

4 to 5 mm. in diameter, decreases also towards the two ends of the spiral, according to that of the inserted cormidia. Each single cormidium (Pl. XX. fig. 16) is composed of the following parts, which succeed one another in the distal direction, beginning from the uppermost part of the facette:—(1) a simple palpacle (*r*); (2) a large palpon (*p*); (3) a female gonodendron (*gf*); (4) a male gonostyle (*gh*); (5) a tentacle (*t*); and (6) a siphon (*s*). Since the tentacle is only an organ of the siphon, and the palpacle an organ of the palpon, each cormidium may be explained as originally an association of four medusomes, two fertile and two sterile; the umbrellas belonging to the latter may have been originally the nectophores, widely dislocated and separated. The common base of the trunk from which these parts of each cormidium arise, corresponds to a node or a lateral branch of those Siphonanthæ which have prolonged stems with large internodes and widely distant ordinate cormidia. The muscular frame which surrounds each polygonal facette corresponds to the muscle-group of the internode. The facette itself, which becomes visible after the detachment of the palpons, above the gonodendra, is the base of their insertion, with the palponal canal in the centre (figs. 9–13, *cq*).

*Siphons* (Pl. XIX. fig. 1; Pl. XX. figs. 13, 16, *s*).—The single siphon of each cormidium is inserted into its distal side or the inferior part of the node of the trunk; this is the innermost part in the subhorizontally coiled-up trunk, on the concave inside of the spiral bladder. When the siphons are detached from their pedicles, and the trunk seen from below (Pl. XX. fig. 12), the conical papilliform pedicles remaining connected with the trunk form a regular dextrotropic spiral line on its basal face (fig. 12, *sp*). The siphon proper, besides the pedicle, is spindle-shaped or ovate, and has in the dilated state a length of 20 or 30 mm. or more, in the contracted state scarcely 4 to 8 mm. Its basigaster is ovate, large, the thick-walled exoderm full of small cnidocysts. The dilated stomach is rather thin-walled, inside covered with vacuolated villi, without coloured hepatic stripes. The contractile proboscis is very dilatible, with eight strong longitudinal muscle-bands. The distal mouth may be expanded in the form of a large suctorial disc, and is sometimes circular, at other times slightly octolobate (figs. 13, 16, *so*).

*Tentacles* (Pl. XIX. fig. 1; Pl. XX. figs. 13–16, *t*).—The long capturing filament, which arises from the pedicle of each siphon, near the attachment of its basigaster, bears a series of very numerous large tentilla. Each fully-developed tentillum exhibits the peculiar well-known structure of *Physophora*, and is composed of two parts, a long pedicle, the distal portion of which is inflated, and a large pyriform cnidosac (fig. 14). This latter contains, included in a double involucre, a very large, spirally coiled up and reflected pink cnidoband. The two lateral groups of large ensiform cnidocysts, which were originally placed on the proximal end of the cnidoband, lie in the fully-developed tentillum on its distal end; this remarkable inversion is effected by the peculiar development of the involucre described above (p. 260). The proximal base of the involucre is connected in the median line of its concave ventral side with the distal end of the reflected