

adambulacral plates behind the first pair are more frequently in single series than in oblique pairs, forming a slightly oblique line on the ridge much more distinctly than in *Pholidaster squamatus*. The spinelets are also rather shorter than in that species, and show a slight tendency to be curved.

Colour in alcohol, a bleached greyish white, with a tendency to a light brownish shade.

*Locality*.—Station 192. In the Banda Sea, between the Ki Islands and the Banda Islands. September 26, 1874. Lat.  $5^{\circ} 49' 15''$  S., long.  $132^{\circ} 14' 15''$  E. Depth 140 fathoms: Blue mud. Surface temperature  $82^{\circ} 0$  Fahr.

#### Family STICHASTERIDÆ, Perrier, 1885.

The general structure of the small group of forms now classified together fully warrants, in my opinion, their recognition as an independent family. The skeleton of *Stichaster* differs so essentially from that of the Asteriidæ that I venture to think the justice of the step taken by Perrier<sup>1</sup> will not be disputed. I differ, however, from Perrier, in that I exclude from the Stichasteridæ the genus *Zoroaster*, which, with its allies, I have placed in a separate family. The Stichasteridæ in many respects occupy an intermediate position between the Zoroasteridæ and the Asteriidæ.

Of the two new genera which I have ranked in this family, *Neomorphaster* and *Tarsaster*, the former is especially striking for the approach it presents to the Zoroasteridæ.

The family comprises the genera *Stichaster*, *Neomorphaster*, and *Tarsaster*.

#### Genus *Stichaster*, Müller and Troschel.

*Stichaster*, Müller and Troschel, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, 1840, April, p. 102.

*Tonia*, Gray, Ann. and Mag. Nat. Hist., 1840, vol. vi. p. 180.

*Cælasterias*, Verrill, Trans. Conn. Acad. Arts and Sci. 1871 (1867), vol. i. part 2, p. 247.

*Stephanasterias*, Verrill, Bull. Essex Institute, 1872 (1871), vol. iii. p. 5 (non *Stephanaster*, Ayres, 1851).

So far as at present known this genus appears to be confined to the temperate and frigid zones; and most of the species are probably limited bathymetrically to the Littoral zone, only two occurring in the Continental zone and one in the Abyssal zone.

#### *Chorology of the Genus Stichaster.*

##### a. *Geographical distribution*:—

ATLANTIC: Six species between the parallels of  $80^{\circ}$  N. and  $60^{\circ}$  S.

\**Stichaster albulus*, from Greenland, the northern coasts of the American continent, Iceland, and Spitzbergen. \**Stichaster roseus*, from the coasts of Britain and Norway. *Stichaster arcticus*, off

<sup>1</sup> Ann. Sci. Nat. (Zool.), 1885, t. xix. Art. No. 8, p. 15.