

largest horizontal diameter near the umbrella margin amounted to 30 mm., double the vertical height of the umbrella (15 mm.). As the umbrella margin in the specimen examined was strongly contracted, the height in the living animal must be proportionately greater (20 mm. or more). The umbrella, seen from the upper or lower surface, appears distinctly octagonal, as the eight principal radiæ (with peronia and tentacles) project more strongly outwards than the eight interlying side walls (fig. 2), so that the umbrella of the dead Medusa has really the shape of a short, regularly octagonal prism. The gelatinous substance of the umbrella is tolerably soft (as in all true *Æginidæ*), not so firm as in the *Cunanthidæ* and *Peganthidæ*, though there, as here, it is traversed by numerous elastic fibres. The gelatinous umbrella is very thick throughout the flattened apical surface (equal to one-third of the height of the umbrella) but very thin (and decreasing proportionately below) on the thin lateral walls (fig. 11, *ug*).

The exumbrella is flat, without any special characteristic, and only traversed by eight shallow peronial furrows (fig. 7, *es*); these run vertically from the insertion of the tentacles to the umbrella margin, and are connected by thin "peronial plates" with the peronia or "umbrella clasps" lying beneath them (*em*). The eight peronial plates ("laminæ peroniales," figs. 7, *em*; 12, *em*) consist of a double layer of the exodermal flat epithelium of the exumbrella, and originate from the two gelatinous walls of the umbrella, which limit the open peronial groove laterally in the *Cunanthidæ* (Pl. IX. fig. 5, *es*), but lie above the grooves with their edges fused together in the *Æginidæ*. The peronium in the *Æginidæ* is therefore completely enclosed by the gelatinous substance of the umbrella on the abaxial side, and by the subumbrella on the axial side, whilst in the *Cunanthidæ* the abaxial side of the peronium lies free at the bottom of the open peronial groove (Pl. IX. fig. 5, *en*). In *Æginura* the distal end of the peronium joins that of the peronial plate under the umbrella margin; both pass continuously into the marginal urticating ring (Pl. XIII. figs. 1, 2, 4, *nc*; Pl. XIV. fig. 11, *nc*).

The umbrella cavity and the subumbrella lining it do not present in *Æginura*, any more than in the other *Æginidæ*, any of the striking peculiarities which distinguish the two families of the *Narcomedusæ*, the *Cunanthidæ*, and *Peganthidæ*; the conditions do not differ essentially from those usual in the *Craspedotæ*. Hence it comes that the umbrella collar is not divided into separate lobes by deep peronial incisions, and the margin of the umbrella is therefore almost entire. The peculiar lobe cavities of the *Cunanthidæ* (Pl. IX. fig. 6, *nl*) and the *Peganthidæ* (Pl. XII. fig. 7, *nl*) are consequently wanting. In *Æginura* the umbrella cavity is more a simple cylindrical, or almost octagonal, hollow space, with the œsophagus hanging in its axis, whose horizontal roof is formed by the subumbral bottom of the stomach (Pl. XIV. fig. 11, *gw*), whilst it opens wide below, and is limited laterally by the vertical side walls of the subumbrella. The latter has an unbroken broad layer of circular muscular fibres, which is divided by the eight peronia into eight quadrangular plates, but not cut through by it (comp. figs. 7, 11, 12, *mw*).