

General Conclusions.

The Turtle agrees with the Lizards in having a large orbito-nasal septum and an epipterygoid, and in the mode of ossification of the occipital arch and auditory capsules; it differs from them in having the alisphenoid quite aborted, and the opisthotic permanently distinct.

It agrees with the Chamæleon in having a single vomer, but differs from it in having an epipterygoid, a tympanic cavity, a functional columella, a rudimentary cochlea, and a fenestra rotunda; in which characters it agrees with the typical Lizards.

It agrees with *Hatteria* and the Crocodile in having a quadrato-jugal, and in this character differs from the other Lizards and Snakes. Although forming in the adult condition so great a contrast to the Snakes in their outward form, it agrees with them and differs from other reptiles in having neither sternum nor sternal ribs, the whole plastron and much of the carapace being formed of membrane bones.

The Turtles, like the Batrachia, are remarkable for the fewness of their investing bones; the nasals and prefrontals are ossified as one tract, and there are no super-orbitals, no second temporal bone, and no splenials.

One of the most remarkable things in the early embryo is the large number of somatomes, in the neck especially, and also in the tail, as compared with what is seen in the intercalary bony segments (vertebræ) of the adult; thus, the embryo suggests an ancestry having a longer neck and tail than the existing forms. As some of the Cretaceous Chelonia certainly possessed teeth, and as a few forms, both fossil and existing, have the nasal bones distinct from the prefrontals, it is evident that the modern Chelonia are forms that have become separated from their nearest reptilian relations by specialisation. A long necked ancestry with a feebly-developed carapace, and many feeble bones of the plastron arranged triserially, would bring us very near to the Plesiosaurs. The great and close conformity of the Turtles, even now, to the Lacertilia, suggests a common parentage.¹

¹ The magnificent skeleton of the Leathery Turtle (*Sphargis coriacea*), recently added to the treasures in the British Museum, has its ribs distinct from each other, as in young embryos of the ordinary kind, and as in the extinct Plesiosaurs.