

at once distinguish the form, and may ultimately entitle it to be ranked as a distinct species, are the greater number of supero-marginal plates, the narrowness of the rays, the character of the spinulation of the actinal interradial areas, the absence of pedicellariæ alike on this area and on the abactinal area, and finally the character of the adambulacral armature. The madreporiform body appears to be somewhat smaller.

Locality.—Station 133. In the South Atlantic, west of the island of Tristan da Cunha. October 11, 1873. Lat. $35^{\circ} 41' 0''$ S., long. $20^{\circ} 55' 0''$ W. Depth 1900 fathoms. Globigerina ooze. Bottom temperature $35^{\circ} \cdot 4$ Fahr.; surface temperature $58^{\circ} \cdot 0$ Fahr.

2b. *Dytaster exilis*, var. *carinata*, nov.

This variety is characterised by the high and strongly keeled rays—a feature further emphasised by their narrowness. The paxillæ upon the disk are comparatively large and distinct, and composed of rather robust but low papilliform spinelets, whilst along the ray the paxillæ become extremely small, and seldom have more than three to five papillæ in each. There are very numerous valvate pedicellariæ along the margin of the abactinal area of the ray, and also some upon the disk. In the type-form there are no pedicellariæ on the abactinal area. The actinal interradial areas have numerous very large well-developed pedicellariæ irregularly arranged; the individual intermediate plates which cover the area are quite indistinguishable, and they bear small skin-covered papilliform granules. In the armature of the adambulacral plates the spines of the furrow series are large and thick, compressed transversely; those of the second series are rather wide apart, not more than five or six being present; they are dagger-shaped, compressed longitudinally, and are nearly as long as the furrow series. External to them is a row, sometimes two, of small papilliform spinelets or granules. The solitary enlarged spinelet in the second series of spines on the adambulacral plates is confined quite to the tip of the ray, where it is thick and stumpy. The madreporiform body is remarkably large, and with very coarse paxillæ upon it. There are forty-two or forty-three supero-marginal plates. The measurements are $R = 98$ mm.; $r = 16 \cdot 5$ mm.

Young Phase.—A small example taken at the same station seems to me to belong with little doubt to this form. The dimensions are $R = 11 \cdot 5$ mm.; $r = 3 \cdot 75$ mm. Its general appearance at first glance is very different from that of the adult, its facies and proportions resembling those of *Astropecten*. There is as yet no indication of the narrow carinate rays of the adult. There are eleven supero-marginal plates between the median interradial line and the terminal plate. These extend well upon the abactinal surface, their breadth being equal to, or even slightly greater than, their length, and they form a well-defined border to the abactinal surface as seen from above, the breadth a little beyond the middle of the ray being nearly as great as that of the intermediate paxillar area. The margins of the ray are well rounded. The surface of the plates is covered with small, rather widely