

towards the tip, is obtuse there. This spinelet is normally directed over the furrow and separates the adjacent tube-feet. The other two spinelets are subequal, are a little longer than the furrow spinelets, measuring at the base of the ray 4 mm., and are delicate, cylindrical, and tapering, but truncate at the tip, and often with a faint tendency to flare. On the aboral side of the outermost spine is one very small, short, cilia-like spinelet.

The mouth-plates are elongate, narrow, and strongly keeled; their armature consists of a marginal series which extends the whole length of the plate, very small and papilliform along the line of union with the adambulacral plate proper, and only the inner three or four on the free part of the margin larger and spiniform; the innermost two on each plate are close together, often flattened and apposed, and form what may perhaps be looked upon as an incipient pedicellarian apparatus, which is directed horizontally over the actinostome at an angle of  $45^\circ$  to the median radial line. On the actinal surface of the plate is a lineal series of spinelets, robust and large along the greater part of the plate, but diminishing in size as they recede from the mouth, becoming rapidly mere small papillæ at the outer end of the plate.

In the very limited actinal interradial area there are generally two or three additional pedicellariæ exactly similar to those on the small intermediate plate which separates the infero-marginal and adambulacral plates along the ray.

The madreporiform body is situated very near the margin, and is usually hidden by paxillæ; its appearance is more or less spongiform rather than "madreporiform;" and the striations are coarse, with definite foramina distinctly visible here and there.

Colour in alcohol, a warm shade of brown over the paxillar area, becoming nearly brick red at the extremity of the ray; the terminal or ocular plate white. The centre of the disk and a narrow well-defined band traversing the median abactinal line of the ray are marked with a much darker colour, approaching dark purple, which gives a very striking appearance. Actinal surface a bleached yellowish white.

*Localities.*—Simon's Bay, Cape of Good Hope.

"Porcupine" Expedition:

Station 36. 1870. In the Strait of Gibraltar, off the coast of Morocco. Lat.  $35^\circ 35'$  N., long.  $6^\circ 26'$  W. Depth 128 fathoms. Bottom temperature  $12^\circ 9$  C.; surface temperature  $23^\circ 8$  C.

*Remarks.*—This species is nearly allied to *Luidia sarsii* of the North Atlantic, of which it is unquestionably the representative. Both are five-rayed forms, but *Luidia africana* is of much larger size, and the rays taper gradually from the base to the tip, giving them a very pointed and attenuate appearance. The paxillæ on the median portion of the rays are very much smaller than in *Luidia sarsii*, and the central granule is less prominent than in that form throughout. In *Luidia africana* the uppermost or lateral spine on the infero-marginal plates is the largest, whereas in the northern species this is generally smaller. In like manner, the outermost of the three spines on the adambulacral