

investigations to which it has conducted are likely to have an important and permanent influence on geological observation and theory. Already, in the countries best examined,—in England, France, Germany, in Europe generally, and in North America, it is found possible to determine one or more periods when great and extensive subterranean pressures broke the submarine crust of the earth, and raised particular tracts of land above the reach of further marine deposits. Comparatively short periods of widely extended disturbance in the equilibrium of heat are thus clearly established, in alternation with far longer periods of repose in the same regions; and though it may be rather a coincident than a dependent phenomenon, it is not to be doubted that, among the older strata, these critical periods of disturbed equilibrium of heat correspond to critical periods in the revolutions of organic life. That either of these results is true *universally* would be a ridiculous affirmation, in the present state of our ignorance concerning immense areas of the globe; but it will not be the less useful to exemplify their truths, chiefly by application to the British islands. The following table is intended for this purpose, and may be compared with that on page 117., which contains some of the same elements:—

*Primary period*, of ordinary action, among the aqueous and igneous agencies; the ancient bed of the sea was filled with sediments, the most recent of which obviously were derived from tracts of land, which are now for the most part submerged. The organic remains of this whole period really compose but one series, in the same sense that the fossils of the oolitic or cretaceous system are one varied group. There were local disturbances of the sea bed in the Cumbrian and other districts.

*An interval of dislocations* followed, in which all the primary strata of England, in every part (excepting perhaps the silurian region), were raised to angular positions, so that the next system rests unconformably upon them.