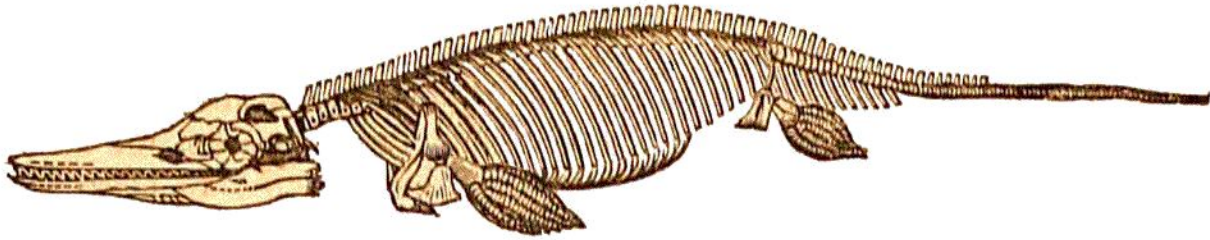
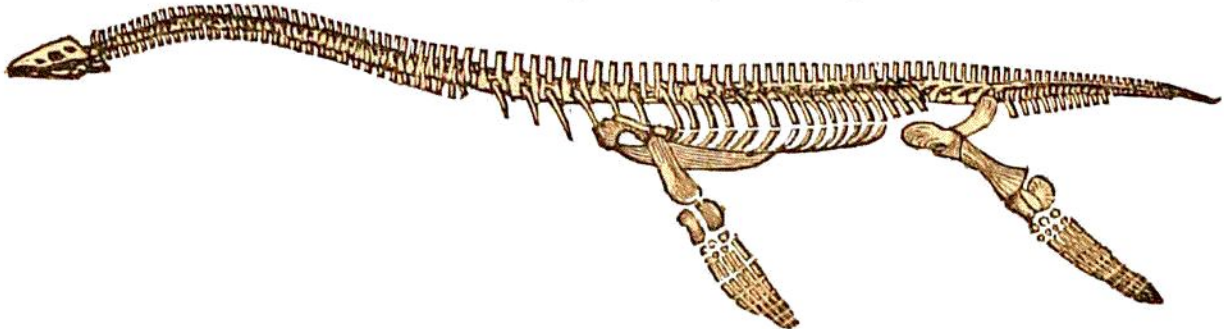


same gentleman, measured nine inches in breadth.* The vertebræ of the ichthyosaurus nearly resemble those of a shark, which enabled



it to bend its tail with great facility, and assisted the motion of its paddles, in propelling the body with great velocity through water. The skeleton of the ichthyosaurus, as arranged by Mr. Conybeare, is represented in the annexed cut. Of the ichthyosarus, several species have been discovered. The plesiosaurus resembles the former genus in many important parts of its osteology; but its vertebræ have a closer approximation to those of the crocodile; they are only slightly concave: its neck was longer than its body, and was composed of thirty vertebræ, which exceeds the number of the cervical vertebræ of the swan. (See the annexed cut.) Five species of plesiosaurius have



been determined; some of them were 20 feet in length. The bones of both animals are found very commonly in the cliffs of lias at Lyme in Dorsetshire, and on the southern bank of the Severn. The organic remains in lias are chiefly, but not exclusively, marine. Bones of the turtle and crocodile have been discovered in lias: the fossilized remains of terrestrial plants also occur in it. This proves that dry land must have existed in its vicinity, at the period of its deposition.

The lias formation extends, in a waving line, through England, from near Whitby in Yorkshire to Lyme in Dorsetshire; at both its extremities it is fully developed, and presents similar features, namely,—dark cliffs of blackish clay or alum shale, with a nearly flat floor of lias limestone extending into the sea, forming a natural pavement, on which the observer may walk secure, treading at almost every step on the organic remains of the inhabitants of a former world, disseminated through the rock. These animal remains are, gener-

* Mr Johnson of Bristol has during many years, devoted much time and labour, and has liberally expended considerable sums of money, in collecting organic remains of these saurian animals; and it is to the collection of these remains, in his private museum, that we are principally indebted for the discoveries which have been made respecting them.