

recent lacertæ, that the cetacea do to other mammalia, and will form a division of the order lacerta to which the name *Enalio-Sauri* (marine lacertæ) may be conveniently applied. The investigation of their comparative anatomy, or rather osteology, is highly important, as laying open various new and interesting links in the chain of animated nature.

Two genera have been ascertained.

1. *Ichthyosaurus*.* Animal with an head resembling the lacerta tribe, but extended anteriorly into a long pointed muzzle, armed with numerous conical teeth. Vertebrae resembling those of fish in being double concave (that is deeply cupped at each end) and as thin as those of the shark, in order to facilitate progression by a vibratory motion of the tail. From these double analogies, the name (the fish-like-lacerta) is derived. The extremities terminate in four paddles *sui generis*, composed of a series of flat polygonal bones greatly exceeding in number not only the phalanges of quadrupeds, but also the phalangeal cartilages of the fins of fish. There are two or three species chiefly distinguished by the form of the teeth.

2. *Plesiosaurus*. The head of this animal is not yet perfectly ascertained: the vertebrae and extremities hold an intermediate place between the former genus and the recent lacertæ, and supply beautiful links in the series of organic structure.

* Although the *Ichthyosaurus* occurs, as will have been seen from preceding lists, in many beds of the oolitic series, we have reserved its description for this place, because the most numerous and perfect specimens have been found in this formation.

The remains of the *Ichthyosaurus* have been figured in the several plates published in the Philosophical Transactions, from 1814 to 1820 inclusive, with descriptions by Sir Everard Home (who proposes the name of *Proteosaurus* from supposed analogies to the *Proteus*; but this has not been generally received). A more detailed account of the osteology of this genus, and the only published description of the *Plesiosaurus*, will be found in the fifth volume of the Geological Transactions.

The Crocodile is said to have been discovered in lias, but the fact remains doubtful. The skeleton described by Dr. Stukely in the Philosophical Transactions, and supposed from the imperfect representation there given to have been a Crocodile by Cuvier, really belongs to the *Plesiosaurus*. The specimen from Whitby, figured also in the Philosophical Transactions, may possibly be a Crocodile, but is too incorrectly drawn to afford any certainty. The *Ichthyosaurus* undoubtedly occurs at Whitby, and is described and represented (but very imperfectly) in the third volume of the Wernerian Transactions. No true Crocodile bones have yet been discovered in the lias of the south-western counties, which constitute, however the most thoroughly examined district occupied by this formation; still as true species of the Crocodile certainly occur in other beds associated with the oolitic series, there is no improbability in their occurring here also.