

PLATE V.

The lettering is the same in all the figures.

a Acontia.
b Mesenteric filaments.
c Stomata in the septa.
*c*¹ Perioral stomata.
*c*² Marginal stomata.
cu Cuticle.
d Glandular streaks of the mesenteric filaments.
e Ciliated streaks of the mesenteric filaments.
ek Ectoderm.
en Endoderm.
g Reproductive organs.
h Septa. *rh* Directive septa.
i Oral disk.

k Wall.
l Pedal disk.
m Muscles.
mm Mesodermal muscles.
ml Longitudinal muscles of the septa.
*ml*¹ Retractor.
mp Parietobasilar muscle.
ml Transverse muscles.
mr Radial muscles of the oral disk and longitudinal muscles of the tentacles.
ms Circular muscle of the wall.
ms Mesoderm.
n Urticating cells.
o Ovicells.

p Filamental apparatus of the ovicells.
*p*¹ Process of the ovicell.
*p*² Apical set of epithelial cells.
r Marginal spherules.
rh Directive septa.
s Œsophagus.
so Openings of the œsophagus into the radial chambers.
sr Œsophageal grooves.
sz Lappets of the œsophagus.
t Tentacles and the openings homologous with them.
*t*¹ Principal tentacles.
*t*² Accessory tentacles.
v Openings of the pedal disk.

All statements given as to magnifying powers have reference to Zeiss's system. The magnifying powers amount to

	Oc. 1.	Oc. 2.		Oc. 1.	Oc. 2.
<i>a</i> ¹	6	10	D	195	240
A	55	70	F	410	550
C	95	125	J	470	530

A with unscrewed front lens (unscr. A) magnifies with Oc. 1 : 30 times; with Oc. 2 : 40 times.

Polystomidium patens.

Fig. 1. The portion of the œsophagus, contiguous to the labial margin, with the openings leading into the radial chambers; three times the natural size.

Fig. 2. Septum with pedal disk, wall, oral disk, œsophagus, and mesenteric filament; natural size.

Fig. 3. Half of the animal seen from the aboral side; natural size.

Fig. 4. Transverse section through the oral disk, near the oral margin. C, Oc. 2.

Fig. 5. Transverse section through a mesenteric filament in the upper part of its course. C, Oc. 1.

Fig. 6. The entire animal, seen from the oral side; natural size. As the only specimen sent for examination was greatly injured, some restoration has been necessary.

Fig. 7. Transverse section through the oral disk, near the stomidia. C, Oc. 2.

Fig. 8. Longitudinal section through the upper end of the wall, the circular muscle running in it and a marginal spherule. Unscr. A, Oc. 2.

Fig. 9. Longitudinal section through the circular muscle. D, Oc. 2.

Fig. 10. Longitudinal section through the lower end of the wall. A, Oc. 2.

Fig. 11. Horizontal section through the circular muscle. A, Oc. 2.

Fig. 12. Transverse section through a septum. Unscr. A, Oc. 2.