

11. *Asterias (Cosmasterias) sulcifera* (Valenciennes, M.S.), Perrier.

*Asteracanthion sulcifera* (Valenciennes, M.S.), Perrier, 1869, Ann. Sci. Nat., 5e Série, t. xii. p. 235, pl. 1, figs. 14, a, b, c.

*Asterias sulcifera*, Perrier, 1875, Révis. Stell. Mus., p. 58 (Archives de Zool. expér., t. iv. p. 322).

*Locality*.—Station 306A. In the Messier Channel, between Wellington Island and the west coast of Chili. January 2, 1876. Lat. 48° 27' 0" S., long. 74° 30' 0" W. Depth 345 fathoms. Blue mud. Bottom temperature 46°·0 Fahr.; surface temperature 57°·5 Fahr.

*Remarks*.—There are several large examples from the Messier Channel which I have referred to this species. They accord exactly with the description given by Perrier, and appear to me to resemble more closely the type specimens preserved in the Jardin des Plantes, at Paris, than those in the British Museum. It is not improbable that the latter may have to be ranked as a variety. The differences affect the number and size of the spinelets—characters, however, in which nearly every example shows some variation.

C. *Asterias scalprifera* group: Subgenus SMILASTERIAS, nov.12. *Asterias (Smilasterias) scalprifera*, n. sp. (Pl. C. figs. 4-6; Pl. CIII. figs. 1 and 2).

Rays five. R = 58 mm.; r = 8 mm. R > 7 r. Breadth of a ray a little beyond the base, 11·5 mm.

Rays elongate, subcylindrical, rather swollen near the base, but not abruptly, thence tapering gradually to the extremity. Disk small, convex and high. Interbranchial arcs acutely angular, the rays appearing to be crushed together at the base.

The abactinal area is beset with small plates, the majority of which are nearly as long as broad. A median radial series of plates rather larger than the others proceeds regularly and uninterruptedly from the disk to the extremity. The plates on each side of this cannot be said to form regular longitudinal lines, though a tendency towards this arrangement appears to be present; a transverse correspondence of the plates is much more distinctly traceable. The plates bear a number of small, low, round-tipped, equal, papilliform spinelets, which are widely spaced upon the plate, and amongst them are large forcipiform pedicellariæ widely spaced and isolated, and nearly as large as the spinelets, from which they can only be distinguished by careful examination with a magnifying-glass. No definite order of arrangement of the spinelets and pedicellariæ on the plates is to be observed, but owing to the presence of indistinct transverse wrinkles and sutures, and the transverse correspondence of plates above mentioned, a certain general transverse character is given to the disposition of the spinulation as a whole. One or two papulæ are present in the interspaces between the plates.

The armature of the adambulacral plates consists of three spinelets closely placed at the base, but radiating a little apart, and forming a transverse and very slightly oblique