the valleys, carrying with it all such soils, the result of antecedent decomposition, as they contained, and transporting an incalculable mass of *débris* of all kinds. This was, for the most part, lodged, not on the surface of the ice-sheet, through which only the tops of the highest hills protruded, but in its lower parts, which were crowded with soil, stones, and rubbish. As, century after century, this inconceivably powerful mechanical agent swept slowly over the surface of the country, meeting rocks of very various degrees of hardness in its passage, it dug more deeply into the soft, and less deeply into the hard, portions of its bed, and so produced the countless lake-beds which characterize the glaciated district. The river valleys, especially those which ran north and south, were also greatly modified by the erosive action of the ice, and their beds were deepened to an extent which would, in some cases, be quite inexplicable but for the hypothesis of the continental glacier.

It is known that North America was covered with forests before the advent of the ice-sheet, and it therefore becomes interesting to inquire into the cause of the great refrigeration of climate involved in the phenomenon of the glacial epoch. Many answers have been given to this question, answers which we have not time to recapitulate, and still less to sift, but, at least, there is no doubt that one of the most powerful of the causes in question was the greater elevation of northern North America in glacial times. The Laurentide range rose to such heights that its summit became covered with perpetual snow. Glaciers began to form everywhere upon its flanks, and increased in volume, little by little, until they covered the greater part of British North America. Finally, these glaciers, becoming confluent, attained the prodigious thickness and spread to the immense distances already cited.

But, after a time, the movement of elevation characterizing the glacial epoch was first checked, then arrested, and lastly reversed. This was the commencement of the "Champlain period," or the beginning of the end of the Age of Ice. As the mountains gradually lost their great height, snowfalls were as gradually exchanged for rainfalls, the *névé* ceased to accumulate, and the foot of the continental ice-sheet began to retreat. The climate becoming milder at the same time, the ice melted faster as less of it remained, and drowned almost the whole country in immense floods of water. The lakes and rivers of the Champlain period became of prodigious magnitude, while the inundations in question were aggravated by the continued subsidence of the land. In the course of time, lakes Erie, Ontario, and Superior formed one vast internal sea; the Mississippi basin was in the same condition, and, as we have already seen, an immense arm of the sea covered the whole valley of the St. Lawrence and extended over Lake Champlain itself.