

DESCRIPTION OF GENERA AND SPECIES.

CLASS ASTEROIDEA.

Sub-class EUASTEROIDEA, Sladen, 1886.

Order PHANEROZONIA, Sladen, 1886.

Family ARCHASTERIDÆ (Viguier, 1878), *emend.* Sladen, 1886.

This family was first established by Viguier,¹ and comprised in his estimation the single genus *Archaster* of Müller and Troschel, to which at that date about twelve species were referred. Viguier, however, appears to have only had the opportunity of examining specimens of three or four of these, and the two species, *Archaster typicus*, M. and T., and *Archaster angulatus*, M. and T., were the forms taken by him as typical, and from the study of which the characters of the family were formulated. The genus *Archaster* was first established by Müller and Troschel,² for the reception of the two species named by them *Archaster typicus* and *Archaster hesperus*. Other species were subsequently referred to the same genus, though many are so widely different that latterly *Archaster* might well lay claim to be considered as the "refuge for the destitute!" It is scarcely exaggeration to say that most of the long-rayed Phanerozonte Asterids that could not immediately be ranked either as *Pentagonaster* on the one hand or *Astropecten* on the other, were at once set down as *Archaster*! Amongst the Starfishes thus disposed of were several deep-water forms, and a number of those recently discovered were temporarily relegated in like manner to *Archaster* at the time they were taken, and before the species were systematically described. In this way *Archaster*, and consequently the Archasteridæ, have come to be spoken of as characteristic abyssal forms.

I have considered it desirable, for reasons explained in their proper place, to divide the species that have hitherto been called *Archaster* into several genera, and some of these it has been necessary, on account of their structure, to remove from the family Archasteridæ altogether. The establishment of several new genera has likewise been requisite for the reception of new types. Amongst the series of allied genera that constitute in my classification the family Archasteridæ, the genus *Archaster* as now limited is in many respects a very divergent form, and is certainly not the one which I

¹ *Archives de Zool. expér.*, 1878, t. vii. p. 235.

² *Monatsber. d. k. Akad. d. Wiss. Berlin*, April 1840, p. 104.