

of the calycle is the same as that of the hydra. The wall (k) of this calycle is of uniform thickness throughout, and, in this respect, is equal to that of the peduncle. The microscopic structure of the horny sheath of the hydrarium does not differ from that of other Hydroids; it being merely a concentric series of fibrillated lamellæ (Pl. XXXIII. *Figs.* 13 and 14, c^2). The transverse striæ, which appear here and there in the thickness of the sheath, are inexplicable features, which have all the appearance of minute anastomosing vessels in another genus (Pl. XXXIV. *Fig.* 1, $a^1 a^2$). There is no essential difference in the hydra from that of *Laomedea amphora* (Pl. XXX. *Figs.* 4 and 5), except that, perhaps, the latter has more tentacles, but of this we are not certain. Every calycle contains a single hydra, consisting of a digestive cavity (Pl. XXXIII. *Fig.* 5, g), which is based upon the semi-partition mentioned above (Pl. XXXIII. *Fig.* 12, c), and terminated by a single coronet of slender, tapering tentacles (Pl. XXX. *Fig.* 5, A B), with an extremely dilatable simple proboscis (pr) rising in the centre of the circlet. As peculiar to all Campanularians, the tentacles are here, also, alternately elevated (B) and depressed (A) when fully expanded, although their bases are, strictly, in one row. The double walls of the stem (Pl. XXXIII. *Fig.* 5, $a^1 b^1$), the digestive cavity ($a b$), the tentacles ($a^2 b^2$), the proboscis ($a^3 b^3$), the reproductive calycle (Pl. XXXIV. *Fig.* 11, $\beta \gamma$), and even the medusæ-buds ($\beta'' \gamma'$), are continuous with each other throughout the hydromedusarium. The inner wall is generally twice as thick as the outer one, except, perhaps, in the reproductive calycles, where the two (Pl. XXXIV. *Fig.* 11, $\beta \gamma$) are nearly alike. The flexibility of the semi-partition (Pl. XXXIII. *Figs.* 12 and 12^a, c) allows the passage of the double walls (*Fig.* 5, $a^1 b^1$) of the pedicel into those of the digestive cavity ($a b$), without sensible constriction. The lasso-cells are arranged not only in transverse but also in longitudinal rows (Pl. XXXII. *Fig.* 5^b, l), the transverse rows corresponding to the transverse walls of the axial cells (b^2). There are at least six longitudinal rows of these prehensile organs, and there are no other Hydroids in which the individual lasso-cells project so far from the surface as in this species, and in all the Campanularians. The figure which we give here (*Fig.* 5^b) represents two of the lasso-threads wound about an Infusorium (α), which was caught while we were examining the tentacle.

As we have said before, the walls of the reproductive calycles are double, and in direct prolongation of those of the stem. They are supported by processes (Pl. XXXIV. *Fig.* 11, β''') from the outer wall, and by their terminal attachment ($\beta \gamma$) to the end of the calycle ($k^2 k^3$). The outer surface of the exterior wall is exceedingly transparent, and, being elevated in longitudinal ridges (β'), has the appearance, in profile, of a third wall; and, moreover, being very plastic, it doubles over the medusæ and seems to form an exterior sheath or veil. The medusæ (A-G) occupy the whole length of the axis, and are present in the younger stages