

easiest flow; that this theory does no violence to the analogy of the existing order of things, requiring merely an enlargement of actual glaciers by the intensification of actual conditions: that abundant evidence can be obtained, as, for example, from Switzerland, that the present glacier system of the earth was once of sufficient magnitude to produce all the observed phenomena; that the most important glacial radiants in the northern hemisphere were, in North America, the district round Hudson Bay, New England and the Adirondacks, with certain areas in the western Cordilleras, and in Europe the Norwegian Dovrefelds and the Alps, Asia apparently possessing none of commensurate importance; that it satisfactorily explains, also, the previously puzzling absence of glacial action over the great plain of Siberia, the coldest portion of the northern temperate zone; that the belief in a vast polar ice cap, thousands of feet thick, covering the whole Arctic region, and extending almost continuously down to low latitudes, is an assumption doing violence to observed physical facts and to probability, that it is not required to account for the phenomena, and is, in fact, contradictory to some of them."

In Europe there is equally good evidence of the existence of huge glaciers on the Scandinavian mountains and the Alps, and of lesser accumulations of ice on the hills, as, for instance, those of the British Islands; but the Scandinavian boulders scattered over the plains of Great Britain must have been water borne.¹

In connection with these extracts I would observe that the writer, and those with whom he has acted in this matter, have never held that icebergs alone, or fields of ice alone, have produced the Pleistocene deposits. Their contention has been that the period was one in which glaciers, icebergs, and field

¹ The reports of the Scottish boulder committee, and Lapworth's recent careful examination of the deposits on the East of England (*Journ. Geol. Soc.*, Aug., 1891), strongly confirm me in this opinion.