

the tentacles are thrown more strongly upward, so as to be nearly parallel with the axis of the proboscis, or, in the systolic act, they are, as well as the disk, strongly curved downwards, and form a deep bell-shaped cavity about the proboscis. The proportions of the disk are like those of an old-fashioned bull's-eye watch-glass, thickest in the centre, and thinning out to an edge. The centre is occupied by a four-sided digestive cavity (*Fig. 12, h¹*), from which a simple, trumpet-shaped quadrate proboscis (*p*) hangs down, to a depth which, in full extension, equals the semidiameter of the disk. The four corners of the proboscis correspond to the four corners of the digestive cavity. From the digestive cavity (*h¹*) four radiating canals (*f¹*) extend from its four corners to near the edge of the disk, where they connect with a circular canal (*f*) which passes through the whole circuit of the margin. Within these canals a constantly circulating current is kept up by means of large vibratile cilia (*Figs. 20 and 21, f, f*). Of the sixteen tentacles, there is one opposite the termination of each radiating canal, and three, arranged at equal distances, in every quarter segment between the canals.

Seen from above, every tentacle seems to taper gradually from the base to the apex (*Fig. 20*), but, upon looking deeper, its actinal end appears enlarged into a broad swelling (*γ*), which, however, when observed more closely and from below (*Fig. 21, γ*), proves to be a two-fold lobe of the edge (*a*) of the disk, embracing the base of the tentacle. The outer wall (*Fig. 12, a¹*) of every tentacle is continuous with the outer wall of the disk (*a*), and the inner wall (*b¹*) of the same is a prolongation of the middle wall (*b*) of the disk. The base of each tentacle has a broad and rounded prolongation (*Figs. 12 and 20, β*), which projects toward the centre of the disk, and across the actinal side of the circular canal. The eight eyes (*Fig. 12, α*) are affixed to the actinal side of the base of the eight tentacles which stand, one on each side of the radiating canals. Each eye is a globular body (*Fig. 21, α*), containing, at its centre, another globular body (*α'*) about one quarter its diameter, and possessing highly refracting properties. The eye stands out from the surface, and, in profile (*Fig. 18^a, α*), is a very conspicuous object. The transverse veil (*Fig. 12, v*), which borders the margin of the disk, is about one eighth the diameter of the latter, more or less wavy at the edge, and very transparent and thin. The proboscidal actinostome (*Fig. 12, p*) is double-walled, as in other Hydroids; the outer wall (*p*) is thin and continuous with the innermost or lining wall (*g²*, and *Figs. 20 and 21, g, g¹*) of the disk, and the inner wall (*p*) is very thick and continuous with the middle wall in which the radiating and circular canals are hollowed out (*Figs. 20 and 21, f, f¹*). The arrangement of the lasso-cells on the tentacles is peculiar; in a view from the abactinal side (*Fig. 20*), we see a single row along the middle, and a double row on each edge; whereas, on the actinal side (*Fig. 21*) there is no central row. Each lasso-cell is