spherical cnidocysts, a proximal and a distal. The cnidocysts, which are contained in the middle ampullaceous dilatation of the odd median club  $(t\alpha)$ , are twice as large as those in the five other cnidonodes. The three terminal branches of the tentillum are solid, rather rigid cylinders, composed of a single column of large hyaline entoderm-cells, with a thin exodermal envelope similar to those of many hydropolyps and of the Narcomedusæ. The canal of the tentillum ends at the base, from which the three branches arise; its surface is covered with papillæ (fig. 9, ts).

Gonodendra (figs. 1, 2, g).—The single large gonodendron, which is attached to each node of the stem, immediately beyond the insertion of each siphon, has a bright golden-yellow colour. It is like a group of clusters and is composed of numerous smaller gonodendra (of the second and third order), the gonostyle being richly ramified. Each smallest group (or secondary gonodendron) is composed, as usual, of a single medusiform gynophore and a corona of club-shaped androphores, with a distal (rose-coloured) palpon. (Compare Pl. XXIII. fig. 8, and pp. 313, 328.)

Genus 68. Linophysa,<sup>1</sup> Haeckel, 1888.

Linophysa, 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 simple, without tentilla or lateral branches.

The genus *Linophysa* is represented by a single species only, inhabiting the depths of the Atlantic between 800 and 1600 fathoms, and captured several times by Studer, who described it under the name *Rhizophysa conifera* (40, p. 4, Taf. i. figs. 1, 2, 4, 7, 13–18). It differs from all other Rhizophysidæ in the simple form of the long tubular tentacles, which bear no tentilla or lateral branches. The siphons possess sixteen black liver-ridges (while the other Rhizophysidæ possess hepatic villi). The strobiliform gonostyles seem to alternate with the siphons, the cormidia being loose. Each gonostyle bears, like a fir-cone, a spiral row of imbricated gonodendra, each covered by a scale (gonopalpon?). These and other structures described by Studer are so peculiar that *Linophysa conifera* may be perhaps the type of a separate family—Linophysidæ.

> Genus 69. Nectophysa,<sup>2</sup> Haeckel, 1888. Nectophysa, 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 simple, not branched.

<sup>1</sup> Linophysa = Filament-bladder, λίνον, φύσα.