

serpents and fishes, where they act as barbs to prevent the escape of their prey.\*

The other parts of the skeleton follow the character indicated by the head. The vertebræ are all concave in front, and convex behind; being fitted to each other by a ball and socket joint, admitting easy and universal flexion. From the centre of the back to the extremity of the tail, they are destitute of articular apophyses, which are essential to support the back of animals that move on land: in this respect, they agree with the vertebræ of Dolphins, and were calculated to facilitate the power of swimming; the vertebræ of the neck allowed to that part also more flexibility than in the Crocodiles.

The tail was flattened on each side, but high and deep in the vertical direction, like the tail of a Crocodile; forming a straight oar of immense strength to propel the body by horizontal

\* The teeth have no true roots and are not hollow, as in the Crocodiles, but when full grown, are entirely solid, and united to the sockets by a broad and firm base of bone, formed from the ossification of the pulpy matter which had secreted the tooth, and still further attached to the jaw by the ossification of the capsule that had furnished the enamel. This indurated capsule, passed like a circular buttress around its base, tending to make the tooth an instrument of prodigious strength. The young tooth first appeared in a separate cell in the bone of the jaw, (Pl. 20, h.) and moved irregularly across its substance, until it pressed against the base of the old tooth; causing it gradually to become detached, together with its base by a kind of *necrosis*, and to fall off like the horns of a Deer. The teeth, in the roof of the mouth, are also constructed on the same principle with those in the jaw, and renewed in like manner.