

mature state than the young of the Turtle. The Australian Fowl (*Talegalla lathamii*) is retained in the large egg until it is as ripe as the hatching Turtle.

On the whole, the growth of the parts is so alike, in both Turtle and Fowl, that to one most familiar with the development of the bird, it requires some reflection for the mind not to become unconscious that the structures seen belong to a creature of another and a lower *Class*.

Thoroughly Chelonian in outer form, these embryos are yet overloaded with brain- and sense-capsules. The head is very disproportionate to the body, and the eyeballs out of all proportion to everything else (Pl. III. fig. 1).

The neck is now much shorter relatively than in the last stage, but is very thick; the carapace now forms a large pent-house to the trunk, and the abdominal walls are much flatter, although still very convex. The umbilicus (*u.v.*) is now fairly in the middle of the abdomen, and its thick rim is relatively much smaller.

Both the ribs and spines mark the carapace, and its lower edge all round is a thick fold in which the infero-lateral dermal scales will be formed. Fore and aft, the rim of the carapace has overlapped the limb-girdles, the specialisation which, of all others, is most characteristic of the Chelonia; the regions and rays of the limbs are evident, although covered with skin and muscles.

The tail is rather long, and coils forwards under the abdomen, so as to reach nearly to the umbilicus, which has just room for its vessels between the tail and the upper lip.

The folds of the neck indicate the old closed seams or clefts; the first post-oral is, however, utilised, and although covered with skin, is a conspicuous part because of its internal expansion, and the parts that enclose it and grow into it.

These parts are the curved and hollow "quadrate" cartilage, the modified skin forming the *membrana tympani*, and the discoidal symplectic end of the *epihyal* element, now transformed into the *columella auris* (Pl. III. fig. 1, and Pl. IV. fig. 7, *q., m. ty., co.*). Over these parts the auditory capsule (*au.*) is visible as an ovoidal swelling; some distance further forward the eyeball (*e.*) occupies a large region in the upper face; and in front of it the nasal organ (*ol.*) is seen as a rounded eminence perforated at the top.

Below and between the nasal openings (*e.n.*) the rostral prickle or spine (*r.sp.*) forms the actual end of the head, the opening of the mouth is still a good distance further back, and the mandible (*mn.*) is relatively small and feeble.

The folded mid-brain (C 2) still preponderates over the other vesicles, and although much further back than in the last stage, is a very tumid region, yet the same thing is seen in the snake at this stage. (See Snake's Skull, 3d stage, Phil. Trans., 1878, pl. xxviii. figs. 1, 2, C 2.)

(b.) *Upper view of head.*—The hemispheres (figs. 1, 2, C 1a) cover the primary vesicle, yet they make but little projection in the roof of the head. The hind-brain