CHAP. II.

1, h, h; PL 24, fig. 7, h, h) is not sensibly changed; but the dorsal artery (PL 18a, fig. 11, j^2) has increased in diameter, especially in a horizontal direction. Just behind the heart and close to the ventral surface there is a small, dark, round body, which, in all probability, is the incipient liver. The allantois (Pl. 24, fig. 15, n^{0}) has considerably increased in size, and is transformed into a two-lobed organ, by a longitudinal constriction. From the region of the heart to the basis of the allantois, the subsidiary layer (Pl. 24, fig. 14, n, fig. 15, n) remains broadly open, but not to the extent that obtained in the last plase. The aperture of this layer is limited by the contracted sides of the body, which have reduced the abdominal opening (Pl. 24, fig. 14, o) to one quarter the length of the body. The branchial fissures (Pl. 18a, fig. 11, m; Pl. 24, fig. 7, m) are more or less gaping. On the exterior of the body, at a short distance behind the heart, and also just posterior to the allantois, the musculo-cutaneous layer projects in the form of little bud-like excrescences (Pl. 24, fig. 14, m¹). There are a pair of these in front and a pair behind, corresponding to the position of the feet.

Progressing still farther, we find an embryo with the head still more bent upon the thorax (Pl. 14, fig. 5) than in the last, so as almost to touch the heart; this embryo exhibits also a considerable increase of size. The brain (Pl. 24, fig. 9a, e^2 , e^3 , e^5) is more deeply folded, especially at the sides (e^5). The eyes (fig. 9a, k, fig. 12, k) are perfectly round, and very prominent; the pigment layer is quite black. The front end of the head is indented, close to the lateral parietes on each side of the middle line, by a deep, broad depression, (Pl. 24, fig. 12, c,) the lower side of which is bounded by a diverticulum-like protrusion from the inferior surface of this region. The dorsal vertebræ are more numerously developed in the tail (PL 14, fig. 5). The heart (Pl. 24, fig. 9, h³, h⁴, fig. 9a, h⁴) is much enlarged, and projects so far on the abdominal side, that it renders this region the thickest part of the body; its auricles (fig. 9, h^3) are very distinct from the ventricle. (h^{\prime}) not only by their position, but also by the peculiar spongy nature of the cavity of the ventricle (fig. 9, h⁴, fig. 9a, h⁴). The network of peripheric bloodvessels in the head is more numerously developed, especially at its end (Pl. 24, The fork of the vena afferens (Pl. 14, fig. 5) is now at the vena fig. In). terminalis; the vence abdominales (Pl. 24, fig. 9, i^3) and the vence capitis (i^5) The abdominal veins (fig. 9a, is) empty with larger channels into the heart (h^3) . are closely approximated to, but run in a plane a little below, the dorsal artery The omphalo-meseraic arteries (Pl. 14, fig. 5) spring from one common (j^2) . point of departure, and, by their increased size, render the vascular area much The subsidiary layer has undergone a considerable change at the antedarker. rior part of the body, both in front and above the heart, where, in the form of a great, capacious tube, (Pl. 24, fig. 1, I', I"',) it forms the lining of the