

still ascending in the series, we come to the Cretaceous formations represented by 12, 13, and 14, a wonderful change takes place. None of the Oolitic species pass into these formations, and some of the genera, especially of chambered shells (Cephalopoda) are new. *There are no marine passage beds in England sufficiently developed clearly to unite the two series.* They were, in fact, separated in their deposition by a long period of time during which our territory generally formed land, and which is therefore *unrepresented in the British area by marked marine stratified deposits* of dates between Oolitic and Cretaceous times.

I have selected the above instances, as affording a good type of the kind of phenomena that occur again and again throughout the whole series of our geological formations. After a minute examination, therefore, of the stratigraphical structure of our island, the result is, that geologists are able to recognise and place all the rocks in serial order, so as to show which were formed first and which were formed latest; and the following is the result of this tabulation, omitting minor details.

It is a necessary part of the plan of this work to give some account of the range, structure, and fossils of the formations enumerated in the following table, and I shall therefore in succeeding chapters give a brief account of each formation or set of formations, beginning with the oldest, so as in some degree to show their general relations to each other, and, as far as I can, to give a description of the physical geography of each prominent geological epoch.