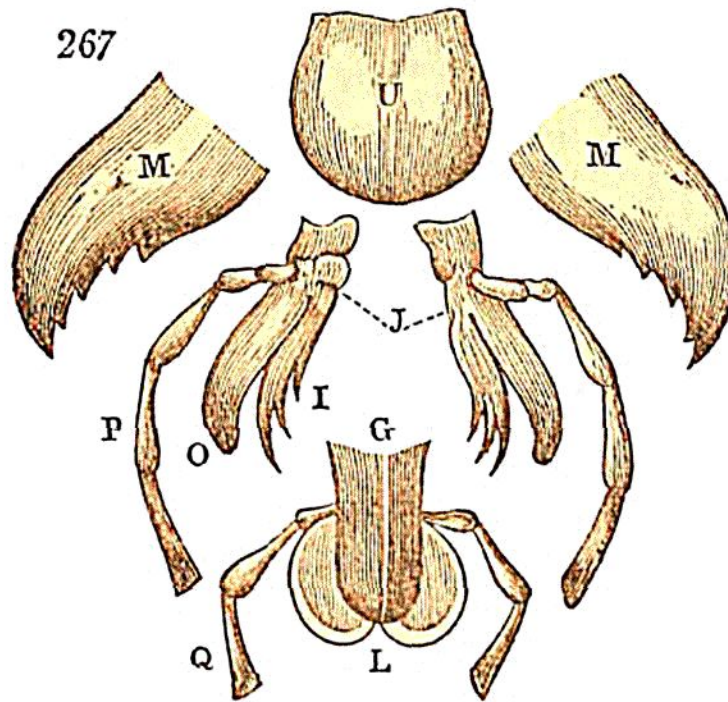


mon grasshopper, are delineated in their relative situations, but detached from one another, in Fig. 267. The upper jaws, (M,) which are termed the *mandibles*, are those prin-



cipally employed for the mastication of hard substances; they are, accordingly, of greater strength than the lower jaws, and their edges are generally deeply serrated, so as to act like teeth in dividing and bruising the food. Some of these teeth are pointed, others wedge-shaped, and others broad, like grinders; their form being, in each particular case, adapted to the mechanical texture of the substances to which they are designed to be applied. Thus, the mandibles of some *Melolonthæ* have a projection, rendered rough by numerous deep transverse furrows, converting it into a file for wearing down the dry leaves, which are their natural food.\* In most cases, indeed, we are, in like manner, enabled, from a simple inspection of the shape of the teeth, to

*cibaria*; and upon their varieties of structure he founded his celebrated system of entomological classification. Kirby and Spence have denominated them *trophæ*. See their introduction to Entomology, vol. iii. p. 417. To the seven elements above enumerated, Savigny adds, in the *Hemiptera*, an eighth, which he terms the *Epiglossa*.

\* Knoch, quoted by Kirby