

Genus 74b. *Arethusa*,¹ Haeckel, 1888.

Definition.—Physalidæ with a simple vesicular pneumatophore, without dorsal polythalamous crest. Siphosome with several large main tentacles of about equal size.

The genus *Arethusa* was established a century ago (in 1789) by Patrick Browne, for that gigantic Physalid of the Tropical Atlantic, which is known to the sailors as the "Portuguese Man-of-War," and which O. F. Müller and Gmelin had called *Medusa caravella* (afterwards *Salacia*), the type of our genus *Caravella* (Genus 75b). Since the generic name *Arethusa* was afterwards given up and replaced by Lamarck's name *Physalia*, we employ here the former for the designation of those Physalidæ which agree with *Caravella* in the possession of numerous large main tentacles, but differ from it in the absence of a polythalamous crest on the pneumatophore. *Arethusa* exhibits, therefore, the same relation to *Caravella* as the crestless *Alophota* bears to the crested *Physalia*.

Two different species of *Arethusa* were observed by me; the first, *Arethusa thalia* (from the Indian Ocean), is similar to *Alophota giltschiana* (Pl. XXVI. fig. 3), and exhibits a free interval between the single basal cormidium at the distal end of the trunk and the central group of loose cormidia on its ventral side. The second species (inhabiting the Atlantic, and figured in Pl. XXVI. figs. 4–8) does not exhibit that interval, but all the cormidia form together a single large group in the posterior half of the ventral side of the trunk.

Arethusa challengeri, n. sp. (Pl. XXVI. figs. 4–8).

Habitat.—North Atlantic, Station 354, May 6, 1876; lat. 32° 41' N., long. 36° 6' W.; surface.

Canary Islands, Lanzerote; December 1866 (Haeckel).

Corm (fig. 4, lateral view of the mature corm from the right side, in the expanded state; fig. 5, from the left side, in the contracted state).—The largest corms observed which possessed gonodendra at the base of the siphons had a length of 40 mm. to 50 mm. The colour of the corm was greenish-blue; the common trunk and the basal ampullæ light greenish, their tops often reddish; the siphons dark blue, with black villi, their proboscis often reddish; the tentacles partly blue, partly purple. The clustered gonodendra (placed on the right side) had a reddish colour.

Pneumatophore (figs. 4, 5, *pf*).—The float filled with air occupies the greatest part of the trunk; it exhibits as usual very different forms, according to the variable state of contraction. The longitudinal axis is subhorizontal. The outer wall (pneumatocodon) is separated from the inner wall (pneumatosa) by the cavity of the trunk, which is rather wide and sacciform in the posterior half, and especially on the ventral side. The

¹ *Arethusa* = 'Ἀρήθουσα, a Nymph, daughter of Nereus.