

rially affected. From the data hitherto obtained, the most eminent botanists (Count Sternberg, M. Brongniart, Dr. Lindley, &c.), consider that the Floras of the ancient world constitute three distinct epochs or eras.

The first comprehends the earliest strata in which traces of vegetation appear, and includes the Carboniferous. The plants of this epoch, as we have already shown, consist of fuci, and other cellular tribes; ferns, of various kinds, in great abundance; coniferous trees, related to species of warm climates; of palms, and other monocotyledons; gigantic lycopodia, and trees (*Sigillariæ*) in great abundance, whose precise relations to known forms are not accurately determined. In this Flora the tree-ferns predominate, constituting nearly two-thirds of the whole known species; and the general type of the vegetation is analogous to that of the Islands and Archipelagos of intertropical climates.

The second epoch extends from the New Red, or Saliferous Strata, to the Chalk inclusive, and is characterised by the appearance of many species of Cycadeæ, Zamia, and other Coniferæ; while the proportion of ferns is much less than in the preceding period, and the Lycopodiaceous tribes, Calamites, &c. of the carboniferous strata, are absent. A Flora of this nature is analogous to that of the coasts and maritime districts, of New Holland and the Cape of Good Hope.

The third epoch is that of the Tertiary, in which