

projecting radial-ribs into sixteen deepened radial areæ or depressions, which project like lobes on the umbrella margin (Pl. VII. fig. 12). Of the sixteen radial ribs ("costæ exumbrales"), four perradial and four interradial (in the middle between the former) lie above the mesogonia. These eight principal ribs are distinguished by thin streaks of purple-red pigment, which pass into eight large red ocellar spots at the umbrella margin, but are wanting in the eight other alternating adradial ribs. All sixteen ribs are tipped with nematocysts, which appear yellowish-white by reflected light and black by transmitted light. These spots of pigment form a broad band in the periphery of the exumbrella above the margin of the umbrella, and are divided from it by a colourless streak. The eight red ocellar egg-shaped spots before mentioned are placed at the distal ends of the eight red pigmented ribs; they may, perhaps, be considered as true ocelli, though they do not appear to contain a lens (comp. Pl. VII. fig. 1). Besides these, there are also sixteen large crescent-shaped golden-yellow spots at the marginal end of the ribs of the exumbrella. The sixteen concave intercostal radial depressions of the exumbrella alternating with these increase in breadth and depth towards the umbrella margin, and are traversed in the middle by a deep-radial furrow ("sulcus exumbralis"). A pedunculated subradial auditory club lies at the end of these radial depressions (Pl. VIII. fig. 8, *ok*) in the middle of the projecting marginal lobe, and of the bunch of tentacles borne by it.

The peculiar peripheric umbrella margin ("margo umbralis," Pl. VIII. fig. 8) is considerably thickened, and armed with a connected urticating ring (*nc*), consisting of a thick accumulation of thread-cells. The sixteen protuberances or flat lobes are rounded like an arch, and when looked at from above (and also at their subumbral surface) show a cord of cilia pigmented black immediately inside the urticating ring. This ciliated cord is sinous, and forms from eight to ten projecting vessels on each lobe (fig. 8, *xp*). In the arching inwards of the umbrella margin between each two lobes, at the distal end therefore of each exumbral rib, the black ciliated cord becomes a tongue-shaped projection, showing a funnel-like depression, which may perhaps be an organ of smell (fig. 8, *xo*). A small free auditory club rises on the outer edge of each of the sixteen marginal lobes enclosing a spheroid or elliptic otolite in the free end (in the last endodermal cell, fig. 8, *ok*). The auditory club lies nearer the lower margin of the umbrella, inwards from the insertion of the tentacles. More minute investigation was unfortunately impossible.

The tentacles, which amount to 200 to 260, are divided into sixteen pencil-shaped bunches, each two bunches between each two radial canals. In the transverse section the tentacles are hollow (fig. 4), capable of great extension, movable and contractile, furnished with a sucking-disk at the end, and are very similar to the ambulacral feet of the Echinodermata. The Medusæ attach themselves by these sucking-disks to the vertical walls of the glass vessel, and climb up them like an Asterias or a Sea-urchin