FOLDINGS OF THE EMBBYONIC DISC.

CHAP. IL.

22, fig: 9, d, d^1) is folded inwardly at several points, a peculiarity which reminds one of the falcate process in the eye of certain Birds, and the flabellum in Fishes. The two deep depressions at the end of the head, noticed in a former page, (p. 555, Pl. 24, fig. 12, v,) are here (Pl. 18a, fig. 9, v) very much broadened, but at the same time the edges are curved inwardly towards each other.

The heart (Pl. 18a, fig. 8, and 9, 18, 14) is separated into two very distinct portions, the auricle (Pl. 18a, fig. 6, λ^{3}) and the ventricle, (λ^{4} ,) which are joined by a narrow tubular isthmus. Although the heart is divided into three chambers, the course of the blood is not at all diverted from the channel in which it ran at In one of our figures, the heart (Pl. 18a, fig. 10, h^3 , h^4) is so the beginning. displayed that its threefold division may be readily seen, and the course of the blood easily understood. From the receiving chamber, the right auricle, (h^{s}) , the blood passes directly into the left auricle, (the middle chamber in the figure,) and from that into the ventricle, (h,) and thence, through the bulbus arteriosus, $(h^1, \text{ fig. 6, } h^1)$ into the dorsal artery, etc. The vessels which ramify around the brain are becoming very numerous, (Pl. 14, fig. 2a; Pl. 18a, fig. 7, 15,) especially (Pl. 18a, fig. 7, j) in the neighborhood of the medulla oblongata. The dorsal artery (PL 9e, fig. 8, j^2 , fig. 8n, j^2 ; Pl. 18n, fig. 7, j^2 , fig. 7n, j^2 , fig. 8, j^3) runs to the tip of the much elongated tail. The omphalo-meseraic artery (Pl. 18a, fig. 8, j^4 , fig. 9, j^4) is much elongated, and projects as a single vessel, far beyond the lower surface of the body, to where the intestine (n', n') communicates with the yolk, and then ramifies, as usual, in the vascular area. The abdominal veins (Pl. 18a, fig. 7, i³, fig. 7a, i³, fig. 8, i³) appear to be in very intimate connection with the Wolffian bodies (fig. 7, q, 7a, q, 8, q). The allantoidian artery (Pl. 18a, fig. 7a, j³, fig. 8, j³, fig. 9, j³) remains single, from its point of origin (Pl. 18a, fig. 8, j^o) to far beyond the body. The alluntoidian veins (Pl. 18a, fig. 7, i^2 , fig. 7a, i^4 , fig. 8, i^2 , fig. 10, i^2) are remarkably wavy in their course along the sides of the body, and even to the point where they empty (Pl. 18a, fig. 7, i, fig. 8, i, fig. 10, i) into the venous sinus. The omphalo-meseraic or afferent vein (Pl. 18a, fig. 8, i, fig. 9, i, fig. 10, i) empties, with the abdominal, the cephalic, and the allantoidian veins, into a common reservoir, the venous sinus (fig. 8, 1, 10, 1). Its course near to and within the body is in contact with and along the lower surface of the intestine, (Pl. 18a, fig. 8, n', fig. 9, n',) and upon the upper surface of the liver (fig. 8, r, and 9, r).

The intestine (Pl. 9e, fig. 8, u^2 ; Pl. 18a, fig. 7a, u^1 , fig. 8, u', u^1 , u^4 , fig. 9, u', u^1 , u^2 ; Pl. 24, fig. 2, u^2 , u^4) has become longer than the whole abdominal region, and projects in a fold through the ventral opening. It still remains in open communication with the yolk, but, with a narrow aperture at its posterior end, (Pl. 18a, fig. 8, u^6 ,) projects slightly beyond the body, but does not open so as to form