

*Umbrella* (Pl. L. fig. 1, from below).—The umbrella is slightly vaulted, lenticular, nearly discoidal, 4 to 6 mm. in diameter; its vertical axis is about 1 mm. The margin is regularly octolobate, with eight deep marginal incisions, from which arise the eight bunches of tentacles.

*Exumbrella* (Pl. XLIX. fig. 7).—The superior face of the umbrella is rather flat, a little vaulted, and exhibits a regular network of brown pigmented canals, the exumbrellar vessels. Eight regular radial canals arise from a central circular canal, in the centre of which is placed the apical stigma of the pneumatocyst. The eight interradian chambers of the latter are separated by these perradian mantle canals, which anastomose outside and form a ring around each chamber. From this ring arise in each octant four to six centrifugal canals, which are forked and prolonged outside the pneumatosaccus into the exumbrellar canals of the limbus. Their dichotomous branches are connected by anastomoses. A few peripheral stigmata are scattered in the outer half of the exumbrella.

*Limbus Umbrellæ* (fig. 7, *um*).—The free margin of the umbrella, outside the corona of tentacles, is distinctly octolobate, and bears a series of pyriform marginal glands on its free edge. The eight interradian convex lobes are more or less prominent between the eight perradian bunches of tentacles.

*Subumbrella* (Pl. XLIX. fig. 11).—The inferior face of the discoidal umbrella is more convex than the superior, and is divided into four different zones. The central zone is occupied by the large central siphon (*sa*). This is surrounded by a corona of sixteen gonostyles, and this by an octagonal tentacular zone (fig. 12, *tu*). Outside the latter is prominent the broad octolobate limb of the subumbrella.

*Pneumatocyst* (fig. 8, half of the inferior face; fig. 9, half of the superior face).—The subspherical central chamber (*ph*) possesses an apical stigma in the centre of its upper face, and is surrounded by a corona of eight equal triangular radial chambers, each of which bears a circular stigma. This octoradial central disc is surrounded by a peripheral girdle composed of eight or nine concentric ring-chambers; the second and third of these (*pk*) are the broadest, much broader than the peripheral chambers. Eight deep perradian furrows of the lower face separate the eight chambers of the octoradial ring one from another, and are prolonged up to the circular margin of the pneumatocyst, dividing it into eight slightly prominent lobes. In the middle between each two furrows (therefore in eight interradian rows) may be seen the pneumathyræ, or openings by which the concentric ring-chambers communicate one with another (fig. 8, *pg*).

The superior or apical face of the discoidal pneumatocyst (fig. 9) is slightly convex, and bears about twenty stigmata, viz., one central, eight interradian (in the middle of the eight triangular chambers), and eight to twelve peripheral, irregularly placed in the second to the fourth ring-chamber.

The inferior or basal face of the pneumatocyst (fig. 8) is slightly concave, and bears