

§ 5. *Chelonia*.

THE order of *Chelonian Reptiles*, which comprises all the tribes of *Tortoises* and *Turtles*, appears to constitute an exception to the general laws of conformation, which prevail among Vertebrated Animals: for instead of presenting a skeleton wholly internal, the trunk of the body is found to be enclosed on every side in a bony case, which leaves openings only for the head, the tail, and the fore and hind extremities. That portion of this osseous expansion which covers the back is termed the *Carapace*; and the flat plate which defends the lower part of the body is termed the *plastron*. It is a form of structure which reminds us of the defence provided for animals very low in the scale of organization, such as the echinus, the crustacæa, and the bivalve mollusca. Yet the substance which forms these strong bucklers, both above and below, is a real osseous structure, developed in the same manner as other bones, subject to all the changes, and having all the properties of these structures. The great purpose which nature seems to have had in view in the formation of the *Chelonia* is security; and for the attainment of this object she has constructed a vaulted and impenetrable roof, capable of resisting enormous pressures from without, and proof against any ordinary measures of assault. It is to the animal a strong castle, into which he can retire on the least alarm, and defy the efforts of his enemies to dislodge or annoy him.

These considerations supply us with a key to many of those apparent anomalies, which cannot fail to strike us in viewing the dispositions of the parts of the skeleton (Fig. 213,) and the remarkable inversion they appear to have undergone, when compared with the usual arrangement. We find, however, on a more attentive examination, that all the bones composing the skeleton in other vertebrated animals exist also in the tortoise; and that the bony case which envelops all the other parts is really formed by an extension