

can be distinguished. The distal mouth is often expanded in the form of a large circular suctorial disc.

*Tentacles* (figs. 1, 2, 5, *t*).—The long and very expansible tentacle which arises from the base of each siphon (on its upper or dorsal side) is a cylindrical tube of rose-colour, purple at the distal end, beset with a series of very numerous simple lateral branches; their length increases gradually from the proximal to the distal end. These tentilla are thin cylindrical filaments with a simple rounded distal apex. Their canal is excentric, since the thickened dorsal wall is filled with spherical cnidocysts (figs. 6, *kc*, 7), whilst from the thinner ventral wall arise numerous conical papillæ, each of which bears a palpcil or a feeling bristle (fig. 6, *tw*).

*Gonodendra*.—The single gonodendron, which hangs down like a pediculate cluster of grapes from each internode, midway between each two siphons, is rose-coloured and composed of numerous secondary and tertiary gonodendra. Each of the latter (fig. 8) is composed of a single large medusiform gynophore (*f*) and a corona of five to ten (usually seven or eight) ovate androphores (*h*) around its base; the distal end is occupied by a large, very movable, spindle-shaped palpon (*gg*). Each branch of the gonostyle bears two or three pairs of opposite secondary branches.

#### Genus 70. *Pneumophysa*,<sup>1</sup> Haeckel, 1888.

*Pneumophysa*, Hkl., System der Siphonophoren, p. 45.

*Definition*.—Rhizophysidæ with loose cormidia, the gonostyles being attached to the internodes of the stem, between the siphons. Tentacles branched; tentilla trifid, with three terminal branches.

The genus *Pneumophysa* differs from the preceding *Nectophysa* in the form of the tentilla, which are not simple tubular filaments, but provided with three terminal appendages similar to those of *Cannophysa* (Pl. XXIV. figs. 8, 9). The odd median appendage is larger and ampullaceous, whilst the two paired lateral horns are smaller and slender. The cormidia are not ordinate, as in *Cannophysa*, but loose, so that a single gonodendron is attached to each internode of the stem midway between two siphons (almost as in *Nectophysa*, Pl. XXIII. figs. 1–3). The single known species of this genus, *Pneumophysa gegenbauri*, was observed by me in December 1881 in the Indian Ocean, and will be described on another occasion. A second species, similar to this, was noticed in my System der Siphonophoren (95, p. 45) as *Pneumophysa mertensii* (= *Epibulia mertensii*, Brandt, 25, p. 33). But a closer examination of the excellent figures which its discoverer, Mertens, has left of this species, taken in the Tropical Pacific, has convinced me that it belongs to the following genus, *Rhizophysa*.

<sup>1</sup> *Pneumophysa* = Air-bladder, πνεῦμα, φύσα.