

ern side of the American continent, and not at all to the west of the Rocky Mountains, or even in their immediate vicinity; since we cannot fail to see, in this apparently anomalous distribution, another instance of the remarkable similarity, pointed out by the founder of the Physical Geography, between the eastern or western shores of our continents when respectively compared with one another, in their physical features, and in the character of their inhabitants.

There is another fact of general interest connected with this family,—its existence in Europe, in past geological ages, while no trace of these Turtles can be found there now. The fact is well authenticated: two very distinct species of Chelydroids, from the Miocene beds of Oeningen, near the Lake of Constance, have been described and handsomely illustrated by Th. Bell<sup>1</sup> and Herm. von Meyer.<sup>2</sup> But what is the meaning of such a phenomenon? I am inclined to think that the early introduction of this family, in Europe, during the Tertiary period, became an inducement for their reproduction, in a later age, upon other continents, one of which, at least, bears every characteristic of having been, long before Europe, and for ages past, essentially what it is now, as far as its physical features are concerned. I would, therefore, suggest that America has among its Testudinata old-fashioned types, because it is the oldest continent, and not because Chelydra is any more characteristic of the American fauna than of the European. I shall presently call attention again to this point.

The eggs of the Chelydroidæ, like those of the Trionychidæ and Chelonii, are spherical; but they are liable to occasional variations, those of *Chelydra serpentina* at least, for I have twice obtained ovate eggs from their nests, and once found an ovate one in its ovary (Pl. 7, fig. 25). Among the spherical ones (fig. 24 and 26) there is also some variation as to size, and to a less extent respecting the hardness of the shell. I have no reason to infer from these facts that the eggs of Testudinata are generally liable to great variations, because the family of the Chelydroidæ stands, as it were, between the lower families with spherical eggs and the higher families with ovate eggs, and we should expect a stronger tendency to unusual combinations in animals holding such a position than in others; though it must not be forgotten that there is also some disposition to vary among the eggs of the families in which they are oval, and that the highest Testudinata lay spherical eggs like the lowest. This last fact seems to me strongly to vindicate the view which I have already expressed, that the Testudinina are not absolutely higher than the other natural groups of this type, and cannot, therefore, be considered in the light of a sub-order coequal with the Chelonii proper. (Compare p. 249.)

<sup>1</sup> Proc. Geol. Soc., London, 1831.

<sup>2</sup> Zur Fauna der Vorwelt., 1 vol. fol.