towards the corresponding series on the adjacent plate, and thus form a rough kind of fasciole, if such a term were permissible for the short stumpy granules of which they are composed. About four or five granules are present in each series, and one or sometimes two similar and parallel lines of perpendicular and rather more robust granules occupy the median area of each plate.

The remaining portion of the actinal interradial area is covered with short stumpy polygonal papilliform granules, conically pointed at the tip; and here and there one more elongate and spine-like at well spaced distances apart.

The mouth-plates bear two series of spines: one forming a straight line, and proceeding along the side of the suture uniting the two plates, and the other following the opposite outline of the plate and consequently forming a bent series. The six or seven innermost spines, which fall in the furrow margin of the plate, are as long as the adambulacral spines, the foremost spine of all being larger than the rest; the three or four remaining spines of this series which follow the line of the plate adjacent to the neighbouring adambulacral plate are quite small and papilliform. The inner series, which runs parallel to the median suture of the mouth-plates, is composed of about eight or nine spines, the outermost of which are little more than granules, but the size gradually increases until the innermost is about equal in length to the marginal series.

Colour in alcohol, bluish grey over the paxillar area and mottled with the same on the actinal interradial areas and the infero-marginal plates within the interbrachial arcs; the rest of the animal is a dirty ashy white.

Locality.—Station 307. In the Messier Channel, between the western coast of Chili and Wellington Island. January 4, 1876. Lat. 49° 24′ 30″ S., long. 74° 23′ 30″ W. Depth 140 fathoms. Blue mud. Surface temperature 53°·0 Fahr.

Remarks.—This species is readily distinguished from *Pseudarchaster tessellatus* and *Pseudarchaster intermedius* by its shorter rays and larger disk, the latter being also flatter. It is further specialised by the presence of the remarkable post-adambulacral fascioles, which are not present in the other species. *Pseudarchaster discus* resembles *Pseudarchaster tessellatus* in having a well-defined line of sharp spinelets along the median line of the infero-marginal plates, and resembles *Pseudarchaster intermedius* in having no prominent spine in the outer part of the adambulacral armature.

2. *Pseudarchaster tessellatus*, n. sp. (Pl. XVII. figs. 3 and 4; Pl. XVIII. figs. 9 and 10).

Rays five. $R = 48$ mm.; $r = 16$ mm.; $R = 3\,r$.

Rays narrow and slightly tapering, rather abruptly pointed at the extremity, breadth midway between the centre of the disk and the extremity, 8 mm. Interbrachial arcs wide and well rounded.

The paxillæ of the abactinal area are regularly hexagonal, tabulate, and closely placed,