

would disappear, and the earth be covered by one vast sheet of water. The globe, however, possesses an internal source of heat,—and whether this heat exist as a central nucleus of high temperature, or as medial foci,—whether it be dependent on the assumed original nebulous state of the earth, or produced by electro-magnetic forces acting on the mineral substances contained in the interior of our planet,—does not affect the present inquiry. This internal heat, however produced, must occasion constant changes in the relative level of the land and water; elevating whole continents,—converting the bed of the sea into dry land,—and submerging the dry land into the abyss of the ocean. The volcano and the earthquake are the effects of its paroxysmal energies,—the quiet and insensible elevation of the land, of its slow but certain operation. By this antagonist power the accumulation of the spoils of the land, which the rivers, waves, and currents have carried into the bed of the ocean, are again brought to the surface, and form the elements of new islands and continents; and by the organic remains discovered in these strata, we trace the nature of the countries from whence these spoils were derived. In the deltas and estuaries of modern times,—in the detritus accumulating in the beds of the ocean,—in the recent tracts of limestone forming on the sea-shores,—beneath the cooled lava currents erupted from existing volcanoes,—the remains of man and of his works, and of the animals