

however, their ossification is not only complete, but has been expanded laterally, so as to form a continuous surface with the extremities of the ribs and with the edges of the plastron, and completely to fill up the vacancy between them; constituting a dense and solid wall, which entirely closes the sides of the general bony case. So strong is the tendency to ossification in all these pieces, that the sutures at first formed between them are often, in process of time, obliterated; and the bony fibres are continuous throughout a great extent of surface.

The most remarkable metamorphosis in the osseous system of this new type is that which occurs in the sternum. So expanded are all its parts, that it is difficult to recognise this bone under the disguised form in which it constitutes the plastron, or broad plate, which, as we have seen, covers the whole of the underside of the body. Yet, by a careful examination of its structure, both in the young animal, and also in the adult, when the sutures are not obliterated, we may easily recognise the nine elements of the sternum; namely, the one in the middle and fore part, and the four pairs of lateral pieces; each having been formed from its respective centre of ossification. In form and relative proportion, indeed, they are widely different from the same parts as they are presented in the skeletons of other animals; yet in number and in relative situations they preserve that constancy and uniformity so characteristic of the beautiful harmony which pervades all animal structures.

It is to be noticed, also, that as the plates, which form this investing case, are bony structures, they could not with any safety have been exposed to the action of the atmosphere. Hence we find them covered throughout with a thin horny plate, originally a production of the integument. It is this substance which is commonly known by the name of *tortoise shell*.*

* It should be observed, that the divisions of these plates, which appear externally, bear no relation to the sutures which separate the subjacent bones,