

the present century considerable portions of country have been elevated above the sea. So with the northern parts of Sweden and Finland a slow rising is constantly going on, and at the same time the Scandinavian Peninsula towards the south-east shore is sinking. The west coast of Greenland is also gradually sinking, and these changes are brought about without any apparent earthquakes. In Canada there are many fossil-bearing strata hundreds of feet above the present sea level, as seen in our own immediate neighborhood.

After the formation of our stratified rocks it is supposed that this continent, being exposed for an unknown length of time, was again dipped beneath the great oceanic waves, when the present mantle of clays, sand and boulders (termed drift) was thrown over our firm rock foundations. Ansted, of Cambridge, has written, "water is the life of the earth, as blood is the life of man;" and certainly there is ample proof of its extensive operations in the formation of the earth's crust. It is, in fact, the great agent in bringing about the vast circle of changes which form the subject of geological investigation. Judging of what has taken place in our midst, viz., the manner in which the great bed of rock at the *Chaudière* has been cut or channeled out by water; also at Niagara, where the river has cut a channel through the solid rock, 200 feet deep, 1,200 to 2,000 feet wide and fully seven miles long. It is evident that the waters are thus carrying both land and rocks in their course, and the amount yearly transported is truly wonderful. On a small scale we can observe this same action exemplified at the "Gatineau Point," where the land is rapidly being removed. At the mouths of the Mississippi, the Amazon and the Nile, immense deposits of material thus carried, are to be observed as the result of the abating action of water.

Of the Ganges, Sir Charles Lyell says, "that if a fleet of eighty vessels, each freighted with 1,400 tons weight of mud, were to sail down that river every hour of every day and night for four months continuously, it would only transport from the higher regions to