polygonal cells. The dilated basal part presents eight longitudinal stripes, the external insertions of the eight radial septa which divide the pericystic cavity of the pneumatophore into eight radial pouches.

Nectophores (figs. 1, 4, lateral view; figs. 2, 3, dorsal view).—The nectocalyces are broad and short, truncate, conical in the tapering distal or basal part, provided with a pair of large auricles in the dilated apical or proximal part. The frontal axis of the latter is three times as long as that of the former, and twice as great as the principal and the sagittal axis. The principal axis is directed obliquely from above and within downwards and outwards. The upper or dorsal face is emarginate convex; the lower or ventral face concave, with a median groove, from which arises the short triangular pedicle attaching the nectophore to the trunk. The two lateral auricles or apical wings are nearly square, slightly bilobate on the lateral edge, and embrace the trunk in the middle interval between two nectophores of the opposite series (an upper and a lower). Each of the two paired wings is nearly as large as the odd basal part of the nectophore.

Nectosac (figs. 1–4).—The subumbrella of the nectophores has nearly the same form as the surrounding exumbrella, from which it is separated by a rather thin but firm jelly-plate. The two lateral auricles, however, are more deeply emarginate in the former, nearly bilobate. The four radial canals are, as usual, of very different size and form; the two sagittal simply curved in the sagittal plane (the dorsal about twice as long as the ventral); whilst the two lateral vessels (right and left) are much longer, and exhibit a complicated undulating course (with four loops), which is intelligible by comparison of figs. 3 and 4 (compare above, p. 216).

Siphosome (fig. 1).—The axial trunk of the siphosome is a slender and exceedingly contractile cylindrical tube, many times longer than the trunk of the nectosome. It has in the fully expanded state a length of 200 mm. or more, and is therefore ten times as long as in the strongly contracted state, when it is only 20 mm. long. The corm contracts very suddenly, and passes over rapidly from the former into the latter state. The entire trunk is densely covered with innumerable prismatic bracts, and at regular large intervals with a great number of ordinate cormidia. All the parts of the corm are so hyaline and transparent, and for the most part so glassy and colourless, that the animal is difficult to perceive, even in the fully expanded state and in motion. The swimming power of the nectosome is great and the usual locomotion very quick.

Cormidia (Pl. XIV. fig. 1; Pl. XV. fig. 5).—Each cormidium is composed of a large siphon (*s*), with a tentacle (*t*), a peculiar cyston (*y*), a male gonostyle (*h*), and a female (*f*), and a number of bracts, which compose a protecting cavity for the former parts. Besides, numerous other bracts cover the long internodes between the cormidia, which bear no other organs.

Bracts (Pl. XIV. fig. 1; Pl. XV. figs. 5, *b*, 6, *b*, 10).—The hydrophyllia are extremely numerous and of a peculiar form, difficult to perceive because of their glassy transparency,