

see the ossifying lateral or symmetrical cartilages, comparable to the neural arches of the spine, although not broken up into inter-neural segments.

Outside the endocranium we see the parietals and squamosals (*p.,sq.*) finishing the temporal roof, and the latter overlapping the quadrate (*q.*) which is here hollowed out to form the drum (*c.ty.*). The trachea, bony shaft of cerato-hyal and unossified hypo-branchials (*trc.,c.hy.,h.br.*) are seen in section below.

*Thirteenth Section.*—Here (fig. 6), we have the very vertebral form of the occipital arch; but, besides that it represents a series of vertebræ and not a single joint, it is also ossified somewhat differently. There is a V-shaped centre above the superoccipital (*s.o.*) answering to the upper part of the “atlas,” then a centre for each side of the arch, the exoccipitals (*e.o.*); and lastly, an azygous bone, the basioccipital, formed by extension of the substance of the “cephalostyle” into the lower part of the arch, on each side.

All this is curiously like and unlike what is seen in a vertebra; and this one arch is formed in a tract that represents the skeleton of the whole post-auditory part of the head, where the glosso-pharyngeal, the vagus (a sevenfold nerve in the Lamprey), and the hypoglossal, all have their exit—a long region, doubtless—in the skulls of archaic types.

Here, at the back of the skull, we see that the shaft of the cerato-hyals, and the cartilaginous hypo-branchials (*c.hy.,h.br.*) have been cut across; also, outside, the end of the parietal dome, and the bifoliate part of the squamosals (*p.,sq.*), are seen in section.

If these figures and descriptions be compared with those of the dissected skull (Pls. XI. and XII.), they will help to a clear understanding of the matter.

*Eighth Stage. The skull of the adult.*—Whilst the formed embryo, at about twenty days after deposit in the sand, is scarcely at all larger than one at the same stage in the Snake (*Tropidonotus natrix*), or of the nimble Lizard (*Lacerta agilis*), this type goes on growing until it is of a huge size, and yet its metamorphosis is complete before it leaves the egg.

After that the changes are scarcely more than long continued increase in bulk; that which is bone at birth is bone in old age, and that which is cartilage at birth is cartilage in old age; the structures become more solid and compact, relatively, but there is scarcely any change of importance.

In front of the basisphenoid all the endocranium remains cartilaginous; a little selvedge of cartilage running down the front of the auditory capsule still represents the alisphenoid, and the three-rayed periotic synchondrosis narrows somewhat, but is permanent.

The epiotic coalesces on each side with the superoccipital, but the opisthotic, ossifying the large paroccipital bar, remains like the prootic, permanently free of all surrounding bones. The old sutures and synchondroses remain, the parietals remain distinct, a line