12. Wings :
13. Legs :
14. Thoracic glands :
15. Abdomen as a whole
16. Its surface and clothing :
17. The terminal segments :
fleshy filaments and sometimes extensile glands.
[Not visible externally, but existing as free internal membranous pads on the sides of the second and third eegments.]
Five-jointed, tapering, smooth, partially chitinous members, no longer than the seg ments which bear them, and ending in a curved claw.

Very generally pressent as evaginab'e median organs on the first segment, in some cases organs on the first segment, in some cases uses.
By its contour not regionally distinct from the thorax, be ng a succession of subequal rings, some of which bear fleshy, rather feebly jointed prolegs.

Similar to that of the thorax in the same stage.

Besides an anal pair of prolegs, the upper portion of tha terminal segment forms an anal plate of different form from the other segments.
18. Spiracles of abdomen:
19. Abdominal glands :

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.
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.
with abrupt elevations, particularly in the middle of the mesonotum and at the base of the wings.

Folded over upon the breast as soldered chitinous pads, the front pair nearly covering the hinder.
Many-jointed members, of which only the post-femoral parts are exposed, and of third concealed beneath the wings) folded over upon the breast, to which they are soldered, unarmed.

None known

By its contour feebly distinet regionally from the thorax and at the base, beneath, overedly diminishing in size posteriorly; the position of the prolegs of the caterpillar often marked by scars.
Similar to that of the thorax in the same stage, but less frequently with special elevations, though these are sometimes very marked and most commonly longitudinally disposed.
Developed as a specially constructed cremas ter, usually armed with hooks for the su pension of the chrysalis.

As in the caterpillar, excepting on the eighth segment, where the spiracles have disap peared.

None are known.

Fully developed and free, covered with scales and often with hairs, especially at base and on the under surface.
Long and slender members, consisting of five very unequal parts, only the distal three eiongated and the fifth broken up into five claws and often other terminal structures, and at least the distal half of the whole leg more or less syined and often scalod.
None known, exsept such as have their openNone in specially modified hairs or scales uponthe wings or legs, when they appear to be always scent-organs.
By its contour completely distinct regionally from the thorax, |with no ambulatory append ages.

Smooth and even, without elevations, densely clothed with scales.

These segments are developed in the female into specially formed parts serving positor and vacinal vestibule; and in the male bear clasping organs both median and lateral of great diversity of form and armature, the latter often very complex.
As in the chrysalis.

Present occasionally, especially on the last two segments, generally as evaginable and odor ous organs; but apparently in no case as developments of scent organs rarely or neverocrurring in the sameinsect in twostages

* 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 oppo-

