

large shrub-like form so densely clothed with polyps that it is only possible to get a clear idea of the mode of branching from parts divested of their fleshy covering.

The plumose branches are from 15 to 31 cm. long, slightly tapering, and bent several times in a zig-zag fashion. Sometimes the original course of the branch before a bend is continued as a short tapering process at the outer angle; at others this process is stronger and gives rise just below its apex to an important lateral branch bearing the usual arrangement of branchlets and pinnules. The whole of the branches are clothed with pinnules arranged in three or four series, showing a subspiral arrangement. In cases where there are three rows of pinnules, two generally arise from the antero-lateral surfaces, and the third from the posterior surface. At other times two may be lateral, a third anterior, and a fourth posterior. Truly lateral pinnules are, however, of comparatively rare occurrence. The pinnules are usually short, and arranged about ten or twelve to a centimetre. The most frequent type is a short forked pinnule from 0.4 to 1 cm. in length. Sometimes the superior arm of the fork is much longer than the other, in which case the length may reach 2 cm. Simple pinnules also occur frequently, and are from 1 to 2.5 cm. long; these are more numerous and usually of greater length in the newer portions of the corallum. Finally, the pinnules may become stronger and then bear three or four rows of short secondary pinnules similar to those on the larger branches, but smaller. In this way, by the increase in importance of certain pinnules, the branchlets are formed. These are mostly sublateral or posterior, and vary from 2.5 to 6 cm. in length. They are placed at irregular intervals, and it is to be noted that only rarely does an anterior pinnule become increased in importance so as to form a branchlet, and when this occurs, the branchlet becomes bent so as to extend sublaterally.

The zooids are usually much crowded and do not appear to be so isolated as in other Schizopathinæ. Six or more occur to a centimetre and the elongation of the mouth is usually situated obliquely (Pl. II. fig. 2). The interzooidal areas are often filled with ribbon-like mesenterial filaments. The fact that the gastrozooids only possess six mesenteries separates this genus from all other known Antipathidæ.

The sclerenchyma is black, polished, and almost smooth in the older and thicker portions of the corallum; there is the usual gradation in colour through dark brown in the branchlets to a bright golden brown in the younger pinnules. The spines are relatively large, subtriangular, with usually a concave upper, and a convex lower, margin. They are somewhat irregular in shape, and the base is often very broad and extends for some distance on each side of the spine as a longitudinal ridge, as is frequently the case in the genus *Antipathella*. They are arranged in irregular dextrorse spirals and also in longitudinal rows, five of which may be counted from one aspect of a pinnule. The members of a row are somewhat irregularly placed, from one and a half to three and a half lengths apart.

*Habitat*.—Station 145A; December 27, 1873; lat. 46° 41' S., long. 38° 10' E., off Prince Edward Island; depth, 310 fathoms; bottom, volcanic sand.