

Fol's¹ investigations have established that the endostyle is an organ for the secretion of mucus, which is carried upwards to the anterior end of the sac by the action of the long cilia on the floor of the groove. It reaches the dorsal lamina, where, along with

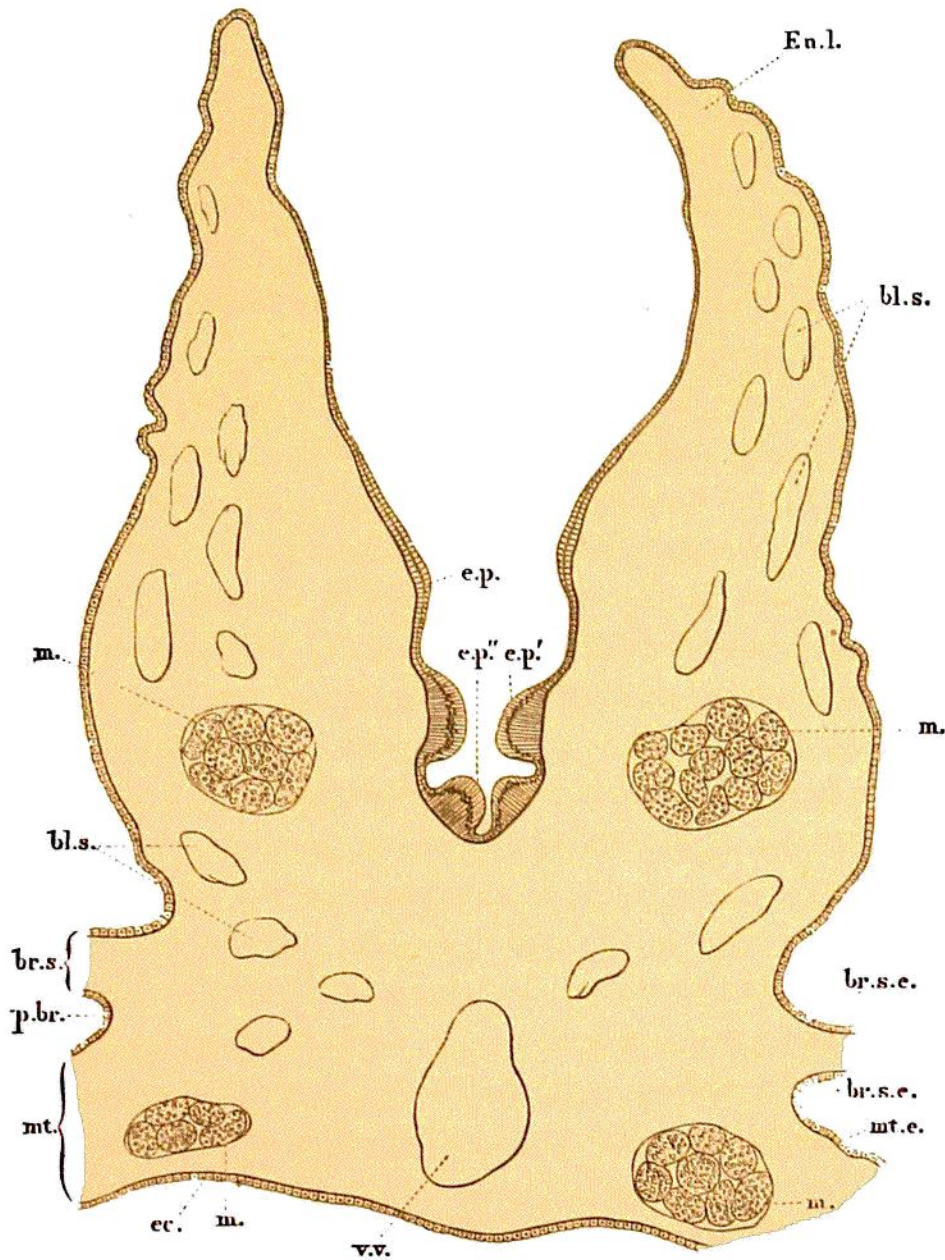


FIG. 8.—Transverse section of the Endostyle of *Molgula gigantea*.

br.s.e., epithelium lining branchial sac; *br.s.e.*, epithelium on outer side of branchial sac; *mt.e.*, epithelium lining mantle; *ec.*, ectoderm; *mt.*, mantle; *br.s.*, wall of branchial sac; *En.l.*, lip of endostyle groove; *ep.*, 1st epithelial pad on inner lip of endostyle; *ep'*, 2nd epithelial pad; *ep''*, 3rd epithelial pad; *m.*, transverse section of inner bundles of muscular fibres; *m.*, transverse section of outer bundles of muscular fibres; *v.v.*, great ventral vessel; *bl.s.*, small blood sinuses; *p.br.*, peribranchial chamber.

entangled food-particles, it forms a long string, extending down to the œsophagus, by being carried round the peripharyngeal groove, lying between the two peripharyngeal bands.

The endostyle is remarkably similar in all the Tunicata, and very rarely furnishes characters which can be made use of in classification.

¹ Ueber die Schleimdrüse oder den Endostyl der Tunicaten. *Morphol. Jahrbuch.*, Bd. i., p. 223, 1874.