I hope from its meantime, it is ating it in the hat I prepared

t attacks only

with the horse tically. I put tainly had the vould do very 'e advised; it for lice had a ce than when

Half a pound hat a double coal oil must

os; when the of rain water.

ture to keep be season. I off for a long 1 I repeated d time, and applications his has to be

so much as

fected about unoyed our ether about where they field they coal oil on died from

s or morely g that they had lost cattle. I wrote immediately to them, asking: "Did you see the dead animals, and can you tell me exactly how they were affected?" and in every instance the answer came back—and I may say that this has been the experience of the United States entomologists as well for four or five years: "It was not I who saw it; I heard of it; it was Mr. So-and-so. Somebody else told me," &c. I have not been able to trace up a single instance in which I could find the man who had actually had an animal killed by the flies. We know this, that they do eluster on the horns and make them in a very dirty mess with their excrement—a condition which is vory unsightly, and which has given rise to the idea that they were bored by the flies, but I have never found a single instance where there was even severe inflammation around the horns. One ingenious theory was advanced that the horns were eaten away and became corrugated; but as I pointed out to a visiting farmer who told me this at the experimental furm, about half of our cows had their horns similarly furrowed. My contention is that the flies will settle where there is least possibility of the animal dislodging them, and this is on the horns and at the base of the tail.

Mr. FAIRBAIRN :---Of course, what I say was only what I was told. I did not see it myself.

## By Mr. Cochrane:

<sup>6</sup> Q. Do the flies lay eggs all the time ?—A. Some insects lay eggs from a few hours after the time they assume the perfect state. In this instance they certainly lay eggs within a day. These eggs hatch within 24 hours; the maggot stage lasts a week or a little more, the pupal stage as short a time as four days in hot weather, and the insects will attain maturity in about 15 to 17 days. I have already published a bulletin, as I have said, on this subject, which is issued both in French and English. I shall be glad to send copies to any one who may desire them. It is a very important thing that we should tackle this pest at once, on its first appearance in the spring, before they begin to propagate.

## By Mr. Bowers :

Q. This fly has not got down to the Eastern Provinces yet?—A. Not yet. In conclusion, I may say that I am very much oblige! to you, gentlemen, for affording me this opportunity of appearing before you. As I have stated on previous occasions, I am always glad to be of service to you or your constituents whenever an opportunity occurs. And with regard to injurious insects, I would mention that out of about 100 of the worst pests that attack farm products every year, we can suggest remedies or give some useful information about at least 85 of them, so as to enable farmers to ward off or alleviate their attacks.

## By Mr. McMillan (Huron):

Q. There is a gentleman in my constituency who discovered in the milk given from one of his cows, two or three little, white, hair-like worms. Have you any idea what that would be? I never knew of anything of the kind before.—A. No, I am afraid I do not recognize the species from your description. I should have liked much to see the specimens. There are some maggots which might occasionally get into milk by accident, but I know of none having been found in milk freshly milked from the teats. Specimens were sent to me from New Brunswick last year of maggots taken from the flesh of sheep that had been blown, and the maggots had eaten into the flesh of the sheep, but I never heard of such a case as you mention.

Having read the preceding transcript of my evidence, I find it correct.

JAMES FLETCHER,

Entomologist and Botanist to Dominion Experimental Farms.

- 3