

It may be observed that the Southern-Ocean forms, when compared with those from South America, have the rays broader at the base, and though relatively shorter are rather more distinctly cylindrical, the union of the abactinal and lateral areas being less angular and less conspicuous. The abactinal area is habitually much more inflated, which gives the variety a conspicuously puffed-up appearance. The small isolated spinelets or enlarged squamules on the marginal plates are smaller and less developed; and in young examples may be absent altogether from the infero-marginal plates and represented on the summit of the supero-marginal plates by a squamule only very slightly greater than those forming the rest of the covering of the plates. The peculiar curvature of the lateral spinelets in the adambulacral armature is less pronounced and is often scarcely noticeable. These modifications, viewed in conjunction with their constancy and the wide separation of the localities, appear to me, after a careful study of a large series of examples, sufficient to warrant the recognition of the variety by name. The colour in alcohol of the variety is also different, being of a warmer shade, approaching pink or light pinkish brown.

An example from Heard Island dredged in 75 fathoms is fully twice as large as the generality of specimens belonging to this species collected during the Expedition. In the two examples from this locality the rays are not relatively so broad at the base as in the Kerguelen specimens, and are more angular at the junction of the abactinal and lateral areas: they have notwithstanding the "obese" appearance; and I have provisionally ranked them with the variety. Their colour in alcohol is somewhat darker.

Localities.—Station 149H. Off Cumberland Bay, Kerguelen Island. January 29, 1874. Depth 127 fathoms. Volcanic mud.

Station 151. Off Heard Island. February 7, 1874. Lat. 52° 59' 30" S., long. 73° 33' 30" E. Depth 75 fathoms. Volcanic mud. Surface temperature 36°·2 Fahr.

2. *Bathybiaster vexillifer*, Wyville Thomson, sp.

Archaster vexillifer, Wyville Thomson, 1873, *The Depths of the Sea*, p. 150, fig. 25.

Locality.—"Porcupine" Expedition:

Station 76. 1869. In the Faerøe Channel. Lat. 60° 36' N., long. 3° 58' W. Depth 344 fathoms. Bottom temperature - 1°·1 C.; surface temperature 10°·1 C.

Remarks.—This species is included here on the strength of the description and figure given by Sir Wyville Thomson. I have never seen the type or any other specimen from the "Porcupine" collection which can be referred to it. Danielssen and Koren¹ have already pointed out the probability that the form belongs to this genus, a view in which I entirely concur, so far as judgment can be drawn from the description and woodcut published in *The Depths of the Sea*. Viguiet,² on the other hand, has expressed the opinion

¹ Den Norske Nordhavs-Expedition, 1876-78, *Zoologi*, xi. *Asteroidea*, 1884, p. 94.

² *Archives de Zool. expér.* 1878, t. vii. p. 240.