

than thirty miles distant, from which they must have been drifted to their present position. This boulder belt, which extends from the lowest tide mark about fifty feet or more upward, is sometimes piled in ridges and sometimes flattened out into a rude pavement. It is a product of the modern field ice, which, attaining a great thickness in winter, has boulders frozen into its bottom, and floating up and down with the tide, deposits these on the shore. At Little Metis, two hundred miles below Quebec, where I have a summer residence, I have from year to year cleared a passage through the boulder belt for bathing and for launching boats, and nearly every spring I find that boulders have been thrown into the cleared space by the ice, while one can notice from year to year differences in the position of very large boulders.

If we pass inland from the shore belt of boulders, we shall find similar appearances on the inland terraces at various heights, up to at least 400 feet. These are inland boulder belts belonging to old shores now elevated. Like the modern boulder belt these inland belts and patches consist partly of Laurentian rocks from the North Shore, partly of sandstones and conglomerates in place near to their present sites. In some places the stones are smaller than those of the present beach, in other places of gigantic size. These boulders lie not only on the bare rock striated in places with ice grooves pointing to the north-north-east; but on the old till or boulder clay, which also abounds with boulders, and which is more ancient than the superficial boulder drift. Locally we find here and there masses of fossiliferous limestone which must have been derived from the high ground to the south of the St. Lawrence, and which have been borne northward either by drift ice or by local glaciers.

If now we study the polished and scored surfaces of rocks in the St. Lawrence valley and the bounding hills, we shall find that while the former testify to a great movement of