the principles of their construction, with the conditions by which existing Turtles are fitted for their marine abode, that Cuvier was at once enabled to pronounce these fossil species to have been indubitably inhabitants of the sea.*

The genera Trionyx and Emys, present their fossil species in the Wealden freshwater formations of the Secondary series; and still more abundantly in the Tertiary lacustrine deposits; all these appear to have lived and died, under circumstances analogous to those which attend their cognate species in the lakes and rivers of the present tropics. They have also been found

• Plate 25', Fig. 4, represents a Turtle from the slate of Glaris: it is shewn to have been marine by the unequal elongation of the toes in the anterior paddle; because, in freshwater Tortoises, all the toes are nearly equal, and of moderate length ; and in land Tortoises, they are also nearly equal, and short; but in all marine species they are very long, and the central toe of the anterior paddle, is by much the longest of all. The accordance with this latter condition in the specimen before us, is at once apparent; and both in this respect and in general structure, it approaches very nearly to living genera. This figure is copied from Vol. 5, Pt. 2, Tab. 14, f. 4, of the Oss. Foss. of Cuvier. M. Agassiz has favoured me with the following details respecting important parts which are imperfectly represented in the drawing from which Cuvier's engraving was taken. " The ribs show evidently that it is nearly connected with the genera Chelonia and Sphargis, but referrible to no known species; the fingers of the left fore paddle are five in number; the two exterior are the shortest, and have each three articulations; and the three internal fingers, of which the middle one is the longest, have each four articulations, as in the existing genera, Chelonia and Sphargis."

GEOL.

S