

about under the individual form of self-subsistent monogastric Calyconectæ (*Eudoxia* and *Ersæa*, Families IV. and V.).

*Bractæ* or *Hydrophyllia* (Protective persons or shields, Protecta, Phyllozooids—"Deckstücke, Deckschuppen" of German authors).—Three families of polygastric Calyconectæ, the Monophyidæ, Diphyidæ, and Desmophyidæ, possess constantly a single bract on each cormidium; it is wanting only in the fourth family, Polyphyidæ, where it has been lost by reduction. The single bract of each cormidium is the reduced umbrella of the Medusa-person, the manubrium of which is the single siphon of the former. This is very obvious in *Praya*, *Calpe*, and some other genera, where the bract still possesses four radial canals. Usually some of these canals are lost, or they have disappeared altogether.

Each bract has a convex exumbrella and a concave subumbrella, both separated by the basal margin of the umbrella. The form of the bract is very various, and characteristic of the single genera of monogastric Calyconectæ; usually it corresponds more or less to the form of the first nectophore. It is hemispherical, mitriform or subspherical, with a smooth exumbrella, in the polygastric Sphæronectidæ, Prayidæ, and Desmophyidæ. The bract is pyramidal, spathiform or conical, with sharply edged exumbrella, a ventral fissure, and a pointed apex in the Cymbonectidæ and Diphyopsidæ; it is prismatic with polygonal faces and sharp edges in the Abylidæ.

The bracteal cavity corresponds with the subumbrellar cavity of the ancestral Medusa, but has lost its important muscle-plate; it embraces the siphon, the single tentacle, and the gonophore; the last is placed at the ventral side of the siphon, the tentacle at its dorsal side. The nutritive canals of all the organs unite in the top or the centre of the bracteal cavity, where it communicates also with the central canal of the common stem by a short bracteal canal. From the same point arises also the phyllocyst.

*Phyllocyst*.—The apical cavity or coryphal cavity of the bract, which we call shortly "phyllocyst," corresponds to the acrocyst or somatocyst of the nectophore. Its form and the number and disposition of its apophyses are often very characteristic of the individual genera of Calyconectæ. Usually the phyllocyst is an ovate or spindle-shaped sacculus of the same structure as the acrocyst, filled with large polyhedral vacuolated cells, and often containing also an oleophore or an apical oil-globule. It arises usually more or less vertically from the top of the subumbrellar cavity, and projects into the thick jelly-substance of the bract. From its base arise sometimes four radial canals, which correspond to the four original subumbrellar radial canals of the nectophores, in *Praya* (Pl. XXXII. figs. 8, 9) and in *Calpe* (Pl. XL. figs. 14–18). These are so arranged that two paired canals lie on both sides of the bilateral bract (right and left), and two odd in the sagittal plane (dorsal and ventral). The majority of the Calyconectæ do not now possess the four original canals. *Cymba* and *Abyla* have only two lateral canals; *Bassia* a single basal canal, arising from the base of the phyllocyst; often they are entirely lost (*Diphyes*, *Monophyes*, &c.).