

Fig. 360. Diagrams illustrating the structure of the compound eye. A. Section through part of an eye showing the arrangement of ommatidia. B. Surface view of part of the eye of an aphid which consists of a small number of ommatidia, showing the facets well separated by unmodified cuticle. C. Surface view of part of the eye of a syrphid which consists of a large number of ommatidia with the facets crowded together. D. Detail of a single ommatidium.

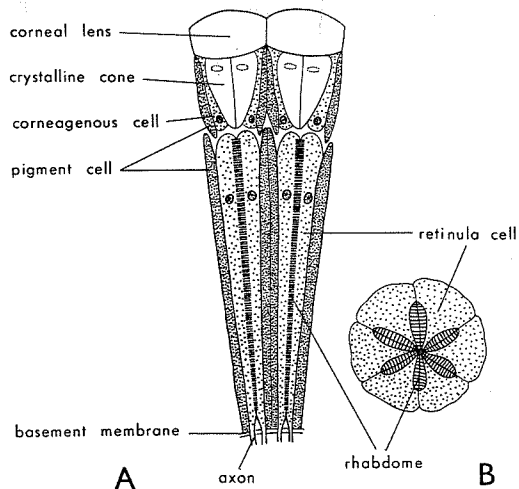


Fig. 2.19. Structure of the compound eye (diagrammatic): A, two ommatidia sectioned in a plane normal to the surface; B, transverse section of a group of retinula cells showing the orientation of the micro-tubules of the rhabdome.

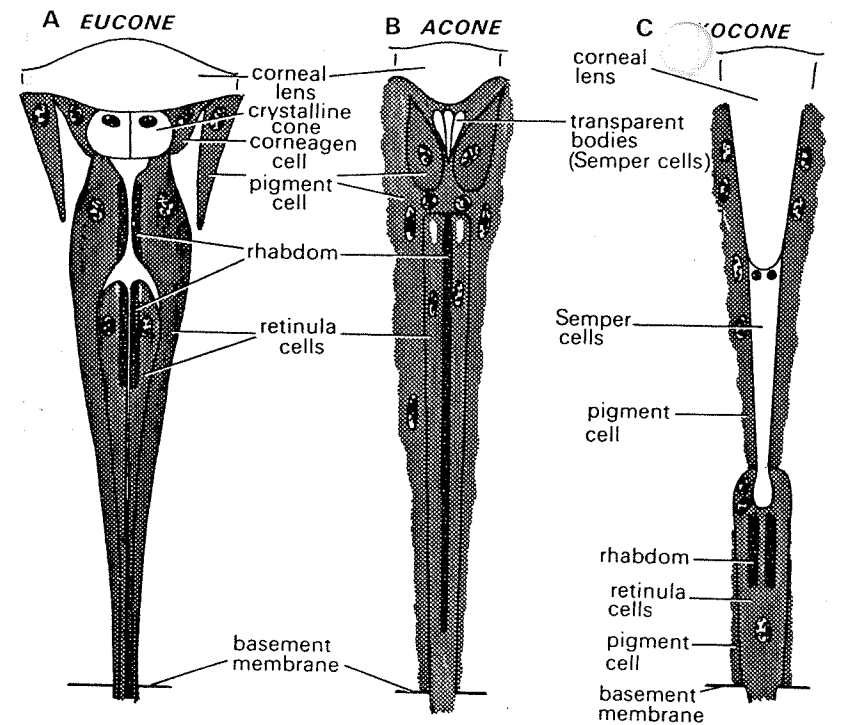


Fig. 363. Different types of ommatidia. A. Eucone ommatidium of *Lepisma* (Thysanura). B. Acone ommatidium of *Trichodes* (Coleoptera). C. Exocone ommatidium of *Lampyrus* (Coleoptera) (from Eltringham, 1933).

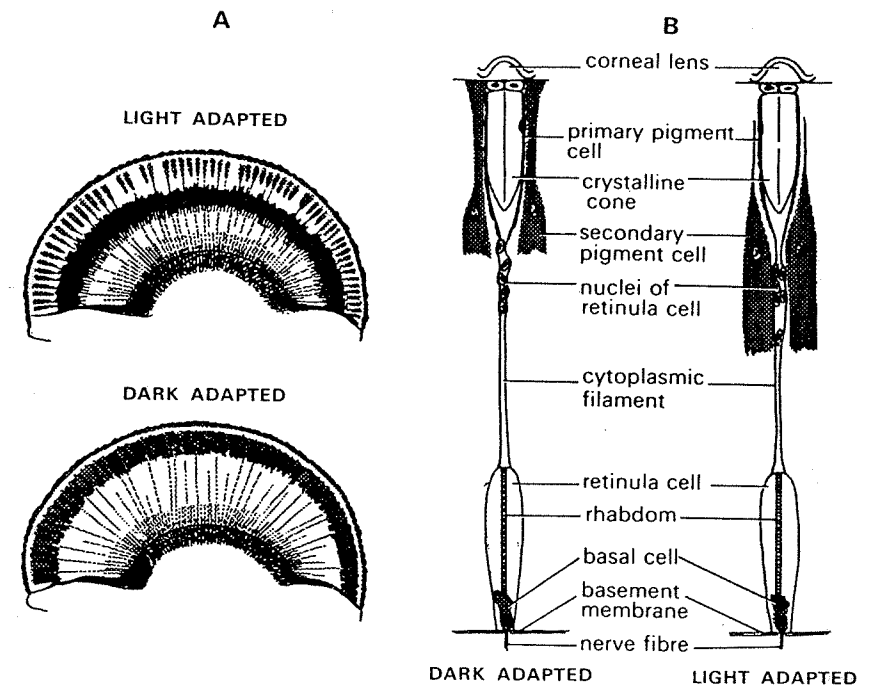


Fig. 364. A. Section through the eye of *Ephestia* in the light and dark adapted conditions. B. Detail of single ommatidia in light and dark adapted conditions (after Day, 1941).

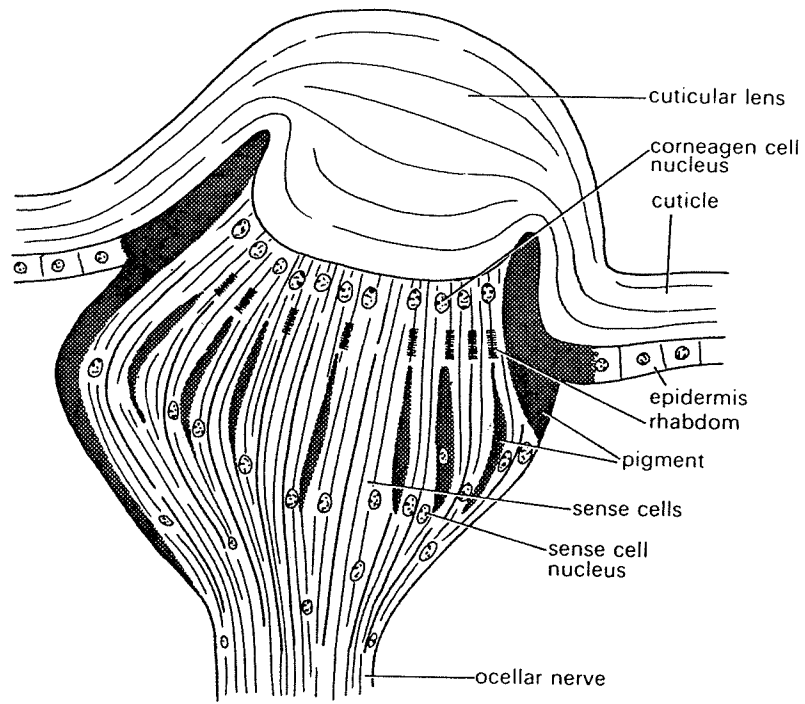


Fig. 380. Section through a dorsal ocellus of *Aphrophora* (Homoptera) (from Imms, 1957).

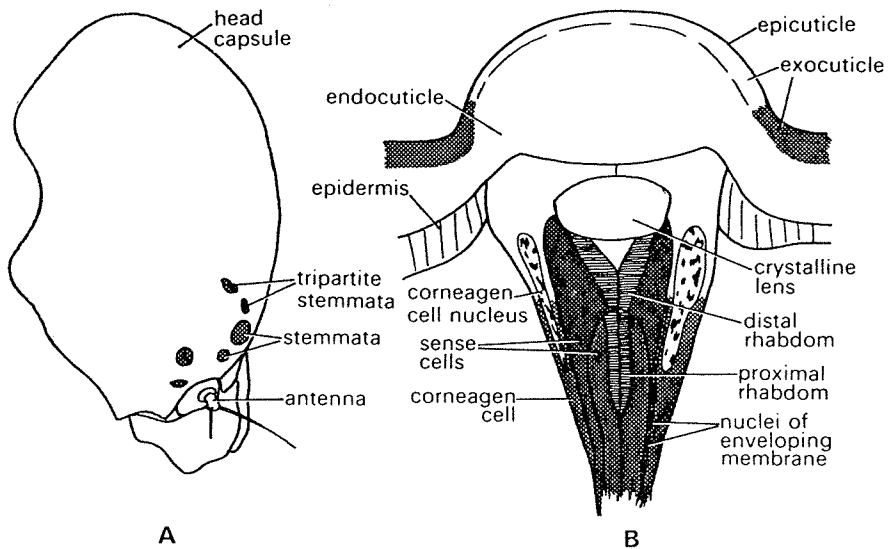


Fig. 381. A. Lateral view of the head of a caterpillar showing the positions of the stemmata. B. Section of a stemma (after Dethier, 1942, 1943).

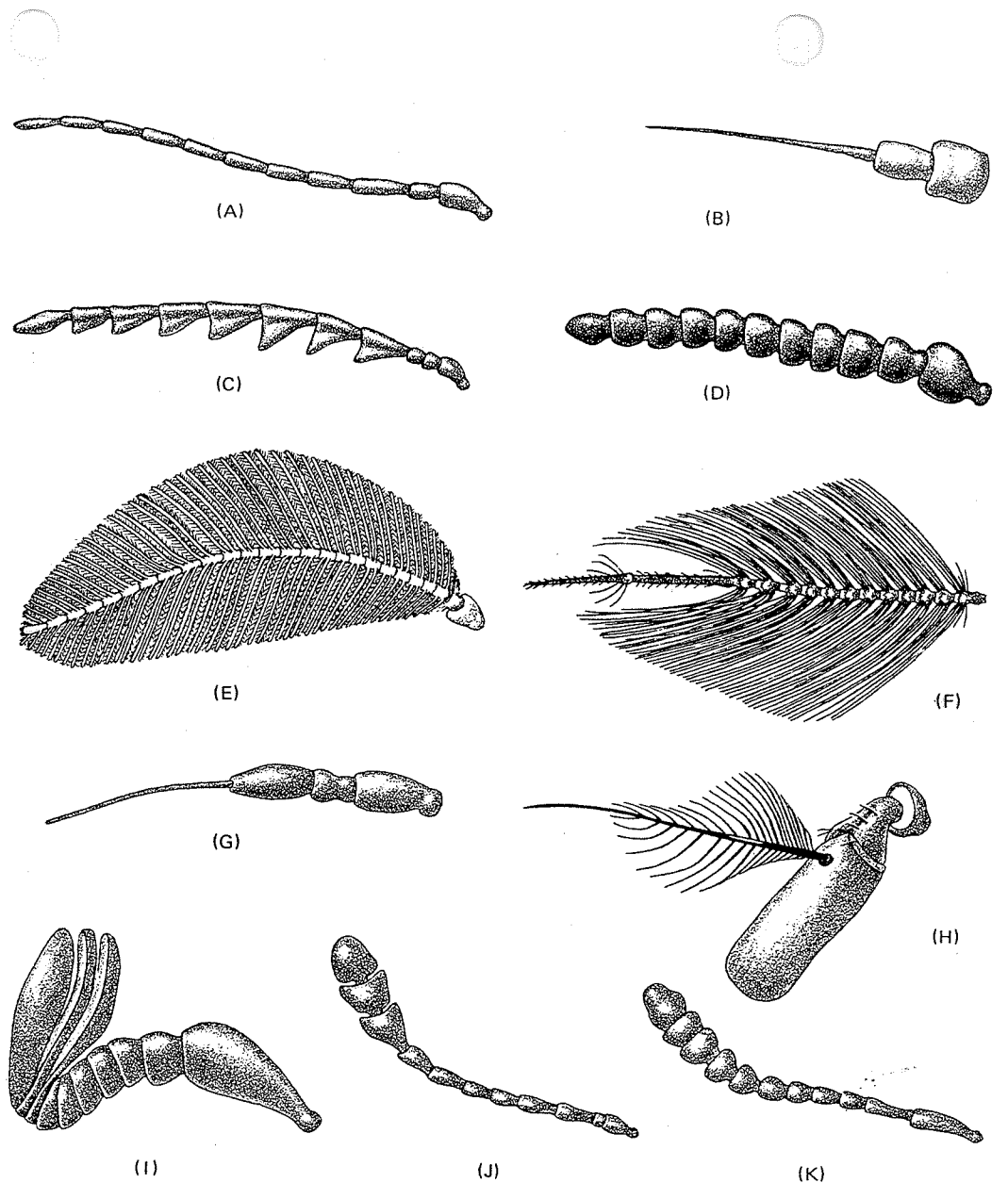


Figure 37. Types of insect antennae. (A) filiform; (B) setaceous; (C) serrate; (D) moniliform; (E) pectinate; (F) plumose; (G) stylate; (H) aristate; (I) lamellate; (J) capitate; (K) clavate.

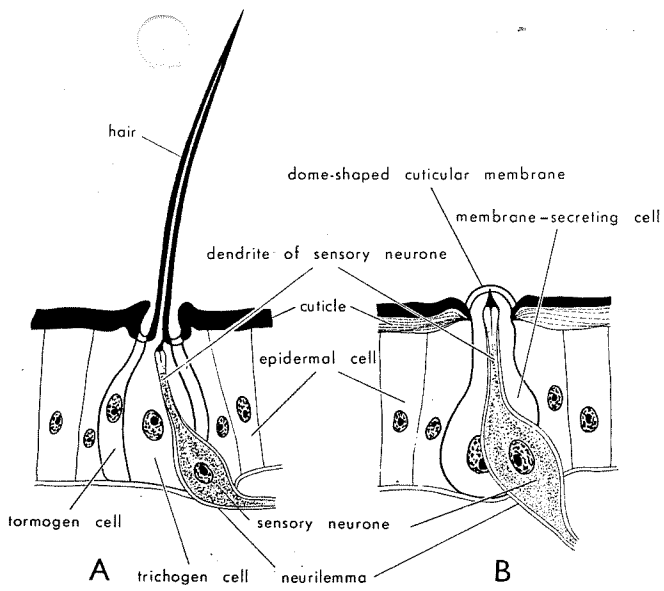


Fig. 2.14. Mechanoreceptors (diagrammatic): A, tactile sensillum; B, campaniform sensillum. In A, the tormogen cell secretes the hair socket and the trichogen cell the hair itself.

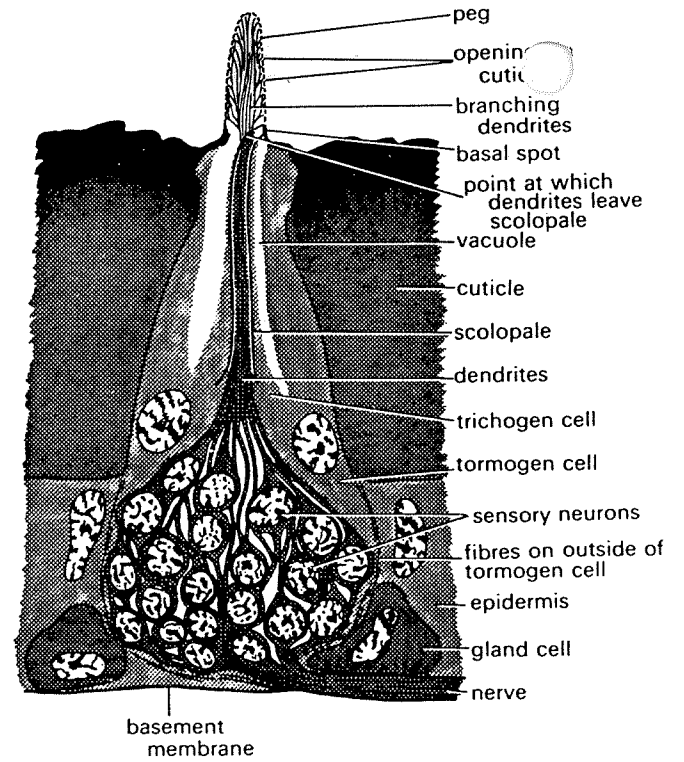


Fig. 426. Diagram of a thin-walled basiconic peg from the antenna of a grasshopper (after Slifer *et al.*, 1959).

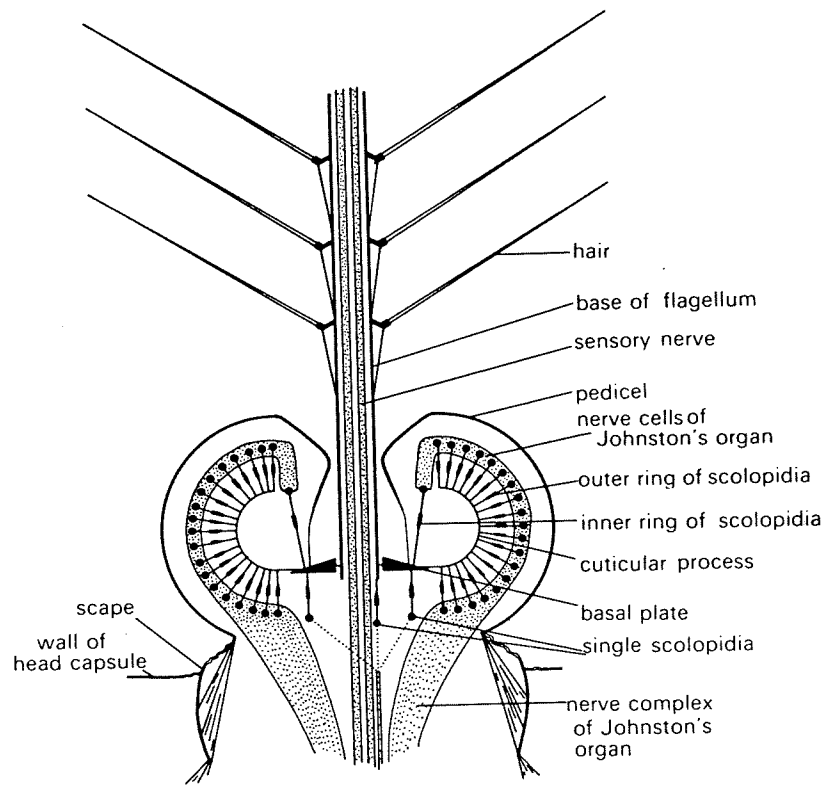


Fig. 412. Diagram of the basal part of the antenna of a male mosquito showing Johnston's organ (from Autrum, 1963).

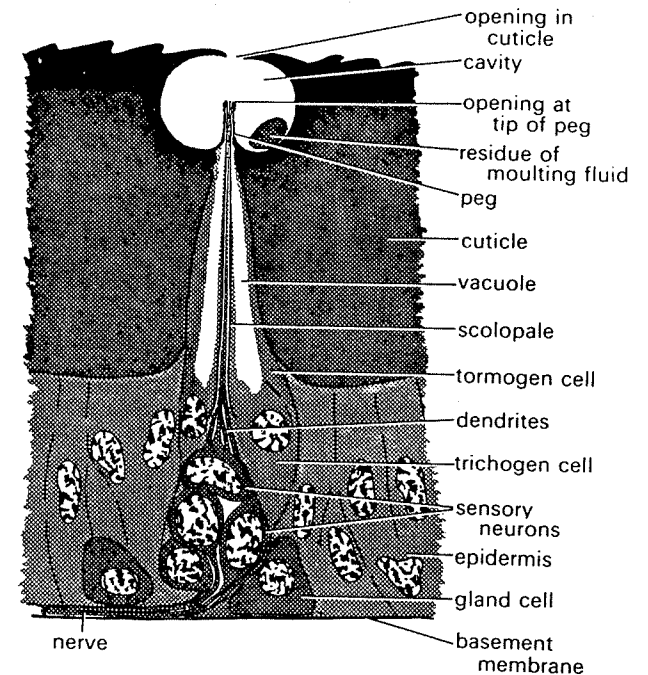


Fig. 427. Diagram of a coeloconic peg from the antenna of a grasshopper (after Slifer *et al.*, 1959).

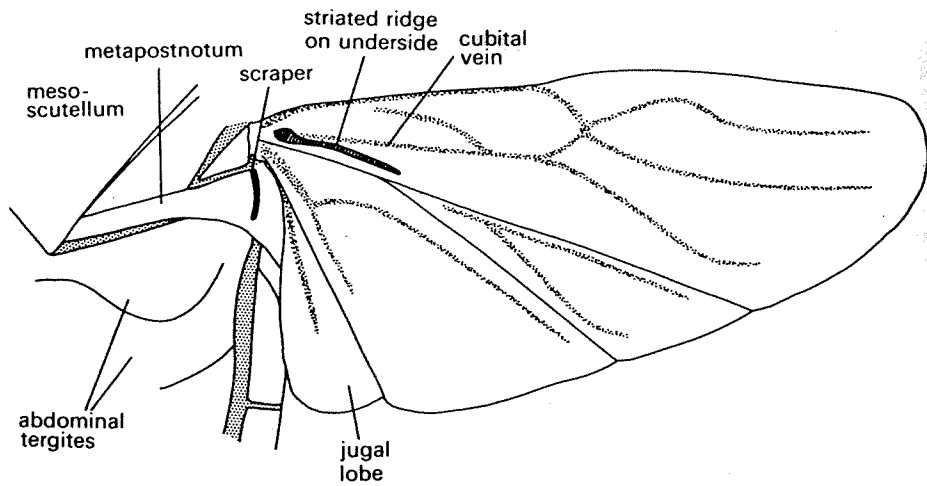


Fig. 392. The wing and part of the thorax and abdomen of *Kleidocerys resedae* from the dorsal surface showing the stridulatory apparatus (modified after Leston, 1957).

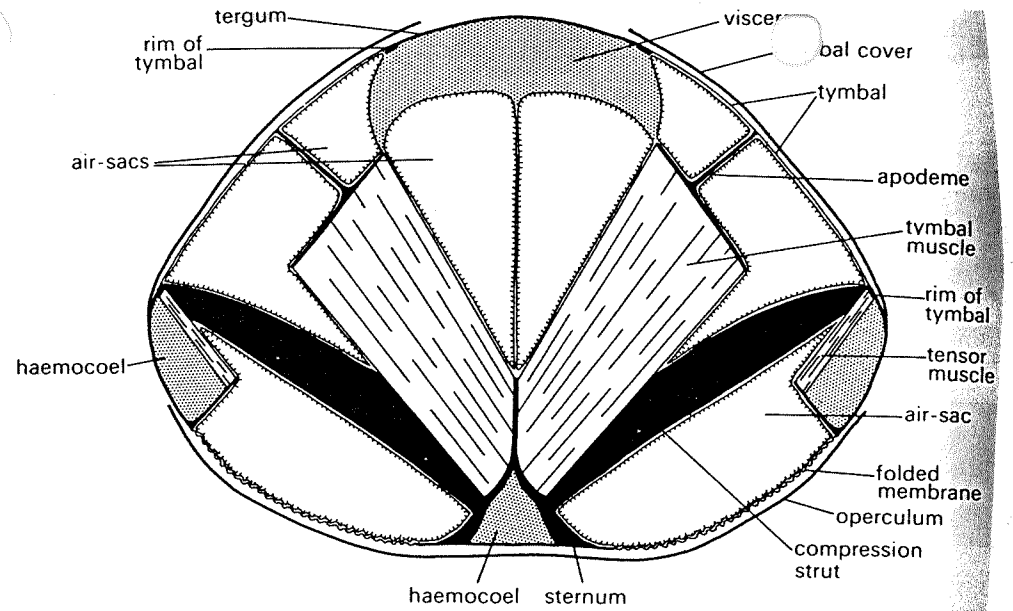


Fig. 397. Diagrammatic transverse section of the first abdominal segment of a cicada showing the main structures concerned with sound production (based on Pringle, 1954).

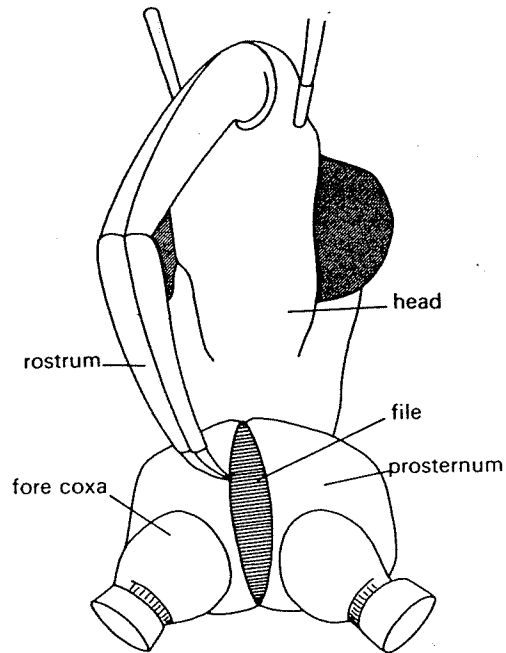


Fig. 393. Ventral view of the head and prothorax of *Coranus* (Heteroptera) showing the tip of the rostrum rasping against the intercoxal file (from Dumortier, 1963a).

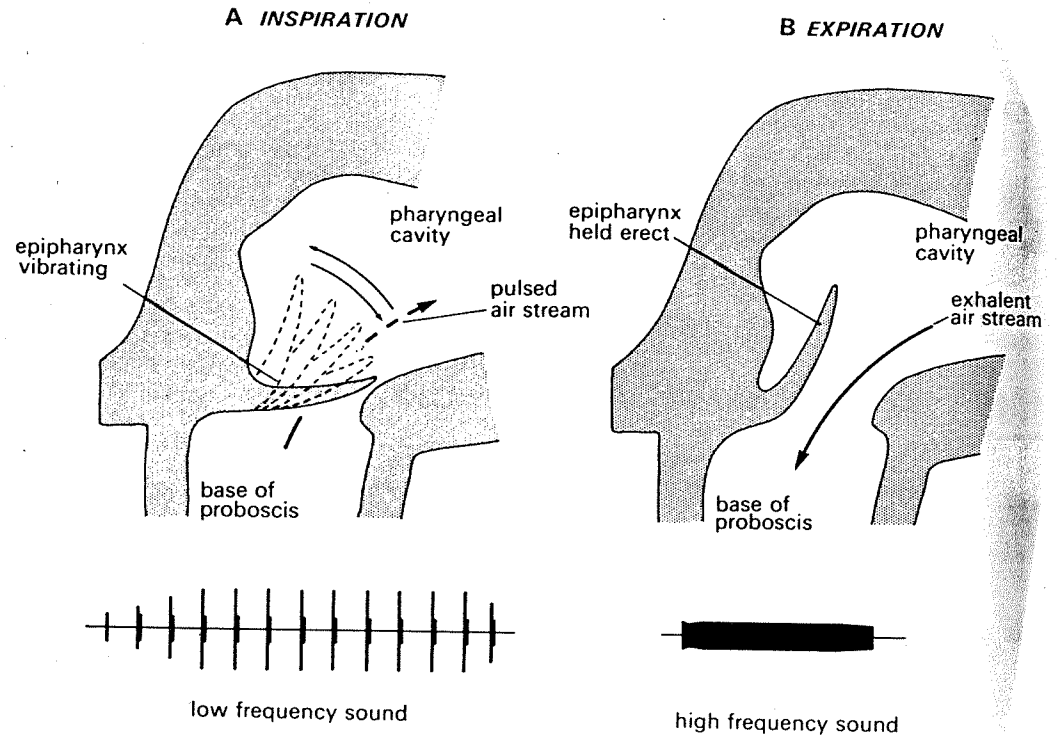


Fig. 401. Diagrammatic sagittal sections of the head of *Acherontia* showing the method of sound production, and oscillograms of the sound produced on inspiration and expiration (from Dumortier, 1963a).