

fibres; and the interspaces include two or three large spiracula. All the spinelets are uniformly protuberant, and that only to a slight degree; they are rather closely placed, and the whole abactinal area is thickly covered with rather fleshy wrinkled skin, presenting a somewhat spongy and subpapillose appearance, and a slightly scabrous feeling to the touch. The primary meshes are not very distinctly marked out superficially, and the hexagons consequently appear to overlap or run into one another in many cases. The oscular orifice is small and inconspicuous.

The ambulacral furrows are broad and more or less petaloid, the closely placed and prominent transverse adambulacral spine-combs adding greatly to the appearance of breadth. The tube-feet are arranged in quadruple series. The combs of spines forming the adambulacral armature are broad, a feature further enhanced by their method of arrangement. Each alternate comb has usually two spines less; in this way combs of seven to eight spinelets alternate regularly with combs of five. The larger combs radiate well over the furrows, whilst the smaller ones, on the other hand, are considerably retired from the margin, the innermost spine standing perpendicularly, or even directed slightly outward. Hence when seen from above, the smaller combs appear to occupy little more than one-half, or at most two-thirds, the space of the larger combs. In the larger combs the innermost spine is smaller and shorter than the rest, frequently not more than half the length. In the smaller combs the innermost spine is much smaller still, often quite aborted and apparently absent. The other spines are nearly equal in length, and both combs are uniform with one another in this respect. The combs are thickly webbed, and have large and elongate saccular extensions developed over the extremities of the spinelets.

The mouth-armature resembles that of *Retaster verrucosus*. The mouth-spines are eight to ten in number, four or five on each plate, both series being webbed together, and forming a narrow scoop-like fan. The secondary or superficial mouth-spines, one on each plate, are thin, cylindrical, not tapering, no longer than the mouth-spines, and covered with membrane.

The actino-lateral spines are of moderate length, reaching up to the margin of the test; they are hidden in membrane, of which a saccular but not indented prolongation extends beyond the extremities as a fleshy marginal fringe. The segmental apertures of the abactinal chamber are very large and elongate, situated well within the transverse combs, and quite hidden thereby.

Colour in alcohol, purplish grey.

*Locality*.—Station 149H. Off Cumberland Bay, Kerguelen Island. January 29, 1874. Lat. 48° 45' 0" S., long. 69° 14' 0" E. Depth 127 fathoms. Volcanic mud. Surface temperature 39°·8 Fahr.

*Remarks*.—*Retaster peregrinator* resembles in general form *Retaster verrucosus* from the Atlantic side of the Strait of Magellan, of which it may be regarded as the representative in the Southern Ocean area. The two forms are, however, specifically distinct, and