

PLATE I.

The lettering is the same in all the figures.

<p><i>a</i> Acontia. <i>b</i> Mesenteric filaments. <i>c</i> Stomata in the septa. <i>c</i>¹ Perioral stomata. <i>c</i>² Marginal stomata. <i>cu</i> Cuticle. <i>d</i> Glandular streaks of the mesenteric filaments. <i>e</i> Ciliated streaks of the mesenteric filaments. <i>ck</i> Ectoderm. <i>en</i> Endoderm. <i>g</i> Reproductive organs. <i>h</i> Septa. <i>rh</i> Directive septa. <i>o</i> Oral disk.</p>	<p><i>k</i> Wall. <i>l</i> Pedal disk. <i>m</i> Muscles. <i>mm</i> Mesodermal muscles. <i>ml</i> Longitudinal muscles of the septa. <i>ml</i>¹ Retractor. <i>mp</i> Parietobasilar muscle. <i>mt</i> Transverse muscles. <i>mr</i> Radial muscles of the oral disk and longitudinal muscles of the tentacles <i>ms</i> Circular muscle of the wall. <i>me</i> Mesoderm. <i>n</i> Urticating cells. <i>o</i> Ovicells.</p>	<p><i>p</i> Filamental apparatus of the ovicells. <i>p</i>¹ Process of the ovicell. <i>p</i>² Apical set of epithelial cells. <i>r</i> Marginal spherules. <i>rh</i> Directive septa. <i>s</i> Œsophagus. <i>so</i> Openings of the Œsophagus into the radial chambers. <i>sr</i> Œsophageal grooves. <i>sz</i> Lappets of the Œsophagus. <i>t</i> Tentacles and the openings homologous with them. <i>t</i>¹ Principal tentacles. <i>t</i>² Accessory tentacles. <i>v</i> Openings of the pedal disk.</p>
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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	<i>D</i>	195	240
<i>A</i>	55	70	<i>F</i>	410	550
<i>C</i>	95	125	<i>J</i>	470	580

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

All the figures are of natural size.

Fig. 1. *Porponia elongata*.

Fig. 2. *Porponia elongata*, opened by a longitudinal incision; and the pedal disk split up by repeated radial incisions. In the lettering on the plate for *so* read *sr*.

Fig. 3. *Cereus spinosus*.

Fig. 4. *Cereus spinosus*; the half of a sextant prepared by cutting into separate pieces; in the left-hand portion one of the principal septa (*h*¹) reaching to the Œsophagus, with mesenteric filament and acontia but without reproductive organs; then follow a pair of septa of the fourth order (*h*⁴) and a pair of septa of the third order (*h*³). The right-hand portion begins with the next following pair of small septa of the fourth order (*h*⁴), and the much larger pair of septa of the second order (*h*²). All the accessory septa have mesenteric filaments, acontia and reproductive organs, but do not reach the Œsophagus which hangs over them like an apron. A portion of the Œsophagus has been removed in the left-hand portion. Only the septa of the second order have coiled mesenteric filaments like the principal septa. The three tentacles of the first row (*t*¹) belong to the pairs of septa of the first to the third order, the two of the second row (*t*²) to the pairs of septa of the fourth order, the four of the third row (*t*³) to the interseptal spaces.

Fig. 5. *Cereus spinosus*, opened by a longitudinal incision, which has run between a septum of the third and a septum of the fourth order. The principal septa (*h*¹) project with their coiled mesenteric filaments below the lower margin of the Œsophagus; the septa of the second order (*h*²) project with smooth edges as their coiled mesenteric filaments, and their reproductive organs are covered by the Œsophagus; the septa of the third order (*h*³) project with their reproductive organs. The septa of the fourth order (*h*⁴) are only visible at the side.

Fig. 6. *Paraetis excavata*, one-third of the animal has been cut out in order to show the arrangement of the oral disk and the corona of tentacles; the section is directed so as to show two principal septa.

Fig. 7. *Phellia pectinata*, opened longitudinally; the section runs between two principal septa of the same pair; the principal septa project with their coiled mesenteric filaments below the Œsophagus.

Fig. 8. *Antheomorpha elegans*.

Fig. 9. *Antholoba reticulata*.

Fig. 10. *Porponia robusta*; fig. 10, *a*, a separate tentacle.