The Influence of Skimming on the Quality of Swiss Cheese

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Your program gives the title of my talk as The Influence of skimming on the quality of Swiss cheese. The chief purpose of this talk was to stir up interest in this subject. I find, however, that interest has already been stirred up to the point of asking the legislature for a modification of the laws to allow the makers of Swiss cheese to partially skim their milk. The resolution passed by the convention at the morning sessions and the marks I was requested to make at that time make this talk superfluous. Because of this I will talk briefly upon the question of skimming and will bring up a few other things which I think will be of interest to the convention at this time.

Last year I talked to you about the use of starters in Swiss cheese making. For the last 12 months we have pursued our studies on this question further and are arriving a little nearer a solution. Our present difficulty, and practically the only one, is in controlling the size and number of eyes. We have, of course, tried many things with this in view and shall try many more. I have with me four cheeses
for your inspection which were made with starters and I can say that while we fall far short of equalling the best of imported cheese in the size and distribution of eyes we probably have as good a lot of cheese on the shelves of our curing room at Washington as was ever put out in one season by any factory in Wisconsin. The cheeses which I have here for your inspection are winter-made, one of them being not over four weeks old. You will notice that they have excellent eyes and some of your cheese makers who have sampled these cheeses say that the flavor and texture are perfect for cheeses of this age. I would like to add that all these cheeses were made from milk which would not make Swiss cheese of any description without the use of starters.

Another question in which you are interested, particularly this season is the source of your rennet supply. Most of the rennets used in this section of Wisconsin are imported from Bavaria. This source of supply is now cut off and the manufacturers of rennet extract, as well as your dealers which furnish your factories with dried rennet, are scouring the county to secure an adequate supply. Many of the rennets which they are securing at the present time are admittedly weak and it will require a larger amount to coagulate the milk in the proper length of time. I am very much afraid that the addition of this extra amount of rennet may lead to some gassy cheese, because the acid in the whey of the rennet will not be sufficient to suppress the large number of gas-forming bacteria carried in the dry stomach. I would suggest that, for the present at least, that the whey intended for rennet be allowed to stand 24 hours in a warm place before the dried stomach is added to it. This will give the acid a chance to get ahead of the gas-forming bacteria and will probably help prevent a lot of serious difficulty with the
cheese.

To come back to the question of skimming, I suppose that every cheese maker in southern Wisconsin would like to be able to make a cheese equal to the best imported, and be able to do this every day in the year. It would mean at least 50 cents per hundred pounds additional for all of the milk delivered to these Swiss cheese factories, and would make it possible for both farmers and cheese makers to make greater profits than they are securing at the present time. To get these results it is probable that some of the conditions existing in Switzerland must be secured in this country. None of us know exactly what condition it is in Switzerland that makes it possible for them to produce cheeses with the large eyes, demanded by the American consumer. We do know, however, a portion of the milk is skimmed and the authorities on this subject in Switzerland are beginning to admit that it is necessary to skim a portion of the milk at a certain season of the year to secure the large eyes.

Again, a large number of analysis made in this country of imported cheeses show that the fat in the cheeses falls below the standard demanded by the food laws of our different States, and also show that the milk used in their manufacture has had a small portion of the fat removed. Our laws demand that the cheese have 50 percent of fat in the dry matter. The authorities of Switzerland are advocating a 45 percent standard, and in fact many of the cheeses manufactured in that country do not have this much fat. Now it is very probable that if the cheese makers of the United States were allowed to remove a portion of the fat from the milk they would be in a better position to secure a cheese more nearly equal to the imported article.

At certain periods of the year, in some factories,
the cheese makers find it very difficult indeed to keep from making a glaze cheese. We had this difficulty in making our experimental cheese and we were forced to skim a portion of the milk to overcome the trouble. Cheese makers of Wisconsin suffer large losses from this same trouble, and it is very probable that the trouble could, in a large measure, be overcome by removing a part of the fat from the milk.