

tentacle opens into the general portion of the coelenteron, the mesenteries on each side of the sagittal axis become further separated, so as to take up more of a transverse position, on account of the relatively large area of the base of each tentacle.

The *gonozooids* are indistinctly divided into two lobes by a median depression which corresponds in position to a mesentery. The surface of each lobe is continued vertically as a tentacle. Apparently only one mesentery is present in each gonozooid, occupying the transverse axis, and probably to be regarded as homologous with the distal portion of a transverse mesentery in *Parantipathes*. It bears the reproductive organs, which occupy the greater portion of the cavity of the zooid, and also at its base forms a convoluted filament. All the individuals on a branch are in communication with one another by means of a prolongation of their coelentera, passing from one zooid to another between the base of the filament, or the stomodæum as the case may be, and the tissues surrounding the sclerobasic axis. The individual zooids are separated from one another by incomplete mesogloæal septa passing vertically downwards. They are apparently slightly longer between adjoining gonozooids than between a gonozooid and a gastrozooid (fig. 11). In other words, the individual members of each group of three zooids are not quite so much isolated from each other as they are from the adjoining groups. This difference is, however, slight, and is only noticeable in sections.

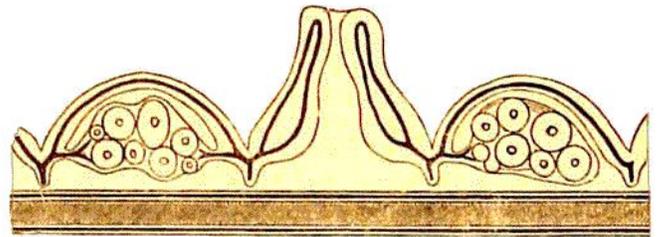


FIG. 11.—Diagram of the arrangement of the dimorphic zooids along the branches in *Schizopathes crassa*.

Bathypathes.

The zooids of this genus do not call for special comment at present. They are similar in outline and in the arrangement of mesenteries to those of *Schizopathes*. The individual zooids are, however, always isolated.

Cladopathes.

This genus is in many respects the most remarkable yet examined. The gastrozooids have an unusually long stomodæum, ending in a funnel-shaped opening close to the base of the zooid. The mesogloæa is very thick, and has a number of connective tissue cells imbedded in its substance. This is the only case with which I am acquainted in which the mesogloæa of the Antipathidæ shows any cellular elements imbedded in its substance. In *Cladopathes plumosa* the stomodæum is much folded, leading apparently to an irregular arrangement of the mesenteries. I have only been able to make out six mesenteries, all of which are "primary," and correspond to the six primary mesenteries of other Antipathidæ. If any "secondary" mesenteries be present