

Disk 20 mm.; spread reaching 25 cm.

Locality.—Station 174B, C, or D, August 3, 1874; near Kandavu, Fiji; lat. (about) 19° 6' S., long. (about) 178° 18' E.; 255, 610, or 210 fathoms;¹ coral mud; bottom temperature at 610 fathoms, 39° F. One mutilated specimen.

Other Localities.—Malacca; Jobie; Zebu; Fiji; Kingsmill Islands.

Remarks.—This species is the one for which the genus *Phanogenia* was established by Lovén² on account of its stellate centro-dorsal and exposed first radials. The same peculiarity was noted by Dr. Lütken in an *Actinometra* of the Godeffroy collection from Fiji, to which he gave the MS. name *Actinometra stellata*; and duplicates of the type have been distributed from the Godeffroy Museum under this name. Having examined some of these duplicates, and also by the kindness of Professor Lovén his original specimens of *Phanogenia*, I came to the conclusion, as Dr. Lütken had previously done, that the two types are identical. Lovén's generic name thus becomes a synonym of *Actinometra*, while his specific name is that by which the type must be known for the future. It is a sufficiently remarkable species, apart altogether from the peculiarities of its radials and centro-dorsal. For the mouth is at no great distance from the centre of the disk, and the arrangement of the ambulacra in five primary divisions is almost as regular as in the Endocyclic Crinoids. The anal interradius is therefore by no means so large and conspicuous as it usually is in *Actinometra* (Pl. LVII. fig. 3; Pl. LXVIII. fig. 1).

Lovén described the two outer radials of this type as articulated bifascially;³ but I believe them to be really united by a syzygy of much the same character as occurs in *Pentacrinus* and *Rhizocrinus*, viz., with the apposed faces almost smooth and devoid of the radial striation which is so marked in the syzygies of *Antedon*. The result is that the junction line of the two joints is simple, instead of being more or less interrupted as in the syzygies of the later ray-divisions in this type and in most other Comatulæ. Lovén gave a sketch of the distal face of a second radial in *Actinometra typica*⁴ which seems to have a median vertical ridge like that which he figures in the corresponding part of *Antedon eschrichti*.⁵ In reality, however, there is not an articular ridge with a fossa on either side of it for the reception of a muscular or ligamentous bundle, but merely a division between the two sides of the joint-face, which has a slight general convexity; and there is a corresponding concavity, which is divided into two parts by a median line, on the proximal face of the axillary radial. If the two joints were really articulated each face would have a median ridge and lateral fossæ instead of fitting into one another by a slight curvature. The median line

¹ The exact station, and consequently the exact depth, is not recorded.

² *Öfversigt. k. Vetensk. Akad. Förhandl.*, 1866, No. 9, p. 231.

³ *Ibid.*, p. 228.

⁴ *Ibid.*, p. 230, fig. c.

⁵ *Ibid.*, p. 230, fig. k.