about 320 feet in the space of 8000 years; and in 12,000 years, if the movement be regular, parts of the bottom of the sea which lie nearest the shores, and are in the present day covered by nearly fifty fathoms of water, will come to the surface and constitute dry land. But what are such intervals of time compared to the length of the geognostic periods revealed to us in the stratified series of formations, and in the world of extinct and varying organisms! We have hitherto only considered the phenomena of elevation; but the analogies of observed facts lead us with equal justice to assume the possibility of the depression of whole tracts of land. The mean elevation of the non-mountainous parts of France amounts to less than 480 feet. It would not, therefore, require any long period of time, compared with the old geognostic periods, in which such great changes were brought about in the interior of the earth, to effect the permanent submersion of the northwestern part of Europe, and induce essential alterations in its littoral relations.

The depression and elevation of the solid or fluid parts of the earth—phenomena which are so opposite in their action that the effect of elevation in one part is to produce an apparent depression in another—are the causes of all the changes which occur in the configuration of continents. In a work of this general character, and in an impartial exposition of the phenomena of nature, we must not overlook the *possibility* of a diminution of the quantity of water, and a constant depression of the level of seas. There can scarcely be a doubt that, at the period when the temperature of the surface of the earth was higher, when the waters were inclosed in larger and deeper fissures, and when the atmosphere possessed a totally different character from what it does at present, great changes must have occurred in the level of seas, depending upon the increase and decrease of the liquid parts of the earth's surface. But in the actual condition of our planet, there is no direct evidence of a real continuous increase or decrease of the sea, and we have no proof of any gradual change in its level at certain definite points of observation, as indicated by the mean range of the barometer. According to experiments made by Daussy and Antonio Nobile, an increase in the height of the barometer would in itself be attended by a depression in the level of the sea. But as the mean pressure of the atmosphere at the level of the sea is not the same at all latitudes, owing to meteorological causes depending upon the direction of the wind and varying degrees of moisture, the