ADDRESS.

LAWS RELATING TO CLEAN AND SANITARY CONDITIONS IN CHEESE FACTORIES.

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MADISON, WIS.

I am sure it would be more agreeable to all present, if instead of speaking on the law, I could have been assigned the duty of proclaiming the gospel of cleanliness in Wisconsin cheese factories. That cleanliness is next to Godliness is an old and familiar maxim. In its application to cheese factories I am of the opinion that it would not be too much to say that cleanliness is Godliness.

I am quite sure that the cheese makers who attend this convention are not the ones who most need instruction as to the laws relating to cleanliness in cheese factories. The cheese makers who never attend the meetings of this association are the ones most needing such instruction. Perhaps some of these will be reached through the volume of your published proceedings. Others may be reached by the inspectors and possibly by the constable.

That scrupulous cleanliness in cheese factories, their floors, walls, vats, pipes, cheesemakers, in the milk received and mode of manufacture, is absolutely necessary to the highest quality of the product, is a matter of common knowledge and general assent. In theory it has been so long and generally admitted and in practice so much neglected, that the legislature of the state no doubt concluded that a law with adequate penalties for its violation might doubtless be made to contribute to the securing of so necessary and profitable a condition, and chapter 67 of the laws of 1903 was in consequence enacted.

Section 1 of that chapter defines unclean and unsanitary milk as follows: “Milk which shall be drawn from cows that are kept in barns or stables which are not well lighted and ventilated or that are filthy from the accumulation of animal refuse or from any other cause, or from cows which are themselves in a
filthy condition, and milk in and from cans or other utensils that are not kept in a clean and sanitary condition, or milk to which has been added any unclean or unsanitary foreign substance, is hereby declared to be unclean and unsanitary milk."

Section 2 prohibits the sale or delivery to any creamery, cheese factory, etc., of such unclean and unsanitary milk, as follows: "No person, firm or corporation shall knowingly offer or expose for sale, or sell, or deliver for sale or consumption, or to any creamery or cheese factory or milk condensing factory, or have in his possession with intent to sell any unclean or unsanitary milk." The unclean or unsanitary milk referred to in this section is the unclean or unsanitary milk as defined in section 1 of that act.

Section 3 prohibits the manufacture for sale of articles of food from unclean and unsanitary milk or cream from the same, as thus defined, in the following language: "No person, firm or corporation shall knowingly manufacture for sale any article of food from unclean or unsanitary milk or from cream from the same."

The first section of this law is intended to reach the dairymen who produce the milk or cream for delivery at creameries, cheese factories and city milk supplies. Section 2 is intended to reach the same class and also all persons who sell or deliver milk for sale or consumption to cheese factories, creameries, etc. It is the purpose of section 3 to make it imperative upon the operators of cheese factories and creameries, that they reject from their factories all unclean or unsanitary milk. The law is evidently intended to be a stimulant to spinal columns. If the cheese factory operator allows unclean or unsanitary milk to go into his cheese product, he can not shift the responsibility upon the patron, because the law places it upon him. Should he plead ignorance as to the quality of milk he receives, he is to be reminded that through the use of the Wisconsin curd test taints in milk from filth or other causes are readily detected. The legislature evidently intended by this act, calling into use as it did the exercise of the police power of the state, to protect the great consuming public against filthy and unsanitary food products. Incidentally its effect is to improve the quality of the cheese product and thereby to enhance its market value.
Section 4 of that act defines unclean and unsanitary conditions in cheese factories, creameries, etc., and requires the owners or managers thereof to keep the same in clean condition. The provisions of that section are as follows: "All premises and utensils employed for the manufacture or sale or offering for sale of food products from milk or cream from the same which shall not be kept in clean and good sanitary condition are hereby declared to be unclean and unsanitary. Any milk dealer or any person, firm or corporation, furnishing milk or cream to such dealer, or the employee of such milk dealer, and any person, firm or corporation or the employee of such person, firm or corporation, who operates a creamery, cheese factory or milk condensing factory, or manufactures, reworks or packs butter for sale as a food product, shall maintain his premises and utensils in a clean and sanitary condition."

Section 5 of that act requires the emptying and cleansing of cans, bottles and vessels which have been transported over any railroad or boat line, where such cans, bottles or vessels are to be returned.

Section 6 provides a punishment by fine of not less than twenty-five nor more than one hundred dollars for each and every offense and in default of payment imprisonment in the county jail not less than thirty days nor more than sixty days.

It is thus made apparent that the violation of any provision of this law is a quasi criminal act and is an expression of the judgment of the legislature upon the conduct of any one who shall maintain a cheese factory in an unclean or unsanitary condition or who shall manufacture cheese from unclean or unsanitary milk. Who can say that the judgment or condemnation is too strong?

Section 1410a of the Wisconsin statutes of 1898 makes it the duty of the state dairy and food commissioner to enforce the laws regarding the production, manufacture or sale of dairy products. Section 1410b, statutes of 1898, confers upon the commissioner, his agent or assistant, free access to any barn or stable where any cow is kept or milked, or to any factory, building, dairy or premises where any dairy product is manufactured, handled or stored, when the milk from such cow or such product is to be sold or shipped, and confers upon him authority to enforce such measures as are necessary to secure perfect
cleanliness in and around the same and of any utensils used therein. It is further made his duty by law to prosecute those who may be found violating the dairy laws of this state.

Section 4607, statutes of 1898, prohibits the sale or delivery to factory or creamery of any unmerchantable, adulterated, impure or unwholesome milk, and section 4607a, statutes of 1898, fixes the standard for purity of milk by providing that milk which shall contain less than three per cent. of butter fat, or that has been diluted, or any part of the cream of which has been abstracted, or that, or any part of it, was drawn from a cow known to have been at the time it was drawn within fifteen days before or less than four days after parturition, or which was known to have any disease, ulcers or other running sores, shall be held or found to be unmerchantable, adulterated, impure or unwholesome, as the fact may be. The penalty fixed for violating this statute is the same as that before given.

I have thus briefly enumerated the salient features of the laws of Wisconsin relating to clean and sanitary conditions in cheese factories.

Referring to the articles of incorporation of this association, I find it stated that the business, purpose and object shall be the education of its members for better work in the art of making cheese, the care and management of factories, the sale of their products and the weeding out of incompetency in the business of cheese making.

It must be conceded that the number of inspectors provided for the state dairy and food commission is not adequate for the absolutely complete enforcement of these laws. It is believed that progress has been made during the past year. An assistant chemist and two inspectors, one of whom is a dairy, creamery and cheese factory inspector, were added to the commission. In addition to this the dairy and food commissioner was authorized to appoint the traveling instructors now employed by the Wisconsin Dairymen's Association as his expert agents, thus clothing them with all the authority possessed by the dairy and food commissioner himself. It is believed this law, practically providing for a corps of five instructors or inspectors, more than doubles the effectiveness of the former force. But this force is considered much too small and when our great number of cheese factories and creameries is taken into consid-
eration, is much less than the force employed by state dairy and food commissions of neighboring states.

How to provide the requisite inspection of Wisconsin cheese factories and creameries is in my judgment a highly important problem now pressing for solution. This matter is alike important to producers and to the consuming public.

With the prosecutions to be made and the other interruptions that must inevitably occur, one man cannot inspect more than five cheese factories or creameries in a week and do the work with the thoroughness with which it should be done. This requires that the inspection should begin in the morning with the delivery of the milk as it is conceded by all that unless the quality of the milk delivered is of the highest the quality of the product must suffer.

It is possible that among Swiss cheese factories where milk is delivered morning and evening and the factories are close together and the number of patrons of each is comparatively small, two factories a day or ten to twelve factories a week can be properly inspected. I believe that not to exceed 250 cheese factories or creameries can be properly inspected by one man in a year. At that rate it would require twelve men to inspect once a year the 1,800 cheese factories and the 1,200 creameries in this state. But once a year is not often enough to inspect them. Twice a year is not sufficient; yet to inspect them twice a year would require not less than twenty-four competent, energetic inspectors.

It may be profitable for us to consider what some of our neighbors are doing in this line of work.

The province of Ontario has 1,000 factories. Sixteen traveling cheese instructors are employed. They find this number insufficient and unsatisfactory and wish to increase it. Each cheese instructor gets from $700 to $1,000 for the season. There, a traveling cheese inspector watches a group of from 20 to 30 factories. Some of these he visits but once in a season, others as often as once a month, the number of visits depending upon the necessities of the factory. He gives counsel, sees that the factory is kept clean, and by reporting to the proprietor or the farm owners, is able to weed out the poor cheesemakers and
encourage and stimulate the worthy ones. He has no absolute powers, his work being strictly advisory.

The province of Quebec has about fifty traveling cheese instructors. Here, the dairymen are largely of French descent, and the cheese factories are smaller than those in the province of Ontario and relatively more numerous. Here a different plan is followed from that in Ontario. The cheese factories are allowed to form "syndicates," so-called, that is, twenty-five or thirty factories near together are allowed to form an association for hiring a traveling cheese instructor. If they hire one approved by the government, the government will pay toward his salary up to the limit of $250, but not more, and not more than half his salary in any event. The instructors receive from $600 to $800 for the season. The difference between the government allowance and the total amount of salary is met by the factories themselves. Thus it will be seen that the provincial government of Quebec pays out not more than $12,500 annually for these traveling instructors while the patrons of the factories themselves must pay at least $20,000.

Are there not suggestions here that Wisconsin can make use of to her great profit? Wisconsin is a great dairy state. She has the largest number of creameries and cheese factories of any state in the union. In total volume of dairy products she ranks second. Draw a line from Prescott on the Mississippi river eastward through Marshfield to the northeast corner of Kewaunee county and the portion of Wisconsin south of that line is the richest dairy country, of equal area, in the United States. Can Wisconsin hold her prestige as a dairy state by supineness? Improvement in quality and uniformity is needed. If this association, the Wisconsin Dairymen's Association, the Wisconsin Butter Makers' Association, the Dairy School, the State Dairy Commission, and the State Dairy and Agricultural press could unite and co-operate in an effort to increase the number of instructors or inspectors in cheese making and butter making on some such plan as that of the province of Quebec, could not a progressive movement be thus inaugurated and success achieved?

In high schools, graded schools and the county training schools for teachers, and the county agricultural schools, day schools for the deaf and other enterprises, the state co-operates
and rewards local effort. Why not in the work of bettering dairy conditions?

I most respectfully urge a consideration of these suggestions by this association. It seems to me that greater co-operation by the agency above named, on definite lines that seem most urgent, particularly in the matter of cleanliness and sanitary conditions in our factories, would result in a higher degree of progress.

But equally with laws in relation to cleanliness and good sanitary conditions, there are needed high ideals and public sentiment demanding their enforcement and realization. In creating these high ideals and public sentiment among patrons, a broad field of usefulness is open to cheesemakers. My appeal is that you do not allow yourselves to float along on the tide of a low public sentiment, but that you seek by every possible effort to make public sentiment what it should be and that you seek to create for Wisconsin cheese making the very highest possible ideals, the greatest degree of cleanliness possible and the very best possible sanitary conditions.

Mr. E. L. Aderhold called to the chair.

DISCUSSION.

Mr. Swingel: I would like to ask Professor Emery how to prevent the farmer from feeding food that is not the proper thing for cheesemaking. I have been bothered with my patrons feeding rape and turnips, and it is pretty hard to avoid those things, because rape will increase the flow of milk. I have worked hard and have induced about two-thirds of them not to raise it, but the other one-third are bound to feed it and that makes it unjust to the others who do not feed it.

Professor Emery: That is quite a problem. I suppose I might go back to the time when the question was up in this country as to the resumption of specie payment and Horace Greeley gave that renowned counsel as to the way to resume
specie payment. He said the way to resume was to resume. Suppose we could use authority as cheesemakers to refuse to receive the milk. It is not always wise to use authority. I am of opinion, though I have not had experience in cheese-making, that if I were running a cheese factory I should insist upon the highest quality of milk, and I should reject the inferior milk. I would try to manufacture the very highest quality of product and get the highest market price for it. I don’t know that that answers your question.

Mr. Swingel: Is there any law with reference to that subject?

Professor Emery: It is unquestionable that they can be prohibited from feeding unwholesome food, but I think there is no question upon the right or authority of the manufacturers of cheese to reject from the factory a grade of milk that they regard as inferior and doing injustice to the other patrons. Of course, it would be very profitable if all cheese factories would act together in this matter, so that a person sent away from one factory could not go to another. We had a man who took his milk to a creamery in filthy cans in violation of the law. It has not been the policy of the Commission to become aggressive and at once prosecute a man at the first offense, but the inspector in this case, as in others, called his attention to the filthy condition of his cans, and instead of taking the suggestion in good part, he brought his milk the next morning in the same condition and abused the inspector for interfering with his rights. He threatened to go up to another creamery if he couldn’t leave his milk there, and the inspector told him if he took it to another creamery in filthy cans he would be prosecuted. He took it there in filthy cans, and was prosecuted. Now, I do not think that the prosecution of the law is the most potent thing. I think that high ideals and instruction would prove much more valuable in most cases, but at times the law has to come in with its force.

Mr. Everett: It appears to me there might be a possible remedy in this matter of feeding rape. I see Professor Farrington in the room, and I wish he would tell us whether or not there have not been experiments made at our Station or other stations in regard to feeding rape to milch cows, and its
effect upon the quality of the milk, and how, if possible, it may be avoided?

Professor Farrington: I think that the same experiences have been met in regard to the feeding of rape to cows in the use of the milk for making both butter and cheese. We have made some experiments at Madison at the Dairy School. Now, as I remember the results of those experiments, we did not find that the rape flavor was noticed to such an extent in butter as it was in cheese, and in a good many cases rape can be fed to cows and the milk used for butter making exclusively. But I think that in cases where we made cheese of the milk from cows fed rape, the flavor was quite prominent in the cheese. I think the point that Mr. Everett wants to bring out is that with such foods as rape and others that have a strong flavor, they may be more successfully fed after milking than before, and you may overcome the effects that they cause in the products made from such milk by feeding it after milking.

Mr. Luchsinger: This gentleman who has had trouble on account of the flavor imparted to his cheese by reason of the cows being fed rape, that gentleman may be an employee of some of these patrons or he may be a cheesemaker for a so-called co-operative factory. If that is the case and one-third of his patrons feed rape and the other two-thirds do not, and the quality of his cheese is thereby injured, his course would be to get the influence of the two-thirds on his side and show the other third the injury they are doing to their neighbors as well as to the cheese maker. If he is the buyer of the milk or if he works for a man who does purchase the milk, his remedy is to refuse to take the milk, reject it. Down in our city the milk condensing works have been in operation a number of years. They are very much more particular than any cheese factory or creamery can ever be in requiring good flavored milk, and the way they enforce this is that they have an inspector who receives the milk and he immediately rejects any milk that is brought there that has any taint or odor of rape or any other offensive odor, he sends it back and there is no appeal. That is one of their printed rules which the patron subscribes to when he agrees to bring milk to that factory. It may be that the patrons of the condensing factory will obey their rules more strictly than the rules made by a cheese factory, for the reason that they usually
pay from ten to fifteen cents per hundred more for the milk than is paid by any cheese factory or creamery. They make it an object for people who sell milk to bring milk just as the rules prescribe, and I don’t see why the same rule should not apply in the case of a cheese factory.

The Chairman: We are drifting a little away from the subject. Professor Emery has clearly indicated that there is need of a much larger force of inspectors. I think it would be pertinent to discuss that subject, How can we increase the force of inspectors?

Professor Farrington: I would suggest that the members of the Cheese Makers’ Association here assembled request some one of the members, perhaps Mr. Luchsinger, to draw up a resolution as an expression of the members here, requesting the powers who have the authority, to increase the number of inspectors.

The Chairman: Mr. Luchsinger is one of the members of the committee on resolutions, and if there are no objections I will direct him to embody those ideas in a resolution.

Mr. Mason: It seems to me that the inspectors in cheese factories should be controlled by this Cheese Makers’ Association. I think they ought to make the appointments; they certainly are better fitted to know who is the man who would make the best cheese inspector.

The Chairman: That is all right, but the Cheese Makers’ Association couldn’t pay anybody; so that is out of the question.

Mr. Everett: It seems to me that it ought to be taken out of the hands of the Cheese Makers’ Association, as an Association altogether. The state must pay those inspectors and they should be appointed by the Dairy and Food Commission and empowered to act as becomes necessary. It may be proper for this Association to recommend.

Mr. McKinnon: The idea was brought out here the other day that in Canada, in one of the provinces, the state appropriated so much money towards bearing the expenses of the cheese instructors and that the patrons united in making up the fund to pay the remainder, and it struck me as a very good idea, we can’t expect the state to do everything for us. I hail from Sheboygan county, and I know what the wants of that
county are pretty well, and I know what assistance the cheese instructors have been. Two or three years ago I had Mr. Aderhold visit my factory as often as he could. He charged me a little something every time, I think about six dollars, but if I could have had the same guidance in my factory for the last two years that I had under Mr. Aderhold’s supervision, it would have been hundreds of dollars in my pocket, besides being of great satisfaction to me, and we sometimes work for satisfaction. I presume that a great many of the factory men here have had cheese in their factories that were not first class goods, but they have to sell them, as a matter of course. Now, we not only have to sell that cheese below the price of good cheese; we not only have to suffer the loss in that direction, but we have to suffer in our minds, and I tell you, gentlemen, it is very humiliating to me to know that my cheese are a little poor and that I have got to take a reduction. In fact, that part of it hurts me worse than the financial loss. Now, I believe this kind of thing can be largely remedied by having more instructors. Mr. De Land and myself are on the committee of legislation, and I have no doubt that Mr. De Land, as chairman of the committee, will be glad to use his influence if we can; we will both use our influence to get an appropriation made along this line so that we can have cheese inspectors as we need them. Two or three inspectors for the great state of Wisconsin is not a drop in the bucket. We need a great many, and it would be money well laid out if we had a full corps of working inspectors in the state of Wisconsin.

INSTRUCTION IN CHEESE FACTORIES IN WESTERN ONTARIO.

PROF. G. H. BARR, STRATHROY, ONTARIO.

Chief Instructor for Western Ontario.

Mr. President, Ladies and Gentlemen: I need scarcely say that when I received the very kind invitation from your Secretary to come over and see the cheesemakers of Wisconsin at