if properly carried out will prove as effective here as in Denmark. (Applause.)

President: We have more papers to be read, also the announcement of scores. If there are any questions to be asked Mr. Corneliuson, we would be glad to have them.

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DISCUSSION.

Mr. Stanton: I would like to ask if the state has any control over the County Agricultural Schools.

Mr. Corneliuson: You mean this state?

Mr. Stanton: Yes. There is one in Menominee. The one I refer to has the cream routes in our territory, and they stated they would haul the cream without any expense.

Mr. Corneliuson: I am not in a position to answer that question.

President: Prof. Humphrey is in the room.

Prof. Humphrey: I am not clear on that, but I think the county is responsible for that, the county board.

President: I guess Prof. Humphrey would like to have the floor for a few minutes.

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ADDRESS.

By Prof. Humphrey, Madison.

Gentlemen: I hardly know why I am here this afternoon. It is the result of a suggestion that was made this morning to talk the bull proposition to this convention as well as our Live Stock Breeders’ Association which is in session out at the University. I might say I appreciate this organization, and the men who guarantee the organization. I believe that they know as much about the dairy conditions in the respective localities of the State of Wisconsin as any class of men we have, that is they
know it from the standpoint of the amount of milk that is produced from the average farm in those districts. I know that you are interested in getting all the milk it is possible to get and that the more milk that you can get, the more successful your business is. I know too that you are interested in the dairyman from the standpoint of having him appreciate his business as a dairyman more than he does.

You undoubtedly realize that the best dairymen, the men who appreciate most their cows and dairy stock, furnish you the best grade of product from which you can manufacture.

I am here this afternoon to say just a few words in reference to the bull proposition. We recognize that the dairy bull is the most powerful factor influencing our dairy conditions that we have in the State of Wisconsin today. Perhaps he is a little far away from the creamery, too far away for you to appreciate him; but I dare say most creamerymen can recall to mind the
picture of the average bull which predominates in your community. He is what we sometimes call Duke's Mixture,—Duke's Mixture because he is a little of everything, he is a little of dairy bull, a little of the beef bull and a whole lot of, well,—just bull. I say he is a very important factor in the dairy business. His influence on the dairy industry of Wisconsin is direct and it is indirect. We might say that he exercises a direct influence to the extent of fifty per cent or more that governs the individuality of cows and their ability or inability to produce milk in large and profitable quantities. It has been said that the bull is the strong or the weak link that connects one generation of cows with another generation. Allowing one bull to each farm in the State of Wisconsin on which statistics show there are about nine cows, we might say the influence of the bull is nine times as great as that of any one cow. In herds where there are twenty or more cows he is twenty times more important than each cow because of the direct influence he brings to bear upon all of the heifer calves that are produced in these respective herds. He exercises an indirect influence upon the care of cows by inspiring dairymen to do their very best or by discouraging them in their dairy practice.

It has been said, and well said, that a good bull adds great fame and interest to the dairy industry, and again it is a disappointing mistake to keep a poor bull. We want to appreciate more in Wisconsin the value of these bulls. The question may be well asked,—What is a good bull? A good bull is rare. Until the bull becomes mature we say he is only a chance proposition in the dairy business. Why? Because we don't know the real value of a bull until he has become old enough to prove himself a valuable animal in the reproduction of the right kind of cows.

Until the bull is four years old he is only a chance proposition and statistics gathered from dairymen in the State of Wisconsin indicate that the average age of bulls is less than three years, therefore we might say that the dairy business of the State of Wisconsin at best is only a chance proposition so far as the production of the best class of dairy cows and the production of the greatest quantity of butter fat is concerned.
That concerns you buttermakers and if you are engaged in a business that is only a chance proposition, it seem to me you ought to be extremely interested in anything that would tend to improve those conditions. We might say that the pure bred bull of some of our distinguished dairy breeds, Holstein, Guernsey, Jersey, Ayreshire and Brown Swiss, is a bred-for-production bull, while the bull of the Duke's Mixture type, he is bred for really no purpose except to have a bull around and do the service that such bulls do.

Here is the proposition. To raise a bull calf to a serviceable age will cost $40.00. It will cost to keep a bull until he has reached mature age, $200.00. It will cost $60.00 to grow each of his calves up to the age of producing milk, and with those figures in mind it is very easy to see what the farmers are doing when they use any type of bull. When at the end of that time he has daughters that are satisfactory milk producers, all of that expense of maintaining the bull and raising the heifers is fully offset and the success of the dairyman is assured, but if he is a failure at that time the loss is very heavy and the results are most disheartening.

Bred and tested for production bulls are good bulls. That is our definition of good bulls, and when they have reached a mature age and have daughters that prove they have been the right kind of sires, they are the right kind of sires. That is the kind we want to encourage, and buttermakers and cheesemakers should be interested in that question of sires in their community. Get in just as many of them as you can, because of the fact that it is going to have this direct and indirect influence upon the amount of milk that will be produced in those communities, and the amount of profits there is in the business.

I don't want to take too much of your time this afternoon, but I will be glad to say that cow testing associations and breed association necessitate better cows. The testing that you may do at your creamery ought to be done in the way of encouraging your patrons to appreciate the fact that they should have better cows and where they have cow testing associations and breed asso-
ciations in the state today, they are paying particular attention to this very point. The fact that so many cows fail to make profitable production as determined throughout, and which will be collected through cow testing association, is going to have an influence upon the dairy industry of the state. It is going to emphasize the importance of better sires. If the farmer or the dairyman finds that he cannot be assured of the business of buying and developing herds of dairy cows that will return fair profits, he cannot be expected to continue in the business, and therefore, Wisconsin's most valuable resources will be injured to the extent that men turn their attention to other lines of farming or live stock production.

An instance was recently related where one of the prominent dairymen of the city of Chicago realized that there was no profit in producing milk at wholesale prices with which to supply Chicago demands. This feature of the dairy industry has meant a great deal to Wisconsin. The principal factor which rendered milk production in that vicinity unprofitable was the failure on the part of the cows to produce milk in a profitable manner.

There are a good many cows that are sent out of Wisconsin that go down to the Elgin District in Illinois that are too poor to keep in Wisconsin and when those men take into account paying for their feed, etc., they are waking up to the fact that there is no profit in that kind of dairying. With cow testing associations and other agencies bringing them to the point where they are going to take into consideration the amount of cost, I say they are going to turn their attention to some other phase of farming, and if they do that, it is going to affect your business. We are looking to cow testing associations and breeders associations, that is community breeders associations, today a great deal along this line.

As I say I am very glad to have been here this afternoon to give you this idea of doing all that is possible in your community to encourage that very work because it is something you can well afford to do. Encourage men to get into cow testing asso-
ciations. I think probably a good many of you live in districts where there are cow testing associations, or have been. You know some of the problems, some of the difficulties of getting men interested to go into cow testing associations. A great many of them think they can do it at home. A great many are satisfied with the test you are making for them, but it is not enough and we would like to have your assistance and encouragement along that line until in Wisconsin we can have a good, strong testing association in every creamery district of the state. It would mean more to Wisconsin, I think, than any other agency that could be put to work.

Along with that we need a breeders' association and that perhaps can spend more of its time in looking after the sires and the breeding of cows; that is, your cow testing association is going to locate only the best cows and the best bulls. As was brought out by one of our speakers this morning, the cow testing association tests bulls as well as cows. The community breeders association can look after the exchange of bulls within its own territory. It perhaps can co-operate with the neighboring associations and keep these good sires in Wisconsin. It has been suggested that the State of Wisconsin perhaps should do something through its Live Stock Association, State Dairymen's Association, through their county fairs and our State Board of Agriculture. Perhaps they can do something to encourage better sires of this bred and tested for production type and I am glad to have spent this amount of time bringing this question to you. I am sure that any resolution you might pass which would encourage the greater use of bred and tested for production sires would have a good influence on raising the standard of the dairy industry in Wisconsin. (Applause.)

President: We want to take up the next on the program, Errors in Creamery Accounting, by Martin H. Meyer.