

conditions of sedimentation. It would seem also that, as Hicks has argued for Europe, and Logan and Hall for America, this Cambrian age was one of slow subsidence of the land previously elevated, accompanied with or caused by thick deposits of detritus along the borders of the subsiding shore, which was probably covered with the decomposing rock arising from long ages of subaërial waste.

In the coal formation age its characteristic swampy flats stretched in some places far into the shallower parts of the ocean.¹ In the Permian, the great plicated mountain margins were fully developed on both sides of the Atlantic. In the Jurassic, the American continent probably extended farther to the sea than at present. In the Wealden age there was much land to the west and north of Great Britain, and Professor Bonney has directed attention to the evidence of the existence of this land as far back as the Trias, while Mr. Starkie Gardiner has insisted on connecting links to the southward, as evidenced by fossil plants. So late as the Post-glacial, or early human period, large tracts, now submerged, formed portions of the continents. On the other hand, the interior plains of America and Europe were often submerged. Such submergences are indicated by the great limestones of the Palæozoic, by the chalk and its representative beds in the Cretaceous, by the Nummulitic formation in the Eocene, and lastly, by the great Pleistocene submergence, one of the most remarkable of all, one in which nearly the whole northern hemisphere participated, and which was probably separated from the present time by only a few thousands of years.² These submergences and ele-

¹ I have shown the evidence of this in the remnants of Carboniferous districts once more extensive on the Atlantic coast of Nova Scotia and Cape Breton ("Acadian Geology").

² The recent surveys of the Falls of Niagara coincide with a great many evidences to which I have elsewhere referred in proving that the Pleistocene submergence of America and Europe came to an end not more than ten