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diately under that warble has a peculiar appearance which the butchers in England call 'licked beef.' I do not know what they call it in this country, but as a matter of fact it is produced by suppuration and inflammation which the insect causes.

By Mr. Henderson:

Q. Are these diseases of which you are speaking in connection with cattle as prevalent in this country as they are in England, or are they more prevalent in England?

A. The bot fly is very prevalent in England and in Europe, but I have no evidence as yet, as I have not studied this insect in Canada, as to the prevalence of the warble in the western regions of Canada, though, from what I have found in the United States reports, I should not be at all surprised if it were found to be more prevalent than we think. Unfortunately I do not as yet know how prevalent many of these pests are in Canada, because we have had no system of returns. But I should expect it to be quite a prevalent insect in the western regions of Canada. It is common in Eastern Canada. I should very much like to have information from cattle ranchers and other people in the western part of Canada as to the prevalence of this insect, because it is extremely important to know in what proportion it occurs there. That is a point which I should like to bring out, namely, the desirability for co-operation between the farmers and the fruit growers and the Entomological Division.

By Mr. Robb:

Q. Before you get away from that subject, what time elapses from the time at which the cow is attacked by this fly before the warble develops?

A. The time depends of course on the temperature, which varies in the different regions of so large a country as Canada, but it is usually nine or ten months in the cow and three or four weeks in the ground, or it may be even longer than that.

Q. What is the remedy for it?

A. The remedy is a very simple one—squeezing out the warbles during the winter.

By Mr. Smith (Middlesex):

Q. A lot of people have cattle with warbles that come out through the back?

A. That is the one which I am speaking about.

Q. The description you have given does not quite conform with the habits of that warble in Canada. Here it usually comes out in the spring and these eggs are deposited the year before, so that they come out during the winter.

A. They do not usually come out until the beginning of the spring or summer and the maggots remain under the skin until then; the eggs are deposited in the

previous spring.

Q. I think they come out in the winter and early spring.

A. As I was about to say, you will find that even in a small country like England or Ireland, their habits are affected by the climatic conditions, and you will find no doubt that even in Canada you may have them emerging in the late winter, if the cows are indoors, and in the spring in another place. It is simply a matter of climatic conditions.

Q. But the point I was wanting to get at is the length of time.

A. In the early summer, you may have them beneath the skin for a few weeks only.

Q. I took exception to that because we do not find it has developed in the summer at all.

A. You do not notice it because it is inside the animal.

Q. They have evidently developed in the winter or early spring. And those eggs must have been laid the year before