the transverse diameter is not more than half of that which is included between the upper and the lower sides; but passing toward the tip this disproportion grows less and less, till the sides become nearly equal (PI. XXIII. Fig. 3). At the base the sides are not so flat as toward the end, but curved in such a manner that a transverse section of the tentacle would show a wedge-shaped figure, with slightly convex sides, and the narrower end uppermost. At midway between the base and tip a transverse section (Pl. XXIII. Fig. 3) is parallelogramic, with the narrower ends alike, and corresponding to the upper and lower surfaces, the corners ( $b^{3}$ ) are rounded, and the lateral longer sides ( $c^{2}$ ) are slightly hollowed. Close to the end of the tentacle, just before it rounds off, the sides are more nearly equal and the corners more rounded than at the lower part. The sides of the tip of the tentacles are compressed, so that in a transverse section the figure would be broadly ovate. The end is blunt, and obliquely rounded off, from the upper toward the lower side, so that the extreme tip is nearer the inferior surface of the tentacle.

There are two layers, of different kinds of cells, in the tentacles; the one in the centre (PL. XXUI'. Figs. 1, e, and $2, e$ ) is solid, and broader than deep (PI. XXIII. Fig. 3, e), with four straight sides, in a transverse section, and occupies two thirds of the transverse diameter of the whole tentacle, and almost one half the diameter at right angles to this; the outer layer (a), which forms a sheath to the imer, is thinnest at the sides (Fig. 3, $c^{2}$ ), being about one sixth the thickness of the whole tentacle, and gradually thickens above and below; above (a) it is one quarter, and below ( $a^{1}$ ) almost one third as thick as the whole mass of the two layers in this direction. In consequence of this arrangement, the tentacles appear unsymmetrical when seen in profile (Fig. 1), the greater portion of their central layer (c) being situated above the axis. The whole surface of the tentacles is thickly studded with lasso-cells, but on the under side (PI. XXIII'. Fig. 1, $c^{1}$ ) they are much more numerous than above (c), and at the tip still more crowded. The walls of the saucer-shaped disk (PI. XXIII. Fig. $1^{n}, d$ ), when the large digestive cavity which they enclose is taken into consideration, are comparatively thinner than those of the stem and of the upper part (Fig. $\mathrm{l}^{\circ} . t^{\prime}$ ) of the proboscis. The digestive cavity has a double convex shape, such as would be produced by putting two watch-glasses together face to face; above, there is a gradually narrowing opening which leads to the mouth, and below, another opening which leads to a suddenly expanding globular cavity (Fiy. $1^{\text {b }}, d^{1}$ ) at the end of the stem (d). The lower aperture of the digestive cavity corresponds to the constriction which divides the base of the head from the globular end of the stem. The end of the stem (Fig. $1^{\mathrm{b}}, d^{1}$ ) has a great deal of plasticity, and may assume an elongate, or very broad, flattened spheroid shape; but it is, usually, nearly spherical. It embraces

