In each of these four species the disk is strongly plated, just as it is in the Basicurva-, Spinifera-, and Granulifera-groups (Pl. IX. fig. 2). But in all these three latter types the pinnule-ambulacra have a well-defined skeleton and the lower parts of the rays are flattened laterally; whereas in Antedon elegans and its three allies, which we may conveniently call the Elegans-group, these characters are absent, the plating of the perisome being confined to the disk. This seems to be a constant peculiarity of the multibrachiate species of Antedon which have a syzygy between the two outer radials; and I have not seen any species possessing a plated disk, but no ambulacral skeleton on the pinnules, which has articulated radials.

The Comatula tessellata, Müller,' seems, however, to be of this character. It has ten arms with forty-five cirrus-joints, the later ones spiny, and was described as having the "Haut der Scheibe mit kleinen Knochenplättchen bedeckt." Müller's type is (or was) in the museum at Bamberg, but I have never been able to get a sight of it, and it is the only one of all the described species of Antedon (if indeed it be an Antedon) which I have not personally examined. It may of course be an Actinometra, though the great number of its cirrus-joints rather precludes this supposition; and there is also a possibility that its two outer radials may be united by syzygy, though Müller said nothing to that effect. But its true position must remain uncertain for the present; and I would simply draw attention to the fact that the mode of union of the two outer radials must be carefully examined when an attempt is made to determine the systematic position of a multibrachiate Antedon with a plated disk; for the probability is that it belongs to Series I.

## Genus 5. Actinometra, Müller, 1841; emend. P. H. Carpenter, 1887.

- 1758. Asterias, Linnæus (pars), Systema Naturæ, 10th ed., Holmiæ, 1758, t. ii. p. 663.
- 1783. Asterias, Retzius (pars), K. Svensk. Vetensk. Akad. Handl., År 1783, t. iv. p. 241.
- 1805. Asterias, Retzius (pars), Dissertatio, sistens Species Cognitas Asteriarum, Lundæ, 1805, p. 34.
- 1816. Comatula, Lamarck (pars), Histoire Naturelle des Animaux sans Vertèbres, Paris, 1816, t. ii. p. 530.
- 1830. Comatula (Astrocoma), de Blainville (pars), Dict. d. Sci. Nat., 1830, t. lx. p. 229.
- 1830. Alecto, Cuvier, Règne Animal, Paris, 1830, t. iii. p. 228.
- 1834. Comatula (Astrocoma), de Blainville (pars), Manuel d'Actinologie, Paris, 1834, p. 248.
- 1835. Comatula, Agassiz (pars), Mém. de la Soc. d. Sci. Nat. de Neuchatel, 1835, t. i. p. 193.
- 1835. Comaster, Agassiz, Ibid., p. 193.
- 1840. Comatula, Müller (pars), Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, 1840, p. 91.
- 1841. Actinometra, Müller, Ibid., 1841, p. 180.
- 1841. Alecto, Müller (pars), Ibid., 1841, p. 182.
- 1843. Alecto, Müller (pars), Abhandl. d. k. Akad. d. Wiss. Berlin, Jahrg. 1841 [1843], p. 203.
- 1843. Actinometra, Müller, Ibid., p. 226.
- 1843. Alecto, Müller (pars), Archiv f. Naturgesch., 1843, Jahrg. ix. Bd. i. p. 131.
- 1843. Actinometra, Müller, Ibid., p. 132.
- 1843. Asterias, Müller, Ibid., p. 133.

<sup>&</sup>lt;sup>1</sup> Abhandl. d. k. Akad. d. Wiss. Berlin, Jahrg. 1847 [1849], p. 251.