as widely from each other as crystalline gneiss and coralline limestone. The islands are also formed with their long axes parallel to the direction of the glacial striae in the vicinity.

THE AQUEOUS DEPOSITS.

Interglacial Deposits.—As has been already shown, the evidences of a recurrence of glacial conditions and the intervening temperate era near the northwestern limit of the glaciated area leave no room for doubt that the glacier retired for a considerable time from the greater part of the western prairie region; and perhaps during this interglacial period conditions may