

## PLATE XXIV.

## TUBULARIA COUTHOUYI Ag.

[Figs. 1-6, drawn by A. Sourel; the others by H. J. Clark.]

Figs. 6-13 magnified 200 diameters; figs. 14-18 and 24-26, 100 diameters; fig. 19, 60 diameters; figs. 20-23, 40 diameters.

Fig. 1. A group of female hydroids, natural size. *a* the stem; *b* the medusae; *p* the proboscis; *t* the coronal tentacles.

Fig. 1, B. A lateral view of the head of a hydromedusarium, magnified 5 diameters. *a* the stem; *a'* the largest tubule; *b* the terminal expansion of the stem; *c* the base of the head; *d* *d'* the medusae; *e* the medusiferous branches; *t* coronal tentacles.

Fig. 1, C. The same as fig. 1, B, seen from the under side.

Fig. 2. A male hydroid, with the proboscis (*p*) spread wide open. The letters as in fig. 1.

Fig. 3. Another male hydroid, the head hanging downward. Letters as before.

Fig. 4. The proboscis of a male hydra. *a* the base; *t* *t'* *t''* the tentacles. 5 diameters.

Fig. 5. The broadly-expanded proboscis and a medusiferous branch of a male hydromedusarium (*d* *e*). *a* the base of the proboscis; *b* the decurrent bases of the tentacles (*t* *t'*); *d* the oldest, *e* the youngest medusae. 5 diameters.

Fig. 6. A medusa-bud, just beginning to form. *a* outer, and *b* inner wall; *d* chymiferous cavity.

Fig. 7. A, a double-walled hernia-like medusa. *a'* outer, and *b'* inner wall; *d* chymiferous cavity. B, a far advanced bud. *a'* outer wall; *e* ends of the radiating tubes; *d* the proboscis; *e* base of the radiating tubes; *f* germ-basis.

Fig. 8. A little younger than fig. 7, B. The letters the same.

Fig. 9. An exterior view, a little younger than fig. 7, B. The letters the same.

Fig. 10. An interior view, showing three of the radiating tubes (*e* *e'*). The letters as in fig. 7, B.

Fig. 11. A little older than fig. 7, B, and with the same letters.

Fig. 12. The circular tube is formed. *a* *b* *c* as before; *a'* outer wall of the disk; *b'* inner wall containing the radiating tubes; *d* base of the radiating tubes and proboscis (*d'*).

Fig. 13. A male medusa, a little older than the last, with corresponding letters, and also *e'*, junction of radiating and circular tubes, seen in the distance, and *g*, spermatie mass.

Fig. 14. A nearly mature female medusa. *c* remains of the circular tube; *d* proboscis; *e* radiating tube; *f* germ-basis.

Fig. 15. The chymiferous tubes obliterated, and the germ-basis (*f* *f'*) beginning to divide. *a* *a'* *b* *b'* *d* as in fig. 12; *b'* the base of the proboscis. Drawn as a sectional view.

Fig. 16. The germ-basis, still further divided. *a* *b* *f* *f'* as in fig. 15; *c* as in fig. 14.

Fig. 17. A sectional view of a medusa of the same age as that of fig. 16. The letters as in fig. 15, and *c* as in fig. 14.

Fig. 18. The germ-basis nearly all divided off into hydræ (*f'* *f''*). *a* outer, and *b* inner walls of the pedicel; *c* junction of circular and radiating (*e*) tubes; *d* proboscis.

Fig. 19. Similar to fig. 18, but not so far advanced. *f* germ-basis.

Figs. 20, 21, 22, and 23. Similar to figs. 18 and 19, with the same letters.

Fig. 24. The hydroids have escaped, but more of the germ-basis remains. Letters as in figs. 18 and 19; also *a'* the wrinkled disk.

Figs. 25 and 25<sup>a</sup>. Lateral and end view of an empty medusa. Letters as in fig. 24.

Fig. 26. A male medusa. *a* outer, and *b* inner wall of the pedicel; *c* as in fig. 14; *f* spermatie mass; *g* disk cavity.

## PLATE XXV.

## HYBOCODON PROLIFER Ag.

[Figs. 1, 2, 15, 15<sup>a</sup>, and 15<sup>b</sup>, drawn by A. Sourel; the others by H. J. Clark.]

Fig. 1 natural size; figs. 2 and 3 magnified 10 diameters; figs. 2<sup>a</sup>, 14, 14<sup>a</sup>, 15, 15<sup>a</sup>, and 15<sup>b</sup>, 40 diameters; figs. 4, 5, 6, 7, 8, 9, 200 diameters; figs. 10, 11, 12, 13, 100 diameters.

Fig. 1. A single hydra. *a* the stem; *t* the coronal tentacles.

Fig. 2. A profile view of the upper part of an individual, loaded with medusa-buds. *a* the stem; *a'* the horny sheath; *b* the top of the stem; *c* the base of the head; *d* *d'* *d''* *e* medusae; *t* coronal tentacles; *t'* *t''* proboscidal tentacles.

Fig. 2<sup>a</sup>. The proboscis of fig. 2. *p* the mouth; *p'* the intervals of the exterior row (*t'*) of tentacles; *p''* the decurrent bases of *t'*; *t'* inner row of tentacles.

Fig. 3. A much older head than fig. 2, with the coronal tentacles (*t*) cut off near the base. *a* the stem; *a'*