

and branches of the forest, overwhelmed and buried beneath the transported detritus of distant strata.

These phenomena may be explained by supposing the inundation of a thickly-wooded plain, by an irruption of the sea, or of a vast inland lake, occasioned by the sudden removal of some barrier; or by a subsidence of the tract of country on which the forest grew. But when we find an accumulation of strata, in which triple deposits of this kind are repeated some thirty or forty times through a thickness of many thousand feet, a satisfactory solution of the problem is very difficult. Not only subsidence after subsidence must have taken place, but the first submergence have been followed by an elevation of the land—another soil, fit for the growth of forest trees, been produced—another generation of vegetables, of precisely the same species and genera, have sprung up, and arrived at maturity—and then another subsidence, and another accumulation of drift. And these oscillations in the relative level of the sea and land, must have gone on uninterruptedly through a long period of time, not in one district or country only, but all over the world, and during the same geological epoch. At present I do not think we have data sufficient to explain these phenomena; what has been advanced may, perhaps, serve to elicit further information, by pointing out the difficulties in which the question is at present involved, and show the student what