show the usual green color and markings of the females. The earliest appearance at Moline is August 22.

*71. *Merminia bivittata* Serville. Very rare if it occurs at all in the state. Mr. Thomas thinks he has seen one specimen taken within this limit. It has been taken at Omaha, Nebraska, by Mr. Lawrence Bruner so that its occurrence here is very probable.

72. *Truxalis brevicornis* Linn. This is a southern species but it extends as far north as Urbana, Illinois, where I am told by Mr. C. A. Hart it has been frequently taken at the electric light, as many as seven or eight having been taken in one evening, August sixteenth.

**LESTES EURINUS** Say.—This species appears never to have been taken since Harris's day, who obtained his specimens on the borders of ponds in Milton, Mass., in 1826. The only notices which have been published since the description by Say, in 1839, have been based solely on his text. The accompanying description is from the type (a ?) in the Harris collection of the Boston Society of Natural History. It is a true Lestes.

Greenish blue above, yellowish beneath. Head bronze blue above, yellow beneath; apex of clypeus, labrum, sides of mandibles, and front of face very pale greenish blue, glintening. Thorax bright blue above with violaceous reflections and with dorsal and lateral sutures yellowish brown; sides of thorax blue, the side of mesothorax with a biserrate lemon yellow spot occupying lower posterior third, that of metathorax yellow with an oblique triangular fuscous stripe; base of all the legs, and under surface of femora (especially of posterior pair) yellow; upper surface of femora, lower surface of tibiae and tarsi brownish green; upper surface of tibiae fuscous; wings subhyaline or very slightly flavescent, pterostigma black; abdominal segments 1-5 above blue, 6-10 blackish green; beneath very pale fuscous, more dusky posteriorly, their apices blackish; superior appendages forcipated, beneath bidentate inferiorly; the first tooth at the extremity of the basal fourth sharply pointed, directed posteriorly; the second, just beyond the middle, depressed, laminate, denticulate, directed toward that of the opposite appendage (inferior appendages lost); thirteen postcubital cross nervules on right, fifteen on left fore wing.

Length (inc. forceps) 46 mm.; alar expanse, 59 mm.; length of pterostigma, 2.5 mm.

**SAMUEL H. SCUDDER.**

**HEMIDIPTERA HAECKELI.**—Entomologists who would derive the Diptera from the Hemiptera, if any such exist, will be delighted to find in the last number of the Jenaische zeitschrift für naturwissenschaft (bd. 25, heft. 1 & 2, 1890, p. 13-15) a description of what purports to be a "zwischenform" connecting these two widely separated orders. Dr. N. Léon figures and gives a brief description of an insect taken by Prof. Ernst Haeckel in Ceylon together with species of
Halobates. The insect, of which Dr. Léon had only a single specimen, is 4 mm. long. Its mouth "is constructed exactly like that of the Hemiptera," it has typical hemipteran antennae, a pair of prominent compound eyes, three stemmata, and the head is not freely attached to the thorax. The wings, of which only the mesothoracic pair is present, appear to be hyaline, with a venation which by no stretch of the imagination can be regarded as dipteran. The legs are hairy and adapted to swimming; there are three tarsal joints, the last of which terminates in a single claw. When we come to look for dipteran characters the only one that can be found is the lack of metathoracic wings; as if this character were sufficient to elevate a hemipter to the rank of a dipter! Has Dr. Léon ever heard of the two-winged male Coccidae, which no tyro in entomology would think of placing among the Diptera? The stemmata furnish Dr. Léon with another reason for regarding his insect as allied to the Diptera, because, forsooth, the Hydrocorisæ have no stemmata! We are informed that at the very beginning of his examination of this insect, Dr. Léon saw that he was not dealing with a Halobates but with a form which resembles a dipter more than a hemipter. He further states that Dr. Arnold Lang, to whom he communicated his observations was of the same opinion. We cannot believe that so eminent a phylogenist as Dr. Lang could have examined the specimen. The insect is not a hemidipter but a genuine hemipter albeit with only one pair of wings. It will hardly be necessary to study its ontogeny for the sake of ascertaining that it does not hatch as a maggot and does not pass through a quiescent pupal stage. W. M. Wheeler.

Protection by conspicuous colors.—The following passages in Lord Walsingham's last presidential address to the Entomological society of London are suggestive:—

"My attention was lately drawn to a passage in Herbert Spencer's 'Essay on the Morals of Trade.' He writes:—'As when tasting different foods or wines the palate is disabled by something strongly flavoured from appreciating the more delicate flavour of another thing afterwards taken, so with the other organs of sense, a temporary disability follows an excessive stimulation. This holds not only with the eyes in judging of colours, but also with the fingers in judging of textures.'"

"Here, I think, we have an explanation of the principle on which protection is undoubtedly afforded to certain insects by the possession of bright colouring on such parts of their wings or bodies as can be instantly covered and concealed at will. It is an undoubted fact, and one which must have been observed by nearly all collectors of insects abroad, and perhaps also in our own country, that it is more easy to follow with the eye the rapid movements of a more conspicuous insect soberly and uniformly coloured than those of an insect capable of changing in an instant the appearance it presents. The eye, having once fixed itself upon an object of a certain form and colour, conveys to the mind a corresponding impression, and if that impression is suddenly found to be unreliable the instruction which the mind conveys to the eye becomes also unreliable, and the rapidity with which the impression and consequent instruction can be changed will not always compete successfully with the rapid transformation effected by the insect in its efforts to escape. . . .

"If this protective effect of the partial and intermittent display of brilliant colouring is so obvious in relation to the human eye, must it not be at least equally so in relation to the eyes of its more natural enemies, such as birds, and have we not here indicated a new and distinct line of investigation as regards the use and advantage of brilliant colours in many cases which cannot be accounted for by the theory that they are developed for the purpose of warning, or through their aesthetic relation to courtship?"
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