gradual accumulation during a long series of years.

In the case of deposits formed in estuaries, the admixture and alternation of the remains of fluviatile and lacustrine shells with marine Exuviæ, indicate conditions analogous to those under which we observe the inhabitants both of the sea and rivers existing together in brackish water near the Deltas of the Nile,* and other great rivers. Thus, we find a stratum of oyster shells, that indicate the presence either of salt or brackish water, interposed between limestone strata filled with freshwater shells among the Purbeck formations; so also in the sands and clays of the Wealden formation of Tilgate forest, we have freshwater and lacustrine shells intermixed with remains of large terrestrial reptiles, e. g. Megalosaurus, Iguanodon, and Hylæosaurus; with these we find also the bones of the marine reptiles Plesiosaurus, and from this admixture we infer that the former were drifted from the land into an estuary which the Plesiosaurus also having entered from the sea, left its bones in this common receptacle of the animal and mineral exuviæ of some not far distant land.†

Another condition of organic remains is that

* See Madden's Travels in Egypt, vol. ii. p. 171-175.

† For the detailed history of the organic remains of the Wealden formation, see Mr. Mantell's highly instructive and accurate volumes on the geology of Sussex.