Colour in alcohol, a bleached greyish white.

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

Genus Cnemidaster, n. gen.

Disk small. Rays long, delicate, cylindrical, more or less rigid. Interbrachial arcs rounded.

Abactinal plates arranged in a single, regular, longitudinal line along the ray, covered with thin skin and bearing no granules or spinelets. Abactinal covering of disk composed of the primary apical plates, all large and convex, covered with thin skin and bearing no granules or spinelets.

Supero-marginal larger than the infero-marginal plates; both series covered with skin and bearing no granules or spinelets (excepting a few of the infero-marginal plates in the interbrachial arc, which may bear appendages similar to those on the actinal intermediate plates).

Actinal intermediate plates, two series present bearing small compressed sacculated spinelets, appressed to the ray and forming longitudinal series along the ray.

Adambulacral plates broader than long, with a prominent angle into the furrow (all equally prominent), and a transverse median keel. Armature consisting of a transverse series of short spinelets, equidistantly spaced on the keel.

Madreporiform body small, circular, exposed, situated external to the adjacent primary basal plate.

Anal aperture distinct, excentric in position.

No pedicellariæ.

Ambulacral tube-feet with a fleshy terminal knob, and forming two simple regular rows. Remarks.—This genus is distinguished from Zoroaster and the other forms in this family by the large skin-covered abactinal and marginal plates, devoid of spinelets or granules of any form. The armature of the actinal intermediate and of the adambulacral plates is also characteristic. The starfish described by Perrier under the name of Zoroaster sigsbeei is perhaps more nearly related than any other form known to me; but the description and the figure are both insufficient to enable me to say how close the relationship may be.

¹ Bull. Mus. Comp. Zoöl., Harvard, 1881, vol. ix. p. 5; Nouv. Archives Mus. Hist. Nat., 2e Série, 1884, t. vi. p. 195, pl. iii. fig. 2.