James Ridings in 1864 (Proc. Ent. Soc. Phil. 4, 201). The female is larger than the male and much more inscribed on under side. This species does not seem to be seasonably dimorphic, as are *Camillus* and *Tharos*, but the early and late examples are of the same pattern of marking.

ON THE COURTSHIP OF THE SEXES IN ŒDIPODA CAROLINA.

BY C. H. T. TOWNSEND, CONSTANTINE, MICH.

For several seasons past, along in the latter part of summer (August and September) I have noticed certain peculiar actions on the part of the large flying locust, Ædipoda carolina Linn. I have always suspected that these actions have something to do with the union of the sexes. In the warm parts of the days at this time of the year individuals of this species may frequently be seen rising from the ground, and, hovering several feet in the air, rapidly vibrating their wings and making a peculiar flapping or beating sound, the while keeping nearly the same relative position in Although my notes on this subject are rather imperfect, I think space. they may be of use. I can not find that the subject has ever been touched upon before ; such may be the case, but I have not been able to discover record of it in any reports, periodicals or works on insects. Still these actions must have been noticed by observers, as they are of common occurrence.

On the 14th of August last, in the afternoon, I saw one of this species fly up from the dry parched grass, and remain nearly stationary about two feet in the air for some time, by means of a rapid beating of the wings. Presently it flew back to the ground. In a few minutes another one, which had witnessed the performance at a short distance, flew quickly over and alighted by the side of the performer. They ran by each other several times, occasionally touching each other, but did not make any further manifestations, and finally the last one flew away, leaving the other motionless in the withered grass. Though it is probable that the females are attracted by these performances of the males, and that the males vie with each other in their exhibitions, still I think that the two just spoken of were both males and were disposed to fight from a feeling of rivalry, the one that flew off having been beaten. On the 24th of the month I noticed