

one small conical spinelet at the junction of the pair of plates and two others on the margin of each plate. The odontophore is visible. The actinal interradiar areas are covered with a complete pavement of plates.

*Localities.*—Station 45. Off the coast of North America, east of Delaware and Maryland. May 3, 1873. Lat.  $38^{\circ} 34' 0''$  N., long.  $72^{\circ} 10' 0''$  W. Depth 1240 fathoms. Blue mud. Bottom temperature  $37^{\circ} \cdot 2$  Fahr.; surface temperature  $49^{\circ} \cdot 5$  Fahr.

Station 46. Off the coast of North America, east of New Jersey. May 6, 1873. Lat.  $40^{\circ} 17' 0''$  N., long.  $66^{\circ} 48' 0''$  W. Depth 1350 fathoms. Blue mud. Bottom temperature  $37^{\circ} \cdot 2$  Fahr.; surface temperature  $40^{\circ} \cdot 0$  Fahr.

Station 47. Off the coast of North America, east of New Jersey and Long Island. May 7, 1873. Lat.  $41^{\circ} 14' 0''$  N., long.  $65^{\circ} 45' 0''$  W. Depth 1340 fathoms. Blue mud. Surface temperature  $42^{\circ} \cdot 0$  Fahr.

*Remarks.*—This species is at once distinguished from the other members of the genus by the single cribriform organ in each interbrachial arc, by the absence of segmental pits and papillæ, by the short rays, and by the spinelets on the abactinal membrane being confined to limited areas which occupy the interradiar lines and the central region of the disk.

2. *Porcellanaster caulifer*, Sladen (Pl. XXI. figs. 5-10; Pl. XXVII. figs. 9-12).

*Porcellanaster caulifer*, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 222

Rays five.  $R = 21$  mm.;  $r = 6 \cdot 5$  mm.  $R < 3 r$ .

Rays moderately long and slender, not much broader at the base than at mid-arm, tapering only slightly, the minor radius in the proportion of 30 per cent. Interbrachial arcs rather flatly rounded. Disk high and much inflated.

The abactinal area is covered with an integument, beset with spinelets, excepting at the very base of the rays. The spinelets are simple, delicate, clavate, or thickened at the extremity, covered with membrane, and rather widely spaced. Large papulæ-like bodies are distributed here and there. A very long tubular epiroctal prolongation or anal funnel rises from the central region of the disk, in length nearly equal to the minor radius, rather narrow and tapering towards the extremity.

The marginal plates are moderately high, and form a perpendicular wall in the interbrachial arc, but arch over on the abactinal surface of the rays, and leave only a narrow space along the median line between the corresponding plates of the two sides. The supero-marginal plates are seven in number, exclusive of the terminal; all are longer than high, and each carries a long, delicate, acicular spinelet. The terminal plate is large and elongate, very slightly prominent abactinally, and flattened; it normally carries three spinelets, though sometimes more are present. These are longer than the spinelets on the other supero-marginal plates, and are delicate and acicular; one