

less defined in the centre of the disk, similar to that present in some species of *Astropecten*, but is usually more conspicuously developed, although it does not attain the tubular form of this appendage found in *Porcellanaster*.

Actinal interradial areas extensive, paved with numerous thin intermediate plates arranged in regular columns and imbricating.

Ambulacral furrows narrow and concealed. Armature of the adambulacral plates consisting of short compressed spines, three to five in number, usually forming a kind of fan or independent series on each plate.

Cribriform organs five to seven (or nine<sup>1</sup>) in number in each interbrachial arc.

*Synopsis of the Species included in the Genus Hyphalaster herein described.*

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| A. Five cribriform organs in each arc. Abactinal area with prominent groups of paxillæ .   | <i>diadematus.</i> |
| B. Seven cribriform organs in each arc. No prominent groups of paxillæ on the abactinal area.  |                    |
| a. Supero-marginal plates meet in the median line. Cribriform organs very narrow. Secondary row of granules behind the furrow series of spines on the adambulacral plates aborted or absent.                                     |                    |
| a. Disk with very imperfect pseudo-paxillæ. Two innermost supero-marginal plates on each side of the median interradial line with small spinelets. Mouth-plates with secondary mouth-spines. Body frame very thin and delicate . | <i>hyalinus.</i>   |
| b. Disk with fully developed paxillæ. No spinelets on the supero-marginal plates. No secondary mouth-spines. Body frame robust and rigid .   | <i>inermis.</i>    |
| b. Supero-marginal plates not united in the median line. A series of small secondary granules behind the furrow series of spinelets in the armature of the adambulacral plates. Cribriform organs very broad and expanded .      | <i>planus.</i>     |

M. Perrier<sup>2</sup> mentions by name two starfishes which he refers to *Hyphalaster*, dredged in the Atlantic during the "Talisman" Expedition, from 2995 and 4787 metres respectively. This is an interesting extension of the range of the genus, as no representatives of it were found in the Atlantic during the Challenger Expedition. Unfortunately no descriptions of the species are given, and I am therefore unable to compare them with the present series. The following is the only information respecting them given (*loc. cit.*, p. 886) by M. Perrier:—"Les *Hyphalaster* (*Hyphalaster Antonii*, E. P., *Hyphalaster Parfaiti*, E. P.) ont leurs plaques adambulacraires de forme normale, et non pas obliques, par rapport à la gouttière qu'elles bordent; le premier a sept organes cribriformes, dont deux rudimentaires, mais il y a, pour chaque bras, neuf plaques marginales dorsales dont les quatre dernières se soudent à leurs symétriques; le second a neuf organes cribriformes."

<sup>1</sup> *Fide* Perrier, *Comptes rendus*, 1885, t. ci. p. 886.

<sup>2</sup> *Comptes rendus*, 1885, t. ci. p. 886.