

Fig. 4. Eye, with a larger part of its surroundings. *o* eye; *a a a* marginal circular tube; *c c c* outer tubes; *i i* marginal folds inclosing the ocular apparatus; *f f f* radiating chymiferous tubes; *d d d* tentacles.

To understand correctly the sections represented in figs. 5, 6; 7, 8, and 9, the direction in which they are cut should be first ascertained by a comparison with figs. 1, Pl. VI. and VII. Section 5 runs from the centre, between two ovarian pouches, to the margin of the disk. If it were prolonged across the whole animal, it would divide fig. 1 of Pl. VI. and VII. into halves; and the part represented corresponds to the right side of the upper half, the tube running between the bisected arm *b* and the ovary *r*, along the lower surface of the disk, being one of the chymiferous tubes which arise from the main cavity of the body. Figs. 7, 8, and 9 also pass through the centre of the disk, but extend through the centres of two opposite ovarian pouches, that is, they run at an angle of 45° with the section fig. 5, or obliquely across fig. 1 of Pls. VI. and VII. In fig. 7, the central pyramid of the disk is removed to show more plainly the mode of communication of the ovarian pouch *n p*, with the central cavity of the body *s*; and, to bring these relations more plainly into view, the left ovarian pouch is also removed, and in the right ovarian pouch the veil which separates the pouch from the blind sac below is removed with the ovaries themselves, while in figs. 8 and 9 they are left in place. Fig. 9 corresponds to fig. 8, except that fig. 8 passes through the centre of the pouch and shows the cavity from one side and fig. 9 from the opposite side, the section passing somewhat obliquely through the pouch. Fig. 6 is a transverse section across an ovarian pouch from side to side of the pouch, and not, like all the others, radiating from the centre to the periphery.

Fig. 5. Section across the disk, including the centre and one side. *o* pyramid of the centre; *p* veil forming the lower floor of the sexual pouch; *q* channel leading from the central cavity into the sexual pouch; *r* sexual organ; *n* sexual pouch; *s* central cavity; *a a* oral lobe; *b* its stem cut through; *c c* its marginal folds; *m m* upper floor or gelatinous mass of the disk.

Fig. 6. Sexual pouch, seen from the side opposite its communication with the central cavity. *d d* lower floor of the disk; *p* arch of the veil *p'*, which separates the sexual cavity *n*, in which the sexual organs *r r* are inclosed, from the blind sac *f*, which is below and

communicates through the hole *f* with the surrounding medium.

Fig. 7. Another section through the centre of the disk, across two opposite ovarian pouches, leaving one, in the centre of the figure, entire in the distance. *s* central cavity; *a a* oral appendages or arms; *b b* stems of the oral appendages cut through; *c c* marginal folds of the arms; *d* and *e* the thickened pillars in the lower floor surrounding the hole *f*, below the sexual cavity; *r r* sexual organs; *p* veil forming the lower floor of the sexual pouches; *n* sexual cavity; *m m* upper floor.

Fig. 8. Another section passing through a sexual pouch. *o* pyramid of the centre of the disk; *s* central cavity of the body; *a* oral appendage or arm, cut through at *b*; *c c* its marginal fringes; *d* and *e* lower floor thickened and inclosing the blind sac *f*; *q* channel leading from the main cavity into the sexual pouch *n*; *r* sexual organ; *p'* veil separating the sexual pouch from the blind sac below; *m m* upper floor.

Fig. 9. Another section, passing somewhat obliquely through a sexual pouch. *a* arm, cut through at *b*; *d* and *e* thickened lower floor, surrounding the blind sac *f*; *o* pyramid of the centre of the disk; *s* main cavity; *q* channel leading into the ovarian pouch; *p* veil separating the ovarian pouch from the blind sac below; *p'* section of the veil; *r r* sexual organ; *n n* sexual pouch; *m m* upper floor of the disk.

## PLATE X.

### SCYPUSTOMA OF CYANEA ARCTICA AND AURELIA FLAVIDULA.

[Figs. 18, 23, 31, 32, and 36, *Aurelia flavidula*, were drawn by A. Sourel; the others, *Cyanea arctica*, by H. J. Clark.]

Figs. 1 and 2. Eggs from the ovary of *Cyanea arctica*, Sept. 28, 1857, magnified 500 diameters.—*v* vitellino sac; *y y'* yolk; *p* Purkinjean vesicle; *w* Wagnerian vesicle.

In all the remaining figures, 3 to 38, the following letters refer to the same parts. *a* the outer wall of the body; *a'* the outer wall of the tentacle; *b* the inner wall of the body; *c* the mouth or proboscis; *c'* the basal or posterior end; *d* the digestive cavity; *e e'* the tentacles; *f'* the base of the horn-like sheath or tube.

Fig. 3. A globular embryo, just escaped from the pouches. Magnified 500 diameters.

Fig. 4. Profile view of an ovate embryo just from the pouches. 500 diameters.