of paxillæ are bounded at the one extremity by the marginal plates of the disk and at the other by the median interradial line, and the paxillæ in each series diminish slightly in size as they approach the margin. In addition to their longitudinal arrangement the paxillæ appear to fall into regular obliquely transverse lines proceeding from the median interradial line to the margin of the disk. From this circumstance, together with the fact that the larger paxillæ are in the neighbourhood of the primary radial plate, and that the rest diminish as they recede therefrom, the ornamentation of the disk has a very characteristic appearance. The larger paxillæ are regularly hexagonal, with their margin beset with fifteen to eighteen very short, robust, subprismatic, truncate, papilliform granules, and with four to nine slightly larger but irregular-sized ones on the tabulum, usually definitely spaced but also more or less polygonal. On the smaller plates the number of granules is less, but they appear quite as large and robust as those on the larger paxillæ. The single series of small square plates which occupies the median abactinal line of the ray are covered with small semiglobular granules similar to those on the supero-marginal plates. The dorso-central plate is small and scarcely distinguishable from the numerous rather small plates which occupy the central area of the disk. In like manner it is not practicable to indicate definitely the representatives of the basals and under-basals. The madreporiform body is small and almost hidden by the surrounding paxillæ; it lies external to its adjacent (basal ?) plate, and its position is about midway between the centre of the disk and the margin.

No pedicellariæ of any kind are present.

Colour in alcohol, a slightly yellowish ashy grey, with a darker dirty bluish grey shade over the paxillar area.

Young Phase.—In a small specimen measuring R = 30 mm., $r = 8{\cdot}5$ mm., the basal plates are clearly distinguishable and are the largest paxillæ on the disk. Internal to the primary radial plate are a pair of plates,—a character which may also be noted, but less easily, in the larger example.

Locality.—Station 106. Near the Equator, due south of the Cape Verde Islands. August 25, 1873. Lat. 1° 47′ 0″ N., long. 24° 26′ 0″ W. Depth 1850 fathoms. Globigerina ooze. Bottom temperature 36°·6 Fahr.; surface temperature 78°·0 Fahr.

Remarks.—The specimen which forms the subject of the above description is unfortunately without any indication whatever of its locality. It was found in Sir Wyville Thomson's study after his death. The smaller specimen, which is precisely correspondent in every respect and unquestionably belongs to the same species, was dredged at Station 106.

In many respects this species differs so considerably from *Paragonaster ctenipes* that at first sight it would scarcely be thought to belong to the same genus. The character of the abactinal ornamentation has quite a different appearance; and the broad adambulacral plates of *Paragonaster ctenipes* present a feature special to that species. Care-