

each subfamily, and so forth, is certainly accountable for some of the errors. The Passalidæ of the New World, instead of forming three out of the five subfamilies into which Kaup divided the family, seem to me to belong essentially all to one type of form, with very great diversity of minor characters, but no important differences of structure. The minor differences afford tolerably trustworthy characters for the formation of small generic groups of which Kaup established a large number, and in adopting most of these I have been obliged to institute numerous others on the same class of modifications, chiefly the ridges and armature of the head. I have grouped the genera into two sections, characterized by the form of the base of the elytra and the relative length of these organs, or the hinder body, with regard to the thorax. For convenience of reference and comparison I have adhered pretty closely to Kaup's sequence of the genera, although it violates to some extent their natural affinities.

Section I. *Elytra relatively short, more or less protuberant in the middle of the base.*

A. *Antennal leaflets very long.*

## PROCULUS.

*Proculus*, Kaup, Harold's Col. Hefte, iv. p. 8 (1868); id. Monogr. der Passaliden, p. 65 (1871).

Three species of this fine genus, the giants of the family, are at present known. They appear to be restricted to Guatemala and the adjoining region of British Honduras.

In Guatemala *P. goryi* is confined to the Pacific slope, and found at elevations of from 1000 to 5000 feet; *P. opacipennis* and *P. mnischechi* to the Atlantic slope, and to the humid forest region of Alta Vera Paz, at elevations of from 3000 to 5000 feet; examples of the last-named species were only met with sparingly in various localities in this district by Mr. Champion, who, at the time not possessing means of preserving such large insects in a very humid climate, was unable to retain examples.

Decaying specimens of these and other Passalidæ occasionally harbour rare Staphylinidæ.

### 1. *Proculus goryi*.

*Passalus goryi*, Melly, Guér. Mag. Zool. 1833, t. 56<sup>1</sup>.

*Proculus goryi*, Kaup, Monogr. der Passal. p. 66, t. 5. f. 1<sup>2</sup>.

*Hab.* GUATEMALA<sup>1 2</sup>, Pantaleon, Las Mercedes, Las Nubes above Mazatenango (*Champion*), Costa Cuca (*Sarg.*).

This species was obtained plentifully by Mr. Champion in the coffee estate of Las Nubes and elsewhere along the Pacific slope, by employing the Indians to turn over the fallen trunks of the largest forest trees, in the decaying wood on the under side of which the insect passes its earlier stages.