

assumed personage admitted that the remains in question were fossil animals and vegetables, but asserted that they had been entombed in the strata by a general deluge which had softened the crust of the earth, and engulfed in the sediment of its waters the remains of animated nature,—should we not reply, that as such a catastrophe must inevitably have mingled together the remains of animals and vegetables, whether of the land, the rivers, or the seas—the regular stratification of the materials composing the delta, and the exclusive occurrence of land and fresh-water productions, were fatal to such a supposition, and afforded conclusive evidence of the correctness of our explanation of the phenomena?—by such a train of reasoning the fluviate nature of the wealden has been determined.

34. WEALDEN OF THE SUSSEX COAST.—From the distribution of the wealden over the south-east of England, instructive sections have been formed by the action of the sea along the coast, between Beachy Head and Dover. From the stupendous cliffs of Beachy Head the chalk extends towards Southbourn, where beds of gault, glauconite, marl,

which grow shells, or rather half-shells, having the appearance of periwinkles of different magnitudes, according to the time of their growth. These stones naturally grow in the earth, and the shells upon them, and *are another certain proof that shells are generated in the earth, as well as in the sea, and that there is no necessary connexion between a shell and an animal.*" (!!)—*Natural History of England*, p. 193, vol. i. 1759.