

Colour in spirit,—the skeleton a light brownish-white, with the perisome sometimes darker. Sacculi abundant, especially on the pinnules, and sometimes appearing on the outer ends of the plated disk-ambulacra.

Disk 8 mm.; spread probably 80 to 90 mm.

*Locality.*—Station 190, September 12, 1874; lat.  $8^{\circ} 56' S.$ , long.  $136^{\circ} 5' E.$ ; 49 fathoms; green mud. Two mutilated individuals and one fragment; one varietal form.

*Other Localities.*—H.M.S. "Alert," 1881; Torres Strait. One specimen.

*Remarks.*—Three of the Challenger specimens agree very closely in their general characters, though the frequency of the arm-divisions, and therefore the number of arms, varies considerably. All the distichal series consist of the usual three joints with a syzygy in the axillary; nearly all the palmars have but two joints without a syzygy; post-palmars are present in every individual, and in the majority of cases resemble the type of the palmars, so that the arm-formula becomes A.R.3.2.2. (Pl. VIII. fig. 1).

There was, however, a fourth specimen obtained besides these three, from which it differs in many points, though not, I think, sufficiently so to entitle it to a distinct specific rank (Pl. VIII. fig. 2). The colour of the calyx and arms is the same brownish-white as in the type, but the cirri have a strong reddish-brown tint (which was probably purple during life) with white bands at the inter-articular lines, and the lower joints are shorter relatively to their width than in the type-forms, though remaining longer than wide. The difference from the type is most apparent, however, in the arm-divisions. For four out of the ten distichal series have but two joints, the axillary without a syzygy; and out of the twelve palmar series which remain, six have two and the other six three joints, while there are no post-palmars at all, although they occur in each of the three type-specimens. The arms too, are somewhat more massive than in these last, and their component joints, instead of being smooth and obliquely quadrate, are relatively shorter and more wedge-shaped, with a slight tendency to overlap.

The differences between this individual and the other three, which agree so closely in their general characters, are certainly very marked; but it is difficult to find in any one of them an adequate reason for specific distinction. This conclusion is confirmed by the fact that a third form which combines certain characters of each of the other two was obtained in Torres Strait by Dr. Coppinger of H.M.S. "Alert." Being in a somewhat mutilated condition it was not described by Professor F. J. Bell in his Report on the "Alert" Echinoderms, but was put aside until the arrival of better preserved material; and I am indebted to him for the opportunity of referring to it here. It resembles the type-form in the shape of its arm-joints but has no post-palmar series; and it further resembles the varietal Challenger specimen in having purplish cirri with white bands as described above. It is tolerably clear, therefore, that as in so many other cases, we are here dealing with a somewhat variable specific type, and I propose to designate it