gradually thins out laterally, as may be seen in an oblique view (*Fig.* 2, *c'*), until at right angles to the plane of greatest thickening the two opposite sides are alike (*Fig.* 6, *c, c*). From the latter point of view, the outline is elongate pear-shaped, whereas on the thickest side (*Fig.* 5, *c'*) the contour is arched inwardly, and on the side opposite to this (*c*) the outline is an outward curve. Just below the constriction (*Fig.* 5, *f*) of each joint, and immediately above the point of greatest thickening (*e*), the pedicels arise, at an average angle, to the main stem, of about thirty or thirty-five degrees.

The diversion of the chymiferous tube from the main stem begins exactly where the corneous tube is thickest, and, as it were, rests upon this point, the thickening, therefore, forming a part of the pedicel, yet thinning out so rapidly that the second ring is not affected by it, but has an equal thickness on all sides; and so is it with the rest of the pedicel up to the base of the calycle, while, at the same time, the calibre gradually lessens, and the rings become successively thinner. The number of rings varies from eight to twelve, but usually there are not more than five to eight, the higher number apparently arising from an injury and the renewal of the lost part; in which case, as often happens among Hydroids, the tendency is to a distortion in form, or an exaggeration in number. The calycle (*a, a'*) has the form of a cup, whose sides diverge at an angle of thirty or thirty-five degrees, and whose depth is to its greatest breadth as six is to five. The margin, which is perfectly smooth, is slightly oblique to the axis of the pedicel, the slant trending toward the stem, and, consequently, the outline, as seen from above (*Fig.* 5ⁿ), is broadly ovate. The wall of the calycle (*Fig.* 5, *a, a'*) is much thicker than that of the pedicel, and even varies on different sides; on the side furthest from the main stem, and directly above the great thickening in the joints of the latter, the wall is twice as thick (*a'*) as that of the pedicel, but passing around to the opposite side (*a*) it gradually diminishes to half this amount. At the margin the wall thins out to a sharp edge rather suddenly, and with like rapidity the base diminishes as it passes into the pedicel. The transverse perforated septum (*Figs.* 5 and 7, *k*), which projects into the inferior part of the cavity of the calycle, is also very thick, and, in a transverse section, has the form of an isosceles triangle, one of whose longer sides (*l*) rests against the inner face of the calycle, while the other long side, which is free, faces obliquely toward the mouth of the cup, and the short side, also free, trends at right angles to the last, and faces obliquely toward the base of the calycle. The median third of the partition is occupied by an aperture, formed by the very abrupt termination of the edge. From the lower margin of the truncate edge there hangs a very thin and transparent tube (*m*), with an irregular opening (*n*) at the lower end. This tube is, perhaps, one third longer than its transverse diameter, but owing to