

On the other hand, Souleyet¹ expresses his belief that *Hyalæa depressa* is only a young state of *Cavolinia inflexa*. This opinion² seems to me correct. In fact my examination of a specimen of *Hyalæa depressa* showed me that this form was sexually immature, with incompletely developed accessory genital glands, while on the other hand the slight thickness of the shell, the length, the comparative narrowness, and the curvature of the posterior portion, are in favour of Souleyet's theory; and besides, *Hyalæa depressa* has been found almost always where *Cavolinia inflexa* occurred in abundance, namely, in the Pacific Ocean, 20° S., 87° W. (d'Orbigny), 5° N., 115' W.; Callao to Honolulu ("Vettor Pisani" Expedition, June 9, 1884); in the Indian Ocean, Colombo to Aden ("Vettor Pisani" Expedition, March 10, 1885); and, finally, in the Atlantic (Challenger Expedition).

Challenger Specimens.—I. Living specimens.

Station 216A, February 16, 1875; Samboangan to New Guinea; lat. 2° 46' N., long. 134° 11' E.

On May 4, 1875; at Yokohama.

Station 350, April 11, 1876; Ascension Island to St. Vincent; lat. 10° 55' N., long. 17° 46' W.

II. Deposit shells.

Station 219, March 10, 1875; Admiralty Islands to Yokohama; lat. 1° 54' 0" S., long. 146° 39' 40" E.; depth, 150 fathoms; bottom, coral mud.

There remain four other names, which are not mentioned by Boas, viz.,

Hyalæa truncata, Lesueur.³

Hyalæa rugosa, d'Orbigny⁴ (*Balantium rugosum*, Gray).

Cleodora trifilis, Troschel.⁵

Pleuropus harger, Verrill.⁶

Souleyet⁷ refers the two former to his "*Cleodora curvata*." This appears to me inaccurate. *Hyalæa rugosa* (which has been found in the South-east Pacific) differs from "*Cleodora curvata*" in being less thick, in being longer in proportion to breadth, and in having a less marked curvature.

I regard this form and *Pleuropus harger* (North-west Atlantic) as two successive stages of *Cavolinia gibbosa*. The length, the slight thickness, the moderate curvature of the initial point in both forms, as well as the slight divergence of the lateral margins, support this opinion.

¹ Histoire naturelle des Mollusques Ptéropodes, p. 44.

² Shared by Weinkauff (Die Conchylien des Mittelmeeres, t. ii. p. 424).

³ In de Blainville, Hyale, Dict. d. Sci. Nat., t. xxii. p. 82.

⁴ Voyage dans l'Amérique méridionale, t. v. p. 118, pl. viii. figs. 12-14.

⁵ Beiträge zur Kenntniss der Pteropoden, Archiv f. Naturgesch., 1854, Bd. i. p. 205, pl. viii. fig. 4.

⁶ Catalogue of the Mollusca added to the Fauna of New England during the past ten years, Trans. Connect. Acad., vol. v. p. 555.

⁷ Histoire naturelle des Mollusques Ptéropodes, p. 52.