Other Localities.—Coast of Brazil; also the "Blake," 1878-79, Station 285, off Barbados; 13 to 40 fathoms; and possibly Station 155, off Montserrat, 88 fathoms.

Remarks.—This Atlantic species may be readily distinguished from its allies of the Eastern seas by the greater relative length and the more quadrate shape of the armjoints, the edges of which are by no means so spiny as in Actinometra fimbriata, Actinometra multiradiata, and their allies. The relative shortness of the syzygial interval and the frequent plating of the interradial perisome are distinctive characters of minor value.

The position of the mouth in this type seems to be a somewhat variable one. So far as I have been able to make out, it is radial in the Caribbean variety, but interradial in the Brazilian form. Neither of the Caribbean individuals that I have seen has any palmar series and they are sometimes absent in those from Bahia.

The calyx of Actinometra lineata is not unlike that of Actinometra maculata. In both alike the radials fail to cover the centro-dorsal entirely; while their angles are everted so as to appear beyond its edge (Pl. V. figs. 1a, 1b, 2a, 2b); but the latter character is more marked in the Atlantic species (Pl. V. fig. 2d). Figs. 2c and 2b on Pl. V. show the upper and side views of a centro-dorsal, from which three radials have been removed, so as to expose the rosette and a portion of the basal star.

Closely allied to this species is a very remarkable Actinometra, which was dredged by the "Blake" in the Caribbean Sea. At first sight it greatly resembles a large example of Actinometra lineata; but the palmar series are represented by single axillary joints, and the post-palmars may be of the same character, or there may be two joints united by syzygy. The second brachial is generally a syzygy on the outer arms of each ray, and sometimes also on the adradial arm, which is on the inner side of each distichium. But the other arms generally have the first two joints united by syzygy,

so that the specific formula comes to be—a.3.1.1.  $\frac{2br}{2}$ .  $\frac{(o)}{(i)}$ . I really cannot tell what to

make of this remarkable form, and should much like to see some more examples of it. For the present at any rate it may remain in the neighbourhood of Actinometra lineata.

The Comatula with an excentric mouth which was described by Rathbun<sup>1</sup> as Antedon, sp., from some locality either on the the coast of Pernambuco or of Parahyba do Norte, is I think identical with Actinometra lineata. But the question is a little difficult to decide, as he makes no reference to the presence or absence of syzygies in the distichal and palmar axillaries; and the position of the first brachial pinnule is not described very clearly.

<sup>1</sup> Trans. Connect. Acad., 1879, vol. v. p. 157.