

to live stock men and cattle producers of Canada than the others. The disease is known as Bangs. A serum is being produced at the Ontario Agricultural College, but evidently it is not allowed to be distributed by the federal department. I do not know exactly what the reason is, but so far farmers whose herds have been affected by this disease have had trouble in getting treatment. I believe there is an underground activity going on by means of which serum is being used by certain veterinarians and farmers, but I understand it is contrary to law at the present time to sell that particular remedy or to use it. This is the department that should investigate the germ which causes this disease and try to eliminate it. What is being done?

Mr. GARDINER: An investigation is being carried on in connection with Bangs disease. It is concerned with calf's vaccination which it is hoped may be the means of preventing the disease, but it has not so far been established that it is a preventive. Experiments are being carried on by our department over at Hull across the river and at Guelph by the veterinary college there. These two experiments are being conducted in the hope that they may establish the remedy as a preventive. So far that has not been established and it is not yet recommended.

Mr. SENN: The minister says it is not being recommended. Is there any prohibition of the serum which is being produced at Guelph being used by veterinarians and sold to the public?

Mr. GARDINER: Yes. The department takes the position that it is not possible to release this vaccine to the public without upsetting the whole investigation that is being carried on. Until the vaccine is properly developed and produced in quantities that could be distributed properly, there will be no distribution.

Mr. SENN: What reaction would there be to it? What difficulties would arise, or in what way would it damage any investigation?

Mr. GARDINER: The present system of control is one of testing for the purpose of getting reactions and removing the reactors. If this vaccine were distributed throughout the country and persons allowed to use it, it would render the stock susceptible to the test which is now being carried on, and while they are carrying on the present policy of trying to eradicate the disease through location of it and having animals removed from contact with other animals, it is not thought wise to put out this product. The practice would upset the whole policy which the depart-

ment is following at present, particularly when it is not at all assured that vaccination would be a preventive.

Mr. SENN: I ask this because I have been asked the same question a number of times by live stock men, and I could give no satisfactory answer as to why they were not allowed to use the serum.

Mr. NICHOLSON: Last year three veterinary inspectors were provided for; this year there are two. Where are these inspectors located and what is the nature of their work?

Mr. GARDINER: The three were in the Hull laboratories across the river, and this year there will be only two.

Item agreed to.

Science service.

9. Botany and plant pathology, \$283,193.

Mr. STIRLING: What will it be necessary to cut out under this reduction?

Mr. GARDINER: Under permanent employees the reduction is \$3,135; temporary employees \$1,240, wages \$7,006, equipment \$5,485—

Mr. STIRLING: Those are the particulars on page 62 of the estimates, but what work which has been considered valuable in the past will it be necessary to cut out?

Mr. GARDINER: There is no particular service that is being eliminated; it is cutting down expenses of the service all the way through.

Item agreed to.

Science service.

11. Entomology, \$430,509.

Mr. ROSS (Souris): There is a great saving shown under this heading. What is the position relating to grasshoppers in the west, and the arrangement as between the federal and provincial authorities for combating these pests?

Mr. GARDINER: This department does not pay what might be called the greater cost in connection with the fighting of grasshoppers, the buying and spraying of poison and that kind of thing. That is done by the provincial government. This department gives a service which amounts to the mapping of the areas and that type of service; that is included in the general expenditures in connection with this item. I am not in a position to segregate it from the total amount.

Mr. STIRLING: Would the minister give the committee some information regarding the pine bug, the bug that has been working in