

Station 200. East of Samboangan, Philippine Islands. October 23, 1874. Lat.  $6^{\circ} 47' 0''$  N., long.  $122^{\circ} 28' 0''$  E. Depth 250 fathoms. Green mud. Surface temperature  $85^{\circ} 5$  Fahr.

On the reefs at Kandavu, Fiji Islands. August 1874.

*Remarks.*—Attention may be drawn to the occurrence of this species at 250 fathoms (Station 200), for it is, so far as I am aware, the greatest depth at which *Archaster typicus* has been found. I can detect no differences worthy of remark between these examples and specimens from shallow water.

It is interesting to note that amongst this series from Station 200 there are two examples which are provided here and there with short, conical, robust, stunted spinelets, standing upright on the upper margin of the supero-marginal plates. These spinelets are quite irregular in their occurrence. In one of the examples less than a dozen are present on the whole starfish, but in the other case they are much more numerous. In this example it is also to be remarked that the lateral walls of the rays are much more vertical than in the other specimens from this locality, the supero-marginal plates being less bevelled or arched towards the abactinal surface, with which the lateral wall consequently forms a more angular junction, resembling in this respect the character of *Archaster angulatus*. In all other respects this interesting specimen is an extremely well-marked example of *Archaster typicus*.

Lütken<sup>1</sup> has placed on record the presence of occasional spinelets on the supero-marginal plates of this species, and it appeared to be of frequent occurrence in the large series of examples from the Nicobar Islands studied by him. Through his kindness I had the opportunity of examining a remarkably fine example from Billeton in the Natural History Museum at Copenhagen, in which from four to six spinelets were present on each side of a ray. In the Museum at Leyden are examples from Java and the Togeian Islands (N.E. of Celebes) also similarly characterised, and this form has been named in manuscript by Professor C. K. Hoffmann *Archaster typicus*, var. *multispina*. The presence of these spinelets on the supero-marginal plates is so very irregular and sporadic, and seems to me to be unaccompanied by any other character of sufficient importance, that I fail to appreciate the necessity of ranking the examples in question as a named variety.

The normal composition of the adambulacral armature in this species is:—(1.) A furrow series of three spines, the middle one much in advance of the other two, at the apex of the angular projection of the plate; (2.) on the actinal surface of the plate are three spines, often flattened and truncate, forming a lineal series slightly oblique in relation to the axis of the ray (on the outer part of the ray there are usually only two<sup>2</sup>); behind these are two much smaller spinelets, placed wide apart and close to the margins

<sup>1</sup> *Videnskab. Medd. naturh. Foren. i Kjøbenhavn*, 1864 (1865), p. 136.

<sup>2</sup> Lütken has remarked on the apparent discrepancy in the original diagnosis of Müller and Tröschel (*System der Asteriden*, p. 65), in which two are stated to be the normal number. (*Videnskab. Medd. naturh. Foren. i Kjøbenhavn*, 1864 (1865), p. 135.)