

to the whole suite : but if we compare this suite, either with the more recent shelly beds above the chalk, or the older associated with the coal transition series, a marked and striking difference is instantly perceived, and the common genera will be found to bear a comparatively small proportion.

The natural connexions of these series may be further illustrated by the gradual transition of the one into the other, often observable near the point of junction ; thus the lower beds of the chalk often become charged with sand and interspersed with green particles, and thus pass into the green sand of the second series ; this sand is often associated with calcareous beds nearly approximating in character to some of those in the oolitic or third series ; and the clays which subdivide this series, are generally only to be distinguished by the specific differences of their organic remains.

Having thus stated the analogies which connect the above members of our supermedial class, it remains to notice the fourth and lowest series of beds which we have comprised in it ; although this is distinguished from the preceding by many peculiar circumstances, it will yet be seen that there are sufficient grounds for including it in the same general division.

D. This consists of the series of the new red sandstone and magnesian limestone. The sandstone is characterised by the deposits of gypsum and rock salt contained in its upper marly beds, and by the conglomerates abounding in its lower beds. It is entirely destitute of organic remains, and is thus strongly distinguished from the preceding formations ; but the magnesian limestone beds which form the lowest strata of this series, again present these remains, and the genera are more nearly allied to those contained in the oolites than those of the older formations. This circumstance, taken together with the general conformity of stratification in this and the preceding series, and the appearances of a gradual transition which may be observed between the lowest marles of the lias formation, and the upper marles of this series at their junction, render it more advisable to class them together, than to constitute a separate class for the reception of this series only, which would otherwise be necessary.

A comparative view of the distribution of the several members of this class in England and other countries, will be found in the introductory sections of the chapters in which each of them is separately considered.