

the living testaceous fauna, whether freshwater or marine, had already come into being. If such events can take place while the zoology of the earth remains almost stationary and unaltered, what ages may not be comprehended in those successive tertiary periods during which the Flora and Fauna of the globe have been almost entirely changed! Yet how subordinate a place in the long calendar of geological chronology do the successive tertiary periods themselves occupy! How much more enormous a duration must we assign to many antecedent revolutions of the earth and its inhabitants! No analogy can be found in the natural world to the immense scale of these divisions of past time, unless we contemplate the celestial spaces which have been measured by the astronomer. Some of the nearest of these within the limits of the solar system, as, for example, the orbits of the planets, are reckoned by hundreds of millions of miles, which the imagination in vain endeavours to grasp. Yet one of these spaces, such as the diameter of the earth's orbit, is regarded as a mere unit, a mere infinitesimal fraction of the distance which separates our sun from the nearest star. By pursuing still farther the same investigations, we learn that there are luminous clouds scarcely distinguishable by the naked eye, but resolvable by the telescope into clusters of stars, which are so much more remote, that the interval between our sun and Sirius may be but a fraction of this larger distance. To regions of space of this higher order in point of magnitude, we may probably compare such an interval of time as that which divides the human epoch from the origin of the coralline limestone over which the Niagara is precipitated at the Falls. Many have been the suc-