

A NEW GENUS AND SPECIES OF SEA-SLUG, AND TWO NEW SPECIES OF SEA-HARES FROM AUSTRALIA.

By

JOYCE K. ALLAN,
Assistant, Conchological Department, Australian Museum.

(Plates xxxiv-xxxv.)

During the last two years I have been able, through the kindness of the Director of the Taronga Zoological Park and the help of the staff of the Zoo Aquarium, to study and make observations upon Mollusca, particularly sea-slugs and sea-hares, living there in captivity. This has helped me considerably in identifying or describing material, as the animals of both these groups mentioned are liable to undergo a severe change in colour and form in preservative, and unless some record of these characters is made when the animals are alive, later research work on them may prove very difficult.

My thanks are, therefore, due to those who have helped me in this way, and I hope as a result of the opportunities afforded me, and with the aid of the material in the Australian Museum collection, to publish papers dealing with these two groups, so common in Australia yet so much neglected, the sea-slugs and the sea-hares.

Family FIMBRIDÆ.

Genus *Propemelibe*, gen. nov.

Orthotype, *Propemelibe mirifica*, sp. nov.

Animal very large and showy, gelatinous, elliptical in shape, with a constricted neck and the head enlarged into an enormous rounded fringed veil with thickened edges. This veil is about half the size of the main part of the body. Rhinophores about half-way down the veil, set fairly well apart and retractile into truncate sheaths with minute stalks. Dorsal surface of the animal covered with irregular sized pustules and branched filaments, including the cerata. Cerata arranged in a single row along each side, very large when fully grown, about 5-7 along each side.

Foot very broad, mouth at the base of the veil, with thickened lips, no radula, but minute jaws. A dark belt of horny processes lines the lower portion of the posterior part of the stomach. Liver divided, extending to the cerata.

I have been compelled to create this new genus for the very interesting and hitherto unrecorded species described below, because of the difficulty experienced in placing it definitely in either of the two genera it resembles. Externally it resembles the genus *Fimbria* Bohadsch, 1761,¹ but, on the other hand, it has several internal characters of the genus *Melibe* Rang, 1829.²

¹ Bohadsch.—*Animalibus Marinis*, 1761, pp. 54-64, pl. v, figs. 1-3; O'Donoghue, *Trans. Zool. Soc.*, xxii, 6, 1929, p. 715.

² Rang.—*Manuel de l'Histoire Naturelle des Mollusques*, 1829, p. 129, pl. iii, fig. b.