

the case. But the distal pinnules in at least five of the posterior arms are provided with the curious ovoid bodies on their dorsal aspect which I have noticed in some forms of *Actinometra parvicirra*.<sup>1</sup> In the latter type the pinnules which bear these bodies are generally non-tentaculiferous; but this is not the case in *Actinometra elongata*.

The centro-dorsal of this form is very thin, with much reduced cirrus-sockets, and is evidently in process of transformation into the *Phanogenia*-condition shown on the same plate (Pl. LVII. figs. 1, 2). One of the arms has been broken at the syzygy in the third brachial, and the new epizygial is an axillary, as is so frequently the case. This fact may possibly indicate that when palmars are developed in this type, there are normally three with a syzygy in the axillary, so that it would then be allied to *Actinometra rotalaria* and *Actinometra valida* (Pl. LIX. figs. 2, 3).

The terminal comb on the oral pinnules is rather a small one, but it may occur at intervals to some way out on the arms. The disk is very large and prominent, without any trace of calcareous deposits, and the radial position of the mouth is not very distinct (Pl. LVII. fig. 3).

2. *Actinometra simplex*, n. sp. (Pl. LIX. fig. 1).

*Specific formula*— $a.2.\frac{b}{a}$ .

*Description of an Individual.*—Centro-dorsal a thin disk bearing about fifteen marginal cirri with fourteen to seventeen segments, a few of which are longer than broad, First radials concealed, and also portions of the second, which are partly united laterally. Two distichals, the axillary without a syzygy.

Eighteen arms; the anterior with one hundred joints, as compared with forty-five in the posterior arms, some of which are non-tentaculiferous. The joints are short, sub-triangular, and slightly overlapping, becoming more elongated at the ends of the anterior arms. A syzygy in the third brachial, and the next about the tenth brachial, with others at intervals of two to four joints.

The second brachial bears a pinnule about 7 mm. long, and the following pinnules diminish to those on the fifth and sixth brachials, afterwards increasing again. The terminal pinnules of the anterior arms are very long and slender, those of the posterior arms being shorter and stouter. The first four pinnules on each side have a small terminal comb, which is found at intervals till near the ends of the arms.

Mouth interradial; a few calcareous granules on the disk.

Colour in spirit,—the skeleton a dull green, and the ventral perisome deep brown.

Disk 8 mm.; spread 9 cm.

*Locality.*—The Admiralty Islands; 16 to 25 fathoms. One specimen.

<sup>1</sup> *Trans. Linn. Soc. Lond. (Zool.)*, ser. 2, 1879, vol. ii. p. 40, pl. ii. fig. 6, c.b.