

The head is large; it is narrow about the nose and eyes, but grows rapidly broad backward to the ear region. The floor of the skull, that is, the roof of the mouth and the base of the brain-box, taken as a whole, is on nearly a horizontal plane; the top of the skull in passing forward over the brain descends as steeply, and in *Gypochelys Temminckii* much more steeply, than in passing over the front part of the head, so that we have here none of the angle which in the *Trionychidæ* is caused by the turning down of the front part of the skull. The ear region is broad from the brain-box outward, but short from behind forward. The mastoid is short; its hind surface reaches more upward than backward, and the os quadratum below descends in nearly a line with it; thus the back of the head is high, broad, and square. The crest on the brain-box is high. The pterygoids are narrow, and their edges are deeply concave. The breadth of the ear region, the height of the crest, and the narrowness of the pterygoids, unite to give room for the attachment and passage of very large temporal muscles. The arch from the ear to the eye, made up of the jugal, postfrontal, and temporal bones is broad; the parietals project sidewise, and, for some distance back of the eyes, unite with the postfrontals in making a continuous arch over the head; moreover the openings for the eyes and nose are small. Thus the head is much more protected by bone than in any other family of the sub-order, but much less than in the sea Turtles, for there the bony arch reaches to the hind extremity of the head, whereas here the ear region is exposed from above. The sphenoid is short, and does not extend nearly the whole length of the pterygoids. The jaws are strong; they have sharp alveolar edges, and are pointed at the symphyses.

The free skin is loose, and very movable on the neck and limbs; it does not close around the legs above the knees and elbows, and below incloses them only loosely. The shield is covered with large horny epidermal scales, the arrangement of which presents rather generic than family characters, especially those of the plastron. The free skin, where it is most exposed, especially on the under surfaces of the limbs, on the whole front limbs below the elbows, on the neck just behind the head, and on the tail, thickens at numerous points into a kind of tubercles, and on these tubercles the epidermis is hardened into a kind of scales.

of the body takes in locomotion, in this family, reminds us rather of the character of the whole vertebral column in the other Reptiles, in which it constitutes the principal organ of locomotion. Thus we have here a character which is rather Reptilian than Chelonian; and this coincides remarkably with the comparatively greater length of the tail in all the

Testudinata during their earlier stages of development. This resemblance of the Chelydroids and other Reptiles is no doubt hinted at in the vernacular name under which the most common North American species is known all over the southern United States, where it is called Alligator-Couta, from the similarity of its tail to that of an Alligator.