

embryo. Their endothelial tubes remain independent throughout, but the splanchnic mesoderm<sup>1</sup> does not at first dip in very far dorsad so as to furnish an independent wall for each heart. Further forward, however, it does so (Fig. 8), and eventually the two bulbs of the heart are widely separated and enclose between them a portion of the common ecdome (Fig. 7). But the two heart-tubes as seen in Fig. 9 do not contract gradually into the condition seen in Fig. 8; on the contrary, there is a marked constriction at the opening of each heart into its bulbous, beyond which a ventricular *cul-de-sac* extends cephalad for a few sections on each side.

The picture presented by Fig. 6 is best calculated to show the anterior duplicity of the vascular system, because when each bulbous approaches the stomatodæum it divides into two ventral aortæ. Of these the lateral aortæ alone form arches up the sides of the pharynx, for the median ones first anastomose below the pharynx, then subdivide into four small vessels which bend round its anterior surface, and finally open into the large vascular space represented in Fig. 5, situated between its anterior diverticula. Tracing this space backwards dorsad of the composite pharynx, we first find four vessels similar to those referred to above, which soon, however, fuse into the "median" dorsal aorta. This retains its size until we reach the segmented region of the embryo, in which it tends to be obliterated opposite the somites and to expand again intersomatically. The "lateral" dorsal aortæ conduct themselves as in a normal embryo, and the same may be said of the veins as far as they are developed.

#### ENTODERMIC TRACT.

Proceeding cephalad from Fig. 11 in which the median ridge formed of the median row of somites alone distinguishes this from the entoderm of a normal embryo we find nothing remarkable until about midway between Figs. 8 and 9, there the lateral pouches of the pharynx reach a little nearer the ectoderm in the region of the first gill-clefts, but a few sections further forward (Figs. 6 and 5) the two stomatodæa at once arrest attention, as do the two anterior diverticula corresponding to the pouches of Seesel of normal embryos.

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I venture to enter a mild protest against Professor Kaestner's note (No. 6, p. 128) on the usage of the words *somatopleure* and *splanchnopleure*. Surely, if it is desirable to have mononyms for "somatic mesoblast," and "splanchnic mesoblast," it would be easy enough to form them instead of using terms which were invented and are constantly used to designate something else. If the language of anatomists knows only one meaning for *πλευρα* that of zoologists is not so restricted. A *Pleuronectid* does not swim on its "pleura!"