Coscinasterias muricata, Verrill, 1871 (1867), Trans. Conn. Acad. Arts and Sci., vol. i. part 2, p. 249.
Asteracanthion australis, Perrier, 1869, Ann. Sci. Nat., 5e Série, t. xii. p. 220.
Asterias Jehennesii (Valenciennes, M.S.), Perrier, 1875, Révis. Stell. Mus., p. 47 (Archives de Zool. expér., t. iv. p. 311).

Localities.—Off Port Jackson. Depth and conditions not recorded.

Station 162. Off East Moncœur Island, Bass Strait. April 2, 1874. Lat. 39° 10′ 30″ S., long. 146° 37′ 0″ E. Depth 38 fathoms. Sand and shells. Surface temperature 63°·2 Fahr.

20. *Asterias* (*Stolasterias*) *volsellata*, n. sp. (Pl. CVII. figs. 1–4).

Rays eleven. $R = 128$ mm.; $r = 10$ mm. $R < 13\,r$. Breadth of a ray at the base, 7 mm; breadth about midway between the disk and the extremity, 5 mm.

Rays elongate and narrow, tapering gradually to the extremity, the outer part being very delicate and attenuate. Abactinal surface of the rays slightly arched and faintly carinate; lateral walls high and vertical. Disk small, depressed, and well defined, the rays readily becoming detached. Interbrachial arcs acute.

The skeletal plates of the rays, which are narrow and delicate, are disposed with great regularity. They form a median radial series, a supero-marginal series which bounds the abactinal area, and an infero-marginal series which is contingent on the adambulacral plates. Between these five regular longitudinal series of plates are transverse bars of similar plates at subequal distances apart which form large quadrangular meshes, covered with a thin delicate membrane. The plates in the longitudinal series, which stand at the place of junction with the transverse bars, may be more or less cruciform, and bear a single elongate and very delicate needle-like spine, the longest near the base of the ray measuring about 4 mm.; the spinelets are about 4 mm. apart. The base of the spine is invested with a short membranous sheath, which is surmounted by a thick, densely crowded wreath of forcipiform pedicellariæ, the spinelet appearing as if passing through a globular mass of these bodies. On the outer part of the ray the abactinal plates become very small and quite aborted in character, the transverse bars which stretch from side to side being frequently the most conspicuous, and then closely resemble the transverse bars of plates occurring in *Brisinga*; the wide intervening spaces covered only with semitransparent membrane enhance the striking similarity. At the base of the ray the membrane which covers the meshes is punctured with numerous small papulæ congregated in groups, several groups being present in each mesh. Several rather large, elongate, isolated forficiform pedicellariæ are borne upon the membrane, amongst and between the groups of papulæ. There are also a number of very large forficiform pedicellariæ, having the jaws broad, curved and expanded at the tips, which are armed with several large, interlocking denticles; these comparatively gigantic pedicellariæ are generally placed singly at or near the base of the large spinelets, and the frequency of this position leads to the supposition