	fleshy filaments and sometimes extensile glands.	with abrupt elevations, particularly in the middle of the mesonotum and at the base of the wings.	
12. Wings :	[Not visible externally, but existing as free internal membranous pads on the sides of the second and third segments.]	Folded over upon the breast as soldered chit- inous pads, the front pair nearly covering the hinder.	Fully developed and free, covered with scales and often with hairs, especially at base and on the under surface.
13. Legs :	Five jointed, tapering, smooth, partially chitinous members, no longer than the seg- ments which bear them, and ending in a curved claw.	Many-jointed members, of which only the post-femoral parts are exposed, and of these only the first two pairs of legs (the third concealed beneath the wings) folded over upon the breast, to which they are soldered, unarmed.	Long and slender members, consisting of five very unequal parts, only the distal three elongated and the fifth broken up into five unequal joints, the last bearing a pair of claws and often other terminal structures, and at least the distal half of the whole leg more or less spined and often scaled.
14. Thoracic glands :	Very generally present as evaginable median organs on the first segment, in some cases for odorous defence, in others for unknown uses.	None known	None known, except such as have their open- ing in specially modified hairs or scales upon the wings or legs, when they appear to be always scent-organs.
15. Abdomen as a whole	: By its contour not regionally distinct from the thorax, being a succession of subequal rings, some of which bear fleshy, rather feebly jointed prolegs.	By its contour feebly distinct regionally from the thorax and at the base, beneath, over- laid by the thoracic appendages, but decid- edly diminishing in size posteriorly; the position of the prolegs of the caterpillar often marked by scars.	By its contour completely distinct regionally from the thorax, with no ambulatory append- ages.
16. Its surface and clot ing :	h- Similar to that of the thorax in the same stage.	Similar to that of the thorax in the same stage, but less frequently with special ele- vations, though these are sometimes very marked and most commonly longitudinally disposed.	Smooth and even, without elevations, densely clothed with scales.
17. The terminal seg- ments :	Besides an anal pair of prolegs, the upper portion of the terminal segment forms an anal plate of different form from the other segments.	Developed as a specially constructed cremas- ter, usually armed with hooks for the sus- pension of the chrysalis.	These segments are developed in the female into specially formed parts serving as ovi- positor and vaginal vestibule; and in the male bear clasping organs both median and lateral of great diversity of form and arma- ture, the latter often very complex.
18. Spiracles of abdome	a: Situated one pair to a segment on the sides of the first to the eighth segments, the last pair sometimes placed at a higher level than the others.	As in the caterpillar, excepting on the eighth segment, where the spiracles have disap- peared.	As in the chrysalis.
19. Abdominal glands :	Often situated on some of the segments of the terminal half of the abdomen, either as median or paired organs, and subserving different uses, such as honey secreting or warning organs, or scent emitters.	None are known. †	Present occasionally, especially on the last two segments, generally as evaginable and odor- ous organs; but apparently in no case as developments of those found in the larval stage, abdominal scent organs rarely or never occurring in the same insect in two stages.

* See Kellogg's recent discussion in the Kans. Univ. quart., ii. 55. + The chrysalis of one of the Heliconians is known to attract the attention of the mature opposite sex, but only shortly before the appearance of the imago, when any attracting odors must arise from glands, strictly imaginal, the odors piercing the chrysalis shell.

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