

apex of the float (or the anterior top) exhibits a beak-shaped, very mobile apophysis, the apical rostrum; and at the upper side of its base is the stigma, or the air-pore (*po*).

Cormidia.—The posterior half of the ventral side of the trunk bears a continuous series of densely clustered cormidia, of the same shape as in the younger and smaller forms of *Caravella maxima*. Each fully developed cormidium (fig. 6) bears on a common short cylindrical pedicle (*ap*) four different organs, viz., (1) a blue siphon with black hepatic villi (*sv*) and a distal mouth (*so*); (2) a long blue or red tentacle beset with a series of reniform cnidonodes (*t*); (3) a slenderly spindle-shaped, light greenish basal ampulla (*to*) arising from its base; and (4) a clustered, yellowish or reddish, monostylic gonodendron of the usual composition (p. 313). The structure of all these parts is the same as in the other Physalidæ, as described above (pp. 345–347).

A variable number of main tentacles (usually six to eight) are far larger than the others, besides the young and undeveloped ones. The primary basal siphon (or the protosiphon, fig. 4, *su*), at the distal end of the trunk, is of the same form and size as the secondary siphons (in the ventral side), but is sterile and bears no gonodendron. Between it and the lowermost (oldest) secondary siphon is a group of small pyriform palpons (without tentacles). This group fills the interval (or the basal internode), which is free and naked in *Alophota* (Pl. XXVI. fig. 3).

Genus 75a. *Physalia*,¹ Lamarck, 1816.

Physalia, Lamarck, Hist. nat. des anim. sans vert., tom. ii. p. 478.

Definition.—Physalidæ with a polythalamous crest on the dorsal side of the large vesicular pneumatophore. Siphosome with a single large main tentacle.

The genus *Physalia* and the following *Caravella* make up together the subfamily Caravellidæ, differing from the preceding subfamily Arethusidæ in the possession of that peculiar dorsal crest of the pneumatophore, which is divided by numerous vertical transverse septa into a series of air-filled triangular chambers. All Physalidæ belonging to the Caravellidæ attain a far larger size and bear a far greater number of organs in their loose cormidia than the preceding Arethusidæ. The genus *Physalia*, in the stricter definition here offered, comprises the greater number of species hitherto described. It bears only a single large main tentacle, much longer and thicker than the numerous accessory tentacles, and differs by this constant character from the following *Caravella*, provided constantly with a greater number of subequal strong main tentacles (usually ten to twenty or more). *Physalia* bears therefore the same relation to *Caravella* as the crestless *Alophota* does to *Arethusa*.

The accurate distinction and sharp definition of the numerous species of *Physalia* which have been described is a very difficult task, owing partly to the numerous transitional

¹ *Physalia* = Sea-bladder, $\phi\upsilon\sigma\alpha$, $\delta\lambda\iota\alpha$.