

ness of the pillars and of their prolongation. 1 1 1 1 the four pillars; s s s s the furrows along the middle of the lower surface of the oral lobes; d d d the oral lobes, meeting from below in the centre of the figure to shut the mouth; os, os, os, the cut edges of the sexual pouches.

Fig. 17 explains more fully the relations of the parts represented in fig. 16. 3 oral ring; 4 thickening of the oral lobe d bending over the mouth; os fold of the sexual pouch.

Fig. 18 shows how the sexual organs of are supported in the folds of the sexual pouch os.

Fig. 19 shows the connection of an oral pouch with the concentric folds e<sup>1</sup> of the lower floor, and, with the tentacles t t, connected with the sexual organs of.

Fig. 20. Lobes of a sexual pouch stretched out. o ovaries; of folds formed by the ovaries; t their tentacles.

Fig. 21. Lobes of the sexual pouch of a young female. o undeveloped ovary; of folds of the ovary; t their tentacles.

Fig. 22. Lobes of a sexual pouch of a male stretched out. os folds of the pouch passing into the concentric folds of the lower floor; s spermathecae; sf folds of the spermathecae; t their tentacles.

Fig. 23. Part of the lower floor, embracing one entire ambulacrum o and one entire interambulacrum a, with one half of the adjoining ambulacrum and interambulacrum, to show the inequality of the width of the ambulacral, e, and of the interambulacral, e<sup>1</sup>, chambers, k k being the gelatinous bands along which the upper and lower floors are united; f the tentacles, and d<sup>1</sup> the point where the folded part of the lower floor passes into the folds of the sexual pouches and into the pillars of the digestive cavity.

Fig. 24. Ramifications of the chymiferous channels along the margin of the disk. c tube of the eye; o lobe of the eye; a interambulacral incision; a<sup>1</sup> a<sup>2</sup> interambulacral lobes; o<sup>1</sup> and o<sup>2</sup> ambulacral lobes. The parts in black correspond to the parts in white of fig. 23, the channels being kept light in fig. 24 and dark in fig. 23, having been drawn upon different grounds.

## PLATES VI., VII., VIII., and IX.

AURELIA FLAVIDULA, Pér. and LeS.

[All the figures of these plates were drawn from nature by A. Sourel.]

PLATE VI. represents our Aurelia from below, with sundry details.

Fig. 1. When the disk is fully expanded, and the appendages of the lower side are in their natural position, several features appear in this species, which seem not to have been noticed in other allied Acalephs. The mouth is closed by folds of the oral lobes, and one of these folds forms a transverse ridge across the oral aperture. The oral lobes, or so-called arms, are not stretched out at the same angles with one another, but stand nearer each other on opposite sides in one direction than in the other. In the ramifications of the chymiferous system it should also be noticed, that, of the sixteen simple radiating tubes, eight reach the base of an ocular apparatus, and eight others, alternating with them, anastomose with the marginal circular tube without branching.

Fig. 2. Segment of the same, the margin being arched downward. This figure shows that during the contractions of the disk r r, the oral lobes are not projected beyond its margin, but are bent along the furrow formed by the curve, and the tentacles, b, thrown out. o o eyes; d d chymiferous tubes; a a folds of the oral lobes or arms; e their stem; i opening leading into a blind sac below the sexual pouch (this opening is generally but falsely represented as leading into the sexual cavity and communicating with the main cavity).

Fig. 3. Oral opening laid open by the reversion of the oral lobes a<sup>1</sup> a<sup>2</sup> a<sup>3</sup>, a remaining in place. o pyramid of the centre of the disk projecting into the oral aperture, which exhibits eight emarginations, four, i i, in the angles corresponding to the base of the stems of the oral lobes, and four, e e, in the direction of the sexual pouches.

Fig. 4. Eye, as seen facing the margin of the disk where this is curved down. o eye; c c ocular lobes of the margin of the disk; e e, i i chymiferous tubes of the ocular apparatus.

Fig. 5. Transverse section of the oral arm of a male individual, showing how much thinner its stem is than that of the female, fig. 6. a stem of the oral lobes; b and c its two halves spreading to form the folds or lobes, e e, of the arms.

Fig. 6. Transverse section of the oral arm of a female individual. a stem; b c its halves; e e the folds or lobes in the pouches of which the eggs are received and remain until the young is freed to swim about.

PLATE VII. General view of Aurelia flavidula from above, with structural details.

Fig. 1. View of our Aurelia from above, in which the ovaries appear plainly through the transparent disk,