

ends; extending backwards from the actual condition of our Planet through the manifold stages of change, which its ancient surface has undergone.\*

## SECTION IV.

## VEGETABLES IN STRATA OF THE TERTIARY SERIES.†

It has been stated that the vegetation of the Tertiary period presents the general character of that of our existing Continents within the Temperate Zone. In Strata of this Series, Dicotyledonous Plants assume nearly the same proportions as at present, and are four or five times more numerous than the Monocotyledonous; and the greater number of fossil Plants, although of extinct species, have much resemblance to living Genera.

This third great change in the vegetable kingdom is considered to supply another argument in favour of the opinion, that the temperature of the Atmosphere, has gone on continually diminishing from the first commencement of life upon our globe.

\* Fruits of another genus of Pandaneæ, to which Mr. Ad. Brongniart has given the name of Pandanocarpum, (*Prodrome*, p. 138,) occur together with fruits of Cocoa nut, at an early period of the Tertiary formations, among the numerous fossil fruits that are found in the London-clay of the Isle of Sheppey.

† See Pl. 1, Figs. 66 to 72.