

suborder (Cymbonectariæ) would include the Cymbonectidæ, Diphyopsidæ, Abylidæ, and Vogtidæ.

*Hydræcium* or *Infundibulum* (funnel cavity, house-room, Gehäuskammer, Trichterhöhle, Stammbehälter).—All polygastric Calyconectæ possess a protective cavity, into which the contracted siphosome may retire. This hydræcium (or infundibular cavity) is always an external space, filled with sea-water and invested by the exoderm. In the Monophyidæ it is originally an open groove or fossula on the ventral side of the single nectophore (*Monophyes*, *Cymbonectes*, Pl. XXVII.). This open groove, or the "hydræcial sulcus," becomes a closed cylindrical or conical canal, by concrecence of the two opposite margins, or by deeper invagination of the exodermal fossula, in another part of the Monophyidæ (*Sphæronectes*, *Muggiæa*, *Cymba*, Pl. XLI.). The singular genus *Mitrophyes* (Pl. XXVIII.) has no hydræcium, but it is replaced here by a pouch-like space between the permanent secondary nectophore and a mitre-shaped or scutiform bract, which is the remnant of the reduced primary nectophore.

The hydræcium of the Diphyidæ exhibits various degrees of development. In the Prayidæ it is an incomplete canal, formed by two opposite ventral grooves of the two nectophores, fitting one into another. *Diphyes*, *Diphyopsis*, and the Abylidæ possess a conical infundibular cavity at the ventral side of their first or apical nectophore, and this continues into an incomplete hydræcial canal, formed by a longitudinal groove at the ventral side of the second or basal nectophore. The two margins of this groove are often partly united by concrecence, so as to form a shorter or longer canal. In other cases the two opposite margins of the hydræcial groove are developed in the form of two broad dentate plates (right and left) which overlap one another. The genus *Galeolaria* has no hydræcium, the siphosome hanging freely down between the distal end of the first and the proximal end of the second nectophore.

The hydræcium of the Desmophyidæ and Polyphyidæ is an infundibular cavity between the two opposite rows of nectophores, almost as in the Prayidæ.

*Somatocyst* or *Acrocyst* (top-cavity of the stem, coryphal cavity; Saftsack, Saftbehälter, *cs*).—The single nectophore of the Monophyidæ, and the first or proximal nectophore of the Diphyidæ, contains a remarkable cavity, the acrocyst or somatocyst, at the ventral side of its nectosac and at the top of its hydræcium. This is the uppermost part of the common trunk included in the jelly-substance of the first nectophore; it may be compared to the apical canal or peduncular canal of the ancestral Medusa, which was connected by it with its hydropolyp-parent. The somatocyst is usually spindle-shaped or ovate, at other times subspherical or cylindrical; its upper or apical end is blind, whilst its lower or basal end passes directly into the small apical central cavity, from which arises the central canal of the stem and the pedicular canal of the nectosac.

The narrow cavity of the somatocyst, or the acrocyst-canal, is invested by very large entoderm cells, usually vacuolated and polyhedral owing to mutual compression. Its