

## PLATE VIII.

The lettering is the same in all the figures.

*a* Acontia.  
*b* Mesenteric filaments.  
*c* Stomata in the septa.  
*c*<sup>1</sup> Perioral stomata.  
*c*<sup>2</sup> 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*<sup>1</sup> Retractor.  
*mp* Parietobasilar muscle.  
*mt* Transverse muscles.  
*mr* Radial muscles of the oral disk and longitudinal muscles of the tentacles.  
*ms* Circular muscle of the wall.  
*mc* Mesoderm.  
*n* Urticating cells.  
*o* Ovicells.

*p* Filamental apparatus of the ovicells.  
*p*<sup>1</sup> Process of the ovicell.  
*p*<sup>2</sup> 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.  
*sc* Lappets of the Œsophagus.  
*t* Tentacles and the openings homologous with them.  
*t*<sup>1</sup> Principal tentacles.  
*t*<sup>2</sup> 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. |
|----------------|-----|-----|-----|--------|--------|---|-----|-----|-----|--------|--------|
| a <sup>1</sup> | ... | ... | ... | 6      | 10     | D | ... | ... | ... | 195    | 240    |
| A              | ... | ... | ... | 55     | 70     | F | ... | ... | ... | 410    | 550    |
| C              | ... | ... | ... | 95     | 125    | J | ... | ... | ... | 470    | 580    |

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

Fig. 1. Transverse section through the wall of *Phellia pectinata*. D, Oc. 2.

Fig. 2. Transverse section through the directive septa of *Phellia pectinata* below the Œsophagus. A, Oc. 2.

Fig. 3. Part of a transverse section through the longitudinal muscular swelling (retractor) of a septum of *Tealia bunodiformis*. C, Oc. 2.

Fig. 4. Longitudinal section through the wall of *Tealia bunodiformis* with endodermal saccules. A, Oc. 2.

Fig. 5. Part of a transverse section through the Œsophagus, the wall, the directive septa, and the adjoining septa of *Tealia bunodiformis*. a<sup>1</sup>, Oc. 1.

Fig. 6. Transverse section through the wall of *Cereus spinosus*. Fig. *a*, a portion of the cuticle, drawn out like a tube. D, Oc. 2.

Figs. 7, 8. Portions of the circular muscle of *Tealidium cingulatum*, taken at different points. J, Oc. 2.

Fig. 9. Endodermal muscles of the oral disk of *Comactis flagellifera*. D, Oc. 2.

Fig. 10. Portion of a transverse section through the circular muscle of *Phellia pectinata*. D, Oc. 1.