

described genera also belong. This Hydroid may be very readily recognized by its remarkable, feather-like form (Pl. XV. *Figs.* 1 and 1^a). The main stem (*Fig.* 1, *a*) rises from its stoloniferous basis with a long and gentle curve (*Fig.* 1^a), which extends to its extreme, free end; it does not, however, trend strictly in the plane of the general curve, which it simulates, but follows it in a slightly transversely zigzag course, giving off a branch at every bend. Obliquely transverse to the plane of this curve, the branches (*c*) arise, alternately on each side, at regular intervals of about one twelfth of an inch, and bend in curves similar to that of the main stem, but more abrupt, and uniformly in the same plane. The angle at which these branches project from the main stem has a twofold relation; it subtends about fifty degrees from the main stem, on the convex side of its curve, and about forty-five degrees from the plane of this curve. Both the main stem and its branches taper gradually from base to apex. At regular intervals, of one twelfth of an inch, on the convex side of the branches (*Fig.* 2, *a* to *a*²), and in one series, arise the peduncles (*a*¹) of the individual hydræ (C D E F G). Unlike the main stem and branches, each peduncle, being about one twelfth of an inch long, expands gradually, from the base upwards, and bears on its broadened extremity a single Tubularia-like hydra, each one of which, going from the base of the branch toward the tip, is successively smaller than the preceding (G F E D C). The tip (*a*²) of the branch also expands, like the peduncles, and bears a single hydra (B), which is much larger than any of those on the peduncles. The same feature is very prominent at the extremity of the main stem (*Fig.* 1, *d*). By these characters the genus *Pennaria* may be distinguished from all others at a glance.

It remains now to describe each feature in detail, so far as we may be prepared to do so, by a few hours study of the living animals, and by the examination of

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| <i>Sertularia pennaria</i> , Cavolini, Mem. Polypi Marini, 1785, p. 134, Pl. V. <i>Figs.</i> 1-6. | ? <i>Aglaophenia</i> , Lamour., Hist. Polyp. Flexibles, 1816, p. 167. |
| " " Cavolini, Transl. Sprengel, 1813, p. 61, Pl. V. <i>Figs.</i> 1-6. | <i>Plumularia</i> , Blainville, Diet. Sc. Nat., 1830, Vol. LX. p. 442.—Manuel Actin., 1834, p. 477. |
| " " ? Linnaeus, Syst. Nat., 1767, 12th ed., Tom. 1, p. 1313, No. 26. | <i>Globiceps</i> , Ayres, Proc. Boston Soc. Nat. Hist., 1852, IV. p. 193. Name preoccupied, for an Hemipterous Insect, by Lepelletier and Serville, Encyc. Méthod., X., 1825. |
| " " Gmelin, Lin. Syst. Nat., 1788, p. 3856, No. 26. | <i>Eucoryne</i> , Leidy, Jour. Acad. Nat. Sc., Philadelphia, 1855, Vol. III. Pl. X. <i>Figs.</i> 1-5. Name preoccupied, for a Coleopterous Insect, by Schönherr, Disposit. Method., 1826. |
| " " Oken, Allgemeine Naturg., Bd. V., 1835, p. 77. | |
| " " Bose, Hist. des Vers, 1830, 2d ed., Vol. III. p. 119. | |
| ? <i>Aglaophenia</i> , Lamour., Bulletin Soc. Phil., Paris, 1812, p. 184. | |