the scalloped part of the opercle; $d^2$ $d^3$ the puffs of $d$. 470 diameters.

Fig. 10. The hydra of Clytia intermedia. $g$ the stolon. 40 diameters.

Fig. 11. A single hydra of fig. 10. $c$ the semi-partition; $c^2$ the top ring of the stem; $c^3$ the calycle; $c^4$ the teeth; $t$ the tentacles. 100 diameters.

## PLATE XXX.

### Laomedea amphora *Ag.*

[Figs. 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, drawn by A. Sonrel; the others by H. J. Clark.]

Fig. 1. A group of young hydra, attached to a sea-weed. Natural size.

Fig. 2. A full-grown bunch of hydræ. Natural size.

Fig. 3. A portion of a branch of a hydromedusarium. 8 diameters.

Fig. 4. A hydra, seen from above. A B the tentacles alternately elevated and depressed. 40 diameters.

Fig. 5. A hydra in profile. A B as in fig. 4; $c^1$ the calycle; $c^2$ the rings of the pedicel; $g$ the intra-calycine axis; $pr$ proboscis. 100 diameters.

Fig. 6. A hydra calycle. $a$ the border, and $b$ the aperture of the semi-partition. 100 diameters.

Fig. 6a. End view of fig. 6.

Fig. 6b. The papillate margin of the semi-partition of fig. 6. 400 diameters.

Fig. 7. The base of a hydra calycle. $a$ the papillæ along the margin of $c$; $b$ aperture of $c$; $c$ the semi-partition; $c^1$ actinal prolongation of $c$; $c^2$ abactinal prolongation of $c$. 300 diameters.

Fig. 8. The terminal development of a branch. $a$ $b$ the youngest portion; $c^1$ the horn-like sheath; $g$ the chymiferous channel. 100 diameters.

Fig. 9. A partially-developed hydra. $ab$ the head; $g^1$ the axis of the pedicel; $g^2$ processes from the outer wall of $g$. 100 diameters.

Fig. 10. A nearly mature hydra. $a$ outer, and $b$ inner wall of the head; $c^2$ rings of the pedicel; $g$ digestive cavity. 100 diameters.

Fig. 11. A hydra a little older than fig. 10. $c^2$ $c^3$ $c^4$ the pedicel and branchlet; $d$ the calyx; $g^1$ the axis. 100 diameters.

Fig. 12. A hydra a little older than the last. $a$ outer, and $b$ inner wall; $c^1$ the calycle; $c^3$ the terminal ring of the pedicel; $g$ the digestive cavity. 100 diams.

Fig. 13. Similar to fig. 12, but the head is retracted. 100 diameters.

Fig. 14. The pedicel of a hydra, to show the very prominent rings ($c^2$). 100 diameters.

Fig. 15. A female hydromedusa. $\beta$ outer, and $\gamma$ inner wall of the axis; $ae$ the egg; $d$ the end of the axis; $h^1$ the medusæ; $k$ the calycle; $k^1$ rings of the pedicel. 100 diameters.

Fig. 16. A medusa from fig. 15. $ae$ the egg; $h$ the discoid termination of the inner wall; $h^1$ the disk; $h^2$ the pedicel; $h^3$ the chymiferous cavity. 300 diams.

Fig. 17. The inferior end of the axis of a male hydromedusa. A–D the medusæ; $\beta$ the outer, and $\gamma$ the inner wall of the axis; $ae$ the spermatic mass; $h^1$ the disk of the medusa; $h^3$ the proboscis of the medusa. 300 diameters.

Fig. 18. A male reproductive calycle. A B, the medusæ emerging in one mass; $k$ the wall of the calycle. 60 diameters.

## PLATE XXXI.

### Figs. 1–8, Laomedea amphora *Ag.*; Figs. 9–15. Tiaropsis diademata *Ag.*

[Drawn by H. J. Clark.]

Fig. 1, A. A spermatic particle, from fig. 18. Pl. 30. 500 diameters. B a diagrammic figure.

Fig. 2. A medusa from a mature hydromedusa. $ae$ the egg; $af$ outline of the egg, next the inner wall; $h$ the discoid termination of the inner wall ($h^3$); $h^1$ the disk; $h^2$ outer wall; $h^3$ inner wall; $h^4$ digestive cavity; $p$ the Purkinjean vesicle. 400 diameters.

Fig. 2a. The Purkinjean vesicle of fig. 2. 500 diameters.

Fig. 3, 3a. Views from two opposite sides of a segmenting egg. $a$ $a^1$ $a^2$ the dividing furrow; $b$ $c$ the two halves of the segmenting mass. 300 diameters.

Fig. 3b. An end view of fig. 3a.

Fig. 4. A quadrated mass. $a$ $a^1$ as in fig. 3; $b$ $c$ $d$ $e$ the four segments; $f$ $g$ the secondary furrow.

Fig. 5, 5a. An unequally quadrated mass; letters as in figs. 2 and 4.

Fig. 6. A surface view of a mass, divided into eight segments. $b$ $b^1$ $c$ $c^1$ the four segments nearest the eye; $h$ $h^1$ $h^2$ as before.

Fig. 6a. The same as fig. 6, by transmitted light. $b$ $b^1$ $c$ $c^1$ correspond to those in fig. 6; $d$ $d^1$ $e$ $e^1$ the four segments in the distance; $h$ $h^1$ $h^2$ as before.

Fig. 7. A mass divided into thirty-two segments ($a$ $af$ $ag$). $h$ $h^1$ $h^2$ as before.

Fig. 7a. One of the segments of fig. 7, isolated.