

the elongation in the transverse axis brings about an arrangement of the tentacles in two subparallel rows of three each. If one were not acquainted with the arrangement of the mesenteries, the tentacles might be described as consisting of an anterior, a middle, and a posterior pair. In *Antipathella* the tentacles are close together, and younger zooids still show them somewhat radiately arranged. In *Parantipathes*, however, the difference between the length of the zooid in the transverse and sagittal axes is very great, so that the tentacles, still arranged in rows, become considerably isolated. In this case there is a faint indication of a division of the zooid into three lobes, each bearing two tentacles. This is brought about by a slight depression in the peristome on each side of the stomodæum. This depression crosses the transverse axis at right angles, and pushes down the transverse mesenteries before it for a short distance. In *Parantipathes larix* the cœlenteron is thus imperfectly divided into three lobes, the central containing the stomodæum and all the mesenteries, the lateral lobes only the distal portions of the transverse mesenteries. The reproductive organs are confined to those sections of the transverse mesenteries situated in the lateral lobes of the cœlenteron. From this type the dimorphism in *Schizopathes* is easily derived by the formation of a mesogloæal partition in each depression of the peristome which, passing down to the base of the zooid, divides it into three individuals, a central gastrozooid and two lateral gonozooids. In the *Parantipathes* type the cœlentera of the various zooids on a pinnule are in communication by means of a basal prolongation of each. The hex-tentaculate individuals are imperfectly separated from one another by mesogloæal partitions which do not reach the base. In *Schizopathes* similar mesogloæal partitions separate the dimorphic individuals from each other, as well as one triplet from another. In *Schizopathes* there are, typically, no prolongations of the cœlentera in the direction of the branch, because all are closely packed, as in *Pteropathes* amongst the Antipathinæ. In *Bathypathes*, on the other hand, the dimorphic individuals are always separated from each other by a considerable interval, and an interzooidal communication is kept up by lateral prolongations of their cœlentera. Thus the Schizopathinæ appear to be directly derived from the Antipathinæ. The transition is brought about, first by an elongation of a zooid along the axis of a branch, and secondly by a division of such an elongate zooid into three individuals by the formation of two vertical mesogloæal partitions, one on each side of the stomodæum. *Parantipathes larix* forms an interesting link between the two subfamilies.

COLONY FORMATION.

The production of a colony from the primary oozoid has not been observed, but it is possible to gain a general idea of the process from an examination of the blastozooids of an existing colony. New zooids are added by a form of budding in all essential features similar to that which obtains in Gorgonidæ. The process is probably