Colour in spirit,—darkish-brown, with a dark medio-dorsal line; the pinnules sometimes tipped with green.

Disk 30 mm.; spread 21 cm.

Locality.—Station 186, September 9, 1874; Prince of Wales Channel; lat. 10° 30′ N., long. 142° 18′ E.; 8 fathoms; coral mud. Three specimens.

Remarks.—This fine species, which I have dedicated to the energetic curator of the National Collection of Echinoderms, is readily distinguished from the two others which have a similar arrangement of the palmar series, by the fact that its first and second post-palmar series are only two-jointed; so that on the outside of the ray there is no pinnule between that of the second distichal and that on the second joint of the free arm.

The difference in the lengths of the anterior and posterior arms is very considerable; and in each of the three individuals all the arms of the D ray are unprovided with ambulacra, which may also be the case on the adjacent arms of the C and E rays as well. This is well shown in fig. 2 on Pl. LXIV. The C ambulacrum only supplies the anterior half of the corresponding ray, so that all the C₂ arms are grooveless. The same is the case with all the arms of D and of E₂, and even with some of those on E₁, as the groove which supplies them suddenly ceases before reaching the level of the palmar axillary.

One rather striking character of this species is the strong carination of the third and following joints in the pinnules of the tenth brachial and its successors; and another peculiarity is the very definite nature of the perisomic plating between the rays. The two radial axillaries are separated by a well-marked polygonal piece which rests on the truncated angles of the second radials, and corresponds exactly with the first interradial piece of the Apiocrinidæ.

One of the three individuals of this species was presented by Sir Wyville Thomson to the Natural History Museum at Stockholm, where I found it in August, 1886. The other two have yielded seven examples of *Myzostoma*. I could, however, find none of these parasites when I first searched for them, and again when I examined the species for descriptive purposes. But they seem to have become detached at a later period after the type had been drawn, and they are therefore not yet described.

6. Actinometra duplex, n. sp. (Pl. LXIV. fig. 3).

Specific formula—a.3.
$$\frac{2}{3} \left(\frac{o}{i} \right)$$
3.(3). $\frac{ab}{a}$.

Description of an Individual.—Centro-dorsal a rounded and slightly convex disk, bearing some fifteen marginal cirri which have fourteen to seventeen tolerably uniform joints. Three radials visible, the second partly united laterally; the rays are quite free