

They arise partly from the pedicles of the cormidia, partly from the branches of the gonodendra; it may be that many of the former (or perhaps all?) are young siphons, which afterwards get a mouth-opening. Those which arise constantly from the branches of the gonodendra may be distinguished as gonopalpons (fig. 8, *q*). The second kind of palpon is connected with the tentacles, so that always a single tentacle (fig. 6, *t*) arises from a common pedicle with a single palpon (fig. 6, *to*). These tentacular palpons are simple, very contractile, cylindrical tubes, closed at the pointed distal end, whilst their proximal end opens into the common pedicle; they do not possess the hepatic villi of the first kind. Eschscholtz even compared them with the ampullæ of the ambulacral feet in Echinoderms (1, p. 158); Leuckart calls them "Tentakel-Bläschen" (81, p. 197), and Huxley describes them as basal sacs (9, p. 103). The physiological function of these basal ampullæ is, indeed, the same as those of the ambulacral ampullæ in the Echinoderms. The morphological value, however, is very difficult to make out. It may be that they are only secondary organs developed from the base of the tentacles, which originally belong to the siphons. On the other hand it is possible that originally a pair of siphons has arisen from a common pedicle; the first siphon has lost the tentacle and preserved the hepatic villi and the mouth; the second siphon, on the other hand, has lost the latter organs and preserved the tentacle. The incipient basal ampulla (fig. 7, *to*) is much larger than the young tentacle arising from its base (*t*).

*Tentacles* (figs. 1, 3, 6, *t*).—The long tentacles exhibit in all Physalidæ the same structure, accurately described by Huxley (9, p. 103, pl. x. figs. 11, 12). They are slender moniliform filaments, or rather ribbon-shaped tubes, and agree essentially with those of *Salacia* (Pl. XXV. fig. 5, *t*). Only the primary tentacle (fig. 1, *t*) arises directly from the base of the protosiphon; all the other (secondary) tentacles arise from a common pedicle with a siphon and a palpon (fig. 6); or more correctly speaking, the tentacle (*t*) and the tentacular palpon (*to*), closely united, have a common pedicle, which arises from the same stalk of the cormidium as the siphon. As stated above, the palpon (the basal sac or basal ampulla, *to*) bears to the tentacle the same physiological relation as the ambulacral ampullæ of Echinoderms to their feet. In form and structure the numerous slender accessory tentacles are the same as the single large main tentacle, which arises from the middle of the ventral group and surpasses the former ten to twenty times in thickness; its breadth reaches 3 to 6 mm. or more. Its length is usually more than a metre, but it may reach in the expanded state ten to twenty metres or even more, as in *Caravella maxima*. The ventral side of each tentacle bears a muscular suspensorium (similar to a ribbon-shaped mesentery), whilst the dorsal side is beset with a series of very numerous reniform cnidonodes. Each of the latter may be regarded as a kidney-shaped tentillum or lateral branch, since it contains a diverticulum of the tentacular canal. The thick dorsal wall of this cavity is filled with innumerable spherical cnidocysts.

*Gonodendra* (Pl. XXVI. figs. 3, 6, *g*, 8).—The corms of all Physalidæ are monœcious