During my residence in the Straits of Gibraltar, in March 1867, I once encountered a small elegant Anthophysid, which at first glance I supposed to be a species of *Athorybia*. A closer examination, however, demonstrated that the form of the tentilla was quite different, each spiral cnidotænia being half enveloped by a campanulate involucre and ending with a single terminal filament (as in *Anthemodes*, Pl. XV.). The form of the bracts was very similar to that figured in *Athorybia melo*, which Quoy and Gaimard had observed in the Strait of Gibraltar forty years before (**2**, pl. ii. figs. 7–12). It is possible that these two forms are identical. The single specimen of *Melophysa melo* captured was lost before I could make a drawing of it.

Genus 60. *Athorybia*,[1] Eschscholtz, 1829.

Athorybia, Esch., System der Acalephen, p. 153.

Definition.—Anthophysidæ with simple bracts, without nectosac. Cnidonodes of the tentacles involucrate, trifid, with a median terminal vesicle and two lateral horns.

The genus *Athorybia*, the oldest and best known form of Anthophysidæ, was founded by Eschscholtz for the reception of three closely allied species; the typical Mediterranean form described in 1775 by Forskål (**11**) as *Physophora rosacea*, and two species observed in the Strait of Gibraltar by Quoy and Gaimard, and named *Rhizophysa heliantha* and *Rhizophysa melo* (**20**). An accurate anatomical description of the Mediterranean *Athorybia rosacea* was first given in 1853 by Kölliker (**4**, p. 24, Taf. vii.). *Athorybia heliantha* from the Northern Atlantic seems to be closely allied to it; it differs, however, in the special form of the tentilla described by Gegenbaur (**10**, p. 82, Taf. xxxi. figs. 43, 44). Another form of tentilla is exhibited in the Canarian *Athorybia ocellata* described in the sequel, differing also from the former species the form of the bracts and the possession of ocelli on the palpons. Another species, distinguished by the form of the bracts as well as that of the cnidosacs, is *Athorybia indica*, discovered by Huxley in the Indian Ocean and described under the name *Athorybia rosacea* (**9**, p. 86, pl. ix.). The gonodendra of this species are monostylic, while usually they are distylic. A number of different species of this genus seem to inhabit all warmer seas; they are, however, in general rare, and an accurate description illustrated by figures taken from the living animals is required to render their comparison and specific distinction possible. Special attention must be paid to the bilateral structure of the vesicular trunk, its ventral series of buds (Pl. XII. fig. 9, *ib*, *is*), and the relation of the nectostyle to the siphostyle. In some species of *Athorybia* the retracted pneumatophore is covered on its ventral side by the prominent cucullate nectostyle, as in *Anthophysa* (Pl. XII. figs. 7–9).

[1] *Athorybia* = Pacific, ἀθορύβος.