

the radius of the umbrella. It is divided from the broad tentacle zone by the velar furrow (or the marginal coronal furrow) of the subumbrella, on which the eight sense clubs lie. As the firm gelatinous substance of the umbrella suddenly becomes very much thinned away at the velar furrow, the lobe zone is very flexible; it is more or less bent round, and in most of the specimens before me, turned back towards the tentacle zone of the subumbrella. Its subumbral surface is quite smooth, covered by a layer of circular muscular fibres, bears no tentacles, and is only traversed by very shallow, almost imperceptible, radial furrows, which correspond to the deeper radial furrows between the marginal lobes of the exumbrella. The eight rhopalia or sense clubs (fig. 1, below) lie in the subumbrella, at the proximal margin of the velar zone, immediately outside the velar coronal furrow.

The eight sense clubs (4 perradial and 4 interradian) are remarkable from their completely subumbral position; their distance from the umbrella margin amounts to nearly the half of their distance from the umbrella centre, therefore, to nearly one-third of the whole radius of the umbrella. The sense clubs lie entirely hidden in eight deep subumbral sense niches, at the distal end of the eight principal radial furrows. Each sense niche ("antrum rhopalare," fig. 2, *on*) is broadly lanceolate in shape and is enclosed by a pair of thick, narrow bean-shaped gelatinous swellings, like a pair of fleshy lips; these clearly correspond to the two sense folds of other *Discomedusæ*, or to the rolled-in medial inner margins, the original ephyra lobes of the umbrella margin; they are here thickened, and have their concave medial margins turned to each other in such a way that both their distal and their proximal ends touch, and the sense club only remains open between them below (fig. 2). Their upper covering (corresponding to the protective scale or protective covering of the other *Discomedusæ*) is formed by the gelatinous substance of the umbrella. The sense club lies almost in the middle of this deep lanceolate sense niche (rather nearer the proximal margin), and is fastened to the under side of its covering in such a way that its radial longitudinal axis appears directed from the inside and above, towards the outside and below, therefore towards the distal entrance of the niche. The rhopalia themselves are comparatively small, almost acorn-shaped, and were sufficiently well preserved in the spirit specimens before me to admit of closer examination with the aid of fine transverse and longitudinal sections (figs. 2-7). Their form and structure on the whole do not differ essentially from that of *Cyanea*. Each rhopalium consists of a thicker proximal and a thinner distal part; separated by a slight circular constriction; the base of insertion of the proximal part is also strongly constricted (fig. 5, longitudinal section). The sense canal (*co*), which is very much narrowed at this basal stricture, immediately becomes enlarged again and is not limited here to the proximal half (as is usual in the *Discomedusæ*), but also passes over into the distal half containing the otolite (fig. 6). The acoustic ectodermal epithelium of the sense club is single-layered, and consists of flagellate, cylindrical cells in the basal half, and