

Strait, 35 to 45 fathoms; Caribbean Sea, abundant between 50 and 262 fathoms; off Cape Frio, Brazil, 35 to 45 fathoms (Hassler).

Remarks.—This species has been figured for the sake of comparison with the other ten-armed species of *Actinometra* which belong to the *Solaris*-group (Pl. LII. figs. 1, 2, 15). The essential difference between them is the absence in the *Echinoptera*-group of the syzygies between the two outer radials and the two lower brachials respectively, these joints being articulated as in most species of *Antedon*.

The examples of this species obtained by the Challenger at Bahia were the first representatives of the genus which I had seen from the Brazilian coast; and as I could not identify them with any form then described, I proposed to call the type *Actinometra brasiliensis*. The calyx is figured under this name on Pl. IV., which was printed off before I received the "Blake" collection containing the original examples of *Actinometra meridionalis*, and also a very large series of variations on the same general type. The exact number of specific forms belonging to this type which are represented in the Caribbean Sea, is a point which I propose to work out in my "Blake" report; and for the present therefore the Challenger species may be known under the name *Actinometra meridionalis*, though it is quite possible that this may have to be discarded in favour of *Actinometra echinoptera*, Müller, sp.

The dimorphism of the arms which is so common in the eastern forms of the genus is very well marked in some of the Challenger specimens of *Actinometra meridionalis*, the hinder arms being ungrooved and consisting of but half the number of joints which occur in the anterior arms. But none of them possess the problematical "sense-organs" on the pinnules which occur both in some individuals from Cape Frio and in others from French Reef on the Florida coast.

The calyx is that of a very typical *Actinometra*. The centro-dorsal is small and discoidal (Pl. IV. fig. 4a), and the articular faces of the radials are set vertically with small muscle-plates, so that their ventral aspect shows a widely open central funnel (fig. 4c); while there is a well-developed basal star, an isolated ray of which is shown in Pl. IV. fig. 4b.

Actinometra, Series III.

Two articulated distichals.

Remarks.—This corresponds to Series III. of the *Antedon*-species, and comprises the multibrachiate forms in which there are but two distichal joints united by a bifascial articulation like that between the two outer radials. There may be no further division as in *Actinometra maculata*, *Actinometra simplex*, and in some forms of *Actinometra pulchella* (Pl. LII. fig. 2; Pl. LV. fig. 2; Pl. LIX. fig. 1). But in other examples of *Actinometra pulchella* and in *Actinometra stelligera* there are palmar series like the