

may be made to the works already noticed; and particularly to the admirable systematic diagram of the formations, by that veteran geologist, Mr. Webster, which forms the frontispiece of Dr. Buckland's Bridgewater Essay.

It will here be necessary to premise, that there are three elements of classification applicable to stratified rocks; namely, 1st, their mineral structure; 2dly, their order of superposition; and 3dly, the nature of the organic remains which they contain: the following arrangement is in accordance with these principles.\*

## CHRONOLOGICAL ARRANGEMENT OF THE STRATA.

*Commencing with the uppermost or newest Deposits.*

### FOSSILIFEROUS STRATA.

- I. MODERN AND ANCIENT ALLUVIUM.—Comprising the modern and ancient superficial deposits, described in the previous lectures. The *modern* are characterised by the remains of man and contemporaneous animals and plants; the *ancient*, by an immense proportion of large mammalia and carnivora, of species and genera, both recent and extinct.
- II. THE TERTIARY SYSTEM.—An extensive series, comprising groups of marine and lacustrine deposits, characterised by the remains of animals and vegetables, the greater portion of which are extinct. Volcanoes of great extent were in activity during this epoch.

\* See Professor Sedgwick's Synopsis of the English Series of Stratified Rocks inferior to the old Red Sandstone. *Proceedings of the Geological Society*, vol ii. p. 76.