

is more developed. The brain (c^3)¹ is already slightly three-lobed; the region of the medulla oblongata (c^1) is more closed over; the eye (k) is more isolated from the surrounding parts: the heart is much more enlarged, and stands out conspicuously beyond the ventral surface of the body; the aortic bulb (h^1) is now quite a prominent feature. At a point (j^3) a short distance behind the heart, the dorsal artery (j^2) gives off only a single, but very broad, omphalo-mesenteric vessel, (j^4), as if the many vessels of the last phase had merged into one great channel. As this figure, with the exception of the head, is not an exact profile, but rather a combination of a profile view and a view obliquely from above, the dorsal artery (j^2) appears to be nearer to the ventral surface than it really is, and the dorsal vertebræ (f) seem thicker than is natural.

In a little more advanced phase, (Pl. 13, fig. 2, and 3,) the spinal marrow is more extended backwards into a distinctly developed tail (wood-cut 1).² The dorsal vertebræ (wood-cut 1, f) reach to the root of the tail. The eyes have become entirely inclosed within complete orbits. The heart has become three-chambered; the single auricle of the last phase (Pl. 18a, fig. 14, h) being now divided into two cavities, thus leaving its fish-like character, and adopting a structure which is peculiar to scaly Reptiles alone. The dorsal artery (wood-cut 1, j^2) extends to the end of the tail, and the cephalic artery branches extensively in the head. The fork of the vena afferens, which in the beginning originated close to the heart, (Pl. 12, fig. 7, i , i ; fig. 10, i ;) but later receded (Pl. 18a, fig. 13, i , i) from this organ, is now (Pl. 13, fig. 2) some distance beyond the body, towards the vena terminalis. This embryo presents a feature (wood-cut 1, n^0) in the posterior region, which, at first sight, might be mistaken for the hind foot just budding forth. Upon close scrutiny, however, we discover that this protuberance is in the perpendicular plane of the axis of the body, and is based upon that area close to where the tail arises. This protuberance is a simple hollow sac, formed by the folding together of the two opposite halves of the subsidiary layer, uniting their edges below. The dorsal artery (wood-cut 1, j^2) runs close upon and above this protuberance, thus showing that the latter is a later production of the same layer which developed the former, the dorsal artery, upon its middle line. Since we find this protuberance (wood-cut 1, n^0) in such a connection, and moreover see traces of bloodvessels coming from the dorsal artery (wood-cut 1, j^2) branching in it, we conclude that this must be the allantois.



¹ In Pl. 18a, fig. 14, the first letter to the left of k , should be c^3 , instead of c^1 .

² This wood-cut corresponds exactly to the parts

in Pl. 13, fig. 2 which it represents, and is chiefly intended to point them out more minutely, no letters having been introduced in the original figure.