Examination of the Canadian specimen of A. glacialis serves to emphasize the close structural agreement of this species with A. marina. The only differences of importance between them are in regard to the number of their chaetiferous segments—19 in marina, 17 in glacialis, and of their gills—13 pairs in marina, 11 in glacialis. The gill axes of this specimen are more elongate than those of the types and in this respect they approach those of the bushy type of A. marina. The two species appear to exhibit differences in the proportions of their prostomial lobes and in the shape of their neuropodial crotchets, but these are slight and are based on the examination of very few examples of glacialis, so that it is not advisable to lay too much stress upon these.

It is interesting to note that while the Canadian specimen of A, glacialis approaches in the character of its gill the littoral variety of A, marina, it agrees in the annulation of the region between the second and third chaetiferous annuli with the laminarian variety of A, marina which has pinnate gills. Examination of well preserved examples of A, glacialis would show how far the funnels of the excretory organs agree with those of A, marina, and young examples would be useful for the comparative study of the chaetae, especially of the neuropodia.

The present position of our knowledge of A. glacialis would seem to be best summed up by the statement that this species has been derived from A. marina -from which it is apparently a comparatively recent offshoot—by a reduction in the number of chaetiferous segments¹ and of gills. If this should prove to be the only difference, the question as to whether A. glacialis is a distinct species or only a variety would require consideration. In 1903 I had to consider a similar though simpler case in the species A. assimilis, which is represented by a forma typica with twenty chaetiferous segments and thirteen pairs of gills, the first on the eighth segment, and by a form with nineteen segments and thirteen pairs of gills, the first on the seventh segment, but otherwise their characters are identical. Although these differ in this constant and striking manner, I decided that it would be better to regard the second form as a variety -var. affinis—rather than as a distinct species. The difference between A. marina and A, glacialis is, however, a matter of two segments¹ and indicates a greater divergence, affording more justification for specific distinction, and I suggest that as A. glacialis has been described as a separate species it may be retained as such; it is a convenient designation for those specimens of the genus with seventeen chaetiferous segments and eleven pairs of small gills, which up to the present have been obtained only on the arctic shore of northwest America.

¹ One of the type specimens of A, glacialis possesses an eighteenth neuropodium on both sides but not a corresponding notopodium or gill.

¹ The number of chaetiferous segments in A, marina is rarely other than nineteen, and when there is a departure from the normal there is a much greater tendency for the development of an additional chaetiferous segment than for the suppression of one. Out of some thousands of specimens which I have examined during the past twenty-eight years, only three have been found to have one segment less than the normal: in one of these the gill, the notopodium and the neuropodium of the last (eighteenth) segment are missing on one side.