

however, no warrant for this opinion. *Cavolinia inflexa* certainly belongs to the second subgeneric section of *Cavolinia*, including the more typical or more highly specialised forms, all, in fact, except *Cavolinia trispinosa* and *Cavolinia quadridentata*. Its elongation and its flattening are not a whit more extraordinary than the expansion and shortening of *Cavolinia globulosa*.

From the above observations this results, that the huge list of species is reduced by analysis to eight, and that, without going to an extreme like d'Orbigny, who united all the Thecosomata of the family Cavoliniidæ into a single genus *Hyalæa*, it may be said that at least the eight species above mentioned form a tolerably homogeneous unit within a single genus.

The eight species thus allowed to exist may be distinguished in the following fashion:—

KEY TO THE SPECIES.

- I. Dorsal lip thickened into a pad.
 - 1. Shell with lateral points, *Cavolinia trispinosa*.
 - 2. Shell without lateral points, *Cavolinia quadridentata*.
- II. Dorsal lip with a thin margin.
 - 1. Posterior portion of the ventral lip markedly projecting laterally, *Cavolinia longirostris*.
 - 2. Ventral lip not more developed than the dorsal.
 - A. Shell without appreciable lateral points.
 - a. Shell narrower at the end of the lips than anteriorly.
 - α. Ventral surface rounded, *Cavolinia globulosa*.
 - β. Ventral surface with an anterior transverse keel, *Cavolinia gibbosa*.
 - b. Shell as broad at the end of the lips as anteriorly, *Cavolinia tridentata*.
 - B. Shell with distinct lateral points.
 - a. Upper lip flattened posteriorly, *Cavolinia uncinata*.
 - b. Upper lip directed straight forwards, *Cavolinia inflexa*.

The best series of figures of these eight species is undoubtedly that given by Boas.¹ We shall, therefore, refer to these figures, since it is useless to figure afresh species already sufficiently well known, and hopeless to expect better figures than those of Boas.

*1. *Cavolinia trispinosa* (Lesueur).

- 1821. *Hyalæa trispinosa*, Lesueur, MS. in de Blainville, Hyale, Dict. d. Sci. Nat., t. xxii. p. 82.
- 1827. *Hyalæa mucronata*, Quoy et Gaimard, Observations Zoologiques faites à bord de l'Astrolabe, &c., Ann. d. Sci. Nat., sér. 1, t. x. p. 231, pl. viiib, figs. 1, 2.
- 1832. *Hyalæa depressa*, Bivona, Descrizione di una nuova specie di Jale, &c., Efemeridi scientifiche e litterarie per la Sicilia, p. 57, pl. i. figs. 4, 5.
- 1841. *Hyalæa cuspidata*, Delle Chiaje, Descrizione e notomia degli animali senza vertebre del Regno di Napoli, pl. clxxx. figs. 1, 2 (*non* d'Orbigny).

¹ *Spolia atlantica*, pl. i. figs. 3-11; pl. ii. figs. 14-21.