

and the oral arms are faintly visible below. This figure shows distinctly, that in four directions the chymiferous tubes arise directly from the main cavity, and in four other directions, alternating with the former, they arise from the peripheric side of the sexual pouches.

Fig. 2. Magnified view of the margin of the disk, seen from below, to show the origin of the tentacles *a a*, between the lobules of the margin *b b b*, the veil *c* extending along the under side. *d* represents a chymiferous tube.

Fig. 3. View of the same from above, more highly magnified, showing the clusters of lasso-cells scattered over the upper surface. *a a* tentacles; *b b* lobules of the margin; *c* circular marginal chymiferous tube; *d d* radiating chymiferous tubes.

Fig. 4. Longitudinal section of the margin of the disk, the better to show the relations of the tentacles *a a a*, and the marginal lobules *b b*.

Fig. 5. View of the centre of the disk from below, the oral appendages being removed. *o* pyramidal projection of the centre of the disk; *a b c* radiating chymiferous tubes arising directly from the main cavity of the body; *d d d* radiating chymiferous tubes arising from the peripheric side of the sexual pouches, one of which, *e*, is laid open by the removal of its lower floor, while in the others the floor is preserved; *i* indicates the arch over the opening leading into the blind sac which extends below the sexual pouches. This opening is generally represented as leading into the sexual pouches, but this is not the case; the arch *i* supports a thin vein which separates the sexual pouches from the blind sacs below.

Fig. 6. Top of a tentacle, magnified. *e* its cavity; *a* epithelial layer covering its surface.

Fig. 7. Termination of one of the oral appendages or arms with its marginal fringes *b, b*; the channel *a* extends along its middle from the tip of the marginal lobes to the main cavity of the body.

PLATE VIII. Profile view of our Aurelia with structural details.

Fig. 1. Profile view, in a state of contraction of the disk, when the oral appendages appear inclosed in the cavity thus formed, and the sexual pouches are seen in profile, exhibiting distinctly the wreath formed by the sexual organs, as well as the origin of the chymiferous tubes arising from the margin of the sexual pouches.

Fig. 2. Transverse section of the margin of the disk, to show the difference of thickness of the upper and lower

floors *a* and *c*, with the chymiferous tubes *b b*, formed by the union of the two.

Fig. 3. Similar section, magnified. *a* upper floor; *c* lower floor; *b* line of separation between the upper and lower floors; *b'* chymiferous tube formed by the recession of the upper and lower floors; *d* lower surface of the lower floor.

Fig. 4. Upper surface of the upper floor magnified, to show the clusters of lasso-cells scattered over it.

Fig. 5. Transverse section of the margin of the disk, which, in connection with fig. 4 of Pl. VII., may fully explain the relations of all the parts there combined. *a* opening of the marginal circular chymiferous tube; *e* the tube itself; *b* section of the veil extending along the lower surface; *c* part of the veil itself; *d d* tentacles; *d'* cavity of one of the tentacles; *f* radiating chymiferous tube, opening into the circular tube of the margin; *f'* another radiating tube cut through in the section, in which *h* marks the upper floor, and *g* the lower surface of the lower floor.

Fig. 6. Magnified tentacles to show their connection with the circular marginal tube. *d* tentacle; *d'* cavity of the tentacles; *e e* marginal tube into which the tentacles open.

Fig. 7. Lobes of the ovary with their tentacles. *a* folds of the sexual pouch; *b b* ovarian lobes; *c c* tentacles of the ovarian folds.

Fig. 8. An ovarian lobe, stretched out to show that the folds of the sexual pouches surround the sexual organ on both sides. *a a* folds of the pouch; *b b* ovarian lobes stretched; *c c* tentacles of the ovarian folds.

Fig. 9. Margin of the oral lobes, in the depressions of which the eggs and planulae are received, magnified. *a a a* clusters of eggs and planulae in different stages of development, gathered in the sac-like depressions of the margin of the oral lobes, where they remain until they are capable of living independently of their parent; *b b* the fringes or tentacles of the margin of the oral lobes, adapted to seize upon the prey.

PLATE IX. Structural details of our Aurelia.

Fig. 1. Spermarian lobes stretched out, magnified sixty diams. *b b* spermaries; *c c* tentacles of the spermaries.

Fig. 2. Several spermarian lobes, less extended, magnified 12 diams. *b b* spermaries; *c c* tentacles of the spermarian folds.

Fig. 3. Eye, with its chymiferous tubes and the tentacles on its sides. *o* eye; *e e* marginal circular tube, from which arise the tentacle-like tubes *i, i', c*; *f f f* radiating chymiferous tubes; *d' d'* tentacles opening into the marginal tube.