

METHOD OF LARVÆ REACHING OSEOPHAGUS.

With regard to this problem nothing definite has been ascertained, but I believe that a continuation of the study of the egg-laying habits of the fly, and of the eggs 'in situ' on the animal, will yield results. The other stages of the larva have been so fully described by many authors,* that I have nothing to add, except some remarks to make about the mature larva.

PLATE 8.

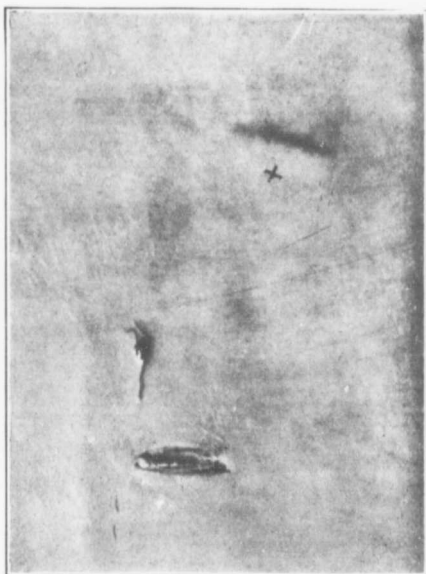


FIG. 1.—Larvæ in oesophagus. Mucous membrane incised to show larva. The shadowy outline of another larva may be seen at the point marked +

A number of larvæ were secured from the animals. The method followed was to glue a piece of gauze over a warble, from which the larva looked about ready to emerge. Some powdered aloes was mixed with the glue, and a little dusted over the patch. The aloes prevented the cattle to a certain extent from licking the patches, and as they were not put on until the grubs were about ready to emerge, there was generally no very long wait. The emerged larvæ were usually found in the morning, this peculiarity has already been noted by Miss Ormerod and others. The fact is of some importance for stabled animals. Many of the grubs are no doubt carried out in the manure, where a number must perish; this would not apply to such an extent in old badly kept stables, where there would be an opportunity for the grubs to crawl into cracks and crevices. The first larva was seen to emerge on April 10, the last were found ready to come out on July 2. (One out of four native cows and two out of eighteen cows imported from Ontario the previous autumn.) Thus the season in Eastern and Western Canada seems to be about identical. It is reasonable to suppose that the period the larva spends within the body must equal the world over, seeing that an animal's temperature does not vary in different countries. The time of emergence of the larva is however bound to vary owing to climate,

* See references, page 20.