

THE GREAT ICE AGE AND SUBSEQUENT FORMATIONS AT OTTAWA, ONTARIO.

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Following this period of great elevation and of extreme cold there came a period of submergence. Nor must it be surmised that the subsidence which took place in this part of the country was necessarily effected in a short time; on the contrary, it must indeed have taken ages for the country to have come down even to the level at which it is at present—a height of between two and three hundred feet above sea level at Ottawa. As the elevated and ice-bound country was gradually subsiding, there came an amelioration in its climatic condition, and more temperate seasons ensued. The glaciers which at one time discharged their materials into valleys and on land—feeders to a regular system of glacial rivers both in the lowlands and in the mountain districts—now discharged these along the coast, and coast-ice and icebergs were soon at work as the sea was encroaching upon the land and depositing over the old beds of the glaciers a series of sedimentary strata, with which there came also the life and organisms common to such habitats, so that the next period or formation with which we have to deal is one of marine origin, deposited in the still depths of an ocean or sea and containing the remains of animals common to that period in the earth's history. Meanwhile, innumerable quantities of icebergs, carrying with them large blocks of rock and detritus—themselves portions of glaciers—were scattering their burden over the bed of this ocean or sea, as the warmer regions were reached, just as is going on at the present day, along the coasts of Labrador, Newfoundland, etc., the icebergs detached from their northern fortresses sweep down towards the centre of the earth—no doubt to a great extent due to that transporting force developed in the rotation of the earth.

There are certain geologists, I believe, who would account for the striations in the hard rock masses below being formed through the agency of coast-ice and icebergs only. Whilst admitting the possibility of