and its single tentacle into a palpacle. Beyond these sterile medusomes have been developed the fertile ones, in the form of gonostyles, which have produced by budding the gonodendra composed of numerous Medusoid gonophores.

Genus 36. Circalia, Haeckel, 1888.

Circalia, Hkl., System der Siphonophoren, p. 38.

Definition.—Circalidæ with a single corona of nectophores radially arranged around the pneumatophore, and with a series of simple filiform tentilla on the single tentacle.

The genus Circalia (Pl. XXI. figs. 1-4), as the single known genus of Circalidæ, possesses the characters of the family described above. As a peculiar character of the genus may be pointed out the remarkable composition of the corona of (eight) radial nectophores, similar to that of Stephalia (Pl. VII. figs. 39, 48). Another character of generic value may be the simple tubular shape of the tentilla, or the filiform lateral branches of the single tentacle (similar to Nectophysa wyvillei, Pl. XXIII. fig. 5). It differs in this from the similar Circonalia haplorhiza (=Physophora alba, Quoy and Gaimard, 2). Compare above, p. 197.

Circalia stephanoma, n. sp. (Pl. XXI. figs. 1-4).

Habitat.—North Atlantic, west coast of Norway, near the Sogne Fjord; September 1869 (Haeckel).

Nectosome.—The swimming apparatus has a diameter of about 5 mm., and is composed of a large apical pneumatophore and a corona of eight nectophores radially arranged around it. These are attached by short ventral pedicles to a central axial trunk, the uppermost dilated part of which is the pneumatophore, whilst the lower part of the trunk passes over directly into the base of the siphon. From the dorsal side of the latter arises the single tentacle, whilst in the median line of the opposite ventral side (between the two ventral nectophores) a small group of young buds is visible.

Pneumatophore.—The float at the apex of the trunk is pyriform or subspherical, of about the same size as the nectophores (2 or 3 mm. in diameter). Its apex bears a ventral depression or umbilicus (perhaps the closed opening?) and around this a redbrown pigment-star, composed of eight equidistant triangular rays. The basal half exhibits eight longitudinal grooves, the insertions of the radial septa which divide the cavity of the pneumatophore into eight radial pouches (fig. 4, pq, in horizontal transverse section).

Nectophores (figs. 1, 2, n).—The eight swimming-bells which compose the octoradial corona around the central pneumatophore are of rather regular campanulate form.

<sup>1</sup> Circalia = Marine corona, κίρχος, ἄλιος.