

Atlantic region. Here we have a form undeniably Palæarctic in origin, which has migrated from its native source and travelled 15,000 miles to found its colonies throughout the North Temperate Zone. Its route has certainly been via Bering Straits into Alaska and thence east and south. Its habitat and its predaceous nature have both contributed largely to its fitness for this long voyage. It is furnished with good wings, sucks any insect it can overcome and lives on the surface of the water. It has therefore had an unimpeded and favourable route from the land of its nativity eastward until stopped at the impassable barrier of the Atlantic ocean. Thus also must have migrated the two *Corixas*, *germari* and *præusta*, out from the Palæarctic region.

This also is the route followed by many of the land bugs, but they indeed must have met the great obstacles, saving only the semi-aquatic strong-flying and predaceous Acanthiidae, to whom the waters can have no terrors. A number of these terrestrial forms are cannibals and live on other insects, their only requirement being that their prey be not encased in impenetrable armor or too large to be overcome. *Zicrona cærulea* may serve as an example of these carnivores, and here we see how much slower has been its progress than that of the aquatic forms, and seemingly it has met with an unsurmountable boundary in the Rocky Mountains. The advent of the phytophagous forms is similarly explained for the majority of cases, in view of the adaptability of the Hemiptera to any vegetable food other than their native food plants, especially when pressed by hunger. The dispersal of one land group, however, is a subject for interesting speculation. I refer to the three species of Aradids common to the Eastern United States and Western Europe. Is this their native home? The genus *Aradus* is boreal in its origin. This much is reasonably certain. But are these three species themselves of Palæarctic or Nearctic origin? And if of Palæarctic origin, how did they get there? And if not, how did they cross Europe?

*Aradus crenatus* was described by Say in 1832; subsequently Herrich-Schaefer described it and figured it in *Wanzenartigen Insekten* (IX., fig. 538, p. 90), under the misnomer *corticalis*; and in 1860 Leon Dufour described it as new, and called it *dilatatus*.