THE MANUFACTURE OF CHEESE.

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Ladies and Gentlemen:

The subject on which I am to speak tonight can be treated in two ways. It would be possible for me to look at the subject as though it were intended for me to tell how to make foreign cheese in the United States. But if I did this it would appear as though I were attempting to give advice to men who know far more about the subject than I do myself. I do not claim to know a great deal about the making of swiss cheese or any other kind of foreign cheese and I say this though I am attempting to conduct experimental work along this line. What I do claim is that while I do not know a great deal about making swiss cheese there is much that no one else knows and until the right or wrong of everything connected with this industry has been proven absolutely there is plenty which is worth while for us to work on.

In this connection I think the results of some of our work done in your own county will help to illustrate what I mean. You of course know that the harp and the stirrer are a couple of instruments used by swiss cheese makers and which are supposed by the majority at least to be absolutely necessary to the successful manipulation of a swiss curd. Last summer Mr. Issajeff of the Dairy Division was in a factory near Brodhead and used the common American curd knife in cutting the swiss curd. He found

that he saved time and he made better cheese on the average than did the regular swiss cheese maker with whom he took turns in making. He also found that he could cut a curd as coarse as curds of a cheddar cheese or larger than a kernel of corn, and he made his best cheese with larger or coarser curd. I tell these things that you may understand my position in saying that there are many things now practiced in swiss cheese making which are not necessary to the process and which may be improved on.

In taking up the real subject on which I desire to speak this evening I will consider the making of foreign cheeses from a business standpoint. The first question that presents itself is there any money in it, and this brings up the questions of cost of production, market prices and possibility of producing a first class article. The demand for many of these cheeses is already developed and is in a large measure supplied by imported goods. imported into the United States annually \$1,000,000 worth of Swiss cheese and \$200,000 worth each of camembert and roquefort cheeses. This cheese is produced where milk is naturally worth more than it is in this country and in addition pays a tariff of 6 cents per pound. Now it has already been demonstrated that practically as good swiss cheese can be produced in this country as can be made in Europe. But here something enters in that I would like very much to impress on you which is that while good swiss cheese can be and is made in this country the best is not sold for domestic swiss cheese but when it gets to the retailer is sold for imported and retails for close to 35 cents per pound or for 15 cents more on the average than does domestic cheese. The question naturally arises as to who gets this extra rake off. You cheese makers sell your cheese even the best as far as I am able to determine at the price of domestic swiss. You do not realize on your ability to make cheese as good as the imported, but somebody gets the money and I cannot tell you who it is for I do not know.

But of far more injury to the industry than the unfairness of you not securing what is justly to you is the influence that this has in making the consumer believe that a good swiss cheese cannot be produced in the United State. Go to any retail market and the cheese which is sold for domestic is an exceedingly inferior article such as you sell for seconds or even poorer grades. The consuming public naturally comes to the conclusion that all domestic made swiss cheese is of the same inferior quality and in the long run it is far more injurious to the business as a whole then the fact that you makers and farmers do not receive what you should receive for this extra good quality cheese. The making right of this condition rests entirely in your hands.

As I have said before there is about \$200,000 worth of camembert cheese imported into the United States every If this cheese can be made in this country it should be made here. The demand is here and could be very much greater if the product was at hand to supply it. Because of the fact that this cheese is a quick ripening cheese and is only fit for consumption for about a week, it is little known except in a few large cities in the east. We believe that it can be made in this country as good as in France. In fact it has been made in this country as good as in France. The Dairy Division in connection with one of the state experiment stations has made as good camembert cheese as can be imported. For a time a large factory in New York made it successfully, so successfully in fact that for a number of years a large part of the so called imported camembert cheese was made in the United States and was successfully sold for imported. present time another large factory in New York seems to be making a good success of the industry.

Camembert cheese appears to be a very profitable cheese. The good cheese wholesales at a price that represents about ten cents per quart for the milk used in its manufacture. There is considerable labor but with a good product and a

good market it should be a profitable industry.

The other variety of cheese which I wish to consider is of the roquefort or stilton type. Roquefort cheese proper is made from sheep's milk and it is very doubtful if any number of farmers in this country will ever care to milk sheep. But cheeses resembling gorgonzola or stilton should be made successfully in this country and of much more uniform quality than the gorgonzola or stilton that is offered on the markets of the United States. These are high priced cheeses that do not require a great amount of labor and should not be hard to make in the United States. Moreover they are cheeses that should create for themselves a very large market as they have a very fine flavor that is entirely distinct from that of any other cheese made.