axillary without a syzygy, while the inner palmar series resembles the distichal one in consisting of three joints, the axillary with a syzygy. This is shown very well in the single example of *Actinometra duplex*, which has no very great number of arms (Pl. LXIV. fig. 3); and the fact that this arrangement is not merely an accidental one is shown by its occurrence in three individuals of *Actinometra belli* (Pl. LXIV. fig. 1), and in six of *Actinometra nobilis* (Pl. LXV. fig. 1), both species having four post-radial axillaries, and therefore a large number of arms.

5. *Actinometra belli*, n. sp. (Pl. LXIV. figs. 1, 2).

Specific formula—a.3. $\frac{2}{3}\left(\frac{o}{i}\right)$.2.2. $\frac{ab}{b}$.

Centro-dorsal a moderately thick circular disk, hollowed in the centre, and bearing about fifteen marginal cirri. These are fairly stout, of fifteen to twenty joints, a few of which are rather longer than wide.

The first radials are partly visible, and the second incompletely united; the rays are quite separate from one another, but the intervening perisome is regularly plated as far as the palmar axillary. The rays may divide five times, giving sixty-five to seventy arms.

Three distichals, the axillary with a syzygy; palmar series two-jointed without a syzygy on the outside of the ray, but three-jointed with a syzygy on the inside.

The first and second post-palmar series, when present, are also two-jointed. The anterior arms are long and slowly tapering, with one hundred and twenty to one hundred and fifty overlapping joints, which are shortly triangular at the base, becoming quadrate about the middle, and slightly elongated near the tip. The posterior arms are shorter and taper more quickly, with only eighty to one hundred joints. A syzygy in the third brachial; the next about the tenth or twelfth, with others at intervals of three to six joints.

The distichal pinnule is moderately stout and reaches 20 mm. in length; the palmar pinnule on the inside of the ray, and that of the second brachial are nearly as long; but that of the third brachial is only half their length and much more slender, while the next pair are the smallest on the arm. The terminal pinnules are long and slender on the anterior arms but shorter on the posterior ones. The basal segments of the genital pinnules have sharp dorsal keels, which are less distinct in the first few pinnules than in those immediately following. In the anterior arms they are lost after about the fiftieth brachial, but are traceable to near the end of the posterior arms. The lowest pinnules have a well-marked comb, which becomes gradually smaller and is lost about the fifteenth brachial.

Mouth interradial; the disk bears a variable number of small granules, especially round the ambulacra; several of the hinder arms are ungrooved.