

forms of the whole order, such as *Ocyroe* and *Calymma*, are exclusively tropical, *Ocyroe* being peculiar to the equatorial zone of the Atlantic, while *Calymma* is found in the Pacific as well as in the Atlantic.

For want of materials, it would be premature, at this time, to attempt tracing with precision the natural boundaries of the Acalephian faunæ. But, in connection with data obtained from other classes, much may already be done towards a better understanding of what zoological provinces truly are. In studying the geographical distribution of animals and plants, naturalists have followed different methods, leading to different results, and bearing in different ways upon the question before us. While investigating the relations under which animals and plants are placed, in different parts of the world, in reference to the physical influences to which they are exposed, we no doubt ascertain much that is of great importance for the limitation of the faunæ; but such studies do not lead, after all, to the knowledge of natural zoological provinces, but only to a fuller insight into the mutual dependence of the organized beings, and the limiting or fostering conditions under which they may live. This study, as I understand it, may end in giving us a more extensive physical history of the organic world, but cannot, by itself, furnish even the foundation for an organic geography, that is to say, for a knowledge of the natural mode of association of animals and plants of the same family or of the same class, which, properly speaking, constitutes natural faunæ or zoological provinces. Nay, this natural mode of association of a variety of animals, belonging either to one and the same class or to different classes and different kingdoms, might be obtained without a deeper knowledge of the physical influences which limit the geographical range of the species considered singly.

Again, much confusion seems to prevail among zoölogists and palæontologists in the use which they make of the word *fauna*. Some designate by it a definite area, within which a variety of animals appears to be naturally associated; and I believe it is in this sense that the term should hereafter be exclusively used. It is self-evident, that if the term *fauna* is applied to such circumscribed areas, and is at the same time used to designate entire zones, over which many distinct zoological provinces may be distributed, as is frequently done when zoölogists speak of the tropical fauna, the temperate fauna, etc., two very different ideas are thus confounded, and no accurate views can be introduced in our science, since in the first case a geographical area is intended, characterized by a peculiar association of various animals, and in the second case a special combination of physical features limiting the range of organized beings. It is far better here to use the expression of *zone*, consecrated in physical geography, and to speak of the tropical zone, the northern and the southern temperate zones, etc.; or, if the two ideas are to be combined, to speak of the faunæ of the tropical zone, in contradistinction to the