

the base upwards; having a long round fang. The pulp-cavity is long and single, surrounded by a body of firm dentine, covered on the crown with a layer of enamel, and at the base with cement (*Odont.* pl. 74.). The dentition in the Plesiosaurs differs from that of the Crocodiles, in the successional teeth emerging through distinct apertures on the inner side of the sockets of their predecessors, and not through the pulp-cavity (*Odont.* p. 282.). The vertebræ are relatively longer than in the Ichthyosaurus, and their articular faces are either flat, or slightly excavated towards the periphery, with a gentle convexity in the centre (*Foss. Til. For.* pl. 9, fig. 4.).*

The *pectoral arch* is remarkable for the pair of elongated and broad coracoid bones (*Bd.* pl. 17.); the *ribs*, which are very numerous, and extend throughout a great portion of the vertebral column, are connected, anteriorly, in the abdominal region, by several slender bones, called *costal arcs*, consisting of six or seven pieces to each pair of ribs; the Ichthyosaurus has a similar structure, but the arcs are composed of but five pieces. As these connecting bones are so constructed as to admit of a certain degree of gliding motion upon each other, it is inferred that, by this mechanism, considerable expansion of the pulmonary cavities in these air-breathing marine reptiles was obtained (*Bd.* pl. 18, fig. 3.).

* For details, see Brit. Rep. 1839, p. 50.