equidistant radial muscles run divergently from the apical centre to the basal periphery, and these are crossed by about a dozen strong circular muscle-rings of equal breadth. The subspherical aurophore (l) is about the same size as a nectophore. The number of nectophores in this species, judging from the insertions of their pedicles, may be twenty or thirty, and they seem to be arranged in a double corona, a superior and an inferior. But the majority of the nectophores were detached in the two specimens examined, and a more accurate examination of their arrangement is required.

Siphosome.—The complete siphosome, including the retracted appendages, is nearly spherical, and may be about the same size as the nectosome. The sagittal section is very similar to that of Stephalia (Pl. VII. fig. 40); but the central axial canal (ac) is wider, and the terminal protosiphon larger (figs. 32, 33, ap). The number of cormidia may be sixty to eighty, and they seem to be arranged in a condensed low spiral. The apical part of the trunk is surrounded by a corona of eight larger cormidia, distinguished by very large annulated tentacles, with a slender terminal filament (figs. 34–38). The other cormidia have slender simple tentacles, similar to those of Stephalia. Each gonodendron (g) bears a large palpon (q).

## Family XIX. RHODALIDÆ, Haeckel, 1888.

Rhodalidæ, Hkl., System der Siphonophoren, p. 43.

Definition.—Auronectæ without a permanent central canal in the axis of the bulbous trunk, and without a permanent primary mouth at its basal pole. Tentacles with a series of tentilla or lateral branches.

The family Rhodalidæ comprises the larger and superior forms of Auronectæ, with branched tentacles, without permanent protosiphon and primary mouth. I was able to examine accurately only a single genus and species of this interesting family, Rhodalia miranda (Pls. I.-V.). A second closely allied genus seems to be Auralia, differing from Rhodalia in the simple corona of nectophores, and in the possession of a large central cavity in the centre of the subglobular trunk of the siphosome. The general composition of the corm, the structure of the nectosome and of the siphosome, and the form of the single organs composing them, have been described above (p. 281). only be added here, that the Rhodalidæ, regarded from a phylogenetic point of view, represent the younger and more highly developed forms of Auronectæ. of the whole corm, as well as of all its single parts, is far larger, and the number of the cormidia and their component persons and organs far more considerable, than in their ancestral forms, the preceding Stephalidæ. The central axial canal of the latter, and its terminal mouth, have either disappeared, or they cannot be distinguished from the other siphonal cavities and mouth-openings. The tentacles produce a series