laginous, and in the Ophidians it is so elastic as to allow the branches to move far apart one from the other.

This solid conformation of the head shows, again, the high standing of the Testudinata, for the loose connection of the bones of the head is a character peculiar to Fishes, while the solid, compact skeleton of the head is characteristic of Mammalia. There is still another feature in the head of the Turtles which gives it a general interest: the great similarity of the hind part of the skull to a vertebra. The resemblance of the os occipitale basilare to the body of a backbone, and of the ossa occipitalia lateralia to an upper arch, is more striking than in any other Vertebrate. The bones around the brain are flattened; the parietal bones inclose the brain from above and from the sides, the wings of the sphenoid remaining relatively small. There are two pairs of frontal bones; the exterior ones are generally, though not always, united by a median suture, and cover the nasal cavity from behind. There are no nasal bones, except in one genus.[1] In the fresh animal, the condylus occipitalis is a nearly round prominence with a depression in the middle, in which the second vertebra articulates; when dry it is triangular. In the dry skull the composition of this condylus, formed from one basilar and two lateral occipital bones, is evident by the sutures. This structure is the same as in the true Saurians and Ophidians; but while in Turtles the second vertebra fits with its head into the pit in the middle of the condylus, in the Saurians and Ophidians, on the contrary, it rides upon a roundish excavation on the upper side of the condylus. Again, the Crocodiles differ from the three other orders of Reptiles by having their round condylus formed only from the os basilare.

There are nine vertebræ of the neck, (not eight as is generally stated,) the second, the so-called odontoid process of the epistropheus, very clearly showing, in these Reptiles, its right to be considered as a distinct vertebra, as it remains separated from the epistropheus through life. There are no transverse processes in any vertebra of the neck. The upper arches are always soldered to the bodies of the vertebræ by sutures. The articulation of these vertebræ to each other is entirely peculiar to Turtles, there being some convex-concave, some concave-convex, one biconcave, (usually the eighth,) and one biconvex, (usually the fifth.) This configuration of the vertebræ gives fixity to certain bendings of the neck, thus depriving it of that flexibility which is characteristic of the neck of the Birds, while it is, at the same time, much more movable than the neck of any other order of Reptiles, or that of the lower Vertebrates.

[1] In Hydromedusa, nasal bones have been discovered by W. Peters, (Observationes ad anatomiam Cheloniorum, Berol., 1838.) Whether this character is common to all Hydraspides, remains to be seen.