narrow limitation of Kölliker's definition. Several of the genera included by us exhibit again a near relationship to the Alcyonidæ, especially to *Alcyonium*. This holds good of *Paranephthya* as regards the condition of the polyp tubes, and of *Chironephthya* as regards the structure of the polyps, which exhibit a distinct calyx, and as regards the distribution of the polyps on the branches.

Genus *Paranephthya*, n. gen.

Upright, ramified colonies, on whose terminal twigs the polyps are placed in thick clusters. The polyps are not retractile. The canals of the colony are narrow and divided from one another by relatively thick partition walls which contain scattered spicules. The outer covering is smooth. The spicules of the outer covering and of the polyps, as well as those of the canal walls, are foliaceous and spiny clubs, with various outgrowths.

The fact that the spicules are still developed in rather small numbers in the partition walls of the canals brings this genus near to the preceding division. As regards the form and build of the colony it stands nearest to *Duva*, Dan. and Kor., and certain forms of *Nephthya*.

The canal-system in the stem and branches is peculiar and different from that of all the representatives of the division Spongodinæ. In the branches there are numerous fine canals, separated by thick dividing walls from one another; these canals are still more numerous in the stem, whose transverse section appears like a fine sieve. Hence the stem has a much more compact character than in the Spongodinæ, in which it is penetrated by less numerous and wider canals.

In the arrangement of the canals no definite boundary can be recognised. They are direct prolongations of the digestive cavities of the polyps, which are thus continued directly into the stem without alteration of their width.

The polyps are club-shaped, not retractile. In repose the tentacles are simply laid together over the mouth. In the contracted condition they bend towards their support, as in *Eunephthya* and as in the Primnoidæ. The spicules are very uniformly developed as foliaceous and spiny clubs, which lie close together. When in spirit the stem, branches, and polyps appear smooth; when dried the polyps in particular acquire a finely granular surface, which appears scaly when slightly enlarged.

The most nearly related genus is *Ammothea*, Sav.

Paranephthya capitulifera, n. sp. (Pl. XXXVIA. figs. 1*a*, 1*b*; Pl. XLII. fig. 8).

The upright stem arises from a broad base growing over a fragment of coral. Gradually diminishing in size it gives off on different sides a number of irregularly