dantly. These are termed alluvial deposits;* they contain remains of the existing races of animals and plants, associated with those of species that are no longer to be met with on the face of the earth.

Even this slight examination of the strata affords convincing proofs of a former condition of animated nature, widely different from the present. We have evidence of a succession of periods of unknown duration, in which both the land and the sea teemed with forms of existence that have successively disappeared and given place to others; and these again to new races, approaching gradually more and more nearly to those which now inhabit the earth, till at length existing species make their appearance.

18. GEOLOGICAL MUTATIONS.—From this view of the physical structure of our planet we learn, at least so far as the limited powers of man can penetrate into the history of the past, that the distribution of land and water on its surface has been undergoing perpetual mutation; yet, that through a vast period of time, the physical condition of the earth has not materially differed from the present; that the dry land has been clothed with vegetation, and tenanted by appropriate inhabitants; and that the sea and the bodies of fresh water have swarmed with living forms; that at a remote epoch, though animal and vegetable life existed, the species were

* The term *diluvial* is applied by some geologists to the most ancient of these deposits; and that of *alluvial* to the modern accumulations only.