

umbrella. These eighty coronal lobes constitute the very movable and flexible velarium, which extends to the velar coronal furrow, and was retroverted on the inner side of the umbrella in most of the spirit specimens examined. A marginal layer of the circular muscles is developed on its subumbral surface, so that it serves as an admirable swimming organ, as in many *Rhizostomæ*.

The lower umbrella surface (subumbrella, Pl. XXX. fig. 1) of this *Medusa* is marked by a very striking peculiarity, which at the first glance distinguishes it not only from all other *Cyaneidæ* but from all other *Medusæ* hitherto known. The subumbrella is divided by two deep coronal furrows, an inner peristom furrow and an outer marginal coronal furrow, into three separate zones, viz., an inner peristom area, a middle tentacle zone, and an outer lobe zone. The central peristom area of the subumbrella (fig. 9) contains the oral cross with its four perradial limbs, and the four powerful perradial oral curtains hanging from them, as well as the four interradianal genitalia, alternating with the latter. The peristomal coronal furrow, which separates the peristom area from the tentacle zone, cuts deeper into the perradii than into the interradii.

The intermediary tentacle zone of the subumbrella is bounded by the peristomal coronal furrow from the peristom area on its concave proximal margin, and by the subumbral velar furrow, from the peripheric lobe zone at its convex distal margin (fig. 1). Its whole extent is traversed by deep radial furrows, in such a manner that numerous thick radial swellings, branched dichotomously towards the periphery, are placed closely beside each other (quadrant, left, below in fig. 1). Numerous long tentacles are scattered everywhere between these radial ribs or swellings, whilst the peripheric lobe zone of the subumbrella, or the velarium of tentacles, and the central peristom area are entirely free from them. On closer examination we can distinguish on the whole forty such thick radial swellings of the subumbral tentacle zone; a stronger, perfectly straight, unbranched radial rib runs in the eight principal radia, direct to the eight sense clubs, whilst four bunched ribs, or broader, dichotomously branched radial swellings, run between each two such principal ribs from the centre to the peripheric coronal furrow. Of the eight principal ribs (of which two are shown in fig. 1, left below), the four interradianal are about one-fourth longer than the four perradial, as the former project further inwards, between the limbs of the oral cross. The four principal ribs are almost linear, rather broader in the middle, quite straight, and unbranched, but divided by a fine traversing principal furrow into two parallel limbs lying close together, so that they really represent double ribs. The four bunched ribs, which occupy the entire space of an octant of the umbrella, between each two principal ribs, form narrow equilateral triangles, whose base line (or the broad distal margin at the velar furrow) is thrice as broad as the truncated point, or the narrower proximal margin, at the peristom furrow. The two medial bunched ribs, on the two sides of the adradial subumbral furrow, are as broad, but rather shorter than the two lateral bunched ribs which lie near the enclosing principal ribs. Each of the