segment of the former as compared with the narrow, bluish-black facial stripe and blackish first abdominal segment of the latter.

In the writer's series of both species the facial stripe colour character holds good, although many obliqua specimens have the brown stripe hardly "faint" but quite prominent. In the fracta series no individual has as much as half the first abdominal segment yellow above, while in the obliqua series all specimens have considerably more than half the segment yellow, in fact only the posterior margin is black. The scutellar pile is a good character for separation; in obliqua it is all black, and in fracta almost all yellow. In both species the picture of the fourth segment is variable, but all the fracta females have the longitudinal stripes divergent anteriorly, while all the obliqua females have these parallel the whole length. This character does not hold for the males, owing to some of the fracta males having stripes not divergent.

A. fracta is a smaller species than A. obliqua. The immature stages are virtually indistinguishable.

The only known extra-Californian record for A. fracta is that of Metcalf (4) for Blowing Rock, N.C. This record suggests a transcontinental range for the species.

## LITERATURE CITED

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- (2) Williston, S. W. Synopsis of the North American Syrphidæ. Bull. U. S. Nat. Mus. 31, p. 97.
  - (3) Osten Sacken, C. R. West. Dipt., p. 331.
- (4) Metcalf, C. R. A List of Syrphidæ of North Carolina. Jour. Elisha Mitchell Scientific Society, Dec., 1916, p. 102.

## OBITUARY.

## F. H. WOLLEY DOD.

On the 24th July, of enteric, at 49 Hospital, Chanak, Frederic Hova Wolley Dod, of Midnapore, Alberta, Sec. Lieut., Yorkshire Light Infantry, attached Macedonian Labour Corps.

Naturalists are born, not made, and if ever there was an enthusiast—a zealous seeker of scientific truths, it was our good friend who is gone. But to F. H. Wolley Dcd even his beloved study of entomology had to take second place in his thoughts after the outbreak of war. He must go, and serve! and handicapped by his years, and his unfitness as a fighting man, he finally overcame all obstacles; obtained a commission; and served as a lieutenant in a Labour Battalion in Macedonia.

His last letter to me was joyous in the Allied victory, and full of plans for the future. "He must set up his Macedonian material; do a little collecting in England for old times sake; and then for Canada, and a trip into the mountains for alpine stuff. Would I go with him?" Aye, gladly would I go!

Dod was the pioneer worker in Alberta on the Ledpidoptera, with a special leaning to the Noctuidæ. For many years he contributed regularly to The Canadian Entomologist, the first of his long series of paper "Preliminary List of

the Macro-lepidoptera of Alberta" appearing in June, 1901. Five or six years ago he again went through his list, publishing additions and corrections. He also published papers in The Entomological News.

His great trait was thoroughness; and a bookcase of his notes on the type specimens, made on the occasions of his periodical visits to South Kensington, etc., not to mention his fine private collection, bear witness to his diligence. In the end he would take nothing for granted; and believe nothing unless substantiated by proofs. Nor can he be blamed for his incredulity when his own side of the case was told, viz., the confusion and added difficulties of his work in the early days, due to the snap judgments and incorrect identifications of the specialists of that time. So thoroughness begat real knowledge, and in the end he enjoyed an international reputation as an authority, if not the greatest authority, on the North American Noctuidæ.

A member of a well-known English family, and of excellent education, he loved his Alberta ranch at Midnapore next only to the Empire, and the science to which he devoted his lesiure hours for so many years.

As a scientist leaving an irreparable gap in the ranks, his death could be deplored, and as a friend I could find it in my heart to bitterly begrudge his loss. But neither of these would be worthy nor characteristic of the man—of the sacrifice he so gladly made, and the life he was so ready to give. He, I know, would have but one request to us all: "Continue the good work!"

F. C. W.

Mr. W. Downes, Temporary Assistant at the Dominion Entomological Laboratory, Victoria, B.C., has been appointed a Junior Entomologist and will assist Mr. R. C. Treherne, Entomologist in charge for British Columbia, in the investigations on small fruit insects that are being conducted on Vancouver Island and the Lower Fraser Valley.

Edmund H. Gibson has resigned his position with the U. S. Bureau of Entomology, and is entering upon a new field of endeavor for himself. Believing that entomology can be put on a dignified professional business basis the same as law, medicine, engineering, etc., he is taking the initial step, and believes that after a certain amount of pioneering work the field should open up to other entomologists. Mr. Gibson's headquarters, for the time being, will be Alexandria, Virginia. His professional card is worded "Consulting Entomologist and Agricultural Engineer."

Mailed October 14th, 1919