

300 to 400 mm. or more, but when contracted measured only 20 to 30 mm. The long and slender stem is a cylindrical tube scarcely 1 mm. in diameter when contracted, 2 or 3 mm. when expanded. It bears a series of ten to twelve fully developed cormidia in the larger specimen, besides numerous buds of young ones on the top of the stem, below the float. The ordinate cormidia are separated by naked internodes of equal length, the colour of the stem and the gonodendra is bright yellow, of the siphons and tentacles rose.

*Pneumatophore* (figs. 1-3, *p*, fig. 4, in profile; fig. 5 from above).—The large ovate or pyriform float has when contracted a length of 6 mm. and a breadth of 3 mm.; in the expanded state more than double this. Its thick-walled pneumatocodon (or outer wall) is separated by a wide cavity from the pneumatosac (or inner wall); this cavity (the pericystic chamber) is closed above and opens below into the axial canal of the trunk; its greater part is filled up by clustered groups of finger-shaped villi, which arise from the hypocystic funnel (fig. 4, *pv*). The large exodermal giant-cells which compose these villi reach the enormous size of 1.5 to 2 mm.; the surface of the villi is covered with a simple layer of ciliated entoderm cells (fig. 6). The thin chitinous wall of the cuticular pneumatocyst is covered outside by the simple exoderm-layer of the pericystic pneumatosac, inside by the thick yellowish-green endocystic tapetum (fig. 4, *pf*); this is composed of several strata of polyhedral exoderm-cells, filled with greenish granules (fig. 7). The endocystic tapetum is wanting only in the uppermost third or fourth of the pneumatocyst, which is covered outside by a hemispherical or cap-shaped mitra ocellaris (figs. 4, 5, *pp*). Above this mitra, which is composed of red polygonal pigment-cells, are visible the radial muscles (*pm*) and the circular muscles of the sphincter (*pn*), which closes the stigma, or the apical opening of the pneumatocyst (fig. 5, *po*). (For the special structure of the pneumatophore, compare above, p. 308.)

*Siphons* (figs. 1-4, *s*).—The feeding polypites are large cylindrical tubes of rose-colour, which open outside by the distal mouth, inside by the small proximal pedicle into the trunk. The thick muscular wall is very extensible and contractile, as is also the mouth, which may be expanded in the form of a circular suctorial disc. Distinct segments are not visible on the siphon; the greater part of its inside is covered with small and very numerous hepatic villi.

*Tentacles* (fig. 8).—The large cylindrical and rose-coloured tentacle, which is attached to the base of each siphon on its dorsal side, bears a series of very numerous tentilla; their size increases gradually towards the distal third of the tentacle; this third is a simple, thick, cylindrical tube, spirally coiled up, more deeply coloured, and covered with small papillæ, but without tentilla. The lateral branches are small and simple in the proximal part of the tentacle, trifold in the middle part. Each fully developed tentillum bears at the distal end an odd thick median club (fig. 9, *tα*) with a short terminal filament (*tf*); and on both sides of it a pair of slender cylindrical lateral horns (*tc*). Each of these three terminal appendages contains two rose-coloured cnidonodes, composed of