

3. The forms among the Lepismians are related to those of Myriapods, as has been observed by different writers, and so also are their movements. Thus they occupy a position between Insects and an inferior order of Insecteans.

4. The third or degradational group of Insects, if such there be, should contain, according to analogy, elongated larve-like forms, such as make an elementalized exhibition of the Insect-type. As the longicaudate Birds, or Erpetoids, constitute the third or degradational division of Birds (aërial Vertebrates), so the longicaudate Thysanures may well represent the degradational division of Insects (aërial Articulates). The shorter Podurians are elliptic forms.

5. While Insects of the *first* grand division are *prosthénic*, and those of the *second* are *metasthénic*, those of the *third* are, on the scheme proposed, *urosthénic*, even those few which are not saltatorial using the caudal extremity in locomotion. It accords with the relations in many other departments of the animal kingdom that these three sthénic grades should mark off the three grand divisions.

6. With regard to the exclusion of other apterous Insects, we offer the following remarks. The apterous Pediculi, as Nitzsch long since observed, have no characteristics that would separate them from Hemipters, and the Nirmids none that would remove them from Orthopters. They are simply inferior wingless species of those types, as much as the Coccids are of Homopters; and they have nothing of the agility of the Lepismids. There are no points of structure indicating an affinity to any two or more of the higher subdivisions of Insects, or to the inferior Myriapods; they are not *urosthénic*, being in no way essentially different, as regards their legs, from the types to which they are referred.

Fleas are permaturative, like all Apipens, and in this and other ways show that they have no relations to the Lepismians. The reasons for regarding them as an independent type under the Apipens have been presented on page 18.

The Lepismians and Podurians appear therefore to be rightly made the *third* grand group of Insects. Like the Erpetoid birds, and degradational or intermediate types in other cases, the group may have been well-represented in species in past geological ages. At the present time we know of only the two above-mentioned families under this type, and both are supposed to have closer relations to the Pteroprosthénics than to the Pterometasthénics. If any group ever existed related as closely to the Pterometasthénics, as the above mentioned are to the Pteroprosthénics, and if, besides, there has existed a third *typical* group, the species are yet to be discovered, either fossil or living.