

and Charlotte counties they must have partly over-ridden some of these in their passage to the Bay of Fundy, and were, at least, two to four hundred feet in thickness. Striæ are found on the north-west flanks of these hills three to four hundred feet above the general level of the district to the north, over which the ice approached them. This district, now nearly level, or but slightly undulating, and extending from the interior of the province, or the central water-shed, to the coast hills mentioned, forms an inclined plane, along which the moving glaciers must have acquired great momentum. Passes exist in these coast hills, through which the glaciers sought outlet to the bay, but some portions of them must have been shoved up on the northern flanks of the elevations between these passes to a height nearly equal to its source on the upper slopes of the central water-shed. These facts and others, which cannot here be given in detail, go to show that the glaciers of this slope must have been quite large, at least in this particular area. The coast hills referred to broke them up, however, as the ice passed through these gaps, as is shown by the wide deviations in the courses of the striæ before their final disappearance on the shores of the Bay of Fundy.<sup>1</sup>

Numerous moraines exist in the western part of the province which could only be formed by local glaciers descending from the hilly tracts into the valleys, as, for example, into the basin of the Chiputnecticook Lakes, or the valley of the Magaguadavic River, etc.<sup>2</sup> Considerable deviations in the courses of striæ occur in the hilly district further east.<sup>3</sup> Near the lower St. John, and along the Kennebeckasis valley, as well as in the highland region between the latter and the Bay of Fundy, striæ are seen running in various directions. The glaciers here must have been small and apparently independent of each other. The

<sup>1</sup> These remarks are based on observations made by the Geol. Surv. staff, but not yet published.

<sup>2</sup> Report of Progress, Geol. Surv. of Can., 1882-84, part GG.

<sup>3</sup> From data obtained in the field by the writer during the seasons of 1887 and 1888, not yet published.