

PLATE XXII.

Figs. 1-4. *Polycarpa minuta*, Herdman.

Figs. 5-7. *Polycarpa molguloides*, Herdman.

Figs. 8-10. *Polycarpa quadrata*, Herdman.

Figs. 11-15. *Polycarpa pilella*, Herdman.

Fig. 1. *Polycarpa minuta*; natural size.

Fig. 2. Part of the branchial sac of *Polycarpa minuta*, seen from the inside, showing a fold (*br.f.*) ; magnified (Hartn., obj. 4).

Fig. 3. One of the " polycarps " of *Polycarpa minuta*; enlarged.

Fig. 4. A small portion of the last figure, much magnified, showing the ova (*o.*) and the calcareous spicules (*sp.*) (Zeiss. obj. $\frac{1}{2}$).

Fig. 5. *Polycarpa molguloides*, a specimen of the natural size, showing the outer coating of sand.

Fig. 6. Part of the branchial sac of *Polycarpa molguloides*, seen from the inside; magnified (Hartn., obj. 4).

Fig. 7. Another small portion, showing the wide internal longitudinal bar (Hartn., obj. 4).

Fig. 8. *Polycarpa quadrata*, a specimen seen from the right side ; natural size.

Fig. 9. Part of the branchial sac of *Polycarpa quadrata*, seen from the inside ; magnified (Hartn., obj. 4).

Fig. 10. A small portion of the same branchial sac, more enlarged, showing the mode of junction of the horizontal membrane (*h.m.*) with the longitudinal vessels (*l.v.*) and the internal longitudinal bars (*i.l.*) (Hartn., obj. 5).

Fig. 11. A number of specimens of *Polycarpa pilella*; natural size.

Fig. 12. A small portion of the branchial sac of *Polycarpa pilella*, showing a fold (*br.f.*), and part of the dorsal lamina (*d.l.*), seen from the inside ; magnified (Hartn., obj. 4).

Fig. 13. The dorsal part of the posterior end of the branchial siphon of *Polycarpa pilella*, seen from the inside, showing the dorsal tubercle (*d.t.*), the neural mass (*gl.n.*), part of the dorsal lamina (*d.l.*), the præbranchial zone (*z.*), and part of the circle of tentacles (*tn.* and *tn.'*) ; magnified (Hartn. obj. 4).

Fig. 14. The dorsal tubercle from the last figure, enlarged to show the ciliated cells round the aperture (Hartn., obj. 5).

Fig. 15. The alimentary canal of *Polycarpa pilella*, showing the œsophagus, stomach, and intestine ; enlarged.