

*racteristic phenomena in the real order of their succession.*

To this task geologists, as such, are quite unequal. The preliminary investigations in mechanical and chemical philosophy are yet incomplete; we do not *know* to what extent the earth, in its interior parts, is solid or liquid; we cannot affirm in what state of combination the substances there occur; the rate of increase of heat below the surface is only approximately determined in particular regions; the depths of the sea have not been measured; the geological surveyor has not visited above half the globe; the true relations of the existing creation of life to those which have passed away are yet the subjects of discussion; the times which have elapsed during the accomplishment of geological revolutions are not even reduced to conjecture!

Yet in spite of these disadvantages, the conviction is spreading that some good will result from even an unsuccessful attempt to deduce mathematically the main consequences of the Leibnitzian speculation. To this task Mr. Conybeare invited attention in 1831; and since that time Mr. Hopkins has given proof, in more than one Memoir, that the subject is in able hands. The mist is gradually disappearing; and if we see not clearly the high point of truth which we desire to reach, and which may yet be far distant, at least the direction of our march is found; and though the paths may be devious and hazardous, they are full of beauty and delight.