

and vary within certain narrow limits; never in essential qualities, but only in unessential points. No new species could ever proceed from the changes or varieties of a species. Not one of all organic species, therefore, is ever derived from another, but each individual species has been separately created by God. Each individual species, as Agassiz expresses it, is "an embodied creative thought" of God.

In direct opposition to the fact established by palæontological experience, that the duration of the individual organic species is most unequal, and that many species continue unchanged through several successive periods of the earth's history, while others only existed during a small portion of such a period, Agassiz maintains that one and the same species never occurs in two different periods, but that each individual period is characterized by species of animals and plants which are quite peculiar, and belong to it exclusively. He further shares Cuvier's opinion that the whole of these inhabitants were annihilated by the great and universal revolutions of the earth's surface, which divide two successive periods, and that after its destruction a new and specifically different assemblage of organisms was created. This new creation Agassiz supposes to have taken place in this manner: viz., that at each creation all the inhabitants of the earth, in their full average number of individuals, and in the peculiar relations corresponding to the economy of nature, were, as a whole, suddenly placed upon the earth by the Creator. In saying this he puts himself in opposition to one of the most firmly established and most important laws of animal and vegetable geography—namely, to the law that each species has a single original locality of origin, or a so-called "centre of creation," from