

fined to the anterior or superior surface of a branch. In much branched species, in which the stem and main branches are relatively thick, the zooids situated on these portions of the corallum have a rounded outline, with the tentacles radiate and equidistant. The zooid is short and the peristome and tentacles are the only portions of it which project beyond the cœnenchyma. Such zooids are, however, usually not numerous. The majority are situated in single linear series on the medium sized branches, branchlets, and pinnules. In these parts the zooids are somewhat elongated in the transverse axis, so that the long axis of the zooids corresponds with the axis of the branchlet or pinnule on which they are situated. The stomodæum is elongated in the opposite direction, the mouth occupying the sagittal axis. Usually the shape is more or less rectangular, and the difference in length between the sagittal and transverse axes is not great. The elongation is, however, sufficiently important to bring about a change in the position of the tentacles, by which the radial arrangement is lost. In most cases the tentacles become arranged in three pairs, forming two longitudinal rows of three each, parallel to the axis of the branch. There is a tentacle at each end of the sagittal axis as usual. The other pairs consist of a tentacle on each side of the mouth, the two pairs being close together in elongate polyps. These may be spoken of as the lateral pairs of tentacles; they limit the long axis of the zooid. The two pairs of lateral tentacles are always inserted into the peristome. The sagittal tentacles, on the other hand, appear to vary somewhat in position, and arise partly from the body-wall. Thus in a side view of a row of zooids on a pinnule, the middle tentacle of each zooid appears to arise from a point nearer to the axis than the others. In young zooids the bilateral arrangement of the tentacles is often not well marked, and all seem at first to share the radiate outline of those situated on the thicker portions of the corallum. With increase in size a more or less well-marked bilateral arrangement of the tentacles is brought about. In extreme cases the tentacles form two straight rows, one on each side of the median transverse axis. Perhaps with regard to their relations to the axes of the zooid, the rows of tentacles would be more correctly defined as "anterior" and "posterior" instead of longitudinal. It is to be noted that in all the species observed having a zooid referable to this type, the elongation of the body in the transverse axis is not pushed so far as to isolate the tentacles of a row. In most cases they are quite as close together as they would have been if arranged radiately. In transverse vertical sections the mouth is seen to open on a prominent oral cone, from the base of which the ectoderm courses out horizontally for a little distance and then becomes rapidly depressed towards the axis, quickly rising again to commence the outline of the next zooid. In some cases the zooids are more isolated, but are rarely more than one diameter apart. The mesenteries in this genus are ten in number, all of which behave in precisely the same manner as those of *Cirripathes*. The relative breadth of the primary mesenteries necessarily depends on the shape of the zooid and the length of the mouth. The reproductive organs are developed on the transverse