

absence on the hillsides, and with the prevalent direction of striation and boulder drift from the north-east.¹

All these indications coincide with the conditions of the modern boulder drift on the lower St. Lawrence and in the Arctic regions, where the great belts and ridges of boulders accumulated by the coast ice would, if the coast were sinking, climb upward and be filled in with mud, forming a continuous sheet of boulder deposit similar to that which has accumulated and is accumulating on the shores of Smith's Sound and elsewhere in the Arctic, and which, like the older boulder clay, is known to contain both marine shells and driftwood.²

The conditions of the deposit of "till" diminished in intensity as the subsidence continued. The gathering ground of local glaciers was lessened, the ice was no longer limited to narrow sounds, but had a wider scope, as well as a freer drift to the southward, and the climate seems to have been improved. The clays deposited had few boulders and many marine shells, and to the west and north there were land-producing plants akin to those of the temperate regions; and in places only slightly elevated above the water, peaty deposits accumulated. The shells of the Leda clay indicate depths of less than 100 fathoms. The numerous Foraminifera, so far as have been observed, belong to this range, and I have never seen in this clay the assemblage of foraminiferal forms now dredged from 200 to 300 fathoms in the Gulf of St. Lawrence.

I infer that the subsidence of the Leda clay period and of the interglacial beds of Ontario belongs to the time of the sea beaches from 450 to 600 feet in height, which are so marked and extensive as to indicate a period of repose. In this period

¹ Notes on the Post-Pliocene: *Canadian Naturalist*, *op. cit.*; also Paper by the author on Boulder Drift at Metis, *Canadian Record of Science*, vol. ii., 1886, p. 36, *et seq.*

² For references see "Royal Society's Arctic Manual," London, 1875, *op. cit.*