

from a sense of the convenience of this long received arrangement, than from the reality of any strongly defined boundaries by which the strata, on the confines of each series, are separated from one another.

As the materials of stratified rocks are in great degree derived, directly or indirectly, from those which are unstratified,* it will be premature to enter upon the consideration of derivative strata, until we have considered briefly the history of the primitive formations. We therefore commence our inquiry at that most ancient period, when there is much evidence to render it probable that the entire materials of the globe were in a fluid state, and that the cause of this fluidity was heat. The form of the earth being that of an oblate spheroid, compressed at the poles, and enlarged at the equator, is that which a fluid mass would assume from revolution round its axis. The further fact, that the shortest diameter coincides with the existing axis

* In speaking of crystalline rocks of supposed igneous origin as unstratified, we adopt a distribution which, though not strictly accurate, has long been in general use among geologists. Ejected masses of granite, basalt, and lava have frequently horizontal partings, dividing them into beds of various extent and thickness, such as those which are most remarkable in what the Wernerians have called the Floetz trap formation, Pl. 1, section Fig. 6.; but they do not present that subdivision into successions of small beds, and still smaller laminæ, which usually exist in sedimentary strata that have been deposited by the action of water.