NOTES ON ARGYNNIS ALCESTIS EDW.

BY C. E. WORTHINGTON, CHICAGO, ILL.

The occurrence of this species in considerable numbers in this vicinity has afforded an opportunity for comparison with *A. aphrodite*, the results of which are appended.

It should be stated that although the number referred to is small, yet the unrecorded comparison of over two hundred examples of both species during the past summer has agreed fully with this. In the line before me are five females each of *alcestis* and *aphrodite*. In every case the general color of the upper surface is duller in *aphrodite*, the basal shading heavier and more extensive, and the black markings on *primaries* heavier; in two examples the color approaches that of *A. cybele*, while the examples of *alcestis* exhibit a uniform clear color with hardly any variation.

On the secondaries the submarginal lunules are serrate in two cases in *alcestis*, all the other black markings being uniformly lighter, especially the Ω spot in the disk, which is nearly or quite separated into two black spots. No other differences discernible. Beneath *aphrodite* exhibits a narrow, irregular, bright band on secondaries, between the two outer rows of silver spots; this is conspicuous in all the examples I have examined; there are also spots and patches of lighter color on the disk.

The under surface of the secondaries in *alcestis* differs widely from this; the whole of the wing is one sheet of uniform color, broken only by the usual silver spots and some black spots, one immediately behind the largest silver spot being very conspicuous in three examples. The silver spots are proportionately larger and closer together, and partially margined with black, much more conspicuously so than in any example of *aphrodite* that I have seen. In none of these is there the faintest trace of a band, while the general color is darker than in any examples of *A. idalia* taken here.

Five males of *aphrodite* and three males of *alcestis* exhibit the same differences above as females, though in a less degree; beneath the band is conspicuous in *aphrodite* ♂ as in the ♀, but obsolete or indicated by a faint shade in *alcestis*. The spots and patches of lighter color are nearly or quite absent in the latter, and the comparative size of silver spots as in ♀. In all cases these spots are more symmetrical in shape in *alcestis* than in *aphrodite*.

It should be added that the males approach each other more closely than the females.

Alcestis is quite abundant on the prairie west and north of this city in July and August ; it seems to be quite local, as examples taken a few miles north in a timbered region are almost uniformly *aphrodite*. I have been greatly surprised at the readiness with which a strong *aphrodite* upon the prairie can be distinguished while on the wing from the surrounding *alcestis*, owing mainly to a slight difference in its manner of flight, which resembles that of *cybele*.

The difference of time of the appearance of the sexes in *alcestis* appears rather to exceed that in other species, the order of capture of the first examples of the larger *Argynnidæ* being as follows : *Alcestis* ♂, *idalia* ♂, *aphrodite* ♂, *aphrodite* ♀, *cybele* ♂, *cybele* ♀, *alcestis* ♀, *idalia* ♀.

The habitat of *alcestis* extends farther west and not so far south as that of *aphrodite*. Since the publication of Mr. Edwards' Catalogue I have received good examples from Michigan, and am informed that it has been taken in New York.

In faded examples of *alcestis* (Sept.) a faint shade is observable in certain lights between the outer rows of silver spots on secondaries, but broad and regular like the band of *cybele*, and not in the least resembling that of *aphrodite*.

ANNUAL MEETING OF THE LONDON BRANCH OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

The Annual Meeting of the above Branch was held on the evening of Jan'y 15th, 1878, at the residence of Mr. Chas. Chapman, when after the routine business had been transacted, the following gentlemen were elected as officers for the current year :—

President, J. M. Denton ; Vice-President, A. Puddicombe ; Sec'y-Treasurer, J. H. Bowman ; Curator, Chas. Chapman ; Council—H. Bock, W. Saunders, J. Williams ; Auditors—H. Bock, W. Saunders.

A pleasant hour was then spent in discussions on insects and their habits, after which the members adjourned.