

smaller and rather wider apart; indeed, in some specimens one is almost inclined to class them along with the secondary series. Midway on the horizontal margin of the flange is one small pointed mouth-spine; and in a large specimen a second and rather larger spinelet occurs between this and the innermost mouth-spine, and nearer to the latter.

The actino-lateral spines are rather robust, well spaced, tapering slightly at the tips, excepting those spines included within the interradial area, which are slightly thickened, and do not meet their corresponding spines from the neighbouring ray in the median interradial line. There are twenty-five to twenty-seven actino-lateral spines on each side of a furrow, the seventh or eighth from the mouth being longest; after this they gradually diminish in size as they proceed outward, maintaining, however, a fair length even at the extremity, where they are a little shorter than the first (or adoral) spine of the series, thus forming a conspicuous little fringe round the extremity of the ray. The ambulacral furrow is extended vertically up the extreme tip of the ray, but is not exposed on the abactinal surface, being arched over by the terminal spinelets just described. Immediately inside this ocular fringe on the abactinal surface is a little ridge of eight to ten minute conical spinelets or papillæ, which forms a semi-circular collaret at the extreme tip.

The actinal membrane is as transparent as the abactinal membrane, the actino-lateral spinelets forming the floor of the test and projecting only their pointed tips beyond the sharp margin, to which they impart a delicate serrate character.

Colour in alcohol, a light straw colour verging towards golden brown.

Locality.—Station 122-122c. Off the coast of Brazil, south-east of Pernambuco. September 10, 1873. Lat. $9^{\circ} 5' 0''$ S. to $9^{\circ} 10' 0''$ S., long. $34^{\circ} 49' 0''$ W. to $34^{\circ} 53' 0''$ W. Depths 32, 120, 350, 400 fathoms. Red mud. Surface temperature $77^{\circ} \cdot 5$ Fahr.

Unfortunately only the Station number is indicated on the label accompanying these specimens, and no record is given as to the particular dredging in which they were obtained.¹

Genus *Hymenaster*, Wyville Thomson.

Hymenaster, Wyville Thomson, *The Depths of the Sea*, London, 1873, p. 120.

This genus was established by Sir Wyville Thomson for the reception of a remarkable Asterid discovered during the cruise of H.M.S. "Porcupine." Only a single example was obtained, and, although the form was not fully described, the characters which distinguish it from *Pteraster* were duly recognised and a good figure of the actinal aspect of the starfish was given by Sir Wyville Thomson. Some doubts were subsequently expressed by Perrier² as to the validity of separating *Hymenaster* from *Pteraster*, but

¹ From an examination of our Station notes I have no doubt the specimens came from the trawling in 350 fathoms.—*Ed.*

² *Nouv. Archives Mus. Hist. Nat.* 1878, 2e Série, t. i. p. 55.