

Fifth Stage. $1\frac{1}{2}$ inch long.—The carapace and limbs are now well formed, but the abdominal region is still membranous. The large head is rapidly approaching the adult form, but the mid-brain still projects. The mandibles now fill in the triangular space between the maxillo-palatines, which have converged to form the upper jaw; above their junction is a median nasal passage. The chondrocranium is well formed, but is at present only an open trough, except in the superoccipital region; the orbito- and alisphenoids are continuous with each other, with the post-clinoid wall, and with the auditory capsules. The notochord is only half as high as the post-clinoid wall, and curves over, having an elongated cartilaginous sheath, which passes down beyond it, behind the pituitary body; the latter is closely applied to the infundibulum, but not united with it. The orbito-nasal septum is now developed. There is no ossification in the chondrocranium, but osteoblasts are quite evident in the pterygoids, and the other investing bones appear as granular tracts. The epipterygoid is continuous with the pedicle of the quadrate. Meckel's cartilages are confluent, and the columella is in two segments, as in the Batrachia (Pls. III.—IX.).

Sixth Stage. 3 inches long, head 7 lines long.—The general form of the head is like that of the adult; ossification has commenced in the exoccipitals, basioccipital, and basisphenoid, and the investing bones are all present. There is no distinction between the nasal and prefrontal, and the parietal has grown down between the second and fifth nerves, so as to abort nearly the whole of the alisphenoid; it reaches the pterygoid. The pituitary body and the infundibulum are now united. There is a distinctly cartilaginous annulus tympanicus, as in the Batrachia; the stapedial plate is distinct from the bar of the columella, and the extrastapedial is discoid, and has a supra-stapedial lobe, as in the Toad. The epipterygoid is not ossified, and is continuous with the pedicle of the quadrate. The parietal fontanelle is wide open (Pl. X.).

Seventh Stage. Nearly ripe.—The parietal fontanelle is now filled in, and almost everything is in the same condition as in the adult, except that the synchondroses are larger. The chondrocranium is largely ossified from the pituitary region, backwards, but unossified in front. The epiotic has not coalesced with the superoccipital, and the opisthotic has only ossified half the cartilage belonging to it. The notochord is flattened in the occipital condyle, but is surrounded by a solid sheath of cartilage. Now, and for a long time afterwards, there is no ossification of the articular cartilage, but its long plate closely embraces it. The nasal capsules form two pouches, closed above and below, and continuous with the septum nasi; the prenasal rostrum is short and descending. There is a distinct ethmo-palatine cartilage, and a rudiment of the inferior turbinal; the epipterygoid is ossified and segmented from the unossified pedicle of the quadrate; the quadrate is ossifying, and is hollowed out to form the drum (Pls. XI.—XIII.).