

IV. CENOZOIC TIME.

It has been observed that, before the close of Mesozoic time, the medieval features of the era were already passing away. The Cycads had mostly given place to the Sassafras, Tulip tree, Willow, Maple, Oak, and Palm; the ancient type of Ganoids, to Salmon, Perch, and Herring; and the Corals, Echini, and Mollusks had close relations to those of existing seas, though of extinct species. But, notwithstanding these changes, the Mesozoic aspect continued to the end. Even the little Mammals, which appeared among the Reptiles, bore the mark of the age, for they approximated to the oviparous Reptiles and Birds, in being themselves either semioviparous or oviparous; that is, either Marsupials or Monotremes.

But with the opening of the new era, the Mammals in their turn became the dominant race. Types much like those of the age of Man were multiplied among them, in all departments of nature. As the era advanced, the first of the species now living appeared, — a few among multitudes that became extinct; and afterward a larger proportion; and, before it closed, nearly all kinds of life, excepting Mammals, were identical with those of the present era. As the Paleozoic or ancient life was followed by the Mesozoic or Medieval, so now there was as marked a change to the Cenozoic or recent life and world.

Cenozoic time embraces two eras: —

- I. The TERTIARY, or era of Mammals.
- II. The QUATERNARY, or era of Man.

These eras, like consecutive eras in preceding time, were continuous in life through both the vegetable and animal kingdoms, and it is not proved that Man, the most characteristic feature of the Quaternary, was not in existence before the close of the Tertiary. But one of the grandest and most sweeping catastrophic epochs intervened between the two, the Glacial, and so separated them, although the destructive influence of this epoch did not extend over tropical regions, except in the vicinity of lofty mountains.

TERTIARY ERA.

The Mammals of the Tertiary era are all extinct; and the proportion of living Invertebrates, the Protozoans excluded, varies from none in the earlier part of the era to 95 per cent in the later part. The Early and Middle Quaternary Mammals are largely extinct, but the Invertebrates and Plants are existing species. The Later Quaternary or Recent animals and plants are of existing species, except those that have become extinct through the agency of man.