

placed very obliquely, the inner or aboral spine being the smallest; the outermost spine is probably the representative of the aperture-papilla, of which it occupies the place, although it differs in no way from the other two spinelets; sometimes a small additional spinelet is present. The spines are long, delicate, and needle-shaped, and there are traces of a fine investing membrane.

The mouth-plates are of the *Hymenaster*-type, and present a prominent peak aborally, sloping adorally, and little prominent in front. Each plate bears two long, clavate, thorny, somewhat curved secondary or superficial spines, nearly equidistant from one another and from the median suture, the posterior spinelets being longest. Two mouth-spines proper are situated on the horizontal margin of each plate, the innermost one being slightly smaller than the anterior secondary (superficial) spine, which it resembles exactly both in form and character; whilst the outer spinelet is very much smaller, and slightly tapering and smooth, instead of being clavate and thorny.

The actino-lateral spines are delicate and rather widely spaced; about fifteen are present on each side of a furrow, the fourth or fifth from the mouth being longest. The spines diminish slowly in size as they proceed outward, and maintain a fair length even at the extremity of the ray. The actinal membrane is perfectly transparent, and composed of very fine and widely spaced fibres, reticulated rather rectangularly. No marginal fringe is formed; and the actinal tissue appears to pass over the margin continuous with the supradorsal tissue. The actino-lateral spines project considerably beyond the margin, and are naked.

Colour in alcohol, greyish white.

Locality.—Station 218. Off the north coast of New Guinea, south-west of the Admiralty Islands. March 1, 1875. Lat. $2^{\circ} 33' 0''$ S., long. $144^{\circ} 4' 0''$ E. Depth 1070 fathoms. Blue mud. Bottom temperature $36^{\circ} 4$ Fahr.; surface temperature $84^{\circ} 0$ Fahr.

Subfamily PYTHONASTERINÆ, Sladen, 1888.

Genus *Pythonaster*, Sladen.

Pythonaster, Sladen in Narr. Chall. Exp., 1885, vol. i. p. 609.

Rays very elongate and flexible, swollen for a short distance from the disk, then rapidly becoming narrow, compressed laterally and extending to an attenuate extremity. Disk small, with a well-defined channel traversing each interradial line, which causes the starfish to appear to be composed of five united rays only. In the central abactinal region are five triangular fan-like valves, composed of delicate spinelets united by membrane, radial in position, which meet together when shut down and cover the dorso-central aperture.

Abactinal and lateral surfaces beset with delicate plates imbedded in membrane and