

cleft into eight distal lobe pouches occupying the greater part of the collar lobes; four perradial tentacles longer than the diameter of the umbrella; twelve auditory clubs (three on each lobe), the middle auditory club twice as large as the two lateral. Horizontal diameter, 4 mm.; vertical diameter, 2 mm.

*Habitat.*—West Coast of Africa. I first observed a living specimen of these species off Lanzerote, one of the Canary Islands, in December 1866, and the figures of Plate IX. and the following description are taken from this specimen. Later I found a specimen in a glycerine preparation of the Challenger expedition, containing the beautiful *Phæodaria Cælodendrum*, south of the Azores, west from the Canary Islands, lat.  $32^{\circ} 41' N.$ , long.  $30^{\circ} 6' W.$  Depth, 1675 fathoms. This glycerine specimen from the Challenger collection was very imperfectly preserved, but sufficiently preserved to settle its identity with the living specimen found at the Canaries. It is, however, possible (or probable) that this Medusa does not belong to such a great depth, but was captured in shallower water in drawing up the lead.

The umbrella (Pl. IX. figs. 1–3) has the form of a flat cap, and is nearly once and a half as broad as high. When the broad velum hangs loose, the aggregate height of the umbrella (including the velum) nearly equals the greatest breadth (in the middle of the height). The umbrella is divided into two distinct anatomical portions, the upper “umbrella lens” and the lower “umbrella collar,” by a deep horizontal circular furrow of the exumbrella, the coronal furrow (fig. 3, *ec*). The central umbrella lens or umbrella disk (fig. 3, *w*) is simply formed by the gelatinous body of the umbrella, and has the form of a thick biconvex lens with a rounded edge; its upper surface is covered with the flat exodermal epithelium of the exumbrella, and is somewhat more strongly vaulted than the lower gastral surface, which is covered by the endodermal epithelium of the stomach. The two surfaces are connected by numerous fine, sinuous elastic fibres which traverse the gelatinous substance perpendicularly (fig. 6, *uf*; fig. 7, *uf*). The consistence of the gelatinous substance is considerable, resembling that of a soft gelatinous cartilage. The umbrella collar (“umbrella edge” or shortly “collar”), as we shall term the portion of the umbrella lying underneath the insertion of the tentacles, has a very complicate structure as contrasted with the simple lens lying above it. It consists of a corona of four lobes arising from deep radial indentations or incisions of the umbrella margin, the peronial furrows. And these, again, are caused by the four tentacles having left their original position on the umbrella margin and having emigrated a little way into the exumbrella. I consider this peculiar centripetal change of position of the tentacles into the exumbrella, which is probably connected with their partial development into feelers, as the first “true cause” of the manifold and varying transformations, which the umbrella margin and the adjacent organs undergo in all *Narcomedusæ*. Originally the tentacles were placed immediately on the margin of the umbrella as in the other *Craspedotæ*. When they passed upwards into the external surface of the umbrella,