

segments in the cranium of insects; while Straus Durckheim considers it as formed by the consolidation of no less than six segments of the vermiform larva. According to this theory, the same elements which in the thoracic segments are developed into feet, are here employed to form parts having other destinations. From the segment adjacent to the thorax the antennæ are supposed to be developed. The two anterior segments belong properly to the face; the one giving origin to the mandibles, (m.) to the maxillæ, or proper jaws, (j,) and also to the palpi, (p;) the other producing the processes called the labial palpi, (l.)

The mode in which the head is connected with the trunk varies much in different insects. Sometimes it is united by a broad basis of attachment, forming a joint between the adjacent surfaces: but usually it is only appended by a narrow filament, or neck; so that the articulation is effected by ligament alone. Occasionally, it is placed at the end of a long pedicle, which removes it to a considerable distance from the trunk. In the *Hymenoptera* and *Diptera*, the head moves upon a pivot, so as to admit of its being turned completely round.

The trunk, or *Thorax*, is composed, as shown in the figure, of three segments, termed respectively the *Prothorax* (x;) the *Mesothorax* (y;) and the *Metathorax* (z.)\* The first of these, the prothorax, carries the first pair of legs; the second, or mesothorax, gives origin to the second pair of legs, and also to the first pair of wings, or to the Elytra (e,) as in the example before us; and the third, or metathorax, supports the third pair of legs, and the second pair of wings (w.) These last two segments are closely united together, but the original distinction into two portions is marked by a

\* In these denominations I have followed the nomenclature of Victor Audouin (*Annales des Sciences Naturelles*, tom. p. i. 119,) as being the simplest and clearest: but other entomologists have applied the same terms to different parts. The first segment is termed by Straus Durckheim and other French writers, the *Corscelet*. Mr. Kirby calls it the *Manitrunk*, and restricts the term *Prothorax* to its upper portion. The united second and third segments are the *Thorax* of Straus Durckheim, the *Tronc alifère* of Cuvier; and the *Allitrunk* of Kirby.