

gididæ, the plastron narrows continually backward from where it is first joined to the carapace; it is firmly wedged in between the curved edges of the carapace, and consists of a thick, stiff sheet of unossified fibrous corium, and strengthened only by a ring of bones of the true skeleton. In Chelonioidæ, however, as the plastron spreads out broader at the middle, as it meets the carapace at a sharp angle, as it is connected with it by flexible corium, and as it is somewhat flexible within itself, it also needs a different structure. It is made up partly of unossified corium, and partly of plates composed of true bone and of bony derm. These plates form by far the larger part of the whole, and sometimes nearly the whole plastron. The two kinds of bone are so united as to be hardly distinguishable; we shall therefore speak of the plates without reference to their composition. There are nine of them, four pairs and one odd one. The first pair is situated between the front limbs; they meet in front and spread apart backward, and overlap the outside of the front edges of the next pair, which are here turned forward; at their ends, where they meet, they are broad and strong, but grow slender backward. Joined to the hind edges of this pair, and reaching back somewhat between the inner edges of the second pair, is the odd plate; it is interposed against the front pair at their union, and prevents the formation of a hinge in that end of the plastron. These three plates, thus united, make a broad, firm support for the shoulder apparatus. The second and third pairs reach across from one edge of the carapace to the other. These two pairs are sutured to one another, and together they make up much the largest part of the plastron; their outer edges are connected with the marginal rim by unossified corium, and their inner edges with one another in the same way, but they approach the marginal rim and one another by spine-like processes reaching out from near the fore end of the second and the hind end of the third pair. The fourth pair underlie the pelvis and meet behind it; they are long and slender, extending more backward than inward, and are joined, before, to the third pair.

In this family, then, the dermal shield is much more extended and more bony than in the Sphargididæ; the wings and paddles are more covered by the shield and less free, and the body is more flattened upon the sides and below. These characters seem to indicate that the animal is less capable of powerful and long-continued flight.

The shield is everywhere covered with epidermal scales. These scales are largest upon the carapace, where there is one median row along the vertebral column, and one on each side above the costal plates, besides the row which protects the marginal rim; the foremost of these is an odd, short, but very broad scale; the hindmost, on the contrary, form one pair. Upon the plastron there is a double row of larger scales in the middle, and a row of smaller ones on each side