

two things: In the first place, we found out that our cheese made in the hot weather is cured in curing rooms not impervious to the outside heat. The curing rooms of cheese factories throughout the country we found to be flimsy of construction, so that the cheese was cured in a temperature which made it practically impossible to make a first-class article. We, therefore, sought to induce the cheesemakers of the country to improve their curing rooms. We did this by a campaign of education in the farmers's institutes and the various association meetings throughout the country. We went even further, and advised the local governments, one of which, at least, that of Quebec, which had offered a bonus to cheese factories that made an improvement in their curing rooms. At the same time, Prof. Robertson worked out the best plans and specifications for these curing rooms, and distributed them gratis to every one who would undertake this work. While this education has been going on, practical work has been going on also, a large number of our cheese factories so improving their curing rooms that to-day they can cure cheese in as cool a temperature in the middle of summer as they can in the fall and spring. And we have proven, by careful experiments under the direction of the department, that cheese that is made in the hottest weather may be as good as that made in the cooler weather. As a matter of fact, the cheese does not shrink so much as when cured in heated chambers. The cost of the improvement is so little that the saving on the shrinkage of cheese is sufficient of itself to make up for the expenditure. I am speaking from memory, but I believe I am right in saying, that in one season enough was saved on the shrinkage on cheese to almost pay the cost of improving the curing room.

Mr. CLANCY. Does the hon. gentleman mean the cost of the curing rooms?

The MINISTER OF AGRICULTURE. Yes, the cost of improving the curing room. One season's make, in the increased value, which was found to be  $\frac{1}{2}$  cent per pound, and the saving in shrinkage, pays for the improvement in the curing room.

Mr. CLANCY. Does the hon. gentleman mean for the manufacture of cheese or those to which the government are giving a bonus?

The MINISTER OF AGRICULTURE. No, the government are giving no bonus.

Mr. CLANCY. But, the government is giving a bonus for this purpose?

The MINISTER OF AGRICULTURE. No; the House is asked under this vote to give a sum toward providing creameries with cold storage accommodation. We are not giving a bonus to cheese factories for curing rooms. The Quebec government did give a bonus for such a purpose.

Mr. FISHER.

Mr. CLANCY. I thought this included cheese factories.

The MINISTER OF AGRICULTURE. No, it is for creameries. There are some factories where cheese is made as well as butter. We give a bonus wherever they put in cold storage plants, and where they make a certain quantity of butter, and fulfil the other conditions. But, I am speaking of the facts that have come out as a result of our work in connection with the subject on which the hon. gentleman has asked questions. The results show that the improvement in our summer-made cheese has increased the reputation of our whole cheese product. Another point of equal importance was ascertained. It was found that in many cases our cheese was damaged in crossing the ocean by being packed in the hot hold of the vessel. I may say that when cold storage was first established a good many people talked of sending cheese forward in cold storage chambers, but the cheese merchants did not, to any extent, avail themselves of that accommodation, and comparatively little of our cheese was sent in the insulated cold storage chamber. In the hot weather cheese, even in the ordinary hold of the vessel, heats a little from its own ripening; and, in the hot battened-down holds, it is seriously hurt. In that connection we have investigated what could be done to ventilate the holds of the ships so as to carry cheese forward in more perfect condition. This was made all the more desirable because of the knowledge our cheesemakers have acquired in connection with their curing rooms, because of which summer cheese is likely to be made of equal quality with the June or September cheese. The vote now before the committee does not include anything for this purpose, but I am going to ask parliament in a little while to give me a vote to secure better ventilation in the ordinary holds of the ships. But, under the vote given, we have obtained the information and carried on the investigations, which have shown us, and proved to the shippers and those engaged in the trade, the necessity of the changes, which I shall outline when that matter comes up.

In this connection, I may also say that in our investigations we have found what was generally stated, but which was not by any means proved, that our apples going forward in ordinary holds of vessels unventilated, have heated, and that in many instances the apples which were put upon the ships in the ports here in fairly good condition, arrived at the other side cooked and hurt to such an extent that they were practically valueless. The general statement of shippers was that all their apples were hurt in that way. This was found not to be the case, but it occurred in many instances. We also found many instances where the apples were heated before they