

*Pneumatophore*.—The float at the top of the trunk is relatively small, usually ovate or pyriform, and pigmented in the apical part. Its outer wall (pneumatocodon) is connected with the inner wall (pneumatossaccus) by a variable number of vertical radial septa: four in *Strobalia*, six to eight or twelve in *Forskalia* and *Forskaliopsis*, sixteen in *BathypHYsa*. The radial pouches or chambers of the pericystic cavity, which are separated by these septa, are closed above, but open below in the common trunk, beyond the funnel-cavity of the pneumatosac.

*Nectophores*.—The numerous nectocalyces, owing to their multiserial and spiral arrangement on the nectosome, differ in form considerably from those of the other Physonectæ. Usually they are attached to the common trunk by a long pedicle of conical or pyramidal form. Their umbrella is prismatic, with polygonal faces, produced by the mutual pressure of the densely associated nectophores. The subumbrella is more or less compressed in the sagittal direction, dilated laterally, often provided with two lateral horns. Sometimes the exumbrella of the apical part, corresponding to the latter, bears two prominent apophyses. The four radial canals of the nectosac, according to that dorso-ventral compression, are usually of different sizes, the two lateral longer than the two sagittal vessels. The ring-canal which connects them at the constricted ostium of the nectosac is sometimes circular, at other times elliptical. Often some ocelli, red or brown pigment-spots, are visible above the small velum, at the inosculation of the radial canals. From the proximal union of the latter in the top of the nectosac arises a long peduncular canal which runs through the pedicle of the nectophore and opens into the axial canal of the trunk (Pl. VIII. figs. 2, 3).

*Siphosome*.—Corresponding to the high development of the nectosome in the Forskalidæ, this interesting family surpasses all the other Physonectæ also in the complicated composition and extraordinary size of the siphosome; it attains in the largest species a diameter of more than one metre in the fully expanded state; in *BathypHYsa* probably four to six metres or more; in the strongly contracted state it is much smaller. The numerous siphons are attached to the long trunk of the siphosome by very long peduncles, and these, as well as the trunk itself, are densely covered with innumerable bracts. These envelop, densely crowded, the outer surface of the contracted siphosome like a protecting carapace of scales. The entire form of the siphosome is sometimes more cylindrical or inversely conical, at other times more ovate or hemispherical; fully expanded, with widely prominent and brilliantly coloured appendages, it presents a most splendid spectacle.

*Cormidia*.—The number of the cormidia which compose the siphosome is usually very large, thirty to fifty or more, in the larger species several hundreds (sometimes more than five hundred). They are arranged around the axial trunk in a continuous spiral, the turning of which is usually right-handed (or dextrotropic), in contrast to the left-handed (or læotropic) spiral of the nectosome. The trunk itself is correspondingly