

They include: (1) the *Planipennians*, (Myrmeleontids, Hemeleontids, Nymphids, Mantispids and Semblids) which are Lepidopteroid in being *permaturative*, as well as in the other character already mentioned, and which, excepting the Semblids, are all *perterrestrial*.—(2) The *Psocideans*, which are Homopteroid in being *prematurative* and *perterrestrial*, and which, as observed by Packard, approach in form and in the roof-like position of the wings the Homopterous group of Aphides.⁷ The little booklice belong to this group, and thus represent the plant-lice among the Homoptera.—(3) The *Perlidaeans*, semiaquatic and *prematurative* species, which are Trichopteroid (or like the Phryganeans) in the form of the wings, in the larve being not only aquatic but also *living in a sheath*, and in the adult eating little or nothing.

Thus each subdivision of the Amplipens, the Lepidopterous, Homopterous and Trichopterous, appears to be represented in the subdivisions of the Amplipenniforms.

The subdivisions of Attenuates or Neuropters deduced are the following:

1. APIPENNIFORMS.

1. *Termitideans*, or Hymenopteroid group.
2. *Panorpideans*, or Dipteroid group.
3. *Aphanipteroid*. Group unknown.

2. AMPLIPENNIFORMS.

1. *Plannipennians*, or Lepidopteroid group.
2. *Psocideans*, or Homopteroid group.
3. *Perlidaeans*, or Trichopteroid group.

3. PERATTENUATES OF TYPICAL NEUROPTERS.

1. *Libellulideans*.
2. *Ephemerideans*.

As the higher Apipenniforms, the *Termitideans*, are *prematurative*, while the Dipteroid *Panorpideans* and the higher Ampli-

⁷ Mr. Packard observes with regard to the Psocideans:—

“The *Psocidæ* find their analogues in the Hemiptera [Homoptera]. The species of *Psocus* are so much like the Aphidæ that when flying they are often mistaken for each other. And, indeed, in the short broad body and broad head and long antennæ, in the very unequal wings, which are folded roof-like over the short abdomen, in their simple neuration, in the short legs and feeble tarsi, and in their mode of flight and their appearing winged towards the close of summer, these small insects are remarkably like the winged plant-lice.”

He also illustrates at some length the relations of some of the Planipennians to the Lepidoptera, in the course of which he remarks, that among the Myrmeleontids “*Ascalaphus* was described by Scopoli as a Papilio, and has been said by Kirby to resemble *Heliconia*.” The form of the antennæ is strikingly Lepidopteroid in its club-like shape, and its rather broad wings are colored. We add that the species of *Drepanopteryx*, a genus of the Hemeleontids, closely resembles some of the small Butterflies, and is called *D. phalænoides*.