

this species has been found by us in the collection. It is not uninteresting to add that in this fragment, which is partly growing over the axis of a Gorgonid, the polyps are nearly all extruded, at least their tentacular crowns in most cases are displayed.

Habitat.—Reefs at Samboangan, Mindanao, *vide* Professor Moseley.

Station 186, Cape York; depth, 8 fathoms (? on Reef).

Family II. NEPHTHYIDÆ.

Nephtyidæ, Verr., Proc. Essex Inst., vol. vi, 1869, including *Siphonogorgiaceæ*, Kölliker, Festschrift z. Feier des fünfundzwanzigjährigen bestehens der physic.-med. Gea. Würzburg, p. 22, 1874.

Spogginæ, Dana.

Spoggolidæ, *Nephtyidæ*, *Lemnastulæ* (*pars*), Gray.

Alcyoniens armés, Milne-Edwards (*pars*), Hist. Nat. des Coralliaires, t. i. p. 127.

Alcyonine capituliferæ et *Siphonogorgiaceæ*, Klunzinger, Korallenthiere des rothen Meeres, Th. 1, p. 10, 1877.

The colonies form upright, branched stems, each consisting of a more or less developed barren trunk, and of branches which ramify very variously and bear the terminal polyps. The polyps are not divided into a calycine and a tentacular portion, so that no complete invagination of the upper tentacle bearing part into a lower gastral cavity can take place, and in repose the tentacles are folded over the oral cavity or the upper portion of the body can be withdrawn. The polyps are continued into long gastral cavities, which, however, do not open into one another but become separated from one another by thin walls. Each gastral cavity diminishes in size downwards, until at length it terminates in a wedge-shaped, blind sac. Only a few are continued, in isolated cases, directly into the main canal.

The trunk and the larger branches are penetrated by sometimes wide and sometimes narrower canals. These canals are separated only by thin walls, sometimes with and sometimes without spicules; they are surrounded on the outside by a thicker external sheath armed with spicules. The large main canals are connected with the long polyp tubes by canals which originate at the base of the polyps. There is also developed, in the partitions which separate the polyp cavities and canals, another system of narrow, capillary "nutrient-canals." From these the young buds arise, between the old ones, which from the commencement of their development possess longer or shorter digestive cavities. In the branches one can usually distinguish four wide canals whose walls are coterminous in the axis of the branch. New polyps, whose narrow tubes appear on transverse section, occur on the outside of the four main tubes, in the spaces between each two, but their boundary walls do not extend as far as the axis. Towards the end of a branch the young polyps constantly increase in number and their digestive cavities become shorter and shorter.