

this second sub-order, called Amydæ by Oppel. In the first place, we notice the Trionyhidæ, so remarkable for the peculiarities already alluded to; next we have the North American Chelydroidæ with their fossil European representative; next the South American Chelyoidæ, the Hydraspididæ, the Cinosternoidæ, the Emydoidæ proper; and lastly, the Testudinina, each of which groups presents typical patterns of form which are constant within their limits, and strikingly contrasted when compared with one another. For it is not true, as is so frequently repeated, that the fresh-water Turtles are flat and broad when compared with the land Turtles. Some of our marsh Turtles, and especially our *Ozotheca*, are quite as high comparatively, and certainly as narrow as any of the land Turtles, whilst the Chelydroidæ with their carinated backs, their dentated margin, their broad, flat heads, their narrow, cross-like sternum, their large tail, their imperfectly retractile limbs and head, differ far more from the other Emydoidæ than any land Turtles. I do not, therefore, hesitate for a moment to consider these two groups as two distinct families. Of the family of Chelydroidæ, there are two species in the United States belonging to two distinct genera, as I have ascertained that *Chelydra Serpentina* differs generically from the *Chel. Temminckii Auct.*, for which I have proposed the name of *Gypochelys Temminckii*. Their thoroughly aquatic habits show them to be, next to *Trionyx* and *Chelys*, the lowest family among Amydæ. Next to them, I would place the family of Cinosternoids, on account of their less extensive sternum and of their more movable pelvis. There can be no doubt that they constitute a family by themselves, when in addition to the difference of form already alluded to it is found that they have no odd bone in the sternum, so that their lower shield divides into symmetrical halves, along an uninterrupted straight suture, following the middle line. The long-necked Hydraspid with retractile head, or rather whose head can be bent laterally and so protected under the shield, come next in order; but as they are all foreign to the United States, and I have had few opportunities for their study, I must omit any further mention of them. I would only recall, in this connection, the interesting fact that the types of land and fresh-water Turtles are so localized upon the surface of the globe, that, though the number of Testudinata is very great in the United States, not a single Hydraspid, for instance, is found within their limits, and only two *Testudos* occur in their southern parts, while the family of Chelydroids, on the contrary, belongs almost exclusively here, and is only found again in China. The true home of the genuine Emydoids is also North America, as the true home of the Chelyoids and Hydraspid is South America, though a few species of the latter family occur also in other parts of the world.

As a family, the Emydoidæ are easily characterized by their ovate form, swelling centrally, while the margin has a tendency to spread outward, in which last feature