

portion occurs in that form. Furthermore, the height of the infero-marginal plates diminishes as they proceed along the ray, and the outermost plate has the shape of a thin elongate wedge. There are only three infero-marginal plates between the median interradiial line and the extremity, and there is no trace of an infero-marginal plate below or corresponding to the small supero-marginal plate next the terminal. The vertical sutures between the infero-marginal plates do not fall exactly below or in line with the sutures of the superior series. The terminal plate is extraordinarily large, and elevated conically towards the extremity. On this elevation is borne a vertical spine. At the extremity of the plate are two similar spines, one on each side of the median line, directed horizontally and radiating slightly apart.

The adambulacral plates are large, and already show the characters of an adult *Porcellanaster*; it may be noted, however, that they appear to be set somewhat obliquely. Each plate bears two spinelets on the furrow margin, side by side, and radiating a little apart. The spinelets are short, but broad and flattened, and rather leaf-like or lanceolate in form.

The mouth-plates are markedly coulter-shaped, the adjacent edges of each plate in a pair being turned up vertically, forming a high-crested keel, and the suture is not closed, but often gaping more or less. The armature consists of a single spinelet at the junction of the two plates and two spines on the margin of each plate, resembling in this respect the adult of *Porcellanaster cœruleus*. The odontophore is exposed on the actinal surface, having superficially the form of an equilaterally triangular wedge which fits in the angle formed by the aboral and unclosed ends of the two mouth-plates.

The actinal interradiial areas are covered with an extremely delicate semi-transparent membrane in which no trace of actinal intermediate plates is yet to be detected.

*Locality*.—Station 137. In the South Atlantic, midway between the Island of Tristan da Cunha and the Cape of Good Hope. October 23, 1873. Lat. 35° 59' 0" S., long. 1° 34' 0" E. Depth 2550 fathoms. Red clay. Bottom temperature 34°·5 Fahr.; surface temperature 56°·1 Fahr.

*Remarks*.—This small form is apparently nearly related to *Porcellanaster cœruleus* of the North Atlantic, but may be distinguished by the more elongate and attenuate rays, even when compared with a rather larger young example of that species. Excepting these characters and the purely embryonic structures described above, the figures of the young phase of *Porcellanaster cœruleus* on Pl. XX. figs. 6, 7, represent the general aspect of the young form under notice so well that I have not considered it necessary to give additional drawings. For the general proportions and composition of the abactinal area the woodcut on the preceding page will supply what is requisite.

The striking manner in which the general structure of this young example agrees with the description given by Perrier of the form he has named *Caulaster pedunculatus* has already been noticed, and it supports my strong conviction that the latter will ultimately prove to be a young *Porcellanaster*.