

the lowest rather wide and stout, with prominent dorsal edges. The next four or five brachials bear similar pinnules with smaller combs and decrease rather rapidly in size, two or sometimes three of the basal joints becoming rather strongly keeled. The succeeding pinnules have stouter joints and increase a little in length.

The mouth is radial and almost marginal; and the anal area is more or less thickly covered with irregular plates, but the ambulacra are unprotected.

Colour in spirit,—reddish- or greyish-brown, bleaching to white, often with a dark medio-dorsal line.

Disk 18 mm.; spread 20 cm.

Localities.—Cape York, September 7, 1874; Channel between Albany Island and Somerset; 8 to 12 fathoms. Several specimens.

Station 187, September 9, 1874; off Booby Island; lat. $10^{\circ} 36' S.$, long. $141^{\circ} 55' E.$; 6 fathoms; coral mud. Several specimens.

Arrou Islands. Three specimens.

Other Localities.—H.M.S. "Alert," Prince of Wales Channel; Albany Island, 3 to 4 fathoms; Port Molle, 12 fathoms.

Remarks.—This is one of the most easily recognisable species of *Actinometra*, owing to the entire absence of cirri in its adult state (Pl. LIV. figs. 1-7). After making a preliminary examination of the Challenger material I found that the type was already in the national collection, having been dredged by Jukes on the north-east coast of Australia; and I therefore proposed to call it "*Actinometra Jukesii*," under which name it was noticed in my Preliminary Report.¹ When the "Alert" collection reached the British Museum, it proved to contain several examples of this type which Professor Jeffrey Bell left undescribed, as he knew that I should publish its diagnosis in the present Report. The "Alert" also dredged some smaller individuals which resembled *Actinometra jukesii* in every respect except for the presence of half a dozen short cirri on the small centro-dorsal. It did not strike me, however, during my first and somewhat cursory examination of the "Alert" material, that these might be young individuals of *Actinometra jukesii*, like those which I had already noticed in my Preliminary Report; and they were eventually described and figured by Professor Bell under the name of *Actinometra paucicirra*,² by which the species must in future be known.

Two other immature specimens, differing somewhat from the type, were obtained by the Challenger at the Arrou Islands; and the centro-dorsal of one of them is figured on Pl. IV. fig. 6, *a*, under the specific name of *aruensis*, which should be changed to *paucicirra*, as I am now convinced that they belong to this species, though I regarded them as distinct when the plate was lettered, six years ago. The changes which take place in the centro-dorsal of the young *Actinometra paucicirra* during its growth to

¹ *Proc. Roy. Soc.*, 1879, vol. xxviii. p. 390.

² "Alert" Report, p. 169, pl. xvii. fig. A, a.