

of cirrus-joints and the additional axillary together constitute a good specific character. Palmars occur on every ray of each of the two Challenger specimens, so that the number of arms reaches twelve or sixteen to each ray; while in *Actinometra multiradiata* there are not usually more than six. Some of the cirri in both individuals have thirty joints or more, though the number may fall to twenty-six in cirri that are apparently mature; and on the other hand there may be as many as forty joints. The Paris specimen has about thirty.

5. *Actinometra lineata*, n. sp. (Pl. V. figs. 2, *a-e*; Pl. LX. fig. 3).

1879. *Antedon* sp., Rathbun, Trans. Connect. Acad., 1879, vol. v. p. 157.

1880. *Actinometra lineata*, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1882, vol. xv. p. 213, pl. xii. figs. 27, *a, b*.

1882. *Actinometra lineata*, P. H. Carpenter, Proc. Zool. Soc. Lond., 1882, p. 747.

Specific formula— $a.3.2.[(p).br.].\frac{b}{a}$.

Centro-dorsal discoidal, bearing twenty to thirty marginal cirri. These have eleven to seventeen joints, usually not more than fourteen, several of which are longer than wide, the later joints overlapping dorsally.

The first radials are usually concealed, together with more or less of the second, which may or may not be united laterally. Three distichals, the axillary with a syzygy, and sometimes two palmars, the axillary with a syzygy. The perisome between the rays is occasionally plated as far as the distichal axillary.

Eighteen to thirty-four arms, the lower joints triangular and overlapping, but little wider than long; the middle joints more quadrate, and the later ones elongated.

A syzygy in the second brachial, and the next between the ninth and twelfth; others at intervals of one to five, usually three or four, joints.

The distichal pinnule reaches nearly 15 mm. long, with a large terminal comb. The next pinnule is but little smaller; but the size decreases considerably after the pinnule on the second brachial, till the third or fourth on the same side. The following pinnules increase slowly in length, becoming very long and slender in the terminal third of the arm. The first five or six brachial pinnules are sometimes webbed by perisome for about one-third of their length and have a small comb, which does not usually extend further, though it may occur as far out as the eighteenth brachial. The basal joints of the lower pinnules are sometimes slightly carinate.

Mouth variable in position; a few of the hinder arms may be non-tentaculiferous.

Disk naked, or bearing a few scattered grains.

Colour in spirit,—reddish or yellowish-brown, with a dark purple medio-dorsal line.

Disk 15 mm.; spread 16 cm.

Locality.—Bahia; 7 to 20 fathoms. Eight specimens.