A NEW SPECIES OF CAVOLINA, WITH NOTES ON OTHER PTEROPODS

BY WM. H. DALL

CURATOR, DIVISION OF MOLLUSKS, U. S. NATIONAL MUSEUM

Having had occasion lately to revise the dry specimens of Thecosomatous Pteropods in the National Museum, in which the collection proved unexpectedly rich, several specimens of a species of Cavolina (=Hyalaa) were found which could not be assigned to any of the recognized species.

CAVOLINA COUTHOUYI, n. sp.

Shell of moderate size, colorless, transparent, inflated, widest at the posterior transverse line of the lateral sinuses; shell in the median line behind blunt, wide, evenly rounded off, with no median spine, the median portion projecting slightly beyond the straight posterior margin of the lateral angles; ventral plate dome-like, the lateral angles triangular, slightly bent dorsally; the lateral clamps as usual in the genus, the anterior lip narrow, slightly reflected backward over a rather wide, strong constriction; surface ornamented with regular, slightly elevated concentric lines, with wider interspaces, which become less wide toward the front; dorsal plate longer, its anterior margin evenly arched over the ventral lip, very slightly produced, with a shallow median, narrow gutter; sculpture of the back with three subequal, low, radial ribs with shallow, wider interspaces, and fine radial striæ crossed by incremental lines; the median rib arching evenly over to the posterior margin of the dorsal lip. Length, 7; width, 7; maximum dorso-ventral diameter, 4.5 mm.

Fiji Islands, A. Garrett, U. S. Nat. Mus., 110,595; New South Wales, Couthouy, on the Wilkes Exploring Expedition, U. S. Nat. Mus., 18,050.

This species has the posterior end rounded as in *C. longirostris*, but the form of the aperture, the sculpture of the back, and the characters of the lateral angles form a combination unlike any of the described species. All the specimens are very uniform in character.

It may be noted that the name of australis (Clio) given by D'Orbigny in 1836 and used in the Challenger Report was used in 1792 by Bruguière for a species now referred to Clione. The later name must therefore he rejected, and for it I would propose the name of Clio antarctica.

In examining numerous specimens of *Peracle reticulata* Orbigny and *P. bispinosa* Pelseneer, I find that, as Pelseneer suspected might be the case, the thin layer comprising the reticulation, while not exactly corresponding to the periostracum, is nevertheless dehiscent, and we have several specimens of *bispinosa* which partially retain it. The reticulation is sometimes partly hexagonal and partly quadrangular on the same specimen, and is more or less calcareous. The puckered sutural margination, which was supposed to be characteristic of *P. bispinosa*, often appears only late in life, the spine on the lip only with complete maturity, so that it is probable that *bispinosa* is only a completely developed mature phase of reticulata. It is also likely that *Limacina triacantha* Fischer should be referred to the genus *Peracle*, from which the shell seems to differ only by its less elevated spire.

Heterofusus peponum Gould is the fry of a Gastropod, probably a species of Lampusia. This determination is made from Gould's type. Limacina helicina Phipps, which is admirably figured by Sars (Moll. Reg. Arct. Norveg., pl. 29), is instantly distinguishable from L. pacifica Dall by its surface sculpture, which in the former is uniform, close, and regular, while in the latter the axial striæ are sparse, distant, and irregular—in fact, nearly obsolete. Heterofusus balea and retroversus may also be easily distinguished, as Sars' contrasting figures indicate. Clione dalli Krause, from Bering Strait, is certainly an immature animal and probably, as believed by Pelseneer, the young of Clione limacina Phipps. Clione elegantissima Dall, from the North Pacific, is, however, a much smaller and fully mature animal, with no resemblance in form, color, or details of its external structure to C. limacina at any stage of its development. No one familiar with both in the living state could possibly confound the two species; but specimens preserved in spirits are subject to such irregular contraction and modification that any one knowing them only by such distorted material must necessarily be more or less misled as to their natural appearance.