

heart (Pl. 12, fig. 9, *h*) has bent upon itself slightly, assuming a sigmoid flexure, so as to produce a protuberance in this part of the body. The large vessel, spoken of above, in a little younger stage, as a broad, transverse band (see p. 547; Pl. 12, fig. 7, *i*) which is connected with the posterior portion of the heart, is now bent sharply upon itself, so as to assume a furcate shape (Pl. 12, fig. 10, *i*). The heart (*h*) has but a slight flexure laterally, but is bent strongly upon itself as it follows the curvature of the body to join the forked vessels (*j*) which run towards the head. The clear, dark, circular area, which we have already mentioned above (Pl. 12, fig. 7, *d*) as surrounding the embryo, still preserves a homogeneous aspect, (Pl. 14, fig. 12,) but has expanded considerably, so as to exceed the embryo by one half the length of the latter.

Proceeding to a still further advanced phase, we find the embryo strongly bent upon itself vertically at each end, (Pl. 12, fig. 10,) so as to bring the head down towards the heart, and the tail towards the abdominal cavity. The tube of the spinal marrow is nearly altogether closed over (Pl. 12, fig. 10, *e*³, *e*⁴, 10a, *e*, 10b; *e*, 10c, *e*). The apparent gaping in one of the figures (fig. 10a, *e*) is owing to the circumstance that the view is not taken from the outer surface, but from the deeper parts of the spinal tube, thus showing the hollow passage through and along the organ. The dorsal vertebræ (Pl. 12, fig. 10, *f*, 10a, *f*) are more clearly defined. The eyes and ears are not so prominent as in the last-mentioned phase. The subsidiary layer, following the curvatures and the approximating sides of the lower surface of the body, has become a sac, whose broad mouth opens downwards through the abdominal aperture (*o*) and in contact with it. Thence it spreads out, as heretofore, over the parietes of the yolk mass. The heart, (Pl. 12, fig. 10, *h*) in this animal, appeared still as it has already been described before; but, in continuance of this part of the subject, we may now point out the peripheric extension of the circulatory system. The clear, dark space bounded by an annular thickening of the subsidiary layer, (Pl. 12, fig. 7, *i*¹) which has already been described, (p. 547,) is more or less streaked here (Pl. 13, fig. 10; Pl. 14, fig. 11) by dark, transparent channels, that run radiatingly from the embryo towards the parietes of this transparent area, where a few of them join a broken, irregular circle (fig. 11) of similar channels. The ring bending towards the body, which was pointed out in a former stage (Pl. 12, fig. 7, *i*¹) as curving in close connection with the transverse broad band, or vessel, (*i*) behind the heart, corresponds here to the circular channels, which also curve inwards towards the same region as above, and join the transverse, or rather now forked, vessel, (Pl. 12, fig. 10, *i*) which enters the posterior end of the heart (*h*). Within all these channels, so far as they are directly in connection with the heart, there is a backward and forward motion of a granular,