

Fig. 17. The proboscis of fig. 12. *a* remains of the germ-basis; *b* wall of the proboscis; *c* chymiferous cavity.

Fig. 17<sup>a</sup>. The same as fig. 17, contracted, and the germ-basis wrinkled and having the appearance of an outer wall.

Fig. 18. A portion of a medusiferous branch, partially contracted. *a* outer, and *b* inner wall; *c* chymiferous channel.

Fig. 18<sup>a</sup>. The same as fig. 18, but uncontracted.

Fig. 19. The same as fig. 18, in a sectional view.

Fig. 19<sup>a</sup>. The same as fig. 19, contracted.

By mistake there is no figure 20.

Fig. 21. A young hydroid, just beginning to develop its tentacles, *b*. *a* the inner mass or wall; *c* outer wall.

Fig. 21<sup>a</sup>. A portion of fig. 21. *a* inner wall; *a*<sup>1</sup> inner wall of the tentacle; *b* an incipient tentacle; *c* outer wall.

Fig. 22. A young hydroid with quite prominent tentacles (*b*). *a* inner, and *c* outer wall.

Fig. 22<sup>a</sup>. A portion of fig. 22. Letters as in fig. 21<sup>a</sup>.

Fig. 23. A young hydroid with tentacles already flexible. *a* inner wall; *a*<sup>1</sup> *b* tentacles.

Fig. 23<sup>a</sup>. A portion of fig. 23. Lettered as in fig. 22<sup>a</sup>. *a*<sup>1</sup> and *a*<sup>2</sup> axial cells of the tentacle.

Fig. 24. A portion of the young hydroid in fig. 11, *c*. *a* inner wall; *c* outer wall.

Fig. 25. A portion of fig. 21<sup>a</sup>, more highly magnified.

Fig. 26. The end of the tentacle of a hydroid, just issuing from the parent; lateral view. *a* outer wall; *a*<sup>1</sup> *a*<sup>2</sup> lasso-cells in *a*; *b* *b*<sup>1</sup> inner wall; *c* globular tip, crowded with lasso-cells.

Fig. 26<sup>a</sup>. The same as fig. 26, but more extended; seen from the actinal side.

Fig. 26<sup>b</sup>. The same as fig. 26<sup>a</sup>, but the lasso-cells more prominent.

the outer wall, *c*<sup>1</sup> lasso-cells; *d* cells of the inner wall or axis, seen through the outer wall; *e* the same as *d*, seen isolately.

Fig. 1<sup>a</sup>. Cells from the dis-integrated outer wall. *a*-*d* lasso-cells; *e* granular contents.

Fig. 2. View from below at the surface of the axis of a coronal tentacle. *a* *a*<sup>1</sup> *a*<sup>2</sup> as in fig. 1; *a*<sup>3</sup> lasso-cells; *c* the two rows of cells nearest the eye, which meet along the line *c*<sup>1</sup>.

Fig. 3. Transversely sectional view of fig. 1. *a* cells of the actinal side; *a*<sup>1</sup> cells of abactinal side; *a*<sup>2</sup> corresponds to *a*<sup>2</sup> in fig. 1; *b*<sup>1</sup> *b*<sup>2</sup> correspond to *b*<sup>1</sup> *b*<sup>2</sup> in fig. 1; *c* *c*<sup>1</sup> same as in fig. 2.

Fig. 4. A combined profile and general view of a portion of the stem, just below the head. *a* the horny sheath; *b* *c* outer wall, in profile; *b*<sup>1</sup> lasso-cells; *d* *c* inner wall, in profile; *f* *f*<sup>1</sup> *f*<sup>2</sup> *f*<sup>3</sup> *f*<sup>4</sup> inner wall in profile, seen through the cells nearest the eye (*g*); *g*<sup>1</sup> *g*<sup>2</sup> end view of the cells of the inner wall, seen through those of the outer wall (*i*); *h* *i* *g*<sup>2</sup> *g*<sup>3</sup> general view of the outer wall.

Fig. 5. The stem of a young hydra, at the upper third, stretched longitudinally. The lettering as in fig. 4; in addition, *g*<sup>1</sup> cells of the semi-partition, corresponding to *g*<sup>1</sup> *g*<sup>4</sup> in fig. 7.

Fig. 6. A cell of the outer wall of fig. 4. *a* lasso-cell; *b* *c* wall of the cell; *d* cavity of the cell.

Fig. 7. Transverse section of the stem, a little below the head. The lettering as in fig. 5; in addition, *j* is the loose pigment layer.

Fig. 8. A transverse section of the stem of *Tubularia Couthouyi* Ag. *a* horny sheath; *b* outer wall; *d* inner wall; *g*<sup>1</sup> *g*<sup>4</sup> the solid cellular mass which fills the axis of the stem; *j* the longitudinal channels; *j*<sup>1</sup> the primary channel.

Fig. 9. A portion of fig. 8, more highly magnified. *a* lamellate sheath; *b* outer wall; *d* *d*<sup>1</sup> inner wall; *g* cells of the solid central mass; *g*<sup>1</sup> mesoblast of the cells (*g*); *g*<sup>2</sup> outline of cells like *g*, but in the distance; *g*<sup>3</sup> mesoblast in profile.

Fig. 10. A portion of the transverse section of the stem of *Hydrocylon prolifer* Ag. *a* the lamellate sheath; *b* *b*<sup>1</sup> outer wall; *d* inner wall; *ddl* pigment cells; *g*<sup>1</sup> *g*<sup>4</sup> the semi-partition.

Fig. 11. Inner face of a semi-partition of fig. 10, with the same letters, and *g*<sup>1</sup> a mesoblast.

Fig. 12. A transverse section of the stem of *Coryne mirabilis* Ag. *a* the horny sheath; *b* *c* cells of the outer wall; *b*<sup>1</sup> a mesoblast; *d* *c* cells of the inner wall; *ddl* pigment cells.

#### PLATE XXXIII<sup>a</sup>.

Figs. 1-7, *PARYPHA CROCEA* Ag.; Figs. 8 and 9, *TUBULARIA COUTHOUYI* Ag.; Figs. 10 and 11, *HYDROCYLON PROLIFER* Ag.; Fig. 12, *CORYNE MIRABILIS* Ag.

[Drawn from nature by H. J. Clark.]

Figs. 1, 1<sup>a</sup>, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, ungnified 500 diameters; Fig. 8 magnified 40 diameters.

Fig. 1. A lateral view of a coronal tentacle in a highly extended state. *a* *a*<sup>1</sup> *a*<sup>2</sup> cells of the outer wall, in profile; *b* *b*<sup>1</sup> *b*<sup>2</sup> *b*<sup>3</sup> *b*<sup>4</sup> general view of the cells of the outer wall, in outline; *c* *c*<sup>1</sup> *c*<sup>2</sup> *c*<sup>3</sup> superficial view of