

beneath, exhibiting the course of its over lapping bones. (Conybeare.)

- A. Tooth of a Crocodile, shewing the incipient absorption of the hollow cone which forms its base, from the effect of pressure of a new tooth rising beneath. (Conybeare.)
- B. Similar effects shewn in the transverse section of the upper and lower jaws of an Ichthyosaurus. (Cuvier.)
- C. Example of the same kind of absorption produced by the pressure of a new tooth, on the base of an older tooth in the jaw of Ichthyosaurus. (Conybeare.)

PLATE 12. Vol. 1. p. 181.

- 1. Sternal Arch and Paddles of Ichthyosaurus. See V. 1. p. 182, Note. (Home.)
- 2. Sternal Arch of Ornithorhynchus. (Home.)
- 3, 4, 5, 6. Occipital and Cervical Bones of Ichthyosaurus, from the Lias at Lyme Regis.\* (Original.)

\* Sir Philip de Malpas Grey Egerton has pointed out some beautiful examples, hitherto unnoticed, in the Atlas and cervical Vertebrae of Ichthyosauri, of peculiar mechanical contrivances to support and regulate the movements of their enormous heads. (See Lond. and Edin. Phil. Mag. Nov. 1835. p. 414.)

Fig. 3, a. represents the Basilar portion of the Occipital bone of a very large and aged Ichthyosaurus, from the Lias of Lyme Regis, (scale one eighth). The nearly hemispherical process (a) articulated with a comparatively shallow socket in front of the Atlas, (4. a.) and this ball and socket, or universal joint, gave freedom of motion and support to a weighty head.

Fig. 4. Atlas and Axis of a very young Ichthyosaurus, (two thirds of nat. size.) These bones adhere together by two nearly flat surfaces, admitting of the least flexure of any of the Vertebrae in the whole body, but giving the greatest strength to that part of the Column, where strength rather than flexure was required.

On the inferior margins of the Atlas and Axis and third cervical vertebra, are triangular facets articulating with three strong wedge-shaped sub-vertebral bones (c) hitherto undescribed.