

found on the opposite Essex shore, but in very small numbers, and in that part of the stratum which has been examined at Kew. Among Mr. Crowe's specimens are many which appear to belong to tropical climates, some which seem to be a species of cocoa-nut, and other varieties of spices.

The existence of a neighbouring region of dry land seems attested by these vegetable remains (which, from the state in which they are found can scarcely have been supposed to have drifted from any great distance), as well as by the occurrence of the amphibia before mentioned. We can scarcely resist the temptation of asking "What was that ancient land? had any part of England then raised its head above the waves? does it not sound extravagantly, even to enquire whether its oldest and highest mountain tracts then formed a groupe of spice islands frequented by the turtle and crocodile?"\* Speculations like these, though unavoidably suggested, almost give the features of romance to the sober walks of science.

The fossils of this formation are abundantly found wherever the sea has laid open natural sections, or artificial excavations have been carried on to any great extent; the following localities may be mentioned.

The cliffs on the south of Harwich in Essex; those which skirt the north of the Isle of Sheppy; those of Stubbington near the eastern entrance of the Southampton water, and more especially those between Hordwell and Christchurch in the south-west of Hampshire; the rocks of Bognor in Sussex (though scarcely deserving the name, as they are mere blocks just peeping above the tide) are likewise very productive. The great excavation for the Highgate archway near London afforded numerous and beautiful specimens; some excavations at Kew are recorded in the same account in P. T. vol. 103, p. 134. The Pits at Richmond are often cited in Woodward's catalogue. Shells have been also found in the wells on Shooter's hill. The Canal lately undertaken, but since abandoned, for the drainage

\* The figure of the Earth as a spheroid of rotation precludes the idea that the line of its equator can have shifted, and many physical reasons concur to render it in the highest degree improbable that the obliquity of the ecliptic has undergone any material change. We cannot therefore refer the indication of a change of climate, which geology seems to present in the higher latitudes, to astronomical causes: but it seems by no means improbable, when we take into consideration the proofs of the much greater extent and energy of the volcanic fires which have acted on our planet at an earlier period, that its general temperature may then have been higher; the number of the points universally allowed to be extinct volcanoes will authorise this remark, without having recourse to the controverted, but certainly probable, theory, of the igneous origin of basaltic rocks.