

tron is very large, underlying the whole lower surface. The carapace is raised considerably above the flattened part of the lower surface, and its outer edge, where it meets the plastron, is turned abruptly downward and somewhat inward, and the adjoining edge of the plastron is turned abruptly upward and somewhat outward. The edges meet thus, and are joined from the first to the fifth rib, so that a large part of the body, including the bulk of the organs of digestion, circulation, and respiration, and situated under the second, third, and fourth, and parts of the first and fifth costal plates, is completely encircled by the shield. The body itself is broadest here, and narrows rapidly to the ends. The free edges of the carapace, that is, the edges which do not meet the plastron, project beyond the body, and flare outward; the free edges of the plastron also project beyond the body, so that the exposed parts, at the openings about the ends, are protected by projections of the shield, above and below. Where the body is entirely encircled, the shield fits closely to it; still, on account of the greater expansion of this region, the flattened surface of the plastron under it, and the arch of the carapace over it, are nearly or quite as broad as they are at the ends, where the edges project. The fixed part of the vertebral column is arched for its whole length, its highest point being nearly over the middle of the body: the arch, however, like that of the carapace over it, is irregular, descending more steeply near the hind end, but the point where the change takes place is hardly, if at all, perceptible; indeed the change is but slight, and the whole may be considered as one arc, whose cord makes, with the lower surface of the body, an angle opening forward. The iliac bones are nearly parallel, making the pelvis about as wide across the hip joints as across the sacrum; they reach but little forward in descending from the sacrum; the scapular arch retreats but little in descending, and the coracoid does not reach the middle transverse suture of the plastron; the shoulders are wide apart. Thus the pelvis and shoulder apparatus do not closely approach one another, as in the *Cinosternoidæ* and *Cylidroidæ*; but the viscera within come down on to the plastron between them, and the limbs are carried out nearer the ends and sides of the body. The legs are stronger than in the *Cinosternoidæ*. The toes vary widely with the habits of the animal; in the most aquatic species they are long, joined by a broad web, and capable of being widely spread; in those that live on land, they are shorter and less flexible, and the web disappears; but in none are the feet stiff enough to raise the weight of the body upon the ends or last joints of the toes, as is the case with the fore feet of the *Testudinina*.

The sides of the head are pretty regularly curved from end to end, and widest apart between the ear and eye openings. The mastoids reach far backward and upward, and are long, rounded, and pointed; the front wall of the ear cavity reaches forward as well as outward from the brain-box. The brain-box is con-