

## Order II. TETRABRANCHIATA, Owen.

## Family XXII. NAUTILIDÆ.

*Nautilus*, Linné.*Nautilus pompilius*, Linné.

1758. *Nautilus pompilius*, Linn., Syst. nat., ed. x. p. 709; No. 283, 233.

1868. „ „ Küster, Conch. Cab., sec. 55, p. 9, taf. ii. fig. 9.

*Habitat*.—Station 173, off Matuku, Fiji Islands; June 24, 1874; lat. 19° 9' 35" S., long. 179° 41' 50" E.; 315 fathoms; coral mud. One specimen.

The specimen of *Nautilus pompilius* obtained by the Challenger was not in the collection when it came into my hands, so that I can give no further information regarding it than is contained in the following quotation from the Narrative.

“In dredging off Matuku Island, in 310 and 315 fathoms, on a coral bottom, some *Phorus*, *Turritella*, and a few other shells were brought up, as well as numerous specimens of the blind Crustacean, *Polycheles*, and other animals showing the fauna to be a true deep-water one.

“A living specimen of the Pearly Nautilus (*Nautilus pompilius*), so rarely seen in the living condition by any naturalist, was captured here. This was the only specimen of this animal obtained by the dredge or trawl during the voyage. The animal was very lively, though probably not so lively as it would have been if it had been obtained from a less depth, the sudden change of pressure having no doubt very much disarranged its economy. However, it swam round and round a shallow tub in which it was placed, moving after the manner of all Cephalopods, backwards, that is with the shell foremost. It floated at the surface with a small portion of the top of the shell just out of the water, as observed by Rumphius.<sup>1</sup> The shell was maintained with its major plane in a vertical position, and its mouth directed upwards. The animal seemed unable to sink, and the floating of the shell, as described, was due no doubt to some expansion of gas in the interior, occasioned by diminished pressure. The animal moved backwards slowly by a succession of small jerks, the propelling spouts from the siphon being directed somewhat downwards, so that the shell was rotated a little at each stroke, upon its axis, and a slightly greater area of it raised above the surface of the water. Occasionally, when the animal was frightened or touched, it made a sort of dash, by squirting out the water from its siphon with more than usual violence, so as to cause a strong eddy on the surface of the water. On either side of the base of the membranous operculum-like head-fold, which, when the animal is

<sup>1</sup> De Amboinsche Rariteitkamer, p. 61, Amsterdam, 1705.