normal condition. The muscular siphons of the two apertures closely resemble those of the last species, both in appearance and minute structure.

The transverse muscle bands are very strong (Pl. X. fig. 10, and Pl. XI. fig. 3), each being composed of several parallel bundles of fibres, and they are placed so closely that they must form a powerful ejaculatory apparatus when suddenly contracted. On the right side of the thorax, these strong circular muscle bands do not extend so far down as to cover the part of the peribranchial cavity which represents the incubatory pouch. Probably this is to prevent the expulsion of embryos before they are ready; while, when developed and fit to leave the maternal atrium, they have advanced into its anterior muscular part. Over the endostyle in the ventral median line the circular bands break up, interlace, and unite with portions of neighbouring bands so as to form a reticulum in that region (Pl. XI. fig. 3).

Branchial Sac.—In this species there is no indentation on the ventral border, the sac having an oblong or somewhat pyriform outline (Pl. X. fig. 10). Its structure is simple, being formed of transverse and small longitudinal vessels, with the addition of internal transverse vessels (or horizontal membranes) which run round the inside of the sac, one at the level of each transverse vessel, and are connected at the ends with the dorsal and ventral trunks. They are of small calibre, rather thick walled, and covered externally with short cilia, and are distinctly seen when the sac is viewed from the inside (Pl. XI. fig. 5, *h.m.*).

The stigmata which lie between the longitudinal vessels are of small size but very numerous, and have the form of elongated ellipses (Pl. XI. figs. 5, 9, 10). There are in the adult sac from twelve to eighteen (usually about sixteen) rows on each side, and an average of forty stigmata in each row, making about twelve hundred stigmata (six hundred on each side) in the entire sac. The walls of the vessels have the usual structure, but the ciliated cells surrounding the stigmata are often of a slightly different form from those already described. They are not so pointed as the conical form in the last species, being more globular or quadrangular and often not showing much difference between the attached and the free ends (Pl. XI. figs. 6, 7); the barrel-shaped kind do not occur in this species. The nuclei are distinctly circular in outline and are placed nearer to the attached than to the ciliated end of the cell.

The Endostyle has the usual structure. It extends in a single curve from the branchial aperture along the ventral margin of the branchial sac to the posterior end. Seen from the ventral or dorsal aspects (Pl. XI. fig. 8) it is nearly straight, not being thrown into a series of curves as in the last species. Viewed from the side (Pl. XI. fig. 2), its posterior extremity is seen to turn dorsally, nearly at right angles to its former course, and extend for a short distance in the direction of the œsophageal aperture. The minute structure of the endostyle is similar to that of the last species.

The Dorsal Lamina is represented by a series of large flat triangular processes or