Challenger Specimens.—I. Living specimens.

Between Stations 162 and 163, April 3, 1874; Melbourne to Sydney; lat. 38° 7′ S., long. 149° 18′ E.

Station 181, August 25, 1874; Sydney to Raine Island; lat. 13° 50′ S., long. 151° 49′ E.

Between Stations 247 and 248, July 4, 1875; Yokohama to Sandwich Islands; lat. 36° 42′ N., long. 179° 50′ 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.

2. *Cleodora pyymæa*, Boas.

1886. *Cleodora pygmæa*, Boas, Spolia atlantica, p. 84, pl. iv. fig. 57.

The close resemblance which this form presents to *Cleodora compressa* shows that it must be the young stage of a species nearly allied to *Cavolinia trispinosa*. But the only species very nearly related to the latter is *Cavolinia quadridentata*.

In the last mentioned, as in *Cavolinia longirostris*, the initial portion of the adult shell is caducous, and is as yet quite unknown, so that *Cleodora pygmæa* fills up a blank.

The three dorsal ribs of *Cleodora pygmæa* correspond absolutely to those of *Cavolinia quadridentata*. The latter is more globular than *Cavolinia trispinosa; Cleodora pygmæa* is also less flattened than *Cleodora compressa*. Finally, the geographical distribution of the two forms is virtually the same; *Cleodora pygmæa* has only been found in localities where *Cavolinia quadridentata* also occurred, in the Indian and Pacific Oceans.

3. *Cleodora curvata*, Souleyet.

1850. *Clio pellucida*, Gray (*pars*), Catalogue of the Mollusca in the Collection of the British Museum, pt. ii., Pteropoda, p. 14.

1852. *Cleodora curvata*, Souleyet, Voyage de la Bonite, Zoologie, t. ii. p. 185, pl. vii. figs. 6–10.

Boas, following Souleyet, regards this form as a species of *Clio* (*Cleodora*), and denies that it is only a young stage.[1] Nevertheless it must be noted (1) that the figure of Souleyet shows that the genital organs are scarcely developed, a good proof that the form is not adult, and (2) that the absence of a marked constriction limiting the embryonic shell shows that the form in question is a *Cavolinia* and not a *Clio*. Krohn[2] has already identified it as a young *Cavolinia*.

[1] Spolia atlantica, p. 81.

[2] Beiträge zur Entwickelungsgeschichte der Pteropoden und Heteropoden, p. 43.