

have been, like the Appalachians, of later date than the creation of organic beings. We also know that, at each geological period characterized by the appearance of distinct races of living beings, the earth's surface, although for the most part tranquil, has been in some regions the theatre of volcanic eruptions. It is very probable that the Silurian, Devonian, and carboniferous strata, which enter into the composition of the Appalachians, underwent the principal movements of upheaval and subsidence to which their prevailing structure is due, at a time when they were still submerged beneath that ocean in which they were originally formed,—for that they were at first marine deposits is testified by their imbedded corals and shells. It is therefore certain that they have undergone some elevation before they arrived at their present position. But we cannot infer from this fact that movements of elevation rather than of subsidence have been most effective in impressing upon them their present structure. The reader will observe, in the section at p. 92, vol. i., that nearly horizontal beds of Newer Red Sandstone (No. 4, fig. 5) rest unconformably on the inclined strata of the Alleghanies. Hence he will perceive that the last series of movements which upraised this continent, was quite distinct from those prior movements, which threw the ancient strata (Nos. 5, 6, 7, fig. 5) into their inclined and curved position.

Having one day entered a stage coach in our passage over these mountains, I conversed with two Kentucky farmers returning in high spirits from Baltimore, where they had sold all their mules and cattle for good prices. They were carrying back their