that occurring in the male of Grylloblatta campodeiformis, which Walker, 1919 (l. c.) considered to be unique among winged insects.

The relative positions of the parts in the sawfly (Figs. 3 and 2) are essentially the same as in the more primitive representatives of the higher orders of insects, such as the tipulids among the Diptera, Philopetamus among the Trichoptera etc., but other structure become secondarily developed in certain of these forms, thereby rendering the arrangement of the parts much more complicated and difficult of interpretation. As was described in a paper on the genitalia of male sawflies (Proc. Ent. Soc. Washington, 1919, Vol. 21, p. 129) there become differentiated from the distal portion of the segment "b" (Fig. 2) of the sawfly's gonopeds, a pair of inner claspers which were interpreted as the volsellæ of higher Hymenoptera in the paper referred to above. These volsellæ-like structures probably correspond to the inner claspers of such Lepidoptera as the Geometridæ, etc. One or both of the valves of the penis "d" may form a portion of the aedeagus; and numerous other changes take place through the outgrowth of various "prongs" and other structures, through the modification of the tergites, such as the posterior prolongations of the lateral region of the ninth tergite labeled "i" in Fig. 6, etc., but these features have been more fully described in an article which will soon appear in Psyche, and need not be further

## ABBREVIATIONS.

- e. Styligers or "coxites"; basal structures bearing the styli. They may unite to form a single plate or basal ring.
  - b. Basal segments of the styli or gonopods.
  - c. Distal segments of the styli or gonopods.
  - d. Penisvalvæ or valves of the "penis."
  - e. Paraprocts, or plates on either side of the anus.
  - f. Cerci.
  - g. Telofilum, or terminal filament.
  - h. Proctiger, or anal papilla bearing anus.
  - Surgonopods, or accessory claspers; prolongations of the ninth tergite.

The ninth sternite "9"" forms the hypandrium, the ninth pleurite "9". forms the gonopleurite, and the tenth or eleventh tergite forms the epiproct-The letters t, p and s written to the right and above the numerals are used to indicate the tergite, pleurite and sternite of their respective segments.

## EXPLANATION OF PLATE VI.

- Fig. 1. Lateral view of terminal structures of a blattid (based on Cryptocercus).
- Fif. 2. Ventral view of genital forceps of a sawfly (based on Sirex).
- Fig. 3. Lateral view of terminal structures of a sawfly.
- Fig. 4. Ventral view of genital forceps of a mayfly (based on Blasturus).
- Fig. 5. Lateral view of terminal structures of a mayfly.
- Fig. 9. Lateral view of terminal structures of a Neuropteron (based on . Nym+ hes and Ithone).
- All figures are very diagrammatic.