Notwithstanding the many exceptional characters of this curious Plumularian, I believe it will be better to keep it in the genus *Plumularia*, rather than construct for it a new one.

Under the name of *Plumularia obconica*, Kirchenpauer describes a Plumularian from the Gulf of St. Vincent, Australia, which in many respects resembles the present species. Its female gonangium carries, as in this, on the outer surface of its walls, a longitudinal series of nematophores. Like *Plumularia armata*, also, the species is monœcious, carrying male and female gonangia in the same colony, while the main stem is divided into internodes, each carrying a hydrotheca, as in *Plumularia armata*. It differs, however, from *Plumularia armata* in its shallower hydrotheca, with plicated margin, and in the conical roof of its female gonangium, while the stem is unbranched, and carries the hydrocladia in such a way as to give them an obviously secund disposition. Kirchenpauer, moreover, describes the nematophores of the trophosome as monothalamic, those of the gonosome being of the usual bithalamic type. In *Plumularia armata* both sets of nematophores are bithalamic.

The collection contains but a single specimen of *Plumularia armata*. It was dredged at Station 163A, off Port Jackson; depth, 30–35 fathoms; bottom, red clay.

Antennularia, Lamk.

Antennularia, Lamarck, Hist. Nat. des An. sans Vert., 1st ed., 1815.
Nemertesia, Lamouroux, Hist. des Pol. Coral. flex., 1816.

Antennularia fascicularis, n. sp. (Pl. IV. figs. 5, 6).

Trophosome.—Colony attaining a height of upwards of three inches; stem thick, sub-dichotomously branched, formed of a multitude of coalesced tubes, which give off on all sides irregularly scattered hydrocladia, which carry the hydrothecæ on alternate internodes, and are about two-tenths of an inch in length. Hydrothecæ rather large, campanuliform, adnate by their base only to the supporting internode, flanked on each side by a long style-like process, which supports on its summit a lateral nematophore; one mesial nematophore carried by the hydrothecal internode near its proximal end, and three by the intervening internode.

Gonosome.—Gonangia springing laterally from the hydrothecal internodes each at the proximal side of a hydrotheca, obovate, supported on a short stalk and carrying a pair of nematophores close to its proximal end.

A more extended comparison of *Antennularia antennina* of our own shores, in which the hydrocladia are verticillate, with those forms in which they are more or less scattered, has led me to regard this difference as of less systematic importance than I had formerly believed, and has induced me to assign to it a specific rather than a generic value. When,