

36° 21' 0" N., long. 23° 31' 0" W. Depth 2025 fathoms. Globigerina ooze. Bottom temperature 35°·9 Fahr.; surface temperature 71°·5 Fahr.

*Remarks.*—This species, by reason of its comparatively short and tapering rays, has a somewhat different facies from that of the other members of the genus; and I felt at first some hesitation in placing it along with them. The length and narrowness of the adambulacral plates and the character of their armature show, however, an unmistakable alliance with *Dytaster*. The general characters of the abactinal surface and of the marginal plates also furnish confirmatory support as to this view of its classification. It is for the present undesirable to damage the solitary adult specimen by dissection to ascertain what evidence might be derived from its anatomy. The depth at which this species was dredged is worthy of note (2025 fathoms).

7. *Dytaster inermis*, n. sp. (Pl. X. figs. 5 and 6; Pl. XIII. figs. 5 and 6).

Rays five.  $R = 16$  mm.;  $r = 5$  mm.  $R > 3r$ . Breadth of a ray between the second and third supero-marginal plates, 4·25 mm.

Rays rather short, broad at the base, and tapering continuously to the extremity. Lateral walls low, and rounded at the junction with the actinal and abactinal surfaces. Interbrachial arcs rather acutely rounded. Abactinal surface plane, sloping slightly from the base to the extremity of the rays. Actinal surface plane.

The paxillæ of the abactinal surface are very small and widely spaced, composed of three to five short, delicate, spinelets of equal length, each with several denticles at the tip. The spinelets radiate very little apart, and form a rather compact paxilla, the base of which is comparatively robust. There is no central spinelet. On the outer part of the rays the paxillæ are very small, with seldom more than three or four spinelets. Near the margin, and at the base of the rays, a number of paxillæ are modified into a comparatively robust, valvate, pedicellarian apparatus.

The supero-marginal plates, fifteen in number from the median interradial line to the extremity, form a narrow but distinct border to the disk and rays, slightly rounded marginally when viewed from above. The plates are small, and their length is slightly greater than their breadth throughout. The height of the plates is less than the length, except in three or four of the innermost plates in the interbrachial arc, in which the height is considerably greater. The surface of the plates appears to have been covered with very minute, short, delicate, microscopic spinelets, widely spaced; but a great number have been abraded, leaving, where this has occurred, a peculiar spongy-looking surface of plate exposed. There are no large spines, nor is any trace of their existence present. The terminal plate is large, slightly swollen laterally at the proximal extremity, and indented for a short distance by the paxillar area in the median radial line.

The infero-marginal plates correspond exactly to the superior series, and their surface is covered with similar widely spaced microscopic spinelets, which have been much