

Radula.—Formula 3 : 1 : 3 ; the median tooth is tricuspid.

Hook-sacs.—Each with about ten rather long hooks.

Colour, brownish.

Length, 5 mm. The two posterior ciliated rings remain until a late period. The three rings were still visible in a specimen 3 mm. long.

Habitat.—The type-specimens, described by Boas, were gathered by the Italian ship "Vettor Pisani," in the South-East Pacific, off Caldera (Chili), about lat. 27° S., February 18, 1882.

In a part of the collection of this scientific expedition, which had not been seen by Boas, I have found larvæ of a species of Gymnosomatous Pteropod, caught off Panama about lat. 8° N., December 1883 (Pl. I. fig. 5), among which the oldest shows the peculiar acetabuliferous appendages of *Dexiobranchæa polycotyla*. Thus the geographical distribution of this species embraces the whole South-West Pacific, along almost the whole west coast of South America.

Challenger Specimens.—The Challenger specimens which belong to this species, are the very young larvæ of Gymnosomata described by H. N. Moseley,¹ from Station 297, November 11, 1875, Tahiti to Valparaiso, lat. 37° 29' S., long. 83° 7' W. These larvæ differ from those of *Pneumonoderma*, and resemble much that of *Dexiobranchæa ciliata*, described by Gegenbaur.² Besides, the abundance of *Dexiobranchæa* in this region enables me to place these larvæ with great certainty in this last genus.

As these specimens have not been preserved, and since the formula of their radula has not been recorded, it may seem difficult to determine specifically larvæ that are so young. Nevertheless, it is nearly certain that they belong to the present species, not only on account of its extensive geographical distribution, of its comparative abundance, and perhaps of the elongated form of the larva, but chiefly on account of the length of the posterior lobe of the foot.

Spongiobranchæa,³ d'Orbigny.

1825. "*Clidita*," Quoy and Gaimard (*pars*), Description de cinq genres de Mollusques, Ann. d. Sci. Nat., sér. 1, t. vi. p. 74.
1840. *Spongiobranchæa*, d'Orbigny, Voyage dans l'Amérique méridionale, t. v. p. 130.
1842. *Spongiobranchia*, d'Orbigny, Paléontologie française, terrains crétacés, t. ii. p. 4.
1856. *Spongiobranchæa*, Woodward, A Manual of the Mollusca, p. 209.
1862. *Spongobranchia*, Bronn, Die Klassen und Ordnungen des Thierreichs, Bd. iii. p. 645.
1885. *Spongobranchus*, Wagner, Die Wirbellosen des weissen Meeres, Bd. i. p. 120.

Body ovate, rather long, round posteriorly ; visceral mass extending to the posterior extremity of the body ; skin pigmented.

¹ On *Stylochus pelagicus*, &c., *Quart. Journ. Micr. Sci.*, 1877, p. 32, pl. iii. fig. 14.

² Untersuchungen über Pteropoden und Heteropoden, pl. iv. fig. 11.

³ From *σπογγία*, sponge, and *βραγχία*, gill.