

Fig. 166. Lateral view of the abdomen of (A) female *Nomadacris* and (B) female *Musca* with the terminal segments extended (after Albrecht, 1956; and Hewitt, 1914).

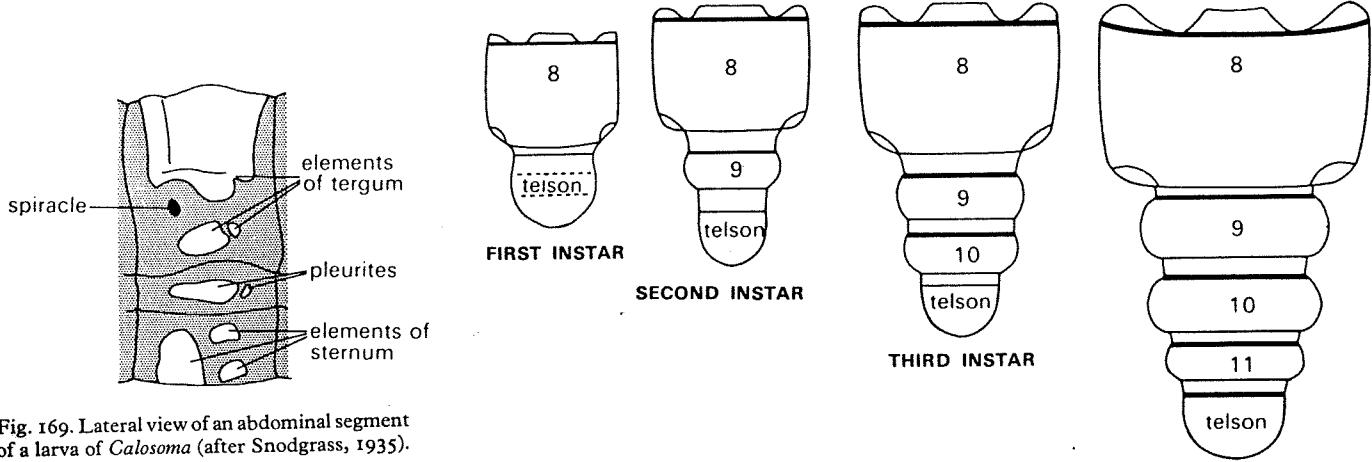


Fig. 169. Lateral view of an abdominal segment of a larva of *Calosoma* (after Snodgrass, 1935).

Fig. 167. Diagram illustrating the anamorphic development of the terminal abdominal segments of a proturan (from Denis, 1949).

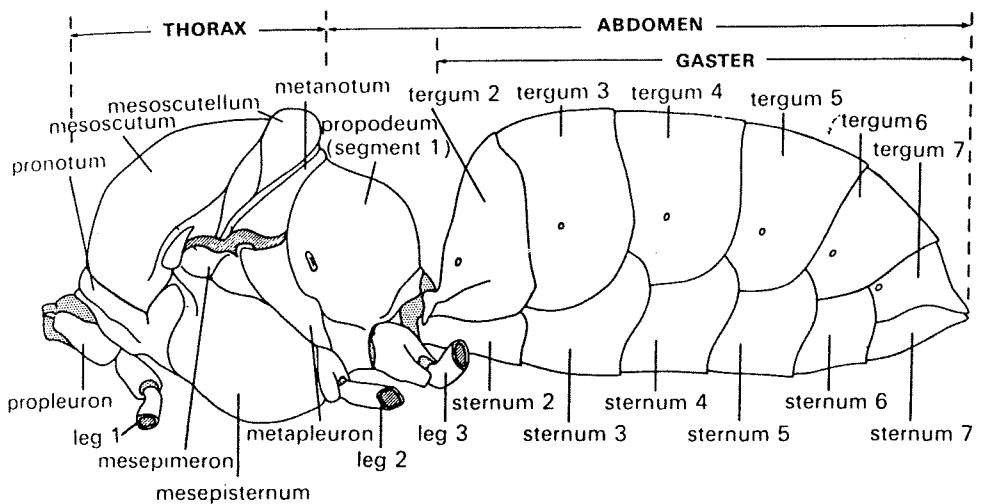


Fig. 168. Lateral view of the thorax and abdomen of *Apis* (after Snodgrass, 1956).

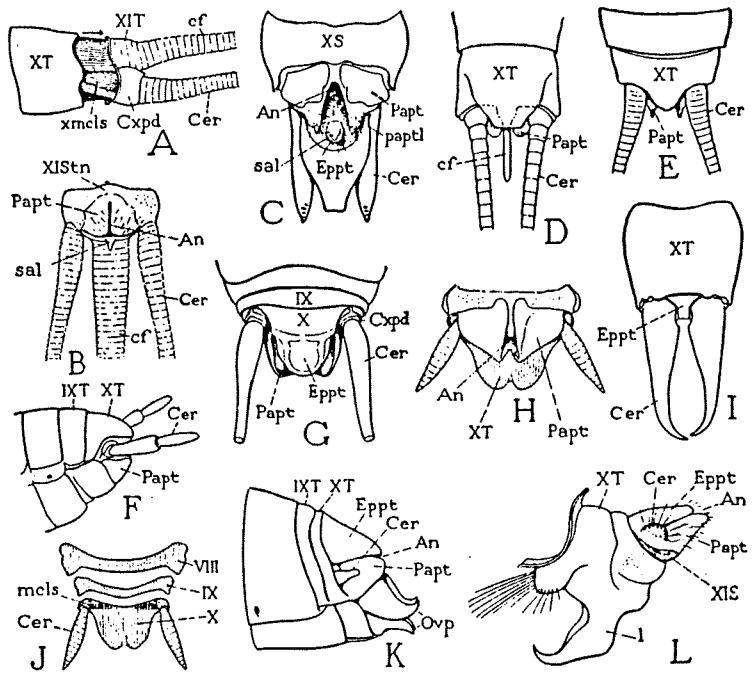


FIG. 140.—Postgenital segments of the abdomen. A, B, *Nesomachilis maoricus*. C, *Plathemis lydia*, adult male, ventral view. D, ephemerid, adult male. E, perlid larva. F, embiid. G, *Gryllus assimilis*. H, *Blatta orientalis*, ventral view. I, *Anisolabis maritima*, female. J, *Blatta orientalis*, dorsal view, segments separated. K, *Dissosteira carolina*, female. L, *Magicicada septendecim*, male. An, anus; Cer, cercus; cf, caudal filament; cxdp, base of cercus (coxopodite); Eppt, epiproct; Ovp, ovipositor; Papt, paraproct; paplt, lobe of paraproct; sal, supra-anal lobe; xmcls, muscles of tenth segment.

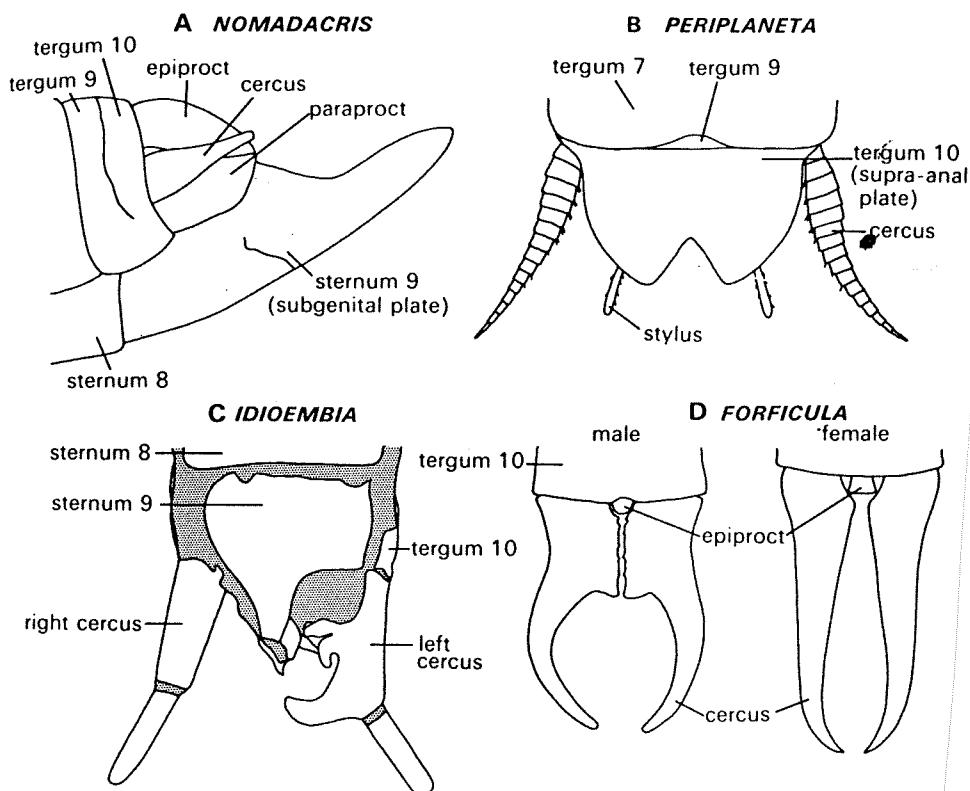


Fig. 172. Different types of cerci. A. *Nomadacris* (Orthoptera)—lateral view of tip of abdomen of male. B. *Periplaneta* (Dictyoptera)—dorsal view of the tip of the abdomen of male. C. *Idioembia* (Embioptera)—ventral view of tip of abdomen of male. D. *Forficula* (Dermaptera)—male and female forceps (cerci) (after various authors).

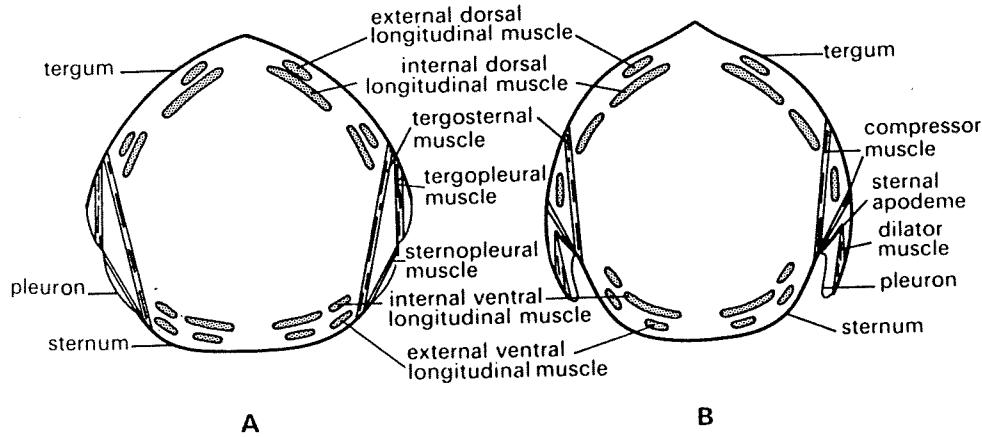


Fig. 171. Diagrammatic transverse sections of an abdominal segment. A. Typical arrangement of the muscles. B. Lateral muscles differentiated into compressor and dilator muscles (from Snodgrass, 1935).

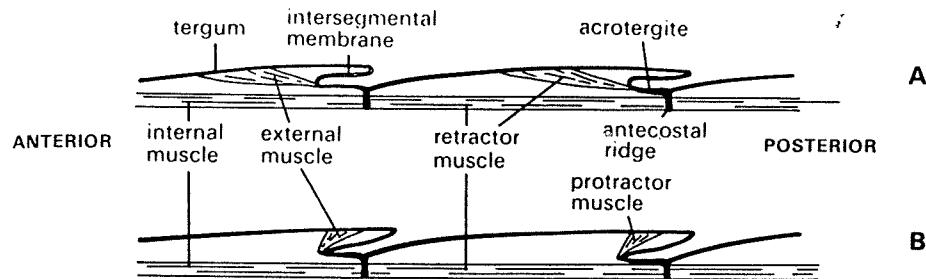


Fig. 170. Diagram of the dorsal longitudinal musculature in an abdominal segment. A. Typical arrangement of external and internal muscles, both acting as retractors. B. Origin of external muscle shifted posteriorly so that it acts as a protractor (from Snodgrass, 1935).

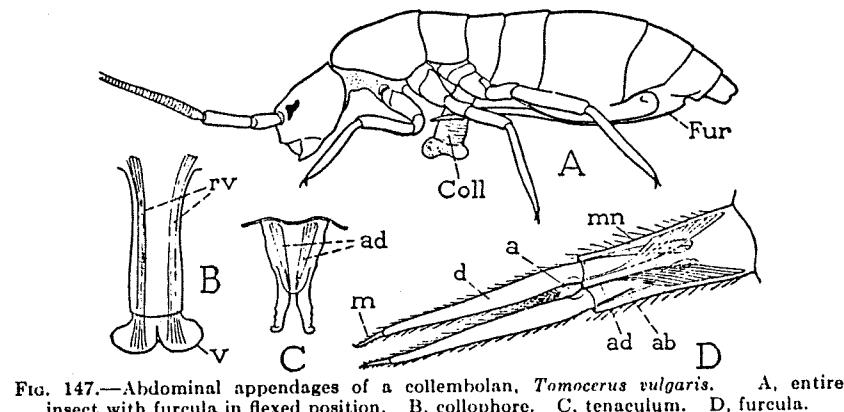
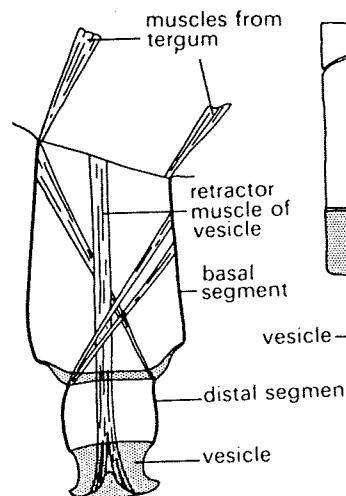


Fig. 147.—Abdominal appendages of a collembolan, *Tomocerus vulgaris*. A, entire insect with furecula in flexed position. B, collophore. C, tenaculum. D, furcula.

A ACERENTOMON



B NESOMACHILIS

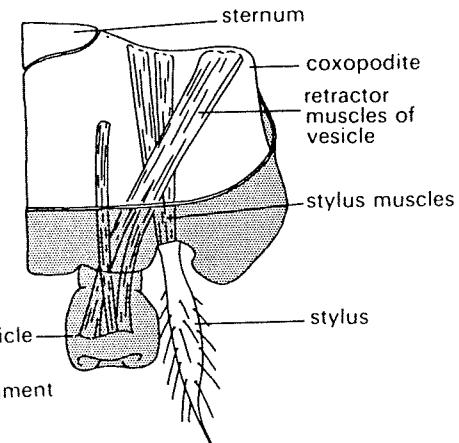


Fig. 173. A. Abdominal appendage of *Acerentomon* (Protura). B. Abdominal appendage of *Nesomachilis* (Thysanura). The sternum and coxopodite are seen from the inside (from Snodgrass, 1935).

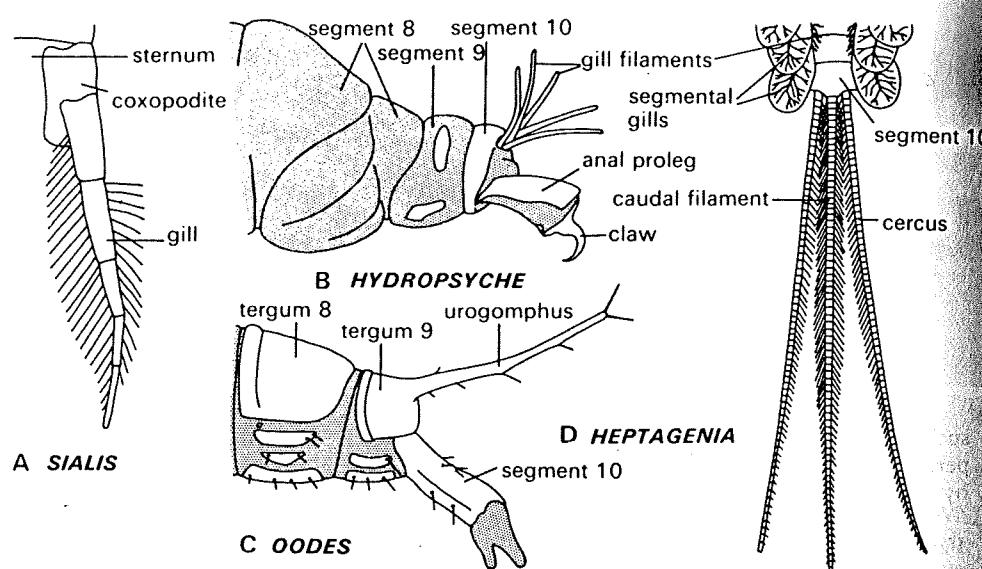


Fig. 177. Abdominal appendages of pterygote larvae. A. *Sialis* gill, dorsal view. B. *Hydropsyche* (Trichoptera) lateral view of terminal abdominal segments showing gills and anal proleg. C. *Oodes* (Coleoptera) lateral view of terminal abdominal segments showing urogomphus. D. *Heptagenia* (Ephemeroptera) dorsal view of terminal abdominal segments showing gills, cerci and median caudal filament (mainly from Snodgrass, 1935).

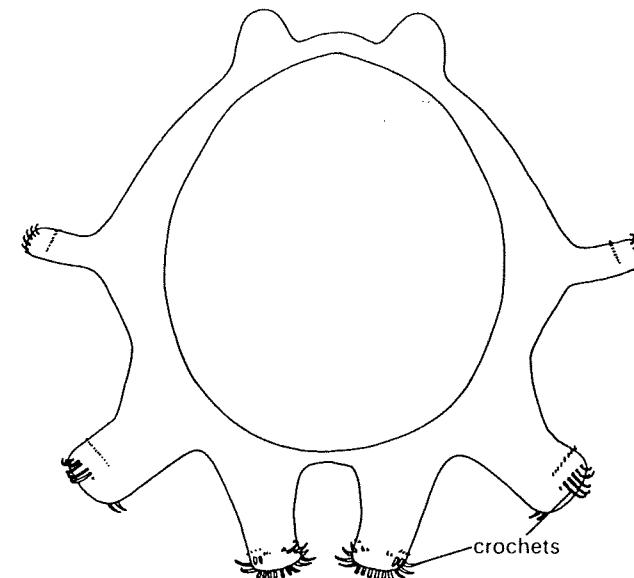


Fig. 175. Cross-section of an abdominal segment of a tabanid larva showing numerous prolegs, including dorsal and lateral pairs (after Hinton, 1955).

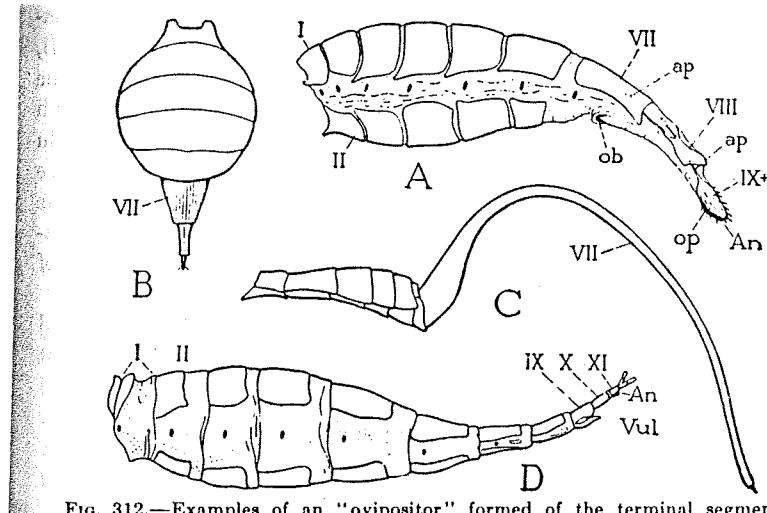


FIG. 312.—Examples of an "ovipositor" formed of the terminal segments of the abdomen. A, a moth, *Lymantia monacha*. (From Eidmann, 1929.) B, a fruit fly, *Paracantha culta*. C, a fruit fly, *Toxotrypania curvicauda*. D, *Panorpa consuetudinis*.