posterior ale, which barely attain the extremity of the pads of the hemelytra. A straight suture marks off this segment from the next. The abdomen is more than twice the length of the thorax, the segment following the thorax slightly constricted. The sides of the abdomen are folded over itself, and are furnished with fringing hairs. There is an indentation in the edge at each segment that bears the thickening of the formative pseudostigmata. The abdomen has only six apparent segments and the siphon or air-tube. The false stigmata show in segments three to five, dorsally, as thickenings of the integument,' darker than the surrounding skin. The siphon is jointed to the sixth segment, and freely movable. The abdomen is keeled beneath, the keel bearing a fringe of short hairs on each side, which meet those of the inflexed abdominal margin. The legs approach more closely to the adult. The second so-called tooth or prominence in the first pair is quite evident. The true tooth is large and triangular, and the clawless tarsus rests against it when the tibia is folded on the femur. The second and third pair are slender, ciliate, with globose coxæ ; the tarsus of the second pair does not quite reach and the second goes slightly beyond the end of the siphon. Both these tarsi are onej inted, and armed with prominent curved double claws.

Size : Long., 44.4 mm . (from tip of rostrum to tip of siphon); lat., 2.9 mm . (at the thorax, but not at wing-pads). Siphon., long., 12.3 mm .

Colour : More or less luteous of varying degrees, without any special pattern. The legs, which in the preceding instars are banded, are apparently unicolorous in this. This, however, may be the peculiarity of the two individuals from which this description has been drawn up. The eyes are black and shining.

This individual arrived at the adult in eight days.
The periods for each instar are as follows, for the individuals bred to maturity or to the third instar :

| Ova taken, May | 20, | 905. | Ova deposited, June |  | 6, 1905 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Emergence, June | 4, | " |  | July | 4 , |  |  |
| First moult, " | 18, | " |  | " | 12, |  | " |
| Second" | 27. | " |  | " | 18. |  | " |
| Third " July | 4 | " | Died | " | 21, |  | " |
| Fourth " | 12, | " |  |  | I, |  |  |

This gives 61 days from the ovum to the adult, or perhaps seventy days, if we allow for the time that may have elapsed before the ova were collected. The full number of instars is seven, as follows: one embryonal, five nymphal, and one perfect adult.

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[^0]:    Mailed July 7th, 1906.

