

able for only showing convoluted striæ on the bevelled margins of the body, the whole of the central area being covered with very numerous small oblong pits.

Colour in alcohol, a bleached yellowish white, with a slight brownish shade.

*Individual Variation.*—In a rather smaller example than that described above,  $R = 56$  mm., and from the same locality (Station 313), it is noteworthy that all the infero-marginal plates, excepting only the last two or three, have a well-developed oval naked space. In this specimen there is some irregularity both in the size and in the position of the large papilliform granules on the adambulacral plates which immediately succeed the furrow series, and sometimes only two are present.

*Locational Variation.*—A series of specimens from Station 311 are all much smaller in size than the type described, the largest measuring only  $R = 37$  mm. In these the tips of the rays are slightly more definitely pointed, and all the infero-marginal plates have naked spaces, excepting only in some instances two or three plates at the tip. The naked spaces appear to be relatively larger in some of the smaller examples, but considerable variation is shown in the series in this respect; and I am therefore unable to say definitely that the size of this area diminishes with age, although I am disposed to think that such is the case. It is remarkable that none of the specimens from this locality (Station 311) have any pedicellariæ on the actinal surface. In the smallest example, which measures  $R = 26$  mm.,  $r = 15$  mm., there are eleven supero-marginal plates, counting from the median interradial line to the extremity.

*Localities.*—Station 313. Near the Atlantic entrance to the Strait of Magellan. January 20, 1876. Lat.  $52^{\circ} 20' 0''$  S., long.  $67^{\circ} 39' 0''$  W. Depth 55 fathoms. Sand. Bottom temperature  $47^{\circ} 8$  Fahr.; surface temperature  $48^{\circ} 2$  Fahr.

Station 311. Off the entrance to Smyth Channel. January 11, 1876. Lat.  $52^{\circ} 45' 30''$  S., long.  $73^{\circ} 46' 0''$  W. Depth 245 fathoms. Blue mud. Bottom temperature  $46^{\circ} 0$  Fahr.; surface temperature  $50^{\circ} 0$  Fahr.

5. *Pentagonaster japonicus*, n. sp. (Pl. XLVI. figs. 1 and 2; Pl. XLIX. figs. 1 and 2).

Rays five.  $R = 68$  mm.,  $r = 50$  mm.  $R = 1.36 r$ . The minor radius is thus in the proportion of about 73 per cent.

Body of large size. General form depressed and thin. Abactinal area slightly convex and capable of being more or less inflated, the inflation being greatest in the radial regions, and emphasised by a conspicuous but shallow sulcus which traverses the interradial lines, but terminates at a short distance from the centre. The interradial channels are of uniform breadth, well defined and smooth, their character and regularity suggesting—fancifully, of course—the appearance of a mark produced by the pressure of a heated cylinder. The marginal contour has the form of an almost regular pentagon, with the sides very slightly incurved, the incurvature being produced more by a slight prolongation