

The two nectophores of the second subfamily, Diphyopsidæ (Pl. XXXIII.), are also of nearly equal size and similar form; but they are pyramidal, pentagonal, and placed one behind the other. Their junction is very loose in *Galeolaria*, whilst in *Diphyes* and *Diphyopsis* the apical part of the second is hidden in the hydræcium of the first nectophore. The sharp edges are often elegantly denticulate, and the hyaline jelly-substance of the umbrella is rather hard and firm, cartilaginous, as also is that of Abylidæ (Pls. XXXV.-XL.).

The differentiation of the two nectophores attains the highest degree in the third subfamily, Abylidæ. The first (proximal or apical nectophore, often also called superior or anterior) is here always symmetrical and much smaller than the second (distal or basal nectophore, often called inferior or posterior); this is more or less asymmetrical. Both nectophores are here polyhedral, prismatic, or truncate-pyramidal, with numerous polygonal faces and sharp prominent edges. The form of the second nectophore and its basal ostium is especially characteristic; it offers three prominent wings in *Abyla* (*trigona*), four in *Bassia* (*tetragona*), and five in *Calpe* (*pentagona*).

*Canals of the Nectophores.*—Each of the two nectophores constantly possesses four radial canals in the subumbrella, which are united above the velum by a circular canal. The size, course, and form of the four vessels are very variable, according to the place of their apical junction, where the nectocalycine duct, coming from the top of the stem, enters into the subumbrella. This point of junction is usually placed not at the apex of the nectosac but in its ventral median line, more or less dislocated downwards, so that the ventral canal (*cv*) is shorter, and the dorsal (*cd*) longer than the two symmetrical lateral canals (*cx* right, *cl* left); the latter are often more or less curved or loop-shaped. The ventral canal is very short, rudimentary, or even lost, in the first nectocalyx of *Galeolaria*, because here the point of junction has quite descended, and the nectocalycine duct enters into the base of the subumbrella, instead of into the apex. The opposite dorsal canal is so much the longer.

*Hydræcium.*—The differences which the hydræcium offers in the Diphyidæ, have been already mentioned above (p. 93). The Prayidæ are distinguished by a cylindrical hydræcial canal open at both ends, composed of the ventral grooves of the two opposite nectophores, fitting one into another. *Galeolaria* has no true hydræcium, since the apex of the second nectophore is simply attached to the base of the first, and the siphosome is suspended freely between them. All other Diphyidæ have a conical or campanulate hydræcial cavity on the ventral side of the first nectophore, and as its continuation, a hydræcial canal on that of the second; this is sometimes an open groove, protected by two overlapping wings, at other times a closed canal, produced by concrescence of the two wings.

*Somatocyst (cs).*—The acrocyst or somatocyst ("Saftbehälter") is wanting in the Prayidæ and in *Galeolaria*; it may be replaced in the former by the ascending pallial