

from the infero-marginal plates. All these actinal intermediate plates bear uniform squamule-like papillæ invested with membranous sacs.

Adambulacral plates large and pentagonal in shape. Armature consisting of:—(1.) An angulated furrow series of five short, subequal, papilliform spinelets, the median one being triangular in section. (2.) On the actinal surface two longitudinal series of short, flattened spinelets, the inner series often disposed in such a manner as to close against the furrow series, thus forming perhaps an incipient pedicellarian apparatus. All the spinelets are in membranous sheaths.

Madreporiform body small, oval, and situated about its own diameter distant from the margin of the paxillar area.

No pedicellariæ are present.

*Remarks.*—This genus is distinguished from *Bathybiaster* by the presence of the epiproctal cone, and by the absence of the pedicellariæ which specially characterise the latter form.

The genus *Ilyaster*, established by Danielssen and Koren<sup>1</sup> for the reception of a small Asterid furnished with a remarkably developed epiproctal prolongation, dredged during the Norwegian North Atlantic Expedition, is probably more nearly related to this genus than to any other form with which we are acquainted. So far as I am able to judge from the description and figures alone, the position of *Ilyaster* in the tabular scheme of the family would probably be adjacent to *Phoxaster*, and perhaps intermediate between that genus and *Bathybiaster*. It differs from *Phoxaster* by the extraordinary development of the "dorsal appendage" and by the character of the armature of the adambulacral plates; furthermore, as no mention is made in the careful description given by its authors of any special membranous investment of the general tegumentary spinulation or granulation, *Ilyaster* probably differs in that respect also.

Respecting the dorsal appendage, it may be remarked that the difference in the relative size of that structure in *Ilyaster* and *Phoxaster* is not greater than that existing between different species belonging to the genus *Porcellanaster*; for instance, between *Porcellanaster cæruleus* and *Porcellanaster caulifer*. The structure of the prolongation, however, would appear to be much more specialised in *Ilyaster* than in *Phoxaster*. I fully share with the learned describers of *Ilyaster* their doubt as to its being an adult form.

I have on a preceding page (pp. 131, 132) stated my opinion that this elongate epiproctal prolongation is in no way homologous to the stem of a Crinoid, as maintained by Drs Danielssen and Koren.<sup>2</sup>

<sup>1</sup> *Nyt Mag. f. Naturvidensk.*, Bd. xxviii. 1ste Hefto, p. 4, tab. i. ii. figs. 15-19; Den Norske Nordhavs-Expedition, 1876-78, Zoologi, xi. Asteroidea, 1884, p. 100, tab. vii. figs. 15-19.

<sup>2</sup> *Loc. cit.*, pp. 102, 103.