

level of the ocean. A large proportion of the dry land is situated in the northern hemisphere, the southern hemisphere presenting a broad and almost uninterrupted surface of water, the Pacific Ocean itself being of greater extent than all the dry land on the surface of the earth. Humboldt estimates the dry land between the tropics in the northern and southern hemispheres as being in the ratio of five to four, and without the tropics as thirteen to one, the northern hemisphere being the greater in both instances.

This relation between land and water has not, in all probability, constantly existed. The loftiest elevation upon the surface of the globe may have been at some past period beneath the level of the ocean, and the agent which elevated it may act, at some future period, upon the bed of the present ocean, and, raising it to the same elevation, entirely change the relative distribution of land and water. If it be denied that the dry land has been once beneath the water, how can the presence of organic remains in rocks be accounted for? It must not be supposed that the ancient shells found in rocks are merely distributed over their surface, for they form an integral portion of the beds, and are so disseminated through them that the rocks and the shells must have been deposited at the same time. But that which was the bed of the sea is now dry land, and consequently one of two things must have happened: either the dry land that then was sank beneath the level of the ancient basins and received their contents, or the bed of the sea was raised, and the waters rushed into the newly-formed valleys. There can be no doubt as to which of these two causes produced the present relative condition of land and water. Rocks have been violently tilted from a horizontal to a highly inclined or vertical position; immense masses of igneous rocks have been ejected from the interior of the earth, and form, as it were, immovable walls, against which the disturbed strata are piled in succession. Some local results may be due to depression, but all the great movements to which the earth's crust has been subject may be traced to elevation.

We need not refer to a very distant era, geologically considered, to find evidence of an alteration in the relations of land and water. The ancient beaches are among the most recent geological formations, and give evidence of at least a partial, though by no means limited elevation, after the depo-