They have a single wall, which is continuous with the outer wall of the tentacle (Pl. XI^b. *Figs.* 3 and 9 i^3), and also with the single wall of the veil (i) and with the upper wall (*Fig.* 9 i^0) of the disk. The tentacle (*Figs.* 3, 4, and 9 i^3) is about three times as long as its basal breadth, and tapers to a rounded point; the inner wall is hollow to the very tip, and is in open connection with the radiating canal (e). In order to give a better understanding of the relation of all these parts just described, we have made a longitudinal section of the veil, tentacle, and margin of the disk, which can be readily understood by reference to the general lettering at the head of the description of Pl. XI. The lappets (*Fig.* 4 j^1) of the oculiferous lobes have a lancet pointed termination, and are remarkable for a median ridge (j^3, and *Fig.* 12 j^2 j^3), which extends along the under side, a little exterior to the median line, from the apex to the base, and thence, a little nearer the margin of the lobe (j), to the circular canal. On each side of the ridge the surface is concave, as a sectional view (*Fig.* 12) shows. The upper side (j^4) is convex.

THE EYE.[1] This is perhaps the most appropriate period of its life at which the eye of Aurelia can best be studied, in all its details, when it is neither too young to lack any of its characteristics, nor too old and grown opaque by the development of dark pigment masses in its walls. The peduncle (Pl. XI^b. *Figs.* 7 and 15 h to h^3) has a peculiar oblong cylindrical shape, which is broader sideways (*Fig.* 7) than vertically (*Fig.* 15). In the first aspect it is rather elongate ovate than otherwise, with the greater breadth at the base (*Fig.* 7 h^3), whereas in profile (*Fig.* 15) it has the outlines and position of a finger half closed; but even in this it varies considerably; at one time the end is perfectly round (*Fig.* 8), and at another is more or less pointed (*Fig.* 15) or compressed. Its usual position is indicative of its office, being turned upwards (*Fig.* 15) between the lappets of the lobe, and projecting to a greater or less extent above the edge of the disk; but at times it is withdrawn under the lobe (*Fig.* 4 h). There are two distinct walls (*Figs.* 7, 8, and 15 h^1 h^2) to the peduncle, and they are directly continuous with the two walls of the lobe (j^6 j^7) from which it arises, very much in the same manner as the walls of the tentacle are continuous with those of the edge of the disk; in fact, the eye peduncle is nothing more nor less than a solid tentacular organ which hangs from the under side of the oculiferous lobe. The outer wall (*Figs.* 7, 8, and 15 h^1) does not differ in thickness from that of the lobe (j^6), except at the end (h), where it thins out rather suddenly as it passes around the tip; but the inner one (h^2) varies in this respect according as it is seen in

[1] Since I began the special study of the Acalephs, I have always been inclined to consider the marginal bodies of their disk as ocular organs; but the first direct demonstration of the true nature of these organs was furnished by Prof. H. J. Clark, whose observations upon this subject are given at full length and in his own words in the following paragraph.