

are about ten or eleven in number, and decrease in size adorally and aborally. Of the mouth-spines proper, situated on the free margin of the plates, the innermost three on each side of the suture-line are long, robust, cylindrical, obtusely rounded, and form, together with the corresponding spines of the companion plate, the comb which stretches horizontally over the mouth-aperture. On the remaining portion of the free margin are three or four small, equal-sized, cylindrical spines. The first adambulacral plate next to the mouth-plate is narrow, with a biserial armature, consisting of about eight small, compressed, slightly flaring, and truncate spines in each row.

The madreporiform body is transversely oval in form, and not more than its own breadth distant from the marginal plates.

The terminal plate is large and broad, very deeply channelled anteriorly, and with two or three short robust spinelets, which curve slightly over the furrow.

Colour in alcohol, very light ochre-brown, almost verging towards grey.

*Locality*.—Station 75. Between the islands of Fayal and San Jorge (Azores). July 2, 1873. Lat.  $38^{\circ} 38' 0''$  N., long.  $28^{\circ} 28' 30''$  W. Depth 450 fathoms. Volcanic mud. Surface temperature  $70^{\circ} 0$  Fahr.

*Remarks*.—This species is characterised by the single short, compressed, lateral spine, with two closely placed small companions, by the broad and flaring spinelets on the actinal surface of the adambulacral plates, and by the absence of an aboral line of spinelets on the infero-marginal plates. The form is very nearly allied to *Astropecten irregularis*, Linck, but is distinguishable by many points of detail when examples of the two species are compared side by side.

### 9. *Astropecten irregularis*, Linck.

*Astropecten irregularis*, Linck, 1733, De Stollis marinis, p. 27, tab. vi. fig. 13.

*Asterias avanciaca*, O. F. Müller, 1776, Zool. Dan. Prod., p. 234, No. 2831.

*Astropecten Mülleri*, Müller and Troschel, 1844, Archiv f. Naturgesch., Jahrg. x., Bd. i. p. 181.

*Astropecten echinulata*, Müller and Troschel, 1844, Archiv f. Naturgesch., Jahrg. x., Bd. i. p. 181.

*Localities*.—"Porcupine" Expedition:

Station 18. Off the west coast of Ireland, north-west of Achill Head. Lat.  $54^{\circ} 15' N.$ , long.  $11^{\circ} 9' W.$  Depth 183 fathoms. Bottom temperature  $9^{\circ} 7 C.$ ; surface temperature  $11^{\circ} 8 C.$

Station 46. Between Scotland and the Faeröe banks. Lat.  $59^{\circ} 23' N.$ , long.  $7^{\circ} 4' W.$  Depth 374 fathoms. Bottom temperature  $7^{\circ} 7 C.$ ; surface temperature  $12^{\circ} 1 C.$

Station 67. East of the Shetland Islands. Lat.  $60^{\circ} 32' N.$ , long.  $0^{\circ} 29' W.$  Depth 64 fathoms. Bottom temperature  $9^{\circ} 5 C.$ ; surface temperature  $11^{\circ} 0 C.$

Station 68. East of the Shetland Islands. Lat.  $60^{\circ} 23' N.$ , long.  $0^{\circ} 33' E.$  Depth 75 fathoms. Bottom temperature  $6^{\circ} 7 C.$ ; surface temperature  $11^{\circ} 4 C.$

*Remarks*.—These are all small forms and have a certain facies of their own, but they