

Fig. 8. A minutely divided mass (*ae*). *h h'* as before.

Fig. 9. An ovary of *Tiaropsis diademata*, seen obliquely from above. *a a' a'' a'''* the median wall of the medusa; *b b'* the innermost wall. 100 diameters.

Fig. 9^a. A transverse, sectional view of fig. 9. The letters as above.

Fig. 10. An incipient tentacle. *a* outer, and *b* inner wall of the bud; *a'* outer, and *b'* median wall of the disk; *c* circular canal. 400 diameters.

Fig. 11. A young tentacle. *a* outer, and *b* inner wall; *b'* the base. 400 diameters.

Fig. 12. An ocular coronet, seen obliquely from above. *a* outer, and *b* median wall of the edge of the disk; *a'* outer wall of the tentacle; *a''* outer wall of the coronet; *b'* inner wall of the coronet; *c* the semicircle of refractive bodies; *d* the boss-like edge of the disk; *e* the pigment spot; *f* circular canal. 400 diameters.

Fig. 13. The same as fig. 12, but seen strictly from above, so that the disk (*h*) partly overshadows it; the same letters; also *g* the innermost wall of the disk.

Fig. 14. The same as fig. 12, seen from below, with similar letters.

Fig. 15. An edgewise view of fig. 12, with similar letters.

PLATE XXXII.

DYNAMENA PUMILA *Lamr.*

[Figs. 1, 4, and 4^a, drawn by A. Sonrel; the rest by H. J. Clark.]

Fig. 1. A hydrarium creeping over a sea-weed. Natural size.

Fig. 2. Two pairs of hydra calyces; the hydra of the upper ones are omitted. *a* outer, and *b* inner wall; *a'* outer wall of the upper pair; *c c'* base of the hydra where it passes through the semi-partition (*d*); *m* aperture of the calyx; *op* operculum of an immature hydra calyx; *p* the proboscis; *t* tentacles. 100 diameters.

Fig. 3. A pair of hydræ, and the bases of two branches, seen from the convex side. *i* the branch; *k* a calyx of the branch; *op* as in fig. 2. 100 diameters.

Fig. 4. A hydra emerging for the first time from its calyx (*b*). Letters as in fig. 2. 100 diameters.

Fig. 4^a. The same as fig. 4, just before emerging.

Fig. 5. An oblique end-view of a young, reproductive hydra. 125 diameters.

Fig. 5^a. The same as fig. 5, in profile. *a, a'* the outer wall; *d c* the inner wall; *e* the calyx. 300 diameters.

Fig. 6. A pair of young hydræ. *a a' a''* the outer wall; *b* the fold of the horn-like sheath, at the base of the calyxes; *b'* the sheath in process of formation; *c* the exterior portion of the sheath; *d* the inner wall of the matured stem; *e c' c''* inner wall of the young hydra; *e'''* inner wall of the growing stem; *f f' f''* the three divisions of the triple bud. 300 diameters.

Fig. 6^a. The top of the branch from which figure 6 was taken. 40 diameters.

Fig. 7. A female hydromedusa. *a* the axis; *g* the growing portion of the axis; *h* ramifications of the axis; *ov* the eggs. 60 diameters.

Fig. 8. A mature male hydromedusa; *a'* the outer, and *c* the inner wall of the axis; *b* the outer, and *b'* the inner wall of the medusa; *e* the calyx; *g* the terminal expansion of the axis; *l* the proboscis of the medusa; *l'* the base of *l*; *sp* the spermiatic mass. 100 diameters.

Fig. 9. A mature female hydromedusa. Letters as in fig. 8; also *ov* the eggs. 100 diameters.

Fig. 10. A young hydromedusa. *A* the main stem; *a' c b b' c' g h* as in figs. 7, 8, and 9. 80 diameters.

Fig. 10^a. A group of hydromedusæ. *A* the main stem; *B C D* the three calyces; *h* the branches decurrent from the axial, chymiferous canal; *i* point of junction of *C* and *D*; *j* the axis. 60 diameters.

Fig. 11, *a*. A spermiatic particle from fig. 8. 500 diameters. *b c* diagrammatic figures of *a*.

Fig. 12. A sectional view of a pair of hydræ, and the terminal development of the main stem. *a* outer, and *b* the inner wall of the stem and the hydra; *a'* the the processes from *a*; *c* the aperture of the semi-partition (*d*); *g* the chymiferous channel; *h* the flat end of the stem. 100 diameters.

Fig. 13, *a c*. Cells from the outer wall of fig. 14^a. 500 diameters. *b c d f g h i* diagrammatic figures of *a c*.

Fig. 14. Profile view of figs. 5 and 5^a. *a* the hydromedusa; *m* the mouth of a hydra-calyx; *A* the stem. 125 diameters.

Fig. 14^a. A pair of hydræ, just beginning to bud from the main stem. *a* the outer, and *d* the inner wall; *c* the horn-like sheath; *e e'* the end of the inner wall of the stem; *e c'* the inner wall of the hydræ. 300 diameters.

Fig. 15. A hydra just before the tentacles develop. The letters as in fig. 12; also *m* the chitinous sheath, between the hydra and the main stem; *l* the roof-like end of the calyx. 300 diameters.

Fig. 16. An egg removed from the medusa, like that in fig. 9. *A* the yolk, 500 diameters; *B* the egg.