

Fam. ERYCINIDÆ.

In studying the members of this family we have had occasion to make a large number of dissections, prepared from representatives of by far the greater part of the recognized genera; these preparations have all necessarily been made from dry specimens, and the process we have adopted has only enabled us to reserve the chitinous structures such as are not soluble in caustic potash. The parts we have been able to prepare satisfactorily are the wings, the antennæ, the palpi, and the legs, as well as the secondary sexual organs of the male; those of the female, except as regards a very few points, have not given us any tangible materials for generalization. By a process, for the knowledge of which we are indebted to Mr. Wood-Mason, by which the colour of the scales of the wings and the hairs of the legs and body have been destroyed, we have been enabled to see the extent to which the discocellular nervules of the wings have become atrophied and the exact relative position of each nervule and branch, whilst the different parts of the legs and the number of the tarsal joints have been traced with a certainty not otherwise attainable. Our observations have led to the discovery of some characters not noted by previous writers. One of the most noteworthy is a peculiarity in the front legs of the males, where the trochanter is inserted at various distances from the end of the coxa, leaving a long projecting portion of the coxa beyond the trochanter joint. In the front leg of the female the relative position of the coxa and trochanter is normal. The tarsus of the front legs of the male in the family Erycinidæ is more or less atrophied as regards its joints, both as to their number and development, while those of the female are perfect, of the normal number of joints, the terminal joint bearing claws and the usual appendages.

The next point of importance is the presence or absence in the secondaries of both sexes of what we have termed a basal nervure; this nervure originates at the joint of the wing, and proceeds upwards outside the precostal lobe. It is fully developed, and very evident in by far the majority of American Erycinidæ; it is either wholly absent or quite rudimentary in all the Old-World genera, and it is absent also in the New-World genera *Eurygona*, *Methonella*, *Hades*, and *Helicopis*. These four genera, with those of the Old World, form our first subfamily, characterized by the secondaries not having a basal nervure or only a rudimentary one. The remaining genera form our second subfamily, characterized by the presence of a well-developed basal nervure. The removal of the first four American genera named above enables us to divide the remaining genera into three sections, according as the subcostal nervure of the primaries has four, three, or two subcostal branches. The position of these branches with reference to the end of the cell enables us to subdivide the second section into three groups, in the first of which all the branches are emitted beyond the cell, in the second one is emitted before and two beyond the end of the cell, in the third two are emitted before the end of