

*Annulata*, as well as the lower form *Rotifera*. Thus defined, the class includes a lower sub-class termed *Myriapoda*, with limbs to each articulation, and whose development is not much beyond that of the larval forms of the higher division; together with the true, or *Hexapodous insecta*, having the lower appendages developed on three articulations only, and the upper, assuming the form of wings, if at all, on two articulations only. The *Apterous* examples will probably appear more certainly the more their structure is understood to be degraded forms of some of the other divisions. It is at least certain that the different groups of *Apterous* insects differ more from each other than they do from some of what are considered as higher forms, whilst there are various special instances of the absence of wings in species obviously allied to others which are furnished with them; so that on the whole, the distinction of winged and wingless insects is of little value, and the *Apterous* orders commonly received might probably be appended to others of which they are but less developed examples. The degree of importance really belonging to some other of the characters relied upon in classifying insects, is very doubtful. One much employed is the mandibulate or suctorial character of the oral apparatus, yet it has been proved that the same elements occur in both structures, and the transitions from one to the other are most remarkable. We cannot think that either the abortive hind wings of the *Diptera*, or their more completely suctorial mouth, should prevent the recognition of their close affinity with *Hymenoptera*, and we incline to the opinion that these two orders, the most peculiarly typical of all insects, would, combined together, occupy a central position in a natural distribution, around which the other leading forms might be placed in the order of their tendencies of development: 1. *Neuroptera*; 2. *Lepidoptera*; 3. *Coleoptera*; 4. *Orthoptera*; 5. *Hemiptera*. Confining our attention now to the *Neuroptera*, it seems to us, in the first place, abundantly evident that the Caddis-flies, which have been elevated into a distinct order under the name of *Trichoptera*, only exhibit a modification of the *Neuropterous* structure in analogy with *Lepidoptera*. Reviewing, then, the various sections which have been proposed, we are inclined to the following view of the families of *Neuroptera*. We place first *Libellulida*, the Dragon-flies, as exhibiting the greatest power and ferocity; 2. *Phryganeida*, the Caddis-flies; 3. *Termitida*, the White Ants, distinguished by their social habits and their large consumption of food, obtained without violence; 4. *Panor-limbs*; a distinct head, with two antennae; respiration by tracheae; and distinct sexes. It is obvious that these characters exclude, on the one hand, *Arachnida*; on the other, all grades of *Crustacea* and