

It is evident that, in this way, a method of comparison is furnished whereby the stratified groups of different parts of the earth's crust can be brought into relation with each other. We find, for example, that a certain group of strata is characterized in Britain by certain genera and species of corals, brachiopods, lamellibranchs, gasteropods, and cephalopods. A group of rocks in Bohemia, differing more or less from the British type in lithological aspect, contains on the whole the same genera, and some even of the same species. In Scandinavia, a set of beds may be seen, unlike perhaps in external characters to the British type, but yielding many of the same fossils. In Canada and parts of the northern United States, other rocks inclose some of the same, and of closely allied genera and species. All these groups of strata, having the same general facies of organic remains, are classed together as *homotaxial*, that is, as having been deposited during the same relative period in the general progress of life in each region.

It was at one time believed, and the belief is still far from extinct, that groups of strata, characterized by this community or resemblance of organic remains, were chronologically contemporaneous. But such an inference rests upon most insecure grounds. We may not be able to disprove the assertion that the strata were strictly coeval, but we have only to reflect on the present conditions of zoological and botanical distribution, and of modern sedimentation, to be assured that the assertion of contemporaneity is a mere assumption. Consider, for a moment, what would happen were the present surface of any portion of central or southern Europe to be submerged beneath the sea, covered with marine deposits, and then re-elevated into land. The river-terraces and lacustrine marls formed before the time