

and the cormidia monoclinic; each ultimate branch of the clustered gonodendra is monostylic, since it bears upon the same stalk a single female (*f*) and numerous male gonophores (*h*), intermingled with some gonopalpons (*q*). The structure of these single persons is the same as in the other *Cystonectæ* (compare above, p. 313). The number of gonodendra is usually four to six in the smaller, eight to twelve or more in the larger species; they are very richly branched, and arise from a common stalk with the siphons and palpons (fig. 6). In the largest species each gonodendron bears some thousands of gonophores. (Compare Huxley, 9, p. 105, pl. x. figs. 14, 15, and Chun, 86, p. 1168.) The club-shaped androphores (Pl. XXVI. fig. 8, *h*) come to sexual maturity whilst sessile on the stem, whilst the larger medusiform gynophores (fig. 8, *f*) become detached and produce ova as free-swimming *Anthomedusæ*.

Synopsis of the Genera of Physalidæ.

I. Subfamily ARETHUSIDÆ	}	A single large main tentacle,	.	.	74a. <i>Alophota</i> .
Pneumatophore simple, without polythalamous dorsal crest.	}	Several large main tentacles,	.	.	74b. <i>Arethusa</i> .
II. Subfamily CARAVELLIDÆ.	}	A single large main tentacle,	.	.	75a. <i>Physalia</i>
Pneumatophore provided with a dorsal crest, which is divided into a series of chambers by transverse septa.	}	Several large main tentacles,	.	.	75b. <i>Caravella</i>

Genus 74a. *Alophota*,¹ Brandt, 1835.

Alophota, Bdt., *Prodromus*, &c., 25, p. 37.

Definition. — *Physalidæ* with a simple vesicular pneumatophore, without dorsal polythalamous crest. Siphosome with a single large main tentacle.

The genus *Alophota* and the following *Arethusa* compose together the subfamily *Arethusidæ*, differing from the following subfamily *Caravellidæ* in the absence of the peculiar polythalamous dorsal crest of the pneumatophore. This characteristic crest is also wanting in the young larvæ of the large-sized *Caravellidæ*; the small *Arethusidæ*, therefore, may be regarded as the ancestors of the former, or also as young *Caravellidæ*, which have reached sexual maturity in the larval form (*Pædogensis*). In every case a crestless genus of *Arethusidæ* must have preceded in older times the crested *Caravellidæ*, much in the same way as the crestless *Rataria* has preceded the crested *Veleva*. The crest of the pneumatophore, as an adaptation subservient to sailing, is a secondary acquisition of later times.

The genus *Alophota* was established by Brandt (25, p. 37) for a small crestless *Physalid* from the Tropical Atlantic. Comparing the good figure which Mertens has left

¹ *Alophota* = Without crest, ἀλόφορα.