

setose cilia." At my request, Dr Halifax of Brighton made for me a series of preparations of the mantle of both *Discina lævis* and *Discina atlantica*. These last, from specimens brought home by the Challenger Expedition, showed in the most admirable manner the highly vascular mantle, fringed with long horny setæ entirely agreeing with the description and illustrations of Professor Owen and Dr S. P. Woodward. The cirri are of great length, and barbed throughout, with spine-like asperities, in some cases they bifurcate near their extremities, and lie close together at their origin. In some specimens of *Discina lævis*, great numbers of full-grown *Pedicellinæ*, belonging to the Polyzoa, adhered to the long barbed cirri (Pl. IV., fig. 17, *b*), looking like Lingulæ, with their long pliant peduncles. The smaller valve of *Discina atlantica* was described by Dr Gwyn Jeffreys, from a North Atlantic specimen, obtained during the "Valorous" Expedition—"Flat, thin, having near the middle a comparatively small round disk, within which is an oval slit for the passage of the byssal stalk (peduncle) of attachment. This disk is slightly sunk within a calcareous substance to which it is attached, as if the byssus had the power of excavation; the rest of the lower valve is free and concentrically striated, like the upper valve. Muscular (adductor) scars in the upper valve, club-shaped, rather close together, no scars observable in the lower valve, not the slightest trace of tubular or perforated structure could be detected in either valve, with one of Smith's and Beck's best microscopes, under a lens of one-fifth power." I am not certain that this species has been hitherto positively found in the fossil state, but Dr Gwyn Jeffreys thinks that the *Discina fallax*, S. Wood, from the crag of England, may, perhaps, be referable to the species under description.

*Discina stella*, Gould (Pl. IV. fig. 19, *a*).

*Discina stella*, Gould, Mem. Boston Soc. Nat. Hist., vol. vii. p. 323; Otia Conch., p. 120, 1860.

*Orbicula stella*, Reeve, Conch. Icon., pl. i. fig. 1, 1862.

*Discina stella*, Dall., Am. Journ. of Conch., vol. vii. part 2, p. 76, 1871.

Shell orbicular, about as broad as long; upper valve conical, and moderately elevated, vertex sub-central, surface marked by numerous radiating striæ, vertex almost smooth, yellow. Attached valve almost flat. Length 6, breadth 6, depth 3 mm.

*Habitat*.—Five upper valves of this species were dredged by the Challenger Expedition, off Bermuda, at Station 190, lat. 8° 56' S., long. 136° 5' N., on September 12, 1874, in 49 fathoms. Bottom temperature, 23° 9 C. Sea bottom, mud. It has also been found by Mr Cuming, near Singapore, and the Philippine Islands. Stimpson and Wilkes quote it from the China Seas.

*Observations*.—In his Conch. Icon., Reeve states that "this species has a wide distribution in eastern seas. On comparing authentic specimens received from Dr Gould, of which is given at fig. 1, *b*, collected in the China Sea, by Wilkes' exploring expedition, I find them identical with specimens collected by Mr Cuming, attached to fragments of