

nations. For this market, therefore, it would be necessary to produce aromatic butter, and therefore acidulate the cream. The more acid is developed in the cream the stronger will be the aroma.

Q. Do you believe you can get as good keeping butter without fully ripened cream? A. Yes; in fact, the best keeping butter is made from perfectly sweet cream.

*By Mr. Cochrane:*

Q. Can you get as much? A. No; not as much. All the butter made in Denmark and shipped to Brazil and the West Indies is made on the deep-setting system, and the cream is churned perfectly sweet. The next best butter is made from cream properly ripened. If the acid is not fully developed, or if it is carried too far, it produces a soft, oily and short-lived butter.

OTTAWA, 21d April, 1885.

Mr. JAMES FLETCHER called and examined.

*The Chairman.*—Mr. Fletcher has been connected with the Department of Agriculture, in the position of honorary entomologist, as I understand it, without pay. He has given a good deal of attention to the question, and thinks, with truth, that it has a very important bearing upon the agriculture of the country, and may be of interest to the committee. Will you state, Mr. Fletcher, your official position in relation to entomological studies for the Department of Agriculture? A. It is just as you have said. I have been asked by the Minister of Agriculture to investigate the life histories of those insects which are injurious to our crops, with the object of proposing remedies and making them known to the farmers.

Q. How long have you held that position, and what have you done, so far, in connection with it? A. My notification from the Minister of Agriculture was in July last. It was rather late in the year then to deal with the chief pests—or rather, it was past the time when the farmer could devote much attention to the insects which destroy a great deal of his produce every year. But that part of the year which was left to me was made use of in establishing a system of correspondence with farmers all over the country. We have a great many scientific students in the country. They are theoretical, and argue that if a certain insect should be treated in a particular manner, it must be the same with reference to others. But we cannot take everything on theory. So I found it desirable to institute correspondence with practical farmers cultivating their own farms, so far as I can, by a system of judicious selection, in which I have been aided by members of this House. I believe I have now gained the position of being prepared to begin this year to do useful work.

*By Mr. Trow:*

Q. This is a matter of great importance. It is a subject we have not yet taken up. The committee is anxious to get away to-day. Would it not be well to devote a whole forenoon to hearing Mr. Fletcher, some other day? A. I am very glad to hear a member of the committee express himself in that way. But you will find, in a report I have made to the Minister of Agriculture, a statement of what has been done during the past year. Besides, my doctors have told me that it is imperative that I should leave at once for a climate in which I can remain out of doors the greater part of the day.

*By Mr. Baker (Victoria):*

Q. Where are you going? A. I am going to British Columbia. We find in all cultivated countries that the number of insect pests developed by the increase in the amount of produce suitable to them for food is very large. I will explain to you what I mean by taking, as an illustration, the potato bug. The potato bug, when first discovered, was one of the rarest insects we had in North America. It was several years, perhaps half a century, before it was discovered again, and for this reason: It feeds only on such plants as the potato. There was no bridge for it to come over; but by the introduction of the potato, the plant upon which it can feed, it had a large supply of food, which is the great incentive to insect life. A large amount of food produces insect life. We have, for instance, in Canada, a very important crop—the clover seed crop. In the census of 1880 we find that there were 517,000 bushels of clover and hay seed produced. The lowest estimate we can put