four similar spinelets, one of which is subequal to the furrow series, the others smaller; near the mouth there may be six spinelets in this series, and on the outer part of the ray there are only three. This series may be disposed in an oblique line, but is usually in an arc.

The mouth-plates are comparatively large, and their armature consists of a marginal series of about ten rather robust, cylindrical, obtuse spinclets, and a secondary or superficial series of about the same number of more delicate and tapering spinelets, similar to those on the adambulacral plates, arranged in a compact arc on the actinal surface of each plate. A few additional smaller spinelets may also be present.

The actinal plates bear a series or comb of four small spinelets, one of the median ones being a little longer than the others, and all radiate slightly apart. Near the mouth there may be five spinelets in a comb; also one or two very small spinelets on each side, isolated from the comb. The plates, which form regular transverse series, become very small as they approach the margin, and the small combs of spinelets are very closely placed there, one comb almost overlapping the next outermost in its own column or series.

The marginal plates, which are very small but distinct and isolated, are somewhat in the form of the blade of an old battle-axe, and they bear on their curved free margin a double comb of about sixteen small subequal spinelets. These plates alternate with the columns of abactinal plates; and there is at the base of each of the plates just described a second small plate with a comb of spinelets, which I regard as the representative of the supero-marginal plate.

The papular orifices are large and spiracle-like, margined by seven or more plates, each of which bears a small comb of rather elongate spinelets directed over the opening. The orifices, which are disposed in a single line on each side of the median radial line, are very few in number and irregularly spaced. There do not appear to be more than five to eight on each side of the radial ridge, and these may be arranged five or six near together near the middle of the radial line and tolerably equally spaced, and then one or two nearer the centre or nearer the extremity; or there may be only two or three near together. The occurrence of orifices on one side of the median ridge does not correspond with the occurrence of orifices on the other side.

Colour in alcohol, pellucid white.

Locality.—Station 219. Off D'Entrecasteaux Reef, North of Admiralty Island. March 10, 1875. Lat. 1° 54′ 0″ S., long. 146° 39′ 40″ E. Depth 150 fathoms. Coral mud. Surface temperature 84° 0 Fahr.

Remarks.—This species is a true Palmipes, but differs so essentially from either Palmipes membranaceus or Palmipes rosaceus that no comparison is necessary. It is an interesting addition to the small number of species of this singular genus. Unfortunately the specimen collected by the Challenger is only a fragment. The whole starfish must be an extremely elegant form, remarkable for its delicacy and transparency.