cups into eight to twelve radial cords, which converge towards the centre of the sucking-cup (figs. 9, 10).

The auditory clubs (probably eight or sixteen) lie on the axial side of the umbrella margin, under the insertion of the velum, inside the lowest row of tentacles. After most careful search, I was only able to discover two or three of them, very small, and of the same construction as in the Aglauridæ. The thin endodermal axis of the auditory club (fig. 16) consists of a few chordal cells (*d*), of which the last is expanded like a vesicle, and contains a large spheroidal otolith with concentric layers (*ol*). The ectodermal cells of the epithelium of the club bear very long and fine auditory hairs (*oh*).

The velum (figs. 11–14) is thicker in *Pectis* than in any Craspedote hitherto known, and is distinguished by a very unusual development of the muscular system. The breadth of the velum is so great that when fully extended it can probably close the entire umbrella cavity like a sphincter. The external abaxial half of the velum contiguous to the umbrella margin, is nearly as thick as the tentacles, and three to six times as thick as the internal axial half, from which it is divided by a deep circular furrow (fig. 11, right half). If we draw the free projecting internal margin of the velum carefully towards the inside, we can bring it so near the centre as to make it probable that the umbrella cavity can be completely closed by the velum being drawn over it, as in the foregoing species. The following layers (from above to below in the natural position of the horizontal extended velum) can be distinguished in horizontal sections through the velum :—(1) the ventral or subumbral epithelium of the velum (*vw*), containing dark-brown pigment similar to that of the subumbral epithelium; (2) a considerably thick layer of clear vesicular connective tissue (*x*); (3) the muscular plate of the velum which projects into this connective tissue in the form of numerous highly-developed circular folds, each fold sending out numerous secondary folds or shoots into the clear plate of connective substance (*x*), so that it appears delicately pinnated in the transverse section (fig. 13, *mv*); (4) a thin but firm elastic supporting lamella, which sends out processes into the muscular folds (*zv*); (5) the dorsal or exumbral epithelium of the velum (*ve*). The epithelial cells of the exumbral epithelium of the velum are much smaller and flatter than those of the subumbral.

The ectodermal epithelium of the lower surface of the umbrella or the subumbrella consists of cells of dark brown pigment, from which the milk-white walls of the canals are sharply thrown out. The underlying annular system of the subumbrella forms numerous compact circular folds. In *Pectis* the umbrella cavity is simple, without subumbral funnel cavities, as the eight radial "mesogonia" or "genital mesenteries" so strongly developed in *Pectyllis* and *Pectanthis* are by no means so complete here. They are merely indicated by eight narrow subumbral folds, running from the basis of the eight genitalia to the basis of the stomach (fig. 2, *wr*).

The gastrovascular system in *Pectis* has, on the whole, the same plan as that of