ance and if you tell him he can construct a barrel, which he can, if they have to pay for something and it costs them something, they are more interested; that is human nature. You can build this tank yourself if you only have the gumption to go ahead and do so, but if you pay for something it costs you something, you are going to take care of it.

MEMBER: I found more trouble by not caring for it after separation than any other case, the proper care of the cream after it is separated is the great thing.

MR. JACOB: I hope you didn’t tell them they didn’t need to wash that separator more than once a day or once a week.

THE WORK OF THE WISCONSIN DEPARTMENT OF AGRICULTURE FOR THE FARMERS OF THE STATE. SPECIAL REFERENCE TO A NEW PLAN FOR THE ESTABLISHMENT OF “TUBERCULOSIS FREE” HERDS.

By C. P. Norgord, Commissioner of Agriculture.

Members of the Wisconsin Buttermakers’ Convention. Ladies and Gentlemen: I appreciate the opportunity of speaking before this splendid gathering of the buttermakers of Wisconsin, for I realize that you are in contact with more farmers in the State of Wisconsin than most any other body of men coming together for a convention in this state. I have always had much to do with the farmers of Wisconsin. The subject which I wish to present today I hope is of some value to them, and therefore I hope that through you this message may reach many farmers in the state.
The main theme which I wish to discuss is a new plan for the eradication of bovine tuberculosis in the live stock of the State of Wisconsin which the Live Stock Sanitary Board of the Department of Agriculture is at present putting forth. Before presenting this, however, I wish to tell you briefly of the field and function of the new Department of Agriculture, and what it has to offer the farmers of the state.

The Field and Function of the New Department of Agriculture.

The work of the Department of Agriculture is very closely related to that of the State Experiment Station and College of Agriculture. It is of the type of agricultural improvement work which has been done in the State of Wisconsin for many years, and which, to quite an extent at least, has helped to bring the state of Wisconsin to the advanced position in agriculture which it occupies today. This type of work may be divided into three
main lines. One of these is the experimental work, which has had to do with new discoveries in the line of agricultural science. By means of this line of work, the Babcock milk test was discovered, which has made possible the accurate measurement of the value of milk for the production of butter and cheese, and which has made possible a proper foundation for the marketing of dairy products and for the improvement of dairy herds. By means of this line of work, improved grains, for which the state of Wisconsin is noted, were produced, causing a great increase in the production per acre of farm crops, and their value to the state. By means of this, also, the soils of Wisconsin have been analyzed, and it was discovered that our marshy soils, many of which are lacking in potash and phosphorus, can be improved and brought up to a normal state of cultivation by the addition of potash and phosphorus salts. These and many other valuable discoveries have been made, and this line of work has been effectively carried on by the State Experiment Station and the various sub-experiment stations in Wisconsin.

Another line of work is the teaching, demonstration and extension work for the benefit of the people of Wisconsin. This has been done by the College of Agriculture of the University of Wisconsin and its extension service, the farmers' institutes, and the various secondary schools scattered throughout the state of Wisconsin.

There remains still another line of work, which has, to some extent, been conducted by the State Experiment Station and other agencies, such as the Dairy and Food Commission. I refer to the control or regulatory work along agricultural lines. This line of work is fully as important as the two others mentioned above. The control of the introduction of weed seeds and the eradication of weeds in the state is of this type of work. We have not, until recent years, had control stations of this type. Germany and other foreign countries have long realized the necessity for this type of work, and has had efficient seed-control stations established and in operation. As a consequence, rules and regulations have been adopted and enforced in these
countries so that seeds having certain kinds of weeds in them, as, for instance, quack grass, Canada thistles and morning glories, could not be sold; but since there were no control stations in this country, and no regulations concerning their sale, it has been possible for these seeds, unsalable in other countries, to be introduced here and sold for good prices. For instance, quack grass seed, which closely resembles Brome grass, has often been sold for that kind of seed, and as a consequence this weed has been widely disseminated with the seed through the hay produced therefrom. Canada thistle seed, likewise, has been disseminated in connection with oats, barley and other grains. As a consequence, many of our fields are covered with these dangerous weeds, our crops have been reduced, the labor of handling these crops has been increased, and the value of our lands greatly reduced in price. This type of control work is being effectively done by the Agronomy Department of the Experiment Station.

The control of sanitary conditions on our dairy farms and in our creameries affects the trade in milk, in butter, in cheese and other dairy products, and greatly affects the market in these products. This important line of work is being effectively done by our Dairy and Food Commission.

The main lines of work included in the Department of Agriculture at the present time are of the control type. The work of the Entomology Division is specifically of this type. Under this division comes the inspection of nurseries introducing trees and plants from foreign countries. With these come soil which contain dangerous fungus diseases at present not found in this state. The plants themselves contain diseases and various insects whose presence in this country might cause great damage. Insects which are checked in foreign countries by their natural enemies may find a new home here where their natural enemies are not present, consequently the spread may be tremendous.

The introduction of sparrows into this country from England is an illustration of how a bird held in check in other coun-
tries will increase in number when taken away from that check. The introduction of the San Jose scale came with foreign shipments. The insect is causing great losses all over the United States. The Entomology Division is making a careful study of the situation throughout the state and is eradicating the disease wherever found. A good piece of work along this line was done by Professor Sanders, State Entomologist, in Milwaukee and in other eastern cities of the state. The Gypsy moth and the Brown Tail moth likewise have been introduced in this way and their ravages in eastern Canada and some of our eastern states are well known.

The inspection of nurseries growing and disseminating shrubs and trees likewise comes under the work of this department, so also does the inspection of orchards and shade trees in cities, likewise the control of insect diseases of general farm crops and the insects affecting stored products and domestic animals.

The inspection of bees is also a part of the work of this department. The control of diseases of bee colonies is important to the bee industry of the state. From outside sources there have been introduced into this state the American and the European foul brood diseases which are constantly destroying the brood and killing hundreds of colonies in the state each year. This work is being effectively done by Mr. N. E. France, State Apiary Inspector, who is working in co-operation with Professor Sanders.

The Immigration Division is likewise doing effective work in looking after the interests of the new settlers coming into the northern part of Wisconsin.

The Veterinary Division is particularly a control division. This division has control of the diseases among stock that are dangerous alike to stock and man such as anthrax, glanders, tuberculosis, and rabies as well as other diseases not contagious to man such as hemmorhagic septicemia and the foot-and-mouth disease. The control of the foot-and-mouth disease by the Veterinary Division in co-operation with the United States
Bureau of Animal Industry, is a good illustration of the value of this division to the state in handling stock diseases. There were two methods by which this disease might have been handled, the quarantine method and the slaughter method. The former method has been used in the countries of Europe, but the latter method is the one which we used in this country and in this state. The results of the former method showed the wisdom of adopting the one we did. Denmark, for instance, in adopting the quarantine method still has the foot-and-mouth disease among its herds in an aggravated form. At the close of the year 1915, Denmark had over 5,000 herds still infected, with a loss of 10 per cent of the milk flow, and from 10 to 15 per cent loss of their young calves and pigs. When we consider that $100,000,000 represents the value of dairy products in this state annually, we can see that a 10 per cent loss of these products to the state would mean a much greater sum than $70,000 which the state paid last year in the eradication of the foot-and-mouth disease. While Europe has been unsuccess fully fighting the disease during the past year the United States has successfully eradicated it from twenty-two states, each of them practically as large as any of the European countries.

Many other lines of work could be presented; but from these instances, you will see that the control and regulatory work of the state of Wisconsin is a line of work which is important and which should be made the main work of one large, thoroughly organized department. It is this line of work which has been adopted as the main field of work of the new Department of Agriculture. Most of our states have agricultural departments in addition to the experiment stations and colleges of agriculture, but in practically all of them, the field of work occupied by this department is the same field of work as that covered by the experiment station and college of agriculture. Such duplication as this could not be tolerated in this state. We have always endeavored to properly organize and systematize our work, so that there should be no duplication of work and consequent duplication of expenditures. The friction which is
certain to come where more than one department occupies the same field of work should be avoided. It has been our policy, in selecting a field of work for the new Department of Agriculture, to choose a field entirely separate from that occupied by the other departments which I have mentioned. The agricultural improvement work of the State of Wisconsin should be a unit, and properly organized and correlated, each department co-operating with the other.

In addition to the lines of work which are strictly of the control type of work, a few lines of work have come to the Department of Agriculture by inheritance that differ somewhat from this type, yet being lines of work which are not and could not well be handled by other agencies in the state. I refer to the State Fair Division, the Division of Crop Statistics, and the Immigration Division. One new line of control work which is of much importance to the state is found in the Entomology Division. This includes the inspection of orchards, nurseries, insecticides and fungicides, and the inspection of apiaries throughout the state.

The control division of the Department of Agriculture, which is of most interest to the dairymen of the state is the Veterinary Division, which includes the Live Stock Sanitary Board, and which has in charge the eradication of infectious diseases of stock throughout the state. Through this division, in co-operation with the United States Bureau of Animal Industry, the dangerous foot-and-mouth disease was eradicated from the state. The policy pursued by this department in slaughtering all herds infected with this disease has been criticised by the people of the state, and it has been suggested that the animals might have been quarantined until the disease was past. The quarantine method has been used by Denmark and Germany for a number of years. During the past year a severe epidemic of this disease has occurred in Denmark. The result was, in following the quarantine method, that at the end of a year's work Denmark still had 5,000 herds infected with the disease; they have lost from 10 to 12 per cent of their milk flow
and from 10 to 15 per cent of the young calves and pigs have died. When we stop to calculate the loss to the State of Wisconsin, were such percentages of loss to occur, we can quickly realize that the $70,000 spent by the state in paying for herds that were destroyed is but a small amount as compared with the losses which would have resulted had the quarantine method been used. Moreover, we would then probably still have had a large percentage of the herds of the state of Wisconsin infected with the disease.

*Veterinary Division and Live-Stock Sanitary Board Controls Live-Stock Diseases.*

Among other diseases which this department must endeavor to control and eradicate is that of Bovine Tuberculosis. Effective work has been done by the College of Agriculture and experiment stations in the past, in educating people to the dangers of this disease, and methods of eradicating it. The climax of this work came three years ago, when the compulsory law was passed for the testing of animals to be sold. Unfortunately, the people were not ready for this step at that time, and consequently the law was repealed at the following session of the legislature, and since that time there has been a considerable lull in the work of eradicating tuberculosis from the state. This disease is not only dangerous from the standpoint of financial loss, but is also dangerous because of its relation to the human type of tuberculosis. Practically all scientists agree that the bovine type may be the direct cause of the human type. Some years ago Germany appointed a commission to examine into the causes of tuberculosis among children. The result of its finding was that 25 per cent of all cases studied could be traced directly to the bovine type coming specifically from the use of unsterilized milk. A similar commission appointed in England found that 23 per cent could be traced to the bovine type, and among 625 special cases cited, it was found that 20 per cent could be traced directly to the infection from the bovine type.
The United States Bureau of Animal Industry, in making a special study on the infection of hogs from the drinking of milk found that out of one lot of young pigs fed tubercular milk for three days, 87 per cent contracted lesions of the intestinal tracts. With another group fed tubercular milk for thirty days, at the end of 50 days the entire group showed tubercular lesions of the intestines. Owing to the similarity of the intestinal tracts of pigs and of humankind, it is easy to draw the conclusion that very similar results must occur in children fed on milk coming from tubercular animals.

The creamery and cheese factories are effective means of disseminating tuberculosis. A special study was made by the College of Agriculture some years ago in creamery districts situated in the south-central part of the state. It was found that in two creamery districts into which tubercular animals were introduced some years ago, the spread of tuberculosis was remarkable. In studying the percentage of tuberculosis in these two creamery districts, in comparison with five or six other adjoining districts, it was found that 30 per cent of all the animals in these two districts were infected with tuberculosis, whereas only eight per cent were found in the adjoining creamery districts—chiefly confined to two. The agencies for spreading tuberculosis from creameries and cheese factories are mainly the by-products of skimmed milk and whey. While no action has been taken by the Live Stock Sanitary Board regarding the sterilization of the by-products of the milk coming to and going from the factories and creameries, it is entirely possible that such measures might be wise.

The result of feeding the by-products of factories to pigs is noticeable in the number of animals coming to our slaughterhouses condemned on account of tuberculosis. One of our larger packing plants has recently reported that 30 per cent of hogs shipped in are affected with tuberculosis in minor or aggravated form. The increase of tubercular animals has corresponded with the growth of the dairy industry and the feeding of by-products. In 1894, the average percentage of pigs in-
fected with tuberculosis was less than two-tenths of one per cent, while in 1898 the estimated percentage ran as high as four-tenths of one per cent—a sixty-fold increase.

The public sale is another agency for the spread of tuberculosis. Many herds known to have been infected have been sold, and the individual tubercular animals introduced into separate herds to become the origin of serious cases of tuberculosis in each herd. It is possible that a law should be enacted requiring the tuberculin testing of all animals sold at public auction.

The rapidity of the spread of tuberculosis from the introduction of a single animal into a herd was forcibly illustrated by a record of a herd recently sent to our office. This herd was tested (no reactions) eighteen months ago. About twelve months ago a sire was placed in the herd, and died in a box-stall of the barn. The owner, not being aware of the disease causing the death of the animal, placed a cow in the stall during freshening-time, and, later, put her back in her place at the upper end of a row of cows. The entire herd was watered in a cement manger, the faucet being at the upper end beside the infected cow. The infected saliva dropping from this cow's mouth was carried by the water to all parts of the manger. As a consequence, this tuberculin test above mentioned showed that the entire sixteen animals in the row, with one exception, were infected.

The discovery of the reacting animals by the tuberculin test, and the removal of these animals, and proper disinfection of the premises has been and is still the only means of eradicating tuberculosis.

There are, in certain sections of the state, incorrect opinions that the tuberculin test is not accurate. This idea is based on two causes; one, that animals found by the tuberculin test were not sufficiently well examined so that all lesions were found, hence were reported as having no lesions. The percentage of animals found by the tuberculin test having no lesions when inspected by our own state inspectors at the Milwaukee
yards is very small indeed. But those inspected at other yards, where we do not have such competent inspectors, are larger.

From 1911-1915, inclusive, 6 1-4 No Lesions.
From 1911-1914, 8 1-10 No Lesions.
During 1915, 3 1-10 No Lesions.
At the R. Gumz Packing Plant, Milwaukee, Wis.

The United States Department of Agriculture, in making a more careful examination of animals reported as having no lesions, have almost invariably found lesions in places that were not carefully examined. In an experiment conducted by the United States Department on 24,784 positive reactors from 1903 to 1908, only 1 1-10 per cent. showed no lesions. Dr. Bang of Denmark reports that 96 per cent of all the reactors in that country, from the beginning of the work up to the present time, have showed lesions; and of the reacting animals examined by the State Department from 1911 to 1915, from 96 to 97 per cent showed lesions.

The success of the tuberculin test in discovering the tubercular animals, and the effectiveness of this method for eradicating tuberculosis, are well illustrated in the case of Denmark. Tuberculosis was introduced there from England and Holland early in the Nineteenth Century. When the first tuberculin tests were made in 1890 approximately 35 per cent. of the cattle were infected. In 1900 this percentage was reduced to 25, and by 1908, to 8 1-4.

Some time ago, in conversing with a breeder near Baraboo I learned of a milkman delivering milk in a village, who had a splendid reputation for a clean herd and sanitary dairy. This farmer, being a progressive dairyman, wished to further improve his herd by having it tested for tuberculosis. As a result of this test, five animals reacted. The reputation of having tubercular animals in his herd spread much more rapidly than the reputation for removing the animals and cleaning up the herd. Thus, while his neighbors, who probably had fully as much tuberculosis in their herds but who did not test, suffered no loss, the net result of the test conducted by this dairyman
was a loss to him in trade. It occurred to me that it was the
duty of the state to help such men reap a benefit from having
had the tests made, and it therefore suggested itself to me that
we should list all herds thus tested and properly cleaned up as
"Tuberculosis Free Herds," and that we should advertise them
throughout the state and other states. It may readily be seen
that persons wishing to buy dairy cattle would prefer to buy
from such accredited tuberculin tested herds, rather than from
common herds, and to pay much higher prices. Such an arrange-
ment would naturally be an inducement for farmers in the state
to test their herds, clean up and free them from tuberculosis, in
order that they might come in on the certified list, thus reaping
the benefit and profit therefrom. To the breeders who are sell-
ing stock to other states, this would be a special attraction. We
are annually selling from one to two million dollars worth of
dairy cattle to other states. Under the present arrangement, it
has been possible, because of unscrupulous farmers and dealers,
to smuggle across the line animals that are infected with tuber-
culos is. As a consequence of this, there are four states at the
present time that will not accept Wisconsin's tests for inter-state
shipment. Our State Veterinarian has presented this plan to
the veterinarians of a number of states, and has already re-
ceived assurance from some of these states that if this plan is
carried out, and the inspection is made by the inspectors of the
Wisconsin Department of Agriculture, they will admit animals
for interstate shipment from the lists of certified clean herds,
without the necessity of inspection immediately before ship-
ment. This will avoid a great deal of trouble on the part of
the breeders doing interstate shipping, and the closer inspection
which it will permit will be a greater safeguard against the in-
troduction of tubercular animals into other states from Wis-
consin.

Below is given a brief outline of the plan as it has been
finally outlined and adopted by the Live Stock Sanitary Board
of the Department of Agriculture.
PLAN OF THE LIVE STOCK SANITARY BOARD OF
THE DEPARTMENT OF AGRICULTURE FOR
THE ESTABLISHING OF ACCREDITED
TUBERCULIN TESTED HERDS.

Note: (This is only a tentative plan, and may be subject to
change as defects may be found.)

_Herds Eligible._

The owner of any herd of cattle may make application to
the Wisconsin Department of Agriculture to have his herd
placed on file for preparation to enter the “Accredited Tested
Herds” list. It is not required that these herds must have
been tested prior to application.

_Testing of Herds._

(a) The tuberculin testing of these herds after application
has been made shall be by veterinarians in the employ of the
Department of Agriculture.

Testing of Herds. Number of Tests.

(b) The number of tests required to be made upon each
herd will depend upon:
1st. If any re-actors are found.
2nd. Number of re-actors found on first test.
3rd. Previous history of herd with regard to tuberculosis.
4th. Whether some of the herd have been bought from
untested herds or not.

_The Herd Must Be Considered Safe._

Number of cattle to be tested by one man at one time.
While testing in this work, the veterinarian shall not test
more than fifty head at one time.

_Disposition of Re-actors._

Re-actors and other diseased cattle must be removed under
the direction and in a manner satisfactory to the Board.
Disinfection of Premises.

If tuberculosis has existed or re-actors are found, the premises shall be disinfected under the direction of the Board.

Introduction of New Animals and Calves.

First. Introduction of adult animals: No adult cattle shall be introduced into these herds unless such cattle are either from accredited tuberculin tested herds or have been tuberculin tested by a graduate veterinarian immediately before entry into the herd.

Second: Calves: Untested calves shall not be placed in these herds when bought from any herd except a herd which is also on the accredited tuberculin tested herds list, and any other calves bought must be segregated until such time as they can be tested.

Third. Nurse cows or other cows introduced temporarily into herds must be on same basis as the above.

Milk for Calves.

Calves in these herds shall not be fed on milk skimmed in public skimming stations or on whey from cheese factories unless such milk or whey has been sterilized by thorough pasteurization or heating, sufficient to kill tubercular germs.

Expense of Test.

The expense of making these tests must be met by the owner of the herd. This shall be as near the actual cost of the work as can be calculated by the Live Stock Sanitary Board. (Actual rates will be established and published later.)

Agreement.

Only breeders who wish to avail themselves of the privileges of the accredited tuberculin tested herds plan of the Live Stock Sanitary Board shall sign an agreement to abide by all the rules and regulations herein enumerated.
1. To co-operate.
2. To furnish all data available to tester.
3. Submit herd to test whenever it is thought necessary by the Board.
4. Furnish sufficient attendants to keep cattle in good condition and to keep barn clean while testing.
5. To provide conveyance and suitable maintenance of Deputy while making tests.
6. To allow examination of any or all animals in the herd at any time.
7. Not to introduce any cattle except as provided by the Board.
8. To comply with orders as to disinfection of premises.
9. To pay to the Live Stock Sanitary Board the amount determined by the Live Stock Sanitary Board.
10. To remove re-actors whenever found.

This plan was brought before the individual meetings of the breeders of all kinds of stock at the "Farmers' Week" at Madison, and was unanimously adopted at a meeting of representatives of all of the breeders. It will be presented to the local breeders' associations at their annual meetings, and from the fact that all of the organizations to which it has thus far been presented have enthusiastically adopted it, it is believed that it will be adopted uniformly by all breeders throughout the state, whether breeders of pure-bred animals or grades. Breeders wishing to have their herds tested for entrance to this list are advised to write the State Veterinarian of the Department of Agriculture. The requests will be listed, schedules will be made out in the various parts of the state, and the herds will be tested as soon as our inspectors can reach them.

I thank you. (Great applause.)

The President then asked for an open discussion.

**DISCUSSION.**

**Member:** What is the fee for testing?

**Mr. Norgord:** Well, we haven't settled on that yet. There
are two things we look out for there, one is, we don’t make it so high the farmers can’t afford to test and the other is, we don’t make it so low that the veterinarians would get at us and take our heads off. But, I may say that our hearts are with the farmers and our skins with the veterinarians.

**MEMBER:** What system are you using in testing?

**MR. NORGORD:** We are using different tests, both the injection and the other tests. We will probably subject them to two tests and run the temperatures longer before the injection of the tuberculin and also afterwards, so as to make as careful a test as possible.

**MEMBER:** What do you consider the best test?

**MR. NORGORD:** I am not speaking of this from the standpoint of a practical veterinarian, but a combination is better than one alone. I might say that this matter will come up for discussion at the Farmers’ Week at the College of Agriculture next week. We want to get at the pros and cons of it, we want to leave it so we have the right plan; if we haven’t already got it; we want to get the benefit of what has been done in the other states. We invite the various breeders to send in to us if they think their herd have passed two satisfactory tests. By this plan we are going to encourage farmers to keep trying their herds to see if there are any animals in the herd that have tuberculosis and get rid of those. We will not advertise the fact that a man has got tuberculosis, we will advertise the fact that he hasn’t got it, I think it is safer to advertise his successes rather than to advertise his failures. That is the basis.

**MEMBER:** Can any one receive tuberculin?

**MR. NORGORD:** You can always buy it from Parke-Davis Company or other companies.

**MEMBER:** Is there any guarantee that it is pure?

**MR. NORGORD:** Well, the United States Department of Agriculture, since it got beat in putting out virus is looking out for that. Most of the vacines and viruses you can feel sure are pretty well checked up in these tests.

I remember a herd tested in LaCrosse. He had seventeen
in the herd. When they were taken to the slaughter houses seven were infected and ten were not.

**Member:** What do you attribute that to?

**Mr. Norgord:** Well, what that could have been caused by it is difficult to say, but of course, there are so many things to employ in making tests, a person making the test should know all the things they make the test with. That is one question in favor of having the veterinarians make the tests, for they would be able to detect unnatural conditions, whereas, a person who did not have the experience and training wouldn’t see those abnormal conditions. The temperature is one of the things that tells the presence of tuberculosis. You all know that before an animal is tested we take a set of tuberculin temperatures and they must be normal, not jumping up and down or too high or too low, they must be uniform. You know an animal that has tuberculosis after the injection there is a gradual rise from 1 2-10 and 1 3-10 and 1 7-10, and one and a fraction, I should say, and then a gradual drop in the same way, not a sudden drop, but a slow rise and drop back. Now, if an animal is feeding in such a way her temperature does not rise, but if she is disturbed and frightened her temperature rises, that is something that might come in to disturb the accuracy of the test, a person would have to be careful and know his conditions, know what conditions may affect the test and how good the test really is. We find in certain cases that animals are all brought to a common center to be tested before being shipped. They are driven in and disturbed and their temperature rises or drops, and you can’t make as good an actual test of the animals as the ones in their own barns where people are careful in handling them. We have a good deal of trouble with interstate shipment because the animals are scared. No doubt some disturbance comes in there to vitiate the accuracy of that test. You might say, how do you know that the tuberculin test will actually point out the animals that have the tuberculosis and not kill a lot who don’t have it. I might say in the last three years we looked up the record of say 4,000 animals that came to the state veterinarian’s
office as tuberculous, shown by their test, and after those same animals were killed and a post mortem examination was made only two per cent of the animals failed to show lesions some place in the body, now that takes in the year we have the tests made by law and that the United States inspectors were the ones who examined the animals and many of the inspectors were accustomed to simply inspecting animals in slaughter houses and didn't look them over any better than they did in the slaughter houses and consequently most of the tuberculosis and lesions in the animals they didn't find. There is a slaughter house in the state of Wisconsin where we send animals and we haven't the best kind of a man to make the examination and don't get a high percentage of lesions, but we send animals to Milwaukee where we have a special man, a man who has been in that business a good many years and we find much less than one per cent of the animals haven't got lesions.

MEMBER: Has it ever been known of an animal with tuberculosis germs having recovered?

MR. NORGORD: I am not able to answer that question absolutely, but I think not.

MEMBER: Why wouldn't an animal recover if a man would recover?

MR. NORGORD: I suppose that a good many of the men recover simply by the existing of the tuberculosis, we don't have any known cases that I know of where animals have actually recovered from the tuberculosis. I know it wouldn't be safe to try to cure animals which have tuberculosis. I know Dr. Bassy in Denmark doesn't recommend that.

MEMBER: Would it be the ruling of the department in case the department inspect a herd, if they will give the man that owns the herd the privilege of a quarantine until the test has a chance to act?

MR. NORGORD: Yes sir, everybody has an opportunity to decide that for himself. As soon as the herd shows tuberculosis we send a letter to that man and say “Do you wish to have these animals killed or kept in quarantine under the rules and regulations of the board?” and the man decides that for himself.
MEMBER: What was the practice when the law was first in operation?

MR. NORGORD: Not so much, but that practice has increased. The option was there all the time, but it was not emphasized and not many did keep them in quarantine.

Mr. M. H. Meyers, of Milwaukee, then stated as follows:

I have just a few words to say on matters of national importance in which the Wisconsin Buttermakers' Association is interested. There is a bill in the House of Representatives, known as Number H. R. 9674 demanding that butter be limited to three months in cold storage. We as dairymen know that it would be a great hardship on the farmers, the buttermakers and also on the dealers, and because that bill was introduced on January 21st, last month, I wish to read this resolution covering the situation:

He then read the following resolution:

WHEREAS, a Cold Storage Bill, known as H. R. 9674 is introduced in the House of Representatives Jan. 21, 1916, ordered to be printed; demanding limiting butter to three months cold storage, defining butter as cold storage if kept 40 degrees or below, for ten or more days and if such butter be remanded to cold storage plant it is considered adulterated butter, and

WHEREAS, said intended cold storage bill if allowed to become a law would work great hardships on those interested in dairying, the manufacturers thereof, the consumer and the producer,

THEREFORE, Be it resolved that we condemn said Cold Storage Bill H. R. 9674 as an unusual destructive piece of legislation.

And be it further resolved that we request the Secretary to send a copy of this resolution to our representatives and congressmen asking their aid in stopping said Bill H. R. 9674 from becoming a law.

The motion was made and seconded that the resolution be adopted.

Motion carried and the resolution was adopted.
BY THE SECRETARY: I want to call your attention to the good butter you have had a chance to inspect. Some of you haven't had an opportunity of examining this butter, so we have brought it here for you to look at. Before I distribute the scores I want to say that yesterday I was busy outside of the hall and I understand a number of personalities were passed in the meeting. I don't know what they were; I don't care to know, all I know is that I would like to have the authority, if the association so desires, to cut out the personalities from the report. I think it will be well if the association would not allow such things to get into a report.

Motion made and seconded that all personalities be stricken from the report. Motion was carried.

Distribution of prizes then took place.

Mr. Lee presented the gold watch offered by Hon. Geo. J. Weigle to the winner, H. H. Whiting. At the close he commented upon the resolution in regard to pasteurization passed by the convention early in the afternoon. Mr. Lee said:

MR. C. E. LEE: I have sufficient confidence in the Wisconsin Buttermakers' Association as shown in this convention. I regret very much that the resolution went as it did, I hope and believe that the members will go out this year to remedy the reasons why we did not pass such a measure this time, and then will return to the convention a year from now and unanimously pass such a motion.

MR. WHITING: In listening to the last speech in regard to pasteurizing butter, the creamerries are pasteurizing a great deal of butter that will stand the test, and it is proven beyond a doubt that these pasteurized goods—why not have them advertised—so it will bring more of the creamerries into it?

MR. LEE: Less than fifty creamerries in the state of Wisconsin make pasteurized butter.

BY THE PRESIDENT: I would like to say a few words, and I think Mr. Keppel will bear me out. I am sorry it turned out the way it did, because it is generally understood that compulsory pasteurization of butter is not to make a really better ar-
article of butter or a better keeping article of butter, it is con-
tended that a piece of butter not pasteurized is as good in every
way as the pasteurized. It is not safe; that is the idea, the pub-
lic demand it pasteurized, because it is safer provided it is pas-
teurized, in the way it should be, with a temperature that will
bring the required result, whatever that might be.

The meeting was then adjourned.