

like the historian who divides the history of nations into the three main divisions of Antiquity, the Middle Ages, and Modern Times, and each of these sections again into subordinate periods and epochs. But the historian by this sharp systematic division, and by fixing the boundary of the periods by particular dates, only seeks to facilitate his survey, and in no way means to deny the uninterrupted connection of events and the development of nations. Exactly the same qualification applies to our systematic division, specification, or classification of the organic history of the earth. Here, too, a continuous thread runs through the series of events unbroken. We must therefore distinctly protest against the idea that by sharply bounding the larger and smaller groups of strata, and the periods corresponding with them, we in any way wish to adopt Cuvier's doctrine of terrestrial revolutions, and of repeated new creations of organic populations. That this erroneous doctrine has long since been completely refuted by Lyell, I have already mentioned. (Compare vol. i. p. 127.)

The five great main divisions of the organic history of the earth, or the palæontological history of development, we call the primordial, primary, secondary, tertiary, and quaternary epochs. Each is distinctly characterized by the predominating development of certain animal and vegetable groups in it, and we might accordingly symbolically designate the five epochs, on the one hand by the names of the groups of the vegetable kingdom, and on the other hand by those of the different classes of vertebrate animals. In this case the *first*, or primordial epoch, would be the era of the Tangles (Algæ) and skull-less Vertebrates; the *second*, or primary epoch, that of the Ferns and Fishes; the *third*, or