

and stout gastrozoid with its four tentacles, dark stomach cavity seen through the walls of its body and its mouth at its summit. Around are grouped five dactylozooids, each with many tentacles, but without any mouth or stomach. One of the dactylozooids is seen bending over to feed the gastrozoid of the system.

“By far the most valuable discoveries, from a zoological point of view, with regard to the heterogeneous group which commonly goes under the name of ‘corals,’ made during the Expedition, were those which proved that the curious *Heliopora*, with its dark blue skeleton, to be an Alcyonarian allied to the precious coral of commerce, and the confirmation of the late Professor Louis Agassiz’s results as to the Hydroid nature of *Millepora*. Not only were Agassiz’s conclusions amply confirmed, but another family of Hydroid corals was discovered in the Stylasteridæ, until then believed to be allied to the



FIG. 274.—Portion of the hard coral skeleton of *Millepora nodosa*; twice natural size.

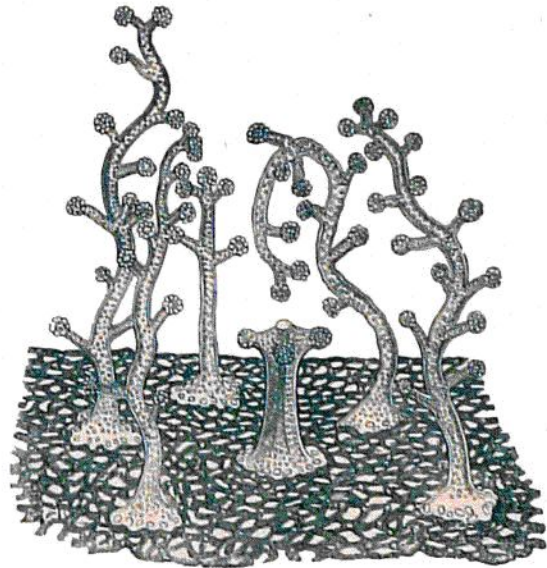


FIG. 275.—System of zooids of *Millepora nodosa* in the expanded condition. Single short gastrozoid in the centre surrounded by five elongate dactylozooids.

Oculinidæ, the members of which exhibit in their structure even more remarkable complexity than the Milleporidæ. *Heliopora*, the blue coral, was, until the voyage of the Challenger, always believed to be essentially similar in structure to ordinary Madreporarian corals, to have its tentacles smooth and non-pinnate, and to bear them in multiples of the number twelve. On examination of the soft tissues, however, it was found that *Heliopora* has eight pinnate tentacles only, and that all its structure conforms throughout with that of other Alcyonarians. *Heliopora* thus proves to be the sole modern survivor of a large series of massive Alcyonarian corals which flourished in the Palæozoic epoch, and its minute structure is of the greatest value, now that it is properly understood, as a guide to the elucidation of complications which occur in its ancestral allies.

“With regard to *Millepora*, some account has just been given of its structure and of
(NARR. CHALL. EXP.—VOL. I.—1885.)