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Proceedings of the eighteenth annual convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association held at Monroe, Wisconsin, Thursday and Friday, March 14 and 15, 1918. 1918

Southern Wisconsin Cheesemakers' and Dairymen's Association
Monroe, Wisconsin: Times Printing Co., 1918

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PROCEEDINGS

OF THE

EIGHTEENTH

ANNUAL CONVENTION

OF THE

Southern Wisconsin Cheesemakers'

and Dairymen's Association

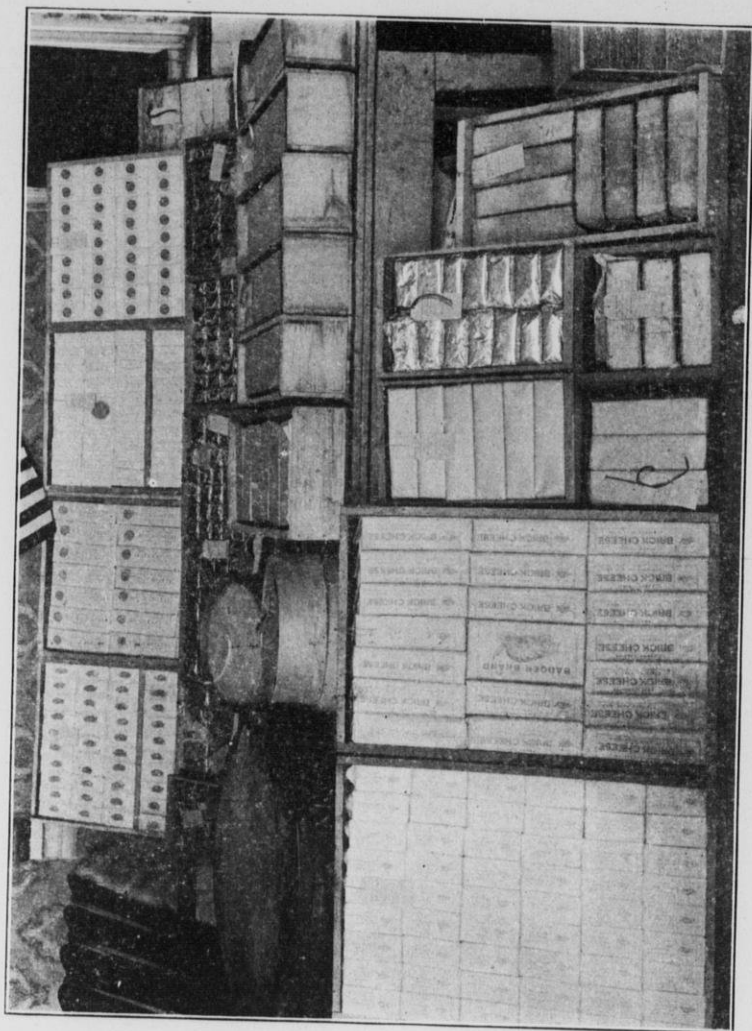
HELD AT

MONROE, WISCONSIN

Thursday and Friday, March 14 and 15

1918

TIMES PRINTING COMPANY, MONROE, WIS.



Part of Cheese Exhibit at 1918 Convention of Southern Wisconsin Cheese-makers' and Dairymen's Association

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OFFICERS FOR 1918

President—S. J. Stauffacher, Monroe, Wis.

Vice President—John Deininger, Monroe, Wis.

Secretary—Henry Elmer, Monroe, Wis.

Treasurer—Joseph Trumpy, Monroe, Wis.

Directors

Fred E. Benkert, Monroe, Wis., for three years.

Gottfried Waelti, Monroe, Wis., for two years.

Nicholas Schmidt, Monroe, Wis., for one year.

Dairy Instructor—John Z. Aeschlimann, Monroe, Wis.

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B

Baltzer, M. E.	Monroe, Wis.
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- Blumer, Ezra	Monroe, Wis.
- Buralow, B. S. Route 1	Monroe, Wis.
- Brown, Wm.	Monroe, Wis.
- Buholzer, X. B.	Argyle, Wis.
- Boerschinger, H. 565 Wash. St.	Chicago, Ill.
- Baxter, Gus.	Brodhead, Wis.
- Bohle, Henry	Monroe, Wis.
- Blumer, Dr. Edward	Monticello, Wis.
- Bontley & Marty	Monticello, Wis.
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- Breylinger, Otis	Monticello, Wis.
- Babler, H. L.	Monticello, Wis.
- Burki, Fred	Monticello, Wis.
- Babler, T. G.	Monticello, Wis.
- Bissig, Matt	Monticello, Wis.
- Babler, Forest	Monticello, Wis.
- Burgy, Jacob	Monticello, Wis.
- Bernet, Peter	Monticello, Wis.

C

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Chambers, C. L.	Monroe, Wis.
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Corson, Frank E.	Monroe, Wis.
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Chesebro, Allen	Monroe, Wis.
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D

Day Bros.	Monroe, Wis.
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Deining, John	Monroe, Wis.
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Discher & Schneider	Monroe, Wis.
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- Detweiler, Fred, Route 4	Monroe, Wis.
- Drake, Frank	Monroe, Wis.
- Dahler, Mike	Calamine, Wis.
Deitz, C. H.	Monroe, Wis.

E

Elmer, John C.	Monroe, Wis.
Elmer, Alvin A.	Monroe, Wis.
Elmer, John H.	Monroe, Wis.
Etter, John A.	Monroe, Wis.
Einbeck Bros.	Monroe, Wis.
- Engelhardt, C. F.	Monroe, Wis.
Elmer, Henry	Monroe, Wis.
Elmer, Adam	Monroe, Wis.
- Eaton, Geo. W.	Monroe, Wis.
Elmer, Matt	Monroe, Wis.

- Emmenegger, Robert	Gratiot, Wis.
- Emmenegger, John	South Wayne, Wis.
- Ellington, Iver	Browntown, Wis.
- Erickson, Anton, % Sharples Sep. Co.....	Madison, Wis.
- Engler, Paul. R. F. D.	Verona, Wis.

F

- Fritz, Dave	Monroe, Wis.
- Fitzgibbons Bros.	Monroe, Wis.
- Faeser, John	Monroe, Wis.
- Faeser, Fred	Monroe, Wis.
- Fritsch, John F.	Clarno, Wis.
- Fritsch, John	Monroe, Wis.

G

- Gettings, John	Monroe, Wis.
- Gruessi, Herman	Monroe, Wis.
- Green County Herold	Monroe, Wis.
- Gnagi, Dr. W. B.	Monroe, Wis.
- Greenwald, Wm.	Monroe, Wis.
- Geiger, Henry J.	Monroe, Wis.
- Galle, F. W.	Monroe, Wis.
- Gorham, R. D.	Monroe, Wis.
- Gettings, Miles	Monroe, Wis.
- Geigel Hardware Co.	Monroe, Wis.
- Geigel, Jacob	Monroe, Wis.
- Geiger, W. J.	Monroe, Wis.
- Gifford, R. B.	Monroe, Wis.
- Greenwald, Mrs. Fred, Route 4	Monroe, Wis.
- Geigel, John	Monroe, Wis.
- Greenwald, Ed.	Brodhead, Wis.
- Gerber, Fred	Monticello, Wis.
- Gempeler, Albert	Monticello, Wis.
- Gempeler, Jacob Sr. 309 E. Farmer St.	Monroe, Wis.
- Gettings, Edward R.	Monroe, Wis.
- Gates, Geo. P. % Sharples Sep. Co.	Madison, Wis.
- Glanzmann, John R. F. D.	Juda, Wis.

H

Heer, Abe & Son	Monroe, Wis.
Hauser, John A.	Monroe, Wis.
Hodges, Dr. F. L.	Monroe, Wis.
Hefty, Henry	Monroe, Wis.
Hartnett, J. J.	Monroe, Wis.
- Heine, W. F.	Monroe, Wis.
Haren, D. H.	Monroe, Wis.
Huffman, E. A.	Monroe, Wis.
Hoehn, Henry	Monroe, Wis.
Holmes, Sam	Monroe, Wis.
- Hill, E. N.	Darlington, Wis.
- Haberman, Henry	Monroe, Wis.
- Holmes, F. A.	Des Moines, Ia.
Hanson, John	Monroe, Wis.
- Hare, L. L.	Monroe, Wis.
- Hunter, Casper	Brodhead, Wis.
- Haefli, Otto	Monticello, Wis.
- Hohl, Otto	Monticello, Wis.
- Hirsbrunner, Andrew	Monroe, Wis.

J

Jaberg, Roy	Monroe, Wis.
- Jeffery, F. D.	Monroe, Wis.
- Janke, L. L.	Madison, Wis.
- Jordon, A. Chas.	Monticello, Wis.

K

Kundert, Henry	Monroe, Wis.
Krueger & Kundert	Monroe, Wis.
Karlen, Jacob J.	Monroe, Wis.
Karlen, Gottlieb	Monroe, Wis.
Karlen, Herman J.	Monroe, Wis.
Knipschild Bros.	Monroe, Wis.
Knight, M. J.	Monroe, Wis.
Knight, Wm. J.	Monroe, Wis.
Kundert Bros.	Monroe, Wis.
Knipschild, John Jr.	Monroe, Wis.

Kohli, Louis H.	Monroe, Wis.
Kohli Jewelry Co.	Monroe, Wis.
- Kaeser, E. F.	New Glarus, Wis.
- Karlen, John Gottl.	Darlington, Wis.
Kubly, John U.	Monroe, Wis.
Klassy, Josuah Sr.	Monroe, Wis.
- Koller, Oswald	Brodhead, Wis.
- Kunz, Sam	Blanchardville, Wis.
- Koller, Anton	Argyle, Wis.
- Knobel, F. B.	Monticello, Wis.
- Kooreman, Gerrit	Monticello, Wis.
- Keller, Otto J.	Monticello, Wis.
- Keller, Ernest	Monticello, Wis.
- Kueng, Gebhardt	Monticello, Wis.
- Karlen & Steinman Lumber Co.	Monticello, Wis.

L

Lewis & Marty	Monroe, Wis.
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Lynch, S. P. & Son	Monroe, Wis.
Lanz, Fred	Monroe, Wis.
Luchsinger, Frank	Monroe, Wis.
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Ludlow, Henry	Monroe, Wis.
Ludlow, Edwin	Monroe, Wis.
Ludlow, Willis	Monroe, Wis.
Lamboley, F. E.	Monroe, Wis.
- Lengacher, Fred Route 9 <i>K...</i>	Monroe, Wis.
- Leiser, Gottfried	Juda, Wis.
Lichtenwalner, John P.	Monroe, Wis.
- Lacey, J. J.	Madison, Wis.
Lenherr, Jacob	Monroe, Wis.
Lichtenwalner, C. H.	Monroe, Wis.
- Liechti, Carl Route 2	Verona, Wis.
- Lanz, John	Brodhead, Wis.
- Leiser, Fred	Orangeville, Ill.
- Luthy, Walter	Albany, Wis.
- Lengacher, John	Monticello, Wis.

- Loertscher, Gottfried Monticello, Wis.
- Loveland, W. A. Monticello, Wis.

M

- Metropolitan Store Monroe, Wis.
- Marty & Speich Monroe, Wis.
- Monroe Plumbing & Heating Co. Monroe, Wis.
- Monroe Furniture Co. Monroe, Wis.
- Monroe & Moore, Drs. Monroe, Wis.
- Miller & Kubly Monroe, Wis.
- Monroe Steam Laundry Monroe, Wis.
- Monroe Light & Fuel Co. Monroe, Wis.
- Monroe Auto Co. Monroe, Wis.
- Meythaler Bros. Monroe, Wis.
- Monroe Land Co. Monroe, Wis.
- Monroe Electric Co. Monroe, Wis.
- Meythaler, Chas. T., Sr. Monroe, Wis.
- Miller & Weaver Monroe, Wis.
- Mornoe Lumber & Fuel Co. Monroe, Wis.
- Miller, Russell L. Monroe, Wis.
- Meyers, Frank Monroe, Wis.
- Moe, H. H. Monroe, Wis.
- Miller, Charles F. Monroe, Wis.
- Morris, Geo. Monroe, Wis.
- Morton, Geo. Monroe, Wis.
- McGuire, Ed. Browntown, Wis.
- Marschall, A. J. Madison, Wis.
- Meyer, Henry Darlington, Wis.
- Monticello Harness Co. Monticello, Wis.
- Monticello Auto Co. Monticello, Wis.
- Monticello Messenger, (S. E. Richards, Prop.)
..... Monticello, Wis.
- Marty-Gempeler Co. Not Inc. Monroe, Wis.
- Marty, Carl & Co. 216 W. Ohio St. Chicago, Ill.
- Marty, Fred 217 E. Russell St. Monroe, Wis.

N

- Neuenschwander, Fred Monroe, Wis.
- Newman, Dr. M. J. Monroe, Wis.

Noble Laundry	Monroe, Wis.
Naef, John	Argyle, Wis.
Newman, John G.	Juda, Wis.

O

Odell, Emery A.	Monroe, Wis.
Ohl, J. S.	Monroe, Wis.
Ott, George Route	Monroe, Wis.
Ott, L. C.	Monroe, Wis.
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Olson, William, Route 2.....	Browntown, Wis.

P

Provision Co.	Monroe, Wis.
Pfund, Henry	Monroe, Wis.
Penn, J. C.	Monroe, Wis.
Priewe, Wm.	Monroe, Wis.
Peoples Supply Co.	Monticello, Wis.
Pratt, D. O. Route 2	Juda, Wis.

R

Reiser, Adolph Route 3	Argyle, Wis.
Rolph Bros.	Monticello, Wis.
Rosa, E. B., the Bee Man	Monroe, Wis.
Roub, Drs. J. F. & Son	Monroe, Wis.
Roth, Christ	Monroe, Wis.
Ruf, M. C.	Monroe, Wis.
Rohrer, Arnold	Monroe, Wis.
Rottler, G. H.	Monroe, Wis.
Rote, Alvin F.	Monroe, Wis.
Roderick, C. A.	Monroe, Wis.
Regez, Herman	Monroe, Wis.
Regez, Jacob	Monroe, Wis.
Regez, Rudy	Monroe, Wis.
Ruehle, Chas	Monroe, Wis.
Regez, Gottfried	Blanchardville, Wis.
Rinehart, Myron, Route 1	Browntown, Wis.

S

Schuetze, Wm. A.	Monroe, Wis.
Schaad, Emil	Monroe, Wis.
Stauffacher, S. J.	Monroe, Wis.
Stauffacher, F. J.	Monroe, Wis.
Schneider Bros.	Monroe, Wis.
Shriner Bros.	Monroe, Wis.
Schneider, Max	Monroe, Wis.
Scheidegger, Ernest	Monroe, Wis.
Streiff & Bauman	Monroe, Wis.
Schmidt, Leon	Monroe, Wis.
Schindler, Chas. A.	Monroe, Wis.
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Scott, G. A.	Monroe, Wis.
Schmid, Karl	Monroe, Wis.
Schindler Bros.	Monroe, Wis.
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Strahm, John	Monroe, Wis.
Stauffacher, I. M.	Monroe, Wis.
● Schmidt, Nicholas Sr.	Monroe, Wis.
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- Salisberg, Ernest Route 2	Verona, Wis.
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- Sammis, J. L.	Madison, Wis.
• Stauffacher, Peter	Monroe, Wis.
- Schmid, Nick. Jr.	Monroe, Wis.
- Stauffer, R. N.	Monroe, Wis.
- Sharples Separator Company.....	Chicago, Ill.
- Stauffacher, Jac.	Monroe, Wis.

Stauffacher, M. H.	Monroe, Wis.
Steinman, Fred	Monroe, Wis.
Steffen, Fred	Monroe, Wis.
- Stauffacher, John	Calamine, Wis.
- Steinmann, Gottfried R. F. D.	Monroe, Wis.
- Shepley, Chas. R.	Monroe, Wis.

T

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Times Printing Co.	Monroe, Wis.
Thorpe, James	Monroe, Wis.
Treat, Frank	Monroe, Wis.
Theiler, Robert	Monroe, Wis.
Trumpy, Joseph	Monroe, Wis.
- Trumpy, J.	Clarno, Wis.
Trumpy, Fred	Monroe, Wis.
Trumpy, Henry	Monroe, Wis.
- Tyler, Frank	Monroe, Wis.
Trachsel, A. C.	Monroe, Wis.
- Trickle, Joe	Monroe, Wis.
- Thorp, Geo.	South Wayne, Wis.
- Tschantz, John	Monticello, Wis.

U

- Ubert, Christ Route 9	Monroe, Wis.
- Uhlmann, M. & Co.	Chicago, Ill.

V

Vogt, Carl	Monroe, Wis.
Voss, Gust	Monroe, Wis.
- Van Wagenen, H. G.	Monroe, Wis.
- Voegeli, Joe J.	Monticello, Wis.

W

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Wier, Dr. M. R.	Monroe, Wis.
Wilkinson, G. W.	Monroe, Wis.
Wenger, J. C.	Monroe, Wis.
Waelti, Gottfried	Monroe, Wis.
- Wittwer, Gottfried	Orangeville, Ill.
- Widmer, Arnold, Route 4	Monticello, Wis.
- Wiedmer, Jacob	Monticello, Wis.
- Woelffer, Roy	Monticello, Wis.
- Walter, Henry	Monticello, Wis.
- Wittenwyler, John	Monticello, Wis.
- Winniger, Gottfried	Monticello, Wis.
- Wittwer, Gottlieb	Monticello, Wis.
- Wittwer, Edward	Monticello, Wis.
- Wittwer, Gottlieb	Monticello, Wis.
- Willi, Joe Route 2	Browntown, Wis.

Y

Young & Co.	Monroe, Wis.
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Young Mrs. Charles

Monroe, Wis.

Z

Zilmer, Wm. F.	Monroe, Wis.
Zinser & Duebendorfer	Monroe, Wis.
Zumbach & Zeller	Monroe, Wis.
Zulauf, Jacob	Monroe, Wis.
Zilmer, A. W.	Monroe, Wis.
Zimmerman, J. F.	Monroe, Wis.
- Zimmerman, H. J. Route 1	Monroe, Wis.
- Zuercher, C.	Brodhead, Wis.
- Zimmerli, Gottlieb	Monticello, Wis.

ADDRESS OF WELCOME

By C. H. DIETZ

Principal Green County Normal School

Mr. President and Members of the Convention:

It is unnecessary for me to say that it affords me much pleasure to have the opportunity of welcoming this convention of dairymen and cheesemakers to your annual convention to be held in Monroe. It is doubtless likewise unnecessary for me to speak of the vast importance to our community and to state and nation at large of the industry that you represent. It has been many times stated at your conventions and elsewhere and it is a well known fact that Wisconsin ranks as the greatest state in the Union in the manufacture of dairy products and that the section of Wisconsin to which your association belongs is the greatest dairying center in the state. We in Green county are very fond of claiming that our county is the heart of this section. It therefore logically follows that Green County is the axis upon which the whole dairy industry of the United States revolves. I need not present any evidence to prove this statement. We are all of us ready to admit it.

I have always believed that the dairying industry has been the greatest single factor in the high degree of prosperity for which our county is noted, but since your president asked me to address you today I have been going into statistics a little, and I find a very striking illustration of this fact, to which I am going to call your attention for a moment, so that we may partially appreciate how true this is. Perhaps the best indication of the progress and prosperity of a community is to be found in the inspection of land values and their rate of increase or

decrease. I have before me two sets of figures. One of them is a table of the assessed valuation of land in the several towns in Green County for the year 1884 together with a similar table for 1917. The other is a table showing the number of pounds of cheese produced and the value of other dairy products for the year 1916.

I have chosen the year 1884 for two reasons. First, I happened to have figures available for that year; second, that is about the time when dairying began to be a really important industry in Green county. I was born in the town of Jordan in 1870. I remember that in 1884 a limburg cheese factory was built in our neighborhood and it was so much of a curiosity that people went miles to see what it was like and how limburg was made. Cheese-making as a leading industry has developed mostly since that time. Now, as all of you are aware, dairying is not carried on quite so extensively in the eastern as in the western part of our county. I want to make two comparisons.

Albany and Brooklyn are on the eastern side of the county. Adams and Jordan are on the western side. I turn to the statistics for 1884 and I find that Albany was assessed at \$15 per acre and Adams at \$6. Brooklyn was assessed at \$14 per acre and Jordan at \$7. In 1917, Albany was assessed at \$75 per acre and Adams at \$77. Brooklyn at \$72, and Jordan at \$75. It will be seen that what were the two lowest towns in 1884 have now outstripped what, with the exception of Clarno, were the two highest towns at that time. Moreover, the increase in value in Adams has been twelve and one-half times while that of Albany has been but five times. In other words, Adams has increased two and one-half times as rapidly as Albany. Brooklyn's increase has been about five times, and Jordan's a little more than ten times—twice as fast. I am not knocking the eastern towns. They are prosperous and we are proud of them, but the comparison does most certainly show what the dairying industry is doing for the Western towns.

In view of the facts just stated, the vast importance of fostering our dairying industry and developing it still more intensively becomes readily apparent. This is the purpose for which your association exists: hence it would at any time be a pleasure to welcome you, but there are other reasons which makes your present meeting one of more than ordinary importance.

I presume it would be impossible at this time to discuss any question at this or any other meeting without considering it in its relation to the one vital topic which is absorbing the attention of the American people at the present time; the great war in which we are engaged.

This is not the place, nor have I the time if it were so, to discuss the causes which led us into it nor the issues which are involved. I only wish to say that if there is anyone here who still believes that we are at war because someone at Washington, Wilson, or Congress, or anyone else blundered or made some sad mistake, he should get that idea out of his head just as soon as possible. No fact is more certain than that the kaiser and his followers, when in 1914 they made war upon Serbia and France and Belgium and England, just as certainly and just as deliberately made war upon the United States. If any mistake was made by our government it was in not recognizing the fact immediately.

The relation of this meeting to the war arises from the fact that it is entirely concerned with one of the greatest problems which the American people have to face in winning the war: that of food supply. Most of us fail to realize the vastness of this problem and as a consequence, we are disposed to chafe under certain restraints that are being placed upon us.

We are disposed to say that we are the greatest nation in the world. That we have more fighting men, more resources, more capital and more of everything else that any or all of the othed nations engaged and we are very likely to act as if that fact in itself were sufficient to win the war for us. It may help somewhat to look into the problem

and see what it means.

To win this war it is not enough to raise an army larger than that of our enemy. That is not a difficult thing to do. In a country like the United States, to raise an army of one million men is a simple matter. In fact it is more than done already. To raise an army of five million men is not a difficult matter, and an army of ten million not an impossible matter. And though we are 3,000 miles away from the scene of the conflict, the transportation of such an army is not by any means the most difficult problem that confronts us.

In this country of ours, we are too likely to take things for granted. Heretofore, whenever we have wanted a sack of flour or a ton of coal, we have simply stepped to the telephone, called up the dealer, and ordered it sent. In a few minutes it has been delivered at our door. Because of this we have never stopped to think what a tremendous transportation organization has been necessary to afford us this splendid service. So we are likely to think it a matter of course that our army of two to five million men will have their supplies as readily.

Someone has said that this war must be won by arithmetic. This seems at first though, like a strange statement, but it is profoundly true. It was because the kaiser knew this and he figured that the Americans had not discovered it that he ventured to force us into the struggle. He has believed and still believes that it is absolutely impossible for us to transport food and supplies rapidly enough to maintain an effective army in France. Let us see if there is any ground for his belief.

First, let us remember that every pound of food, every rifle, every big gun, every piece of clothing, every stick of timber for building cantonments, every locomotive, every freight car, every rail for the roads that we must build, and a thousand and one other things must be carried 3,000 miles across a submarine infested ocean in ships of which our supply is indeed scanty. Our government figures that it requires at the lowest calculation,

one hundred pounds of material per day for each soldier, to make up the total amount to be transported. Let's do a little figuring and make it as simple and concrete as possible. We have approximately 600,000 troops in France at the present time. Suppose we allow one pound per day for each of them; that makes 600,000 pounds, or three hundred tons. Remember that's at one pound per day. Multiply this by 100 and we have 30,000 tons per day to be transported. But big figures usually are confusing. Let's try to picture this to ourselves. How much does an ordinary freight car hold? About thirty tons. That means one thousand freight cars per day. What does that mean? Well, a little more figuring will show us that it means a train of cars about eight miles long, as far as from here to Browntown, every day of the three hundred and sixty-five in the year, to supply even the boys who are over there now. Two million will be more than three times as many and will mean a train twenty-five miles long every day. Is it any wonder the kaiser says it is impossible?

To Americans, however, nothing is impossible and this problem is being rapidly solved. It only needs the full realization on the part of the whole people of its existence and that is why I am speaking of it at this time.

Our problem in Green county is specifically not so much related to transportation as to production. The great ship yards and munition factories are located far away from our doors; but the hundreds of thousands of laborers there employed must be fed, as well as ourselves and our brave boys across the sea. The arithmetic of the war convinces us that there is but one thing for all of us in an agricultural section to do, and that is to eat less and produce more of the kinds of food that are most readily transported.

This particular year the bread problem is the serious one, and so I am going to urge upon this convention a thing that may seem somewhat unrelated to the dairying industry, namely, the raising of wheat in Green county.

Suppose every farmer in Green county were this year to sow two acres of wheat. Let's see what it would mean. There are approximately 2,500 farms in the county. That means 5,000 acres. It will yield an average of at least twenty bushels per acre. Green county wheat will make 40 pounds of flour to the bushel. This means 1600 pounds of flour per farm. That is, every farmer will have enough to supply his own table and enough left over so that the total will come very close to feeding the rest of the people in the county. This means just so much more that can be sent from Minnesota and Kansas and the Dakotas to feed our boys over there. Let's see that it is done.

When I mentioned to the chairman of our council of defense the other day, that I intended to say this at your convention, he urged me not to do so. He said our agricultural expert had been investigating and had found that our soil is not suited to the raising of wheat. Now I am by no means an agricultural expert. But I was born and brought up in Green county and I know that we can raise wheat and good wheat and lots of it. I can remember when it was one of the leading products of the county. There is no question about our ability to raise as much of it as we choose.

But someone says, "We ought not to do this at the expense of the dairying industry because cheese and condensed milk are quite as important elements in the food supply as wheat." I grant this, but I am saying that we must increase production and I maintain that without lessening our cheese production by a single pound or our condensed milk production by a single can, we can raise two acres of wheat on every farm in Green county and thus add not only so much more to our food supply for the nation, but so much more of wealth to our county.

I have gone into this phase of the subject because I believe it is of the most vital importance at the present time. I must resist the temptation to speak of the meaning of the mighty struggle. Suffice it to say that unless

we win this war, this association or any other organization in the United States will have mighty little use for existence. The work of this association or of any other association or individual in the country today is of permanent value only so far as it contributes to the speedy and victorious termination of this hideous conflict, and it is with the thought that your deliberations this year will shape themselves to that end, that I heartily welcome you here oday.

RESPONSE

By F. Marty.

Mr. Chairman and Members of this Association:

It is with great pleasure that I respond in the name of the Southern Wisconsin Cheesemakers' and Dairymen's Association to the hearty and instructing welcome extended to us by your Principal Mr. Dietz in behalf of the citizens of Monroe.

It is with greater pleasure that we again accept your loyal hospitality, for it is your splendid support of the past that has developed us from infancy to one of the largest organizations of its kind in the nation. Our assemblance here again this year stands in self evidence of our appreciation of your hearty support.

Once more we have come to your city to discuss our various questions, to talk over and recount our varied experiences, and to take up such questions that are of the most importance for the future welfare of our industry.

We believe that by this way and only by such intercourses can we be up to date and the most useful in our occupations, for it is here where the best thoughts and ideas converge.

In each of the seventeen conventions of this association we have been confronted with new problems, so again at this the eighteenth convention, it will be our duty to discuss ways and means so that we can nobly respond to the nation's call for greater production of food in our line as well as conservation of the same.

In response to the speaker before me, I can assure you in behalf of the members of this association that we are proud of our war record, and that the spirit of true loyalty will prevail and will be the keynote throughout all of our sessions.

Seemingly it has been the motive of some to attach a

stigma of shady disloyalty on dear old Wisconsin, the speaker before me found occasion to cast a shady light of disloyalty upon Green county when he said that from outside appearance Green county would look like loyal but at heart it was not so much; that he may rest assured. Let me say in behalf of the members of this association who have immigrated to this country, whose membership to a large extent are of foreign birth, immigrated to this country from Switzerland, who fought their bloody battles for freedom and independence as far back as 1280, then surrounded and in the midst of autocracy and have maintained their independence and freedom down to the present day. In their veins also flows the blood of liberty, and with their national slogan, "One for All and All for One," they are ever ready to defend it to a man, woman and child. So in this world struggle for democracy, we all will sacrifice our all for the glorious victory of our Stars and Stripes.

SECRETARY'S REPORT

By **Henry Elmer.**

Mr. President and members of the Association, Ladies and Gentlemen:

I have the honor to submit the eighteenth annual Report of the Southern Wisconsin Cheesemakers' and Dairymen's Association.

In the past year the aim and work of our Association was to promote our great Cheese Industry more and more, although we are more or less hampered in the Factory Instruction work, as the man who applied for the position and was engaged by the Directors and officers of your Association, went back on his word. As it was late in Spring it took us some time to find a man suitable for the position. In May we were fortunate to engage Mr. Sam Alleman, Brodhead, who for the remaining season did very good and satisfactory work.

We had 394 members last year, probably we can not reach this number this year for different reasons.

If you look over the last year's proceedings you will find on page 18, that the amount of the cash prize for first premium on Swiss cheese to Robert Emmenegger was left out. It was overlooked to remit to Mr. Emmenegger the amount coming to him, but since then we sent him five dollars to settle this matter.

There was some criticism that our last proceedings did not mention anything in regard to the Instructions in cooking and sewing, given for the ladies of our community in the annex of Turner Opera hall. We wrote several times to Miss A. L. Marlatt for manuscripts of her talks given at our last convention, but as Miss Marlatt was called very suddenly to Washington, D. C., it was impossible for her to comply with our wishes.

The directors and officers of your Association had 6 different sessions during the year to conduct the regular and extra business of the Association. Mr. John Aeschli-

mann, of Brodhead, was engaged as Factory Instructor for the season of 1918. Mr. Aeschlimann held the same position a few years ago, but on account of his health, was forced to withdraw from the work. We can congratulate ourselves to have such a man as Mr. Aeschlimann in the field, and hope that we can be a help to the factories more than ever, and in this way do more than our bit for the country to produce more and better food.

We can also congratulate ourselves on our splendid program as you will now be favored to listen to today and tomorrow. There are the most noted dairy and cheese authorities on this program. For the entertainment you will surely enjoy the music furnished by our famous Badger and Junior Cadet orchestras; the three act comedy entitled "Getting Even With Felix" given by the well known Monroe Dramatic club will certainly please you, and the singing of our Monroe high school glee club will be as sweet as ever.

Read the list of contributors and note the splendid donations for prizes to cheesemakers.

Regardless of the strenuous times we live in nowadays, and the nearly every-day solicitation for funds, our Monroe business men responded very generously. I have been able to secure, so far, about 180 paying members. If the dairymen and cheesemakers respond as willingly our association will be as strong as ever. We want the help of every cheesemaker, of every milk producer, in fact, of every man connected in any way with our good industry.

Our treasury is also in very good standing as the itemized report of our treasurer, W. J. Trumpy, will show.

We trust that your stay in Monroe will be a pleasant and a profitable one, and that every one, who attends this, our 18th annual convention, may go home with a strong determination to do more for the development of our great cheese industry than ever before.

Thank you for your kind attention and for all the favors rendered to me.

TREASURER'S REPORT

RECEIPTS.

March 7, 1917. Balance on hand	\$1575.76
Mar. 7, Herman Regez, membership tickets.....	100.00
Mar. 8, Miss Anna Beller, membership tickets....	78.00
Mar. 8, Jacob Karlen, membership tickets	5.00
Mar. 8, Henry Meyer, Darlington	6.00
Mar. 8-9, Entertainment tickets to hall	65.00
Mar. 9, Morton Salt Co. Donation	5.00
Mar. 9, Miss Anna Beller, membership tickets....	37.00
Mar. 10, Henry Elmer, membership tickets	21.00
Mar. 19, Henry Elmer, membership tickets	44.00
Jacob Gempeler, membership tickets	12.00
Brodhead Cheese Cold storage	5.00
Ast Bros, Dodgeville	3.00
Herman Regez	76.00
Ernest Regez, Blanchardville	10.00
Received from state	981.11
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Total receipts	\$3023.87
For the year ending Mar. 13, 1918.	

DISBURSEMENTS.

March 19, 1917, General expense for convention\$	30.25
Mar. 21, Green Co. Herold Printing Co. stationery	5.25
Mar. 21, L. A. Woodle & Sons, admission tickets..	7.36
Mar. 21, Times Printing Co., 1916 convention	91.90
Mar. 21, Times Printing Co., 1917 convention	13.90
Mar. 21, Fred Kohli, hall rent	45.00
Mar. 21, S. J. Stauffacher, salary	25.00
Mar. 21, Henry Elmer, salary	25.00
Mar. 22, Prof. H. Otis, expense	3.41
Mra. 22, Ed. C. Gmur, New Glarus, Mannerchoir	17.60
Mar. 22, Young & Co., cartage	3.46
Mar. 22, Shriner Bros., for chairs	1.00

Mar. 27, Miss Charline Booth, drama,	70.00
Mar. 27, Mrs. Nettie Booth Wegg, Orchestra	30.00
Apr. 25, Emery Odell, wrappers	6.93
Apr. 30, Kohli Jewelry Co., medals	13.44
July 1, Sam Alleman, Instructor	102.00
Aug. 1, Sam Alleman, Instructor	126.00
Sept. 1, Sam Alleman, Instructor	138.00
Sept. 19, Young & Co.	6.95
Sept. 19, Lauvern Medal Co.	40
Sept. 19, S. J. Stauffacher, trips to Madison at- tending committee hearings and postage, etc.,	18.75
Sept. 21, Miss Beller, convention work	4.00
Sept. 21, Herman Regez, expense	10.00
Oct. 1, Sam Alleman, Instructor	108.00
Nov. 1, Sam Alleman, Instructor	114.00
Nov. 26, Arnold Rohrer, extract, etc.	2.30
Dec. 22, Badger Cheese Co., Cheese display	5.00
Jan. 16, '18, Henry Elmer, wrappers and stamps	9.77
Jan. 19, Robt. Emmenegger, cash prize on Swiss cheese	5.00
Jan. 17, Times, 1917 Convention	95.00
Feb. 18, St. Louis Button Co.	90.70
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Total disbursements	\$1225.37
Balance March 13, 1918	\$1798.50
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	\$3023.87

Respectfully submitted,
JOSEPH TRUMPY, Treasurer.

We, the committee, appointed to audit the accounts of secretary and treasurer, have examined same and find them correct.

H. G. VAN WAGENEN,
JOHN P. LICHTENWALNER
FRED TRUMPY.

Committee.

CHEESE SCORES

Limburger Cheese.

First prize—

Carl Liehti, Verona, Wis.....99 points
Received \$5.00 in cash, one \$10.00 clock and one \$10.00 rocking chair.

Second prize—

Fred Lengacher, Monroe, Wis. 96 points
Received \$2.50 in cash, one \$8.00 clock, one vacuum bottle and one gal. B. K.

Third prize—

Gottfried Regez, Blanchardville, Wis.....95½ points
Received one \$4.50 clock and 1 gal. B. K.
Anton Motz, Belleville, Wis. 95 points
Rudy Lengacher, Monticello, Wis. 94 points
Oscar Sutter, Davis, Ill. 92 points
Ernest Salvisberg, Verona, Wis. 92 points
Muller Joe, Monroe, Wis. 91 points

Brick Cheese.

First prize—

Albert Schlappi, Browntown, Wis. 97 points
Received Gold Medal and one \$12.00 rocking chair.

Second prize—

Robert Salvisberg, Livingston, Wis. 96 points
Received silver medal, one vacuum bottle and one gallon B. K.

Third prize—

Joe Willi, Browntown, Wis. 95 points.
Received 1 gal. B. K. and 1 gal. curdalac.
Fred Scharli, Monroe, Wis. 94 points
Carl Leichti, Verona, Wis. 93 points
Christ Ubert, Monroe, Wis. 92 points
Fred Steinmann 92 points
Walter Ruber, 88 points

Block Swiss Cheese.

First prize—

Anton Koller, Argyle, Wis. 96 points

Received gold medal, one \$25.00 gold watch, 1 gal. B. K. and a pocket knife.

Second prize—

Fred Stoller, Argyle, Wis. 94 points

Received cash \$2.50, one vacuum bottle, one gal. B. K. and a pocket knife.

Third prize—

Fred Aebersold, Argyle, Wis. 93 points

Received one gal. B. K., one pocket knife and one cheese trier.

Carl Wenger, Argyle, Wis. 91 points

Ed. Wenger, Argyle, Wis. 90 points.

Round Swiss Cheese.

First prize—

Robert Emmenegger, Gratiot, Wis. 95 points

American Cheese.

First prize.

Fred Matti, Fitchburg, Wis. 93 points

Received one gal. curdalac.

PRESIDENT'S ANNUAL ADDRESS

By **S. J. Stauffacher.**

After another year of varied experience, we again assemble here in annual convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association to discuss and solve some of the problems that we have encountered the past year. It is the eighteenth annual meeting of this association and it has been eighteen great strides forward along dairy and agricultural lines. These conventions have proven a great inspiration and help to the hundreds that have attended during the past years and will prove a much greater inspiration and aid to the large numbers who will attend future conventions of this association. Ever since its organization eighteen years ago, it has gradually grown in numbers, interest and usefulness until today its influence is not only county or state but nation wide. Every year from the north and the south, from the east and the west, farmers and dairymen, cheesemakers and cheesedealers, kindred organizations and interested parties have written us for information and assistance in solving great agricultural and dairy problems. This association has been instrumental in solving many of the problems that have come before the dairymen and cheesemakers of the country.

The convention which we open today is an agricultural and dairy school of the highest type, the very best that the state of Wisconsin or nation can furnish. It is equipped with the very best teachers along agricultural and dairy lines that this country can secure. No man can attend this convention and not go away a more practical and better cheesemaker, farmer, business-man and citizen.

The past year has been the most profitable one to

dairymen in the history of the state of Wisconsin. This very hour offers you dairymen the greatest opportunity that has ever come to you. Three long years has this world war raged and brought devastation, misery, sorrow and want to many of the great world powers. Peace is not here.

We have heard whispers of peace at different times, but always close on its sweep could be heard the roaring thunder of fiercer battle which can never be silenced until autoocracy shall be robbed of its power and democracy placed on the throne.

The great warring nations are depending more and more on the United States for dairy products. Permit me to cite but one example. From statistics we find that we exported \$5,000,000 worth of condensed milk in 1915. In 1916 about \$19,000,000 and in 1917 over \$40,000,000, an increase of eight times in two years. We experience a similar increase in exports of other dairy products. Many of the warring nations are slaughtering their dairy cows for meat. The allies today are more than 35,000,000 short and are slaughtering them by the hundreds daily. This means a decrease of dairy products in these countries and consequently a stronger demand for American dairy products. The hour of destiny for the American dairymen has struck—the golden age for dairying is here—the supreme opportunity has come. What are we going to do with it? Are we going to rest on the laurels and success that we had the past year; are we willing to measure 100 per cent to the present opportunity and put forth our best efforts and make this year a bigger and better one than last year? Anything less is disloyalty. For it is our patriotic duty as citizens of the greatest democracy in the world to produce all we can and thus help bring the greatest war of the ages to a speedy close. How can we do this? By doing our very best to make two blades of grass grow where now only one grows. By carefully cultivating every foot of land available. By raising that which the government so much needs as

wheat, pork, etc. By diligently harvesting everything that grows and wasting nothing. By breeding up our dairy herds and weeding out every unprofitable cow. By exercising greater care to manufacture more and a better grade of cheese and butter.

In 1914 on this very platform I expressed my regret at the action taken by the county board in turning down Supervisor Deininger's resolution for a dairy and agricultural school for Green county. On that same occasion I said I have lost no faith but felt sure that the day would come and that not in the far distant future when the aggressive dairymen and the needs of the times would demand the establishment of such an institution or the engagement of an experienced dairy and agricultural representative who shall devote his entire time to the development of our dairy and agricultural interests. At that time I was considered a dreamer, but in less than three years this dream has come true. Today we have an agricultural agent in the county in the person of James Lacey, whose services have already added hundreds of dollars to the resources of the county. Consult him often, invite him to your homes, follow his advice, read good dairy and agricultural papers that he may recommend, attend conventions like this, carry out the instructions and suggestions that you hear and read and you cannot help but meet with success, and Green county and Southern Wisconsin will go "over the top" in food production.

Wisconsin has the distinction of being the leading dairy state in the union and southern Wisconsin the greatest Swiss cheese center in the world. It is no small part that you dairymen and cheesemakers contribute to this high honor which the citizens of the great commonwealth of Wisconsin so much appreciate. In 1890 Wisconsin produced 21.3 per cent of all the Swiss in the United States—in 1910 more than twice as much or about 50 per cent and today much more. We should not only strive to keep Wisconsin the leading dairy state of

the union and southern Wisconsin the greatest Swiss cheese center in the world but we should put forth a special effort to manufacture the finest Swiss cheese in the world, as well as the other kinds, such as brick, limburg and block cheese, and the various American types. To do this the average quality of our cheese must be raised. We must not sacrifice quality for quantity. We must see that only good, clean, unadulterated milk is delivered to the factory and that only intelligent, capable, industrious and conscientious men make up this milk. Men who love their work and take pride in manufacturing only goods of strictly first class quality. This end attained, we must see that the cheese is well cured before it is rushed on the market. Ten day old brick, fourteen day limburg, twenty-one day block Swiss and thirty to forty day Swiss cheese is not fit for market and should not be allowed to be sold. This green, tasteless, uncured, unsalted cheese displeases the consumer so that he refuses to buy any more and the result is that our industry suffers.

One great problem that we must solve sooner or later is how can we break away from the prevailing custom of pooling the milk at the factory. This is a very unjust way of handling milk. It is unfair to the patrons of a factory as well as the cheesemaker. It is ancient, inefficient, unsatisfactory and lacks good business sense. By this method, every patron of a factory receives exactly what his neighbor does regardless of the amount of casein and butter fat the milk contains. It is a well established fact in southern Wisconsin that certain factories will produce one to one and one-half pounds more cheese per hundred pounds of milk than others. What is true of factories is equally true of the milk delivered by the different patrons at the same factory. Take for granted that the milk delivered by one patron of the factory produces one to one and one-half pounds more cheese than the other, at this year's prices on Swiss cheese, it would actually be worth sixty to seventy cents

per hundred more than the other milk. And yet he receives exactly what the others do. Is this fair and just? No.

Again, this practice of pooling the milk is unjust to the patrons of any factory because of the adulterated milk often brought to the factories. Experience has taught us that even in this day of enlightenment men do water their milk. Suppose a patron of a factory puts in twenty pounds of water to a hundred pounds of milk and if this milk averaged \$3 per hundred as it did many months last year, he would receive 60 cents on water per hundred pounds of milk. A reasonable profit I should judge. Suppose he should have 300 pounds of milk per day which is a low average for a farmer of southern Wisconsin, his net gain on water per day would be \$1.80; in ten months or 300 days it would be over \$500. You say this is an exaggerated statement; ask the men who have been buying milk what their experience has been and then decide for yourself. There is only one way to overcome this old custom and that is to pay all milk by test. This done, every patron will receive just what his milk is worth. Who will be the first to blaze the trail along this line?

Again permit me to call your attention to the fact that we must be on our guard concerning legislation, both state and national. So many laws are passed every year that often many of them are detrimental to the dairy interests of the state and nation. A year ago a bill relating to whey fat was introduced in our legislature by Assemblyman Rappel. Another bill known as the skim cheese bill by Assemblyman Grell. The Grell bill was defeated for the second time, largely through the efforts of this association, but the Rappel bill passed. This law is highly detrimental to the dairy interests of the state of Wisconsin and should be repealed at the earliest opportunity. In 1916 Wisconsin produced whey cream that was manufactured into fancy butter in Wisconsin, Illinois, Iowa, and Minnesota to the sum of over

\$700,000. Better than \$100,000 of this was from Green county. This branch of the cheese and dairy industry was to bring a substantial income to the dairymen of Green county, southern Wisconsin and in every part of the state where cheese is manufactured. Scarcely had this law been passed when manufacturers and dealers in whey cream began receiving letters in substance something like this: "Do not ship us any more whey cream—we cannot use it," thereby depriving whey cream of many good markets. Wisconsin has by law repudiated her own product with the result that Illinois, Iowa and Minnesota will soon follow suit. You ask, then what? This whey cream which has brought the dairymen of the state an income of over \$700,000.00 a year and was destined to double and treble in a few years will become a by-product of small value. I would recommend that a resolution be passed by this convention and copies of same sent to our representatives in the legislature requesting the repeal of this law.

In conclusion let me plead that each one of us be patriotic and do our full duty toward this land of our birth and choice. Let us be loyal to the principles of the greatest and freest democracy in the world, the United States of America. Let us continually strive to give every man from every clime an opportunity to prosper and make the best of himself. In the past decades, millions upon millions of men, women and children from the nations across the seas have come to America to begin life anew under the stars and stripes. I can see them come, Caucasians, Mongolian, African and Malaysian—rough, uncouth, illiterate, fearful. I can see them pass the statue of Liberty in New York harbor and file through Ellis Island on our eastern coast. I can see them enter the Golden Gate of the west, timid, bewildered immigrants, many of them almost penniless, but all of them fired with one ambition, namely to better their condition in the United States, the land of the free and brave. I can see these same people twenty years later settled on

the great plains of the west and the rich agricultural fields of the north and Mississippi valley. I can see them working in the shops and mills and managing our large steel, iron and cotton plants of the east and south. I can see them developed into prosperous farmers, great dairymen, successful cheesemakers, able lawyers, keen business men, mighty men of power in every walk of life. Therefore, I cannot but feel that a land that can work such a great transformation in such a short time is worthy our deepest patriotism, highest loyalty and unstinted fidelity. We have been forced into a war against our will where two great principles—democracy and autocracy—are at swords' ends. This war will decide forever whether democracy or autocracy shall sit on the throne and rule the world.

As far as the United States of America, the greatest democratic republic in the world, is concerned, democracy must prevail and autocracy must fail. The great commonwealth of Wisconsin has already sent more than 30,000 of her own boys, the very finest in the land, to join the fighting forces of the army and the navy. Some of these boys are today in the cantonments of our country—training; some of them are on the high seas; some of them are in France; this very hour some of them may be in the trenches in No-Man's Land pouring out their lifeblood for you and me and liberty; some of them today are sleeping at the bottom of the sea. Only a short time ago we received the sad report that more than two hundred were sent to the bottom by a German submarine, many of them were our own Wisconsin boys—all of them are willing to give up their lives for you and me and the freedom of all people. What are we doing—what are we willing to do? If this country is good enough for our brave boys to fight for and give up their lives to defend, surely it is good enough for us to live for. Let us this year live and work for this country—larger and stronger than ever before, and thus win the war the quicker. Victory is sure for right cannot fail. Democ-

racy is right. America is for democracy and America will win.

Alfalfa--A Paying and Patriotic Crop

By L. F. Graber

Secretary, Alfalfa Order, Madison

This is the fourth time that it has been my pleasure to attend your annual convention and I deem it a distinct privilege to be with you again this afternoon. I have been asked to say a few words to you on alfalfa—the greatest gift in the way of a feed producing hay crop the good Lord has given you farmers of southern Wisconsin.

Southern Wisconsin's Most Patriotic Crop.

The air is full of patriotism these days and patriotism can be applied to crops just as it has been and is being applied to men. Patriotic crops are those that work hardest for us—that produce the most for us—that give us the greatest amount of feed for the labor and time and money we expend in growing them. Surely, alfalfa, the crop that excels in yields per acre, in feeding value, in drought resistance, in soil enrichment and in weed eradication is truly our most patriotic hay crop. **And Green county farmers have expressed their patriotism by growing the largest acreage in the state of Wisconsin.**

War on Timothy.

If there is any crop we may call unpatriotic in a time like this, it is that soil robbing, that poor producing, feedless crop, timothy. It is true, there are conditions where timothy has its place but as a general proposition we cannot afford to fool around with a hay crop that produces so little, that gives such meager returns for our labor and efforts as does timothy.

Alfalfa for Defense.

Jack Frost is a pro-German. For three years he has wrecked havoc with our corn—the one crop on which we directly depend, more than any other for our winter feed. And in spite of these three discouraging corn years, we must have corn. No crop produces feed so quickly and in such abundance. But why not depend more on alfalfa? Why not enlist more of our acres into growing alfalfa—that hardy plant which defies Jack Frost and defends our feed supply—which thrives in spite of cold, wet spring weather, cool summers, and early fall frosts—which grows and produces ample yields under those very climatic conditions which are so disastrous to our corn?

Alfalfa Fights for Us.

Yes, alfalfa is a fighter—a fighter for defense—a fighter against the worst enemies of the farm. It wages war on weeds, it fortifies the soil, it defies drought; it increases our milk checks, it produces more food for our army, our allies and ourselves. Alfalfa does all this if we give it a square deal—if we provide it with the food and ammunition it requires to put it in good fighting trim.

What Alfalfa Needs Most.

To get the most out of alfalfa, to make it work hardest for us, it must be fed. I have seen many a field of alfalfa right here in Green county and in many other southern Wisconsin counties that has starved to death. Alfalfa that turned yellow and died of the “jaundice.” Why? Because the first eight inches of soil were so sour the alfalfa became sick and yellow and died for a want of that which it needs most—that which it must have in great abundance, to grow and that is **lime**. Alfalfa is a lime hungry plant. **Every ton of alfalfa hay grown on your farm takes out of the soil nearly 100 pounds of lime.** A four ton yield of alfalfa hay requires twenty times as much lime as a thirty bushel wheat crop. There is no farm crop which requires so much lime—

which must have such an abundance of lime to grow as does alfalfa. And that is why alfalfa is so easy to grow where soils are filled and underlaid with limestone gravel and so hard to grow where soils are sour and there is a deficiency of lime.

Play the Game Sure. Test, Don't Guess.

Not all soils need extra lime. Some are well supplied. But where alfalfa is a continued failure or it is hard to get a catch or where it does not last long and blue grass causes much difficulty—nine times out of ten the soil needs lime and needs it bad. But there is no need in taking any chances. Have your soil tested. Make use of your agricultural agent. With the Truog soil acidity test he can detect sour soils beyond a doubt and also determine, accurately, the amount of lime your soil may need to make alfalfa a lasting success.

Play the game sure. Find out if your soil needs lime and if it does—use it. Put on two to five tons. Use plenty. Suppose it does cost you \$10 an acre. An increase of only one-third of a ton of alfalfa hay will pay the whole bill! And the value of this lime will last and show itself for a period of six or eight years.

John Waelti, Monroe, Wisconsin, one of your best farmers, limed a strip through a forty acre field which he seeded down to alfalfa. He told me that if he had limed the whole forty acres it would have produced him \$1,000 more of alfalfa hay. Nothing pays so well as lime on sour ground for alfalfa.

And then a little manure to help give the alfalfa a good start. Alfalfa needs a reasonably fertile soil. It will grow on rather poor land with plenty of lime but manure is always a big help and increases the yield tremendously.

Valuable Alfalfa Pointers.

Alfalfa needs **more** than lime. If you want to give alfalfa a square deal—follow out these directions. They are not difficult to apply.

1. Choose a sloping, well drained field. Alfalfa will grow on flat land but there is great danger of winter-killing from ice sheets that may form as the snow melts and water accumulates.

Avoid trying to grow alfalfa on soils that have a hard pan sub-soil. Clover does better than alfalfa under such conditions. Choose for alfalfa a field with an open porous foundation. A gravelly limestone sub-soil is best.

2. Prepare the seed bed well. Fall plowing is best with heavy soils as it gives the ground time to settle and become firm. Rolling spring plowed ground with a corrugated roller pays big. It firms the ground and makes conditions ideal for the alfalfa.

3. Inoculate. Send to the alfalfa order or the experiment station, Madison, Wisconsin for cultures in bottles to apply to the seed before sowing. These are furnished post paid, at cost price of 25 cents per bottle, sufficient to treat the seed for one acre. Send in your request with payment about ten days before you intend to sow.

If you prefer to use the soil method of inoculation, spread a load of sweet clover or alfalfa soil on each acre just before sowing the alfalfa.

4. Seed alfalfa with one bushel of barley as a nurse crop. If you use oats, cut it for hay or use an early variety such as the Sixty Day. Get the grain crop off the ground early to give the alfalfa a chance to grow and get ready for possible drought during the summer.

5. To play safe never seed alfalfa later than July 1st. August seedings may be successful if sufficient rainfall occurs to produce an eight inch growth prior to freezing weather, but dry weather usually makes August seedings a failure.

6. If your land grows alfalfa easily—if it has plenty of lime and inoculation and drainage and well prepared, fifteen pounds of alfalfa seed an acre is plenty. If you are seeding for the first time use twenty pounds.

7. Don't clip your alfalfa the first summer unless the weeds are very bad. Remember weeds help hold

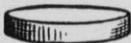
WHICH SYSTEM OF PAYMENT IS BEST?

BY THE POOLING SYSTEM

FARMER A RECEIVES

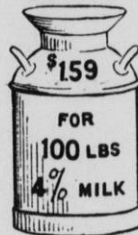


YIELDING 8.3 LBS. CHEESE

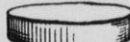


AT 15¢ A LB. WORTH \$1.24

FARMER B RECEIVES



YIELDING 10.6 LBS. CHEESE

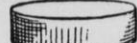


AT 15¢ A LB. WORTH \$1.59

FARMER C RECEIVES



YIELDING 12.9 LBS. CHEESE

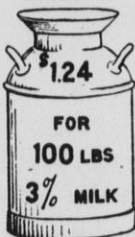


AT 15¢ A LB. WORTH \$1.93

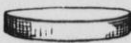
OR

BY THE NEW FAT-PLUS-SIX-TENTHS SYSTEM

FARMER A RECEIVES

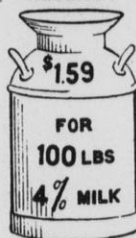


YIELDING 8.3 LBS. CHEESE

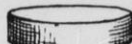


AT 15¢ A LB. WORTH \$1.24

FARMER B RECEIVES

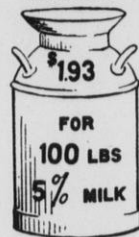


YIELDING 10.6 LBS. CHEESE

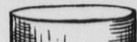


AT 15¢ A LB. WORTH \$1.59

FARMER C RECEIVES



YIELDING 12.9 LBS. CHEESE



AT 15¢ A LB. WORTH \$1.93

the snow for winter protection.

8. Don't top dress your alfalfa with manure the first summer or fall. You may smother it out.

9. If you want alfalfa that will last—that will live through winters where ordinary alfalfa and clover may kill out use the hardy Grimm variety. Twelve to fifteen pounds of seed of this big crowned variety per acre is sufficient.

10. Last but not least, don't kill the goose that lays the golden eggs for you. If you have got a good stand of alfalfa and want to keep it good don't cut or pasture it after the first week in September—even if you only get two crops. More winter-killing comes from this practice than for any other reason. Grimm alfalfa will stand more abuse in the way of late cutting or pasturing than the common strains but even with Grimm it is best not to pasture late in the fall.

When the Farmer Can Help the County Agent

By James Lacey.

The work of a county agriculturist in Green county is comparatively speaking, a new thing. In fact, there are certain portions of the county in which the exact status and purpose of the county agent are not exactly known. For this reason, I have chosen the subject stated on the program, and before I finish my short talk, which I intend to give, I hope I will have justified my choice of subject for the Dairymen's convention.

The ways in which the farmer can help the county agriculturist are mighty numerous. I wish to tell you of only a few, and will leave the remainder of them to be suggested by the gist of my brief talk here this morning.

If a farmer has several bushels, or several hundred bushels of grain, of which he wishes to dispose, tell the county agent. He, perhaps, comes into intimate contact with more people than does any other man in the county. The task of getting the buyer and purchaser together is part of his work and he will be only too glad to find an outlet for the grain which you wish to sell.

On the other hand, if you wish to buy the same amount of grain for seed or feeding purposes, the county agent is a mighty good man to know. He may be able, not only to locate it for you, but he will be able to assist you in securing the very best grain obtainable. His knowledge of the best strains of seed grains, coupled with his knowledge of local conditions, gives him the very best qualifications which anyone could ask. He can tell you the best variety for your particular locality, and oftentimes the suitability will determine the ultimate yield. Select grains for the district in which you live, and if possi-

ble, purchase nothing but the pure bred strains. It will pay you, and when farmers who take a great deal of pride in possessing pure bred live stock insist on planting and harvesting scrub grains, they are not giving the feed producing end of the business a fair share.

If you have grains which you kept for seed purposes, and which may be affected with smuts or blights, notify the county agent. He will tell you how, or demonstrate to you, the proper methods of eradicating those diseases. Smuts and blights cause a tremendous loss each year, and because of the shortage of cereals, we cannot afford to grow anything but the very healthiest and heaviest yielding crops. Last year, in certain instances here in Green county, oat smut ruined more than 1-3 of the entire crop. This loss we could ill afford. In order to prevent a recurrence of such condition, let us start a campaign to banish grain diseases from the county forever. Boost this campaign with words and actions. Talk to your neighbor and secure his cooperation. And now, with all due respect to any ministers who may—etc.

So far I have made reference only to the small grains, or cereals. The most important is yet to come. I refer to the seed corn used for producing the 1918 crop. Seed corn is scarce, scarcer and of poorer quality, than it ever has been before. If we are to plant anything like the usual acreage, we must test every bit of available seed to separate the useless from the strong, viable seed. If you have seed to test, inform the county agent. He will test it for you, and do it free of charge. If you have not sufficient seed, or if you have seed to spare, the county agent is in a very good position to assist in its purchase or distribution. If you buy corn, have it tested. If you sell it, have it tested, or test it yourself. Test it though, by all means.

If you have land on which alfalfa cannot be produced to the best advantage, the county agent will be able to tell you why. He will tell you how to remedy this unfavorable condition. If your land is sick, tell the county

agent. That's his business, and for the land's sake give him a chance to tend to business. Much of the land in Green county is sour, too sour to produce alfalfa. This condition can be easily remedied. Limestone applied to the surface soil will neutralize the acid properties and will almost always insure success in alfalfa production. Formerly we had our limestone shipped in. Now, to a small extent at least we are grinding the lime at home. Two or three grinders have already been put in operation in the county, and in half a dozen years, they will be almost as numerous as threshing rigs are today. Green county limestone is some of the best in the world. May be there's a quarry on your farm which is just as good as any in the county. Have the county agent test it. He will do it willingly, and tell you the exact value of the stone for neutralizing purpose.

If you have land which needs drainage tell the county agent about it. He will suggest to you the best possible means of getting rid of the excess water. If surface drainage is possible, he will advise it. If tile drainage is necessary, he will willingly assist you in determining the slope of the pipe, the size of the pipe, and the amount of pipe, which will be necessary to secure perfect and permanent drainage.

If you need help in figuring out the best dairy ration from your available supply of feeds, the county agent will assist you. If you need information on sheep, swine, poultry, or anything in the way of vegetables or garden truck, the county agent will be able to give the desired information to you. He doesn't know everything. He doesn't pretend to. But by virtue of his position and his access to the volumes of knowledge possessed by the state college and the U. S. D. A. he should be able to disseminate knowledge on any agricultural subject.

Often times farmers wish to build new silos, barns, houses or other buildings. The county agricultural man will assist you in planning them, rearranging them, and in fixing them in the most suitable manner. This also

is part of his work. He is here to help the farmer. He is here to help the local dealer, and one of the very biggest problems which confronts him is the one of getting the farmer and local dealer to cooperate and to know each other better. Help him by doing your share.

During the past few years another important item of profit and convenience has been added to the ones already present in Green county. This is the system of farm records and accounts. The income tax reports have become exacting to such a degree that it has forced upon the farmer the necessity of keeping an accurate account of income and expenditures. Here again the services of the agricultural advisor may be sought with perfect safety. This year there has been organized what is known as the Green county Farm Management Ass'n. and every farmer in Green county should become a member. It will pay you big, and again, any assistance or advice in this line may be obtained from the county agricultural agent.

Thus far I have mentioned only the ways in which the county agent may be of value as a business asset. But man is a social creature, and the social side must also be considered. Farm clubs, community clubs, and other organization of a social nature can be arranged. We have only one in Green county today. That one is in the southeastern part of the county, and I'm very proud to say that it is growing and prospering. We need more of them. There should be several in every township. Let's get together and organize them. They are mighty helpful, and they will, in a large measure, solve the problem of keeping the boys and girls on the farm.

My talk has been brief. I could have condensed it more. I could have explained to you the way in which the farmer could do the most for the county agent in two words: Use him. Make use of him at every opportunity. He is put here to stimulate production. See that he does it. Use him as your agent and trusted friend.

“Making Every Seed, Every Cent and Every Second Count”

**Experiences of One Who Has Travelled
In Southern Wisconsin.**

By Prof. L. F. Graber

David Rankin of Tarkio, Missouri, was the wealthiest farmer in the world. His guiding motto has a special significance in these trying times of war. It was this: “Make every seed, every cent, and every second count.” With our scarcity of farm labor, with high priced land, machinery, and live stock and with high prices for our farm products, truly this is a time when we must “make every seed, every cent and every second count.” And this can be done by applying scientific methods on the farm,—by growing the crops like alfalfa and corn silage that work hardest for us; that produce best for us and by growing them right.

As a class, we farmers, do not accept that term “scientific” farming in a very wholesome spirit. We associate it with “book” farming—with theory—with things not practical. And yet the growing of crops is just as much of a science as is the building of bridges, trestle or sky scrapers. Cyrus H. McCormick, inventor of the grain binder, made this significant statement: “Farming is a business; agriculture is a science. The tiller of the soil who blends these two is the man to whom the future offers success.” We have got to recognize that for the greatest production and profit, we have to combine the business of farming with the science of agriculture.

My subject today deals with science as applied to the growing of crops.



Cheese Section of the University of
Wisconsin Dairy School

It has been my privilege to have spent last summer in this great dairy commonwealth, Green County, as Emergency Food Agent. During this period I have observed many interesting experiences of good and bad practices in growing crops from which lessons of great importance for the coming season can be drawn.

In discussing these, I wish to state that, in no way, do I wish to discredit the unusually high standard and plane of farming in southwestern Wisconsin for you have here some of the best farmers in all the world. But I do mean to show that we may even do better those things which we know how to do best.

A Deep Reason For Corn Failures.

A party complained to me last July that his corn was making very slow progress. I examined the field and it looked bad, yet the soil was rich. The seed corn had been tested. No insects were working on the corn roots. What was wrong? It did not take long to find out. **This man had planted his corn three inches deep**—and that's a deep enough reason to make any corn grow slow and ripen two or three weeks later than it otherwise would. One of the worst practices in all the world is deep planting of corn. This is particularly true when we have a cold, wet season. It's just like putting the corn in a refrigerator. The kernels are so far beneath the surface that the warming effect of the sun does not reach them and it may take from one to two weeks longer for the sprouts to come above ground, than it does with shallow planting. And what a difference this makes when it comes to getting your corn ripe. Never plant corn any deeper than is necessary to get sufficient moisture to sprout the kernels—that means one inch deep—no deeper.

Southwestern Wisconsin Soils Need Lime.

Mr. Lacey your present Emergency Food Agent has tested over 150 fields. This summer I tested fifty-six

fields. Ninety per cent of all these were sour and needed lime to make alfalfa a lasting success. There is nothing that will so effectually prevent the failures with alfalfa—the time, money and labor and seed lost in the unsuccessful attempts at growing alfalfa as will the wide spread use of lime on the soil.

I will present herewith a few experiences that well illustrate the value of lime on soils of Green County. I was asked to examine an alfalfa field north of Juda. This was late in May. The soil had good drainage. It was sloping. It was a limestone soil! All along the road which bordered the field limestone cropped out everywhere. Yet, the only good alfalfa on that entire field of ten acres was on the lower end of the field along the road. Here the alfalfa was thick and had a healthy green growth of fully sixteen inches. The remainder of the field was yellow and sickly and about eight inches high. It was plenty thick enough but it didn't grow. What was wrong? That is what the farmer wanted to find out.

On inquiry I found that this field was seeded last year (1916) with barley and that an excellent green growth and stand resulted last fall. It was neither cut nor pastured the first year. It grew up healthy last spring (1917) but the biggest part of it got the "jaundice" in May. It turned yellow and would not grow, I found it well inoculated by the presence of abundant root nodules. "This land must need lime" I suggested. "Lime? Why it must have plenty lime. This is a limestone soil," he replied. "It makes no difference," I asserted, "limestone soils are often sour. This yellow alfalfa has every indication that it's actually starving for want of lime. But we will see."

I took a sample of soil from where the healthy alfalfa growth obtained and tested it with the Truog test. It gave no reaction. Twenty feet away where the yellow alfalfa appeared the soil gave a decided reaction which showed a requirement of at least three tons of finely

ground limestone per acre. When this farmer saw the test with his own eyes he was convinced of the necessity of lime. "But why is this soil where the alfalfa is so healthy and strong not sour?" he asked. "Because of that macadam road!" I answered. "What in all the world has that got to do with it?" he asked. "Just this" I replied. "This road was surfaced with ground limestone. In places it is now pretty much worn off and the rains have carried that ground limestone down through these little ditches into the lower corner of your field. That's why the alfalfa is doing so well there. Nature has demonstrated to you better than I can tell you how badly your alfalfa is in need of lime."

Lime Helps Corn.

On two farms in Green County remarkable results in the way of a decided increase in growth of corn obtained from the use of lime. On one farm a strip about two rods in width was limed and the entire field seeded to alfalfa which was a failure except for the limed strip. This field was all plowed up and planted to corn. The corn on the limed strip was fully eight inches taller in July than that on either side which received no lime. This difference in growth was due to the different effect of lime on the corn and to the greater enrichment of the soil due to the successful growth of alfalfa on the limed area.

A direct increase in the growth of corn was obtained on Arthur Preston's farm near Juda where lime was applied in the fall and corn planted the following spring.

How Alfalfa Helps Get The Corn Ripe.

Last year the frost hit the corn hard. The ears did not ripen and now one of the worst seed corn famines known in years faces the northern states.

That alfalfa has a great deal to do with getting the corn ripe may not seem plausible but it is a fact. You can grow good crops of oats and rye on rather poor soil

but you cannot grow big crops of ripe corn on poor soil. You can have land that is too rich for oats, wheat or barley but you cannot have land too rich for corn. Alfalfa makes the land rich. It builds it up and makes it fertile and fertile soil is one of the main essentials in getting the corn ripe.

I went over a field of corn, a part of which was previously in alfalfa sod for three years and the balance in timothy sod. In the forepart of August the corn on the alfalfa sod averaged a foot and one half higher in growth than that on the timothy. The biggest and ripest corn grew on the alfalfa sod.

Mr. Carl Penn, one of your biggest dairy men, told me that the only ripe corn on his farm last fall was that which grew on alfalfa sod.

Treat All Seed Grains For Smut.

At a cost of three to five cents an acre, smut can be entirely eliminated from our grain. I found a number of fields where from twenty to forty per cent loss occurred by smut due to the failure to treat the seed. The remedy is simple and is herewith given in accordance with the direction from the Experiment Station.

Practical Directions for Seed Treatment.

“No. 1. Treatment best for barley.—One pint formalin to 30 gallons water, temperature 60 degrees Fahrenheit. Soak the seed in loosely filled burlap or gunny sacks for two hours. Drain on slate over the barrels or tanks to prevent wasting the solution. Dry by spreading on a clean floor, stir occasionally with rake or shovel. It will dry faster if the wind can blow over the wet grain. Sow as soon as the seed will run freely or dry thoroughly and store in clean bags or bins until it is planted. Barley requires a two hour treatment to kill the leaf stripe and loose smut diseases.”

“No. 2. Treatment best for oats, wheat and rye.—One pint formalin to 35 gallons water. Dip the seed, in

loosely filled burlap or gunny sacks, into the solution and soak for five minutes. Drain and pile the oats or wheat on a clean floor or canvas and cover with sacks or canvas for two hours. It is best to leave rye covered from four to six hours. This covering is important as it prevents too rapid evaporation of the foramin. It is difficult to dry oats if long treatment is applied. Dry and handle as in treatment 1."

To some these may be matters of minor importance and yet they may spell the difference between success and failure in crop production. Farming of today has changed from that of twenty years ago. Details which at that time were insignificant are today of the gravest importance. It is a time now when all those things must be done to make "every seed, every cent, and every second count."

The Value of Whey

By Prof. J. L. Sammis

Dairy Department, University of Wisconsin

When the price of milk is high, cheesemakers and factory patrons are interested to know how to get the most value from cheese factory whey. I wish to call your attention (1) to the fertilizer value of whey, (2) its value as hog feed, and (3) its value as human food.

1. A strong argument in favor of the cheese factory, and against the selling of whole milk is the need for returning to the soil as much fertility as possible, by feeding whey on the farm, instead of selling whole milk. 100 lbs. of whey contains about .1 lb. of phosphorus and .2 lb. of potash, which at the present high prices for fertilizers is worth about 8 cents.

2. As hog feed, the value of 100 lbs. of whey as now taken from factory to farm may be figured in several ways, depending on the price of corn and on the price of pork. One bushel of average dent corn contains food value equal to 47 lbs. of carbohydrates. 100 lbs. of skimmed whey contains food value equal to about 5.75 lbs. carbohydrates, so that the whey is worth at least one-eighth as much as the corn, or with corn at \$1.50 per bushel, 100 lbs. of whey is worth at least 19 cents.

Feeding experiments with hogs, using about 3 lbs. of whey to one pound of corn, have shown that 100 lbs. of whey will produce as much gain in weight on a hog as one-fourth of a bushel of corn. With corn at \$1.50 per bushel, the whey should be worth $37\frac{1}{2}$ cents per 100 lbs. as hog feed.

3. Within the last few years, the makers of American cheese have learned something which Swiss cheesemakers have known for a very long time, which is that it pays better to use whey fat as human food than as hog feed. 1

pound of whey fat to a hog and turned into a pound of pork is worth only about 16 cents, but one pound of whey fat turned into butter is worth about 50 cents or more. These facts lead us to inquire whether the entire whey solids can not be used as human food, as well as the fat. 100 pounds of whey contains about 5 pounds of milk sugar, and $\frac{3}{4}$ pound of albumin. The $5\frac{3}{4}$ pounds of milk sugar and albumin are about equal in human food value to $5\frac{3}{4}$ pounds of cane sugar.

The food which we eat may be stored up, in part, as fat, and the hog does this while fattening. A part of the food is consumed in the body, to supply warmth and energy for work. This may be compared to the burning of coal under a boiler, supplying some heat which escapes into the boiler room, and supplying energy to run the steam engine.

The man at hard work, like the farmer or cheesemaker, needs to consume about as much mixed food daily, as is represented by two pounds of sugar or other digestible substitutes.

Food For an Army.

The 2500 cheesefactories in Wisconsin now produce about 250,000,000 pounds of cheese annually. With each pound of cheese, there is produced whey containing about one-half pound of milk sugar and albumin, or altogether about 60,000 tons of milk sugar and albumin annually in Wisconsin whey. Allowing two pounds daily for each man, this food supply in the skimmed whey alone is sufficient for 170,000 men for a year.

At the present time it is becoming more necessary to produce the largest possible supply of human food. We should therefore ask whether it is not possible to find ways for using a larger part of this milk sugar and albumin in whey directly as human food, instead of feeding it to hogs. At two or three cheese factories out of our 2,500 in Wisconsin, whey is boiled down in an iron pan, like maple sap, until it becomes thick, so that on

cooling it solidifies like maple sugar. The solid product from whey is called primost, and is eaten only by a few Norwegians and Swedes in our northern states, who learned to eat it before coming to this country. The American consumer does not eat primost at present, but should learn to use it, at the present time, as a means of increasing and saving our food supply.

How Primost Is Made From Whey.

Primost is made by boiling down whey in an open iron pan, 6 to 10 feet in diameter, flat bottomed, and heated by steam at about 20 pounds pressure. When thick, the soft mushy product is packed in wooden boxes holding 100 pounds or more, and left several days to cool and harden. It is then cut into prints with a wire like butter, and wrapped in tin foil to prevent drying out, and each pound print may be put in a carton for the retail trade.

To evaporate 100 pounds of whey, so as to leave 7 to 9 pounds of primost containing about 30-35 per cent moisture, requires the boiling off of about 90 pounds of water. About 15 pounds of coal is required to turn this amount of water to steam in a boiler, and will cost from one-fourth to one-half cent a pound, or a little less than one cent a pound of primost made. If the primost is sold at only 8 cents a pound wholesale, without wrapping in tin foil, the 100 pounds of whey brings in 50 to 60 cents, after paying for the fuel used. Primost at present sells for 13 cents a pound in pound prints, at wholesale.

Possible Uses For Primost.

Primost, consisting almost entirely of milk sugar, is not as sweet as cane sugar, but can replace a part of the cane sugar used in a number of ways. In Europe it is spread on bread, either alone or with butter. It can be added to syrup for making various kinds of candy, and should find use for this purpose in candy-making, both

in the home and in the candy factories.

Mixing primost with peanut butter gives an attractive and fine flavored spread for sandwiches, and the mixture of primost, peanut butter, and glucose or Karo syrup in equal parts with a little sugar hardens well on cooling, and can be cut into caramels. With a shortage of cane sugar, candy manufacturers should find methods of using primost to good advantage in their business, as a means of saving cane sugar. The experiment station at Madison has already begun a study of possible uses to which primost can be put in the preparation of foods of different kinds. The purpose of this work is to create an increased demand for this little used dairy product, if possible, so that farmers and factories may increase their income, and enlarge the food supply of the nation. At the present time, we cannot advise factories generally to begin making primost, until new uses are found for it, and the commercial demand is well established. In the meantime, our people can learn the value and quality of primost by using it in the household.

Samples of commercial primost, and of products containing it were exhibited to the audience by the speaker, after the talk.

Feeding Dairy Cattle

By Hugh G. Van Pelt

Editor Kimball's Dairy Farmer, Waterloo, Iowa.

I hesitate to speak on the subject of feeding dairy cattle here because I know you are real dairymen in this section. Dairying and therefore feeding dairy cattle is your business. You are practical men directing your efforts intelligently. Therefore you have succeeded and are succeeding in building more productive your farms, more convenient and comfortable and more healthful your homes and your barns. You have builded here a prosperous community, good farms, good schools, good roads, good homes. It is easy to tell men not experienced in dairying and men who are failing in the attempt to succeed in dairying how to feed their cattle but a difficult task to tell those who have grown wealthy and prosperous as you have how to do that which you are doing so efficiently.

This morning as I approached Monroe, riding through the section that deserves the name of The Switzerland of America as that name relates to dairying, I marveled at the clean fields. Located in the great corn belt not a standing stalk of corn was standing. Of the tremendous acreage that was grown last year every stalk in the whole country as far as I could see had been harvested, put in silos or shocked, and otherwise preserved that its maximum feeding and fertilizing values might be secured.

Naturally the thought came to me and forced the realization that here was the one community in all the corn belt of the U. S. where farmers really know that 60 per cent of the feeding value of the corn plant is in the ear and the remaining 40 per cent in the stalk, leaf and shuck. The application of this knowledge in any section where corn grows denotes beyond dispute that the first

and most essential rules for feeding dairy cattle economically and efficiently is being practiced. You will agree with me that no man, scientific or practical, can tell how to feed cattle economically and profitably where men are so thoughtless, so extravagant, so wasteful that after going to the expense of raising a crop of corn that they will harvest 60 per cent of the crop and leave the remainder in the field for the winds to play with, the snow to cover and the hired man to cuss the following spring when he tries to do a good job of disking, plowing or harrowing.

The dairy cow has ever been the most economical producer of food for mankind, the most profitable animal that can be kept on the farm and she is the same today in the hands of thoughtful, intelligent man. This is a truth that cannot be disproved providing the basis of the cow's ration is that which is grown on the farm much of which would be wasted if the cow were not kept. It is not a truth providing the basis of the cow's ration must be purchased at present prices while better food is being allowed to go to waste as is the case on thousands of farms today where men complain about the conditions that lose them money, where emaciated cows stand in dark, damp, poorly ventilated barns and where the winds all winter have blown through millions of acres of standing cornstalks shrieking indictments against the most extravagant wasteful farmers the world has ever known.

Without hesitancy I say that present conditions are a blessing in disguise if they will compel the use in the future of that which has been sinful waste in the past.

To illustrate the point I would state that this winter we have fed our cattle cheaper and I believe better, and I know more profitably than we ever did in spite of the high price of feeds. In no better way can I speak to you on the subject of feeding dairy cattle than to relate our own experience.

It became evident early last summer that the dairy-men's problem might be necessary to feed his cattle

for the purpose of conserving them rather than for the purpose of forcing large production. That it would be profitable in the end to conserve them I think I can prove to you in my address tomorrow. At any rate we decided to save every good dairy animal over the critical period that was sure to come that we could. Our five silos would furnish the best possible feed but we would yet have much corn in the field after making enough silage to feed all the cattle all winter and have enough to feed them abundantly next summer when the inevitable drouth, with short dry pastures comes. Cornstalks, if reduced to a palatable and edible form are as good feed for dairy cattle as timothy hay. We secured an attachment for our silage cutter which would grind whole shocks of corn, reducing them to the consistency of corn-and-cob meal. Our plan was to secure molasses, dilute it with water and treat this ground corn fodder to make it palatable. But, molasses became so scarce and high-priced its use was doubtful procedure so we tried feeding the ground fodder without treating. To our amazement there was nothing we could offer cows and calves alike that they liked so well and ate so readily. There was hardly a particle of waste. We even had to look to another source for bedding. Cows would eat from thirty pounds to forty pounds of silage and twenty to twenty-eight pounds of the ground corn fodder daily and calves would eat corresponding amounts. So far the ration was very cheap for except for the corn in the silo and shocks that which they were eating would have been waste and is waste on many farms where cows are hungry and poor. Science and practice tell us cattle must have an abundance of dry matter, succulence and digestible carbohydrates to maintain their bodies and make milk. These were amply supplied by the silage and ground corn fodder in the cheapest possible form. But, these are not all. Digestible protein is absolutely necessary for maintaining the cow and making the casein in milk. Had we not recognized this fact and fed nothing else the cows

would merely have gotten fat and gone dry. We would have solved the problem of cheap feeding but not economical feeding. That is the mistake so many make. They feed cheaply and abundantly. They treat the cow well but when the point is reached where they should stimulate returns for themselves they fall short. They fail to furnish enough protein, not realizing that every pound of milk contains a definite amount of protein and not realizing that it is utterly impossible for the cow to make the protein in the milk unless she has protein in her food. No matter how good the cow may be then she must give but a small flow of milk and finally go dry even though she may be fed so abundantly of carbohydrates that she gets fat.

So now the problem was to feed protein in the cheapest form and yet palatable. Alfalfa, that is the best protein feed that can be raised on the farm in this section of the country. Clover is the next best. It is almost as foolish for us to fail to grow one or both of these wonderful protein furnishing, land enriching crops as it is to let our corn stalks go to waste.

So the cows were offered alfalfa and clover worth \$30 and twenty dollars per ton respectively. But, they were so full of roughage they would eat only eight or ten pounds of this good hay. That was enough for the cow giving from 10 to 15 pounds of milk a day and as nearly a perfect ration as one could compile for young and growing animals but for cows giving from 15 to 100 pounds of milk daily there was yet a lack of protein. To feed such cows economically and profitably it was necessary to feed them some concentrates. Cotton seed meal, gluten meal, distillers dried grains—those feeds although high-priced per ton were the ones that furnished the protein in the cheapest form for they carried with them the least amount of high priced carbohydrates and fat which the silage and ground corn fodder furnished so abundantly and cheaply.

To make sure the cow giving 15 pounds of 5 per cent

milk was getting enough protein she was given one pound of cottonseed daily, the cow giving 20 pounds was given two pounds of cottonseed meal, the cow giving 25 pounds of milk got two pounds of cottonseed and one pound of gluten meal and as the cow gave additional amounts of milk one pound of these protein feeds was added for each additional five pounds of milk, care being taken not to overfeed any one of the feeds. It is always better to feed a number of feeds than only one because cows, like human beings like variety and get tired of just one feed every day. Therefore real high producing cows were favored with a little bran and a little oats and occasionally a few beets to keep them contented and feeding well for no cow produces well unless she eats well.

I have not talked along theoretical lines but I have given you facts which have now been proven so conclusively that regardless of how cheap feeds may become in the future we will utilize every particle of all of the corn crop, feed all of the clover and alfalfa hay we can and then feed as much of purchased protein feeds as we must to keep cows in best working form and producing as largely as their inherent ability will permit, for it is this combination of cheap feeds and essential feeds that make feeding at once cheap and economical, at once possible and profitable.

There is one time however we feed our cows still better and that is when they are dry and resting, when many—too many—dairymen think a cow needs no feed.

When the cow gets within 6 weeks of freshening she should be turned dry. Then excellent feeding should begin. She should receive all the silage, ground corn fodder and clover or alfalfa she will eat.

With this she should have a liberal feed twice daily of a ration something like this: Ground oats 3 parts, bran 3 parts, oil meal 1 part, and if she is not in good flesh two parts of ground corn should be added. Such a ration will accomplish much at this period of the cow's year if she is to freshen in the late fall, winter or early spring.

Of course if she is to freshen on good grass she needs nothing other than the grain ration.

Feeding the cow well six weeks before freshening insures a strong, vigorous calf that can be easily grown. It insures that the cow will be strong, and carry enough flesh and stamina so she will make up a good udder, withstand the effects of parturition safely and start right in milking heavily.

Then by feeding her bran mashes a few days before and a few days following freshening she will be in the best possible condition of health, vigor and thrift.

When she is fresh two or three days the calf should be taken away and fed by hand. The cow should be put on feed suitable with her roughage. Such feed should be weighed. It is too expensive now to over-feed or under-feed. Starting with a small amount it should be increased one-half pound every other day and such increases to continue as long as the cow continues to increase in milk flow sufficiently to pay a suitable profit on the feed given. As a rule good cows continue to increase satisfactorily for 30 days following freshening. The skillful feeder therefore will take 30 days to get her on full feed and by watching the milk weights and by weighing the feed given each individual cow he will determine exactly how much feed she should have every day to keep her in good condition and to assure the largest and most profitable flow of milk.

Scarce and high priced as labor now is it will pay well to use the scales for no feeder can feed with the success and economy necessary under present conditions who does not take time to weigh the expensive concentrates he feeds the cow and the valuable product he takes from her.

The same is true in feeding calves. When the youngster is taken from the cow it must have warm clean milk direct from the mother for a couple of weeks. How much it should have only the careful one by the use of the scales can tell, for calves differ. The amount that would



Machine Shop in the University of
Wisconsin Dairy School

fatten one calf is not enough for another and the amount just right for a third would scour a fourth one. The use of the scales puts efficiency into the dairyman's business and their use requires but a few moments each time.

When the calf is two weeks old it will start eating bright clover hay and should be encouraged to eat all it will. Then too it will begin eating grain. An excellent ration is: Two parts oats, two parts cracked corn, two parts bran, one part oil meal.

When the calf gets to eating hay and grain freely then skim milk or even warm water and calf meal may be gradually substituted for the whole milk so by the time the calf is four or six weeks old, depending on the vigor and growth of the calf, it will be thriving on a good, inexpensive ration providing it is favored with living quarters that are comfortable, warm and an abundance of exercise, fresh air and sunshine are given.

The Dairy Cow After the War.

By **Hugh G. Van Pelt**

Editor Kimball's Dairy Farmer, Waterloo, Iowa.

To arrive at a logical conclusion as to the status of the dairy cow after the war it is only necessary to consider the effect the war is having on the world supply of cows. This together with a recognition of the importance, in fact the absolute necessity, of the cow for perpetuating agriculture and civilization is sufficient to convince the thinker that there can be no doubt of the situation that will exist when the war will have ended.

Hay \$100 a Ton in Denmark.

Less than a week ago a letter from Denmark, which is being published in Kimball's Dairy Farmer, brought the advice that hay is selling there for \$100 per ton, that dairymen are now feeding heather to their cows, that in many ways conditions are becoming so critical that it is going to be necessary to slaughter a large percentage of their animals for lack of feed. At once when the United States placed the embargo on feeds for export to countries, other than our allies, Holland issued a decree to slaughter 500,000 cows and reports indicate that another quota of 500,000 cows have been slaughtered since.

Our importers bring the advice home with them that it is difficult to find cows and heifers on the islands of Jersey and Guernsey because high prices for feed and for beef have led to extensive killing there. In fact, Herbert Hoover published a statement several months ago to the effect that over 28,000,000 head of producing cattle had been sacrificed in Europe. This figure compared with 23,000,000, the number of cows milked in this country, is indicative of the cattle shortage that is sure to prevail,

although of course the entire 28,000,000 head of cattle referred to were not all cows in milk.

Slaughter Begins in America.

Not only on the other side of the ocean are dairy animals being killed. The process has begun in America. In dairy sections where nearly all feed used must be purchased only the best cows are being saved. Low producing cows are going to the butcher. This does not make so much difference for in every section there are many cows that should be slaughtered or mated with sires so good that from them would be secured offspring that would develop into profitable producers. The alarming slaughter that is taking place in this country is of yearling heifers and heifer calves. In New York state alone the census shows that there are 75,000 fewer yearling heifers than there were a year ago.

Cows and heifers, in fact whole herds, can be slaughtered in two hours but two years are required to produce a milk cow after the calf is born. With cows and young animals being destroyed by the millions there are two questions that suggest themselves. Will it be necessary to replace these animals? If so how is it to be accomplished? The answer to these two questions determine the future of the dairy cow for destruction of her kind has already taken place in a wholesale way beyond a doubt. There can be no question about that.

Animals Must be Replaced.

Will it be necessary to replace these animals? In a nutshell the answer emphatically is that they must if agriculture is to be maintained on a permanent basis and civilization is to continue its advancement.

A chief value of the dairy cow is her power to conserve and build greater the fertility of the land. The millions of cows already destroyed in Europe have eliminated by hundreds of millions of dollars annually the supply of fertilizer necessary to keep up the productivity of the

farm lands. This is already asserting itself in lower yields of farm crops in the countries affected. Continued farming year after year and generation after generation is a process which takes from the land the fertilizing ingredients of the soil and destroys humus. Centuries of experience have proven beyond a question of a doubt that continuous taking from the soil without returning to the soil results in destroying the productivity of the land to the extent that it becomes worthless and must be abandoned. Let this take place over a large portion of the world for a long period of time as it is now temporarily taking place and a world famine more cruel in its effects than those resulting from the present war will soon face the people of every nation. Therefore, considered but from one standpoint every dairy animal that has been destroyed must be replaced just as soon as possible to avoid dire catastrophe.

Milk Scarce—Children Dying.

It has long been known that the dairy cow is an important factor in advancing and perpetuating civilization. This is illustrated by the words, where there is a cow there is a home. Great as was the realization of this fact before the war in which we are now fighting it was never realized so fully as it is today. The shortage of milk and dairy products in Europe has caused and is causing appalling disaster among infants and the youth of those countries. A year ago it was reported that in England, where cows have been preserved more largely than in the other European warring nations and where our condensed milk was available, the infant mortality had reached 40 per cent. In France where a lesser supply of milk was available 58 babies out of every 100 died and in Servia where there have been no cows for three years there are scarcely any children under three years of age. This indicates that palpable as is the slaughter of soldiers in the trenches it is small as compared with the slaughter of babies in the homes.

Butter Fat Essential to Life.

At about the time such reports began reaching us Professor McCullom of your own excellent state experiment station made public the results of six years of experiments he has been conducting at Madison. White rats and mice, guinea pigs and farm pigs were used to determine the effect that withholding the products of the cow would have on infants, growing youth and adults. The animals were divided into groups. All were fed the same except that certain groups received butter fat in their rations while others received fats from other sources such as oleomargarine, olive oil, cotton seed oil, etc. The young animals that received the butter fat ration lived, thrived and grew and developed normally. They lived to old age. Without exception, however, those young animals that received no milk, no butter fat, not only failed to grow and develop, they died in a very short time. Older animals even that received no butter fat failed to thrive and it is now believed that even where butter fat is withheld from adults that in three generations further reproduction fails and the family becomes extinct. As yet the experiments along these lines are in their infancy but they have proceeded far enough to prove that which we have long believed, namely, that in order for mankind to continue to inhabit the earth milk is an absolute essential for which there is no substitute. This has been demonstrated in no uncertain manner by Prof. McCollum's experiments and the dire experience that the mothers and fathers of Europe are suffering.

So that the answer to the second as well as the first question tells us the normal supply of dairy cows must be replenished.

U. S. Only Source of Relief.

The answers to these two questions demands an answer to a third question, "How are the cows to be replaced; where are they to come from?" In the past we

have imported cattle from Europe. So has South America. It is a fact that even before the war the only surplus of dairy cattle was in the countries where the most appalling deficiency exists. In this country, now the greatest dairy country in the world, our cow population has hardly kept pace with our human population. For the past ten years there has existed a demand for good dairy cows greater than could be filled. Dairy cattle values have increased by leaps and bounds. In spite of the rapid improvement in our operations of breeding, feeding, and selection we have not bred good cattle fast enough to take care of our own needs. Yet, we now possess the only vast supply of milk producing animals. The parent stock has been eliminated largely in the other dairy countries. Not only does there exist the vexatious fact that two years are required to grow the calf to cowhood but unsolvable fact exists that the parents in sufficient numbers do not exist from which to secure the calves to start with.

America is the only source of relief. The world is not only looking to us to feed them during this most awful crisis the world has ever known, it is looking to us for seed stock with which to replenish the world after the war is over. It is not only our duty to save the democratic freedom of the world which we are striving so persistently, loyally and patriotically to do, it is our duty to save the agriculture and the very babies that shall represent the future civilization of the world.

France Wants Million Cows.

Already France has issued the warning to us that she must have a million of our best cows just as soon as the war is over. Such calls will come not only from the other warring nations but from those countries that have heretofore been supplied by the nations now at war.

With this analysis of the true situation in mind one need not be a prophet to fathom the future of the dairy cow or the status of the cow after the war.

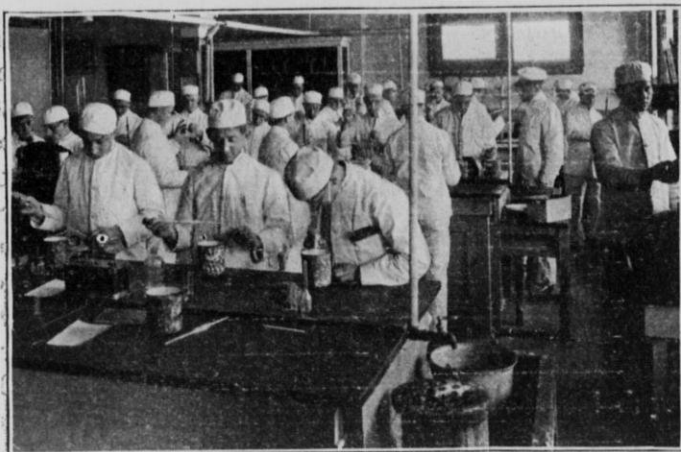
But, we should right now consider the problem with that seriousness which will convince us that the demand will be for good cows, not poor cows. In every old dairy country it is well known that one cow which will make her owner a profit is worth a hundred of those that will make him a loss. There will be no demand for scrub cows. They will be discriminated against more severely than they are today. It would be folly indeed for the European buyer to purchase at high prices low producing cows in this country, pay freight to sea board and over the ocean merely to send them to the butcher when he got them home. Suppose then the vacuum in Europe is filled from our good cows. We are milking 23,000,000 and it is conceded that one-third of them are milked at a loss, one-third of them just about pay for their feed and only one-third of them are truly profitable under our conditions which are less exacting than are those of Europe. If then, Europe were to take from us the best one-third of our cows or 7,300,000—and that is a low estimate of what will be demanded—we would then be in a precarious condition in this country.

It is time for every man who milks to think seriously of his own future as well as the future of the dairy cow, of winning the war and saving the humanity of the world from decadence.

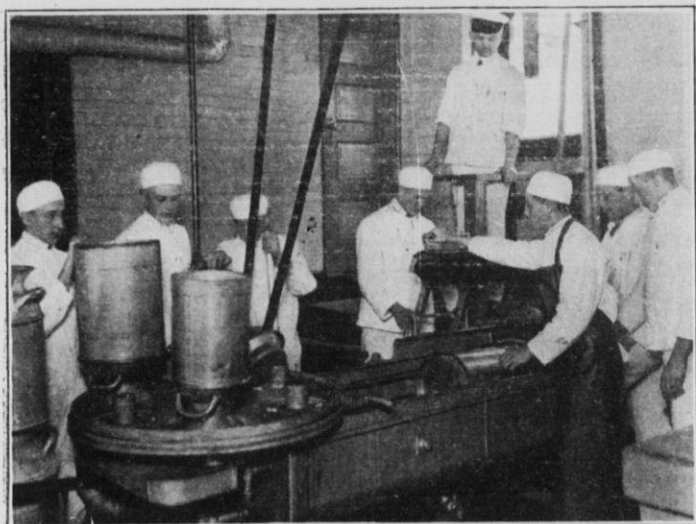
It is not only our duty to save every good cow and every good heifer from the butcher even though we must rearrange our methods so we will use profitably in the future that which we have wasted in the past; it is our duty to breed and develop all good cows instead of an occasional good one and a number of common or poor ones. It is our duty, as well as good business sense, to begin breeding the best cattle we can breed.

Must Use Good Sires.

There is no more wisdom in a farmer using a scrub sire now-a-days than there is in a soldier going to war with a cheap, no account rifle. I say without fear of contradic-



Milk Testing Section in the University of Wisconsin Dairy School



Receiving Milk and Washing of Cans
in the University of Wisconsin
Dairy School

tion that any man who will use as good a sire as he should use can improve his herd in one generation so that every cow he milks will be a profitable cow. There is not a healthy cow in this country so poor but that by mating her with a good, pure bred dairy sire, offspring of a profitable sort can be produced. Like produces like, or the likeness of an ancestor is the great law upon which all of our improved live stock has been builded. By the use of that law and careful, intelligent selection the American Beauty Rose has been builded from the wild rose that grows in the clay bank along the road side, the Jonathan apple has been bred from the little hard, bitter crab apple of the woods and the best cow in the world has been produced from the long horned, flat faced, crooked legged, shallow bodied, drooping rumped, wild cow that roamed the forests and prairies but a few centuries ago.

Our problem is a simple one indeed. Our cattle have all been bred well for us by those who have preceeded us, All we need to do is to follow the plans already laid down and proved infallible. All we need to do is to use good pure bred sires, the best we can secure even though they do cost a little more than the common grade or scrub bulls that cause men to drudge their lives away milking low producing unprofitable cows.

Greatest Opportunity Today.

In conclusion I would say that for the thoughtful, intelligent American dairyman who is not too stingy to head his herd with a good pure bred bull and raise well his heifer calves there never was a time when the future promised him such prosperity. And, leaving out of consideration, if that were necessary or advisable, there never was a time when his opportunity was so apparent and so great as it is today for performing a duty for his country, for the whole world, for future generations, for humanity, for civilization, for democracy and by the doing of his duty profit himself so largely.

Fabrikation von Schweizerkäse.

Von Adolf Mplanalp, Juda, Wis.

Zur Herstellung guten Schweizerkäses erfordert es in erster Linie reine gesunde Milch. Farmer und Käser sollten beide Hand in Hand arbeiten. Es kann der beste Käser keinen guten Käse machen, wenn die Milch am ersten Platz verdorben wird, wie auch ein schlechter Käsemacher gute Milch verderben kann. — Wenn die Milch zur Käseerei kommt, wird sie auf 28 bis 29 Grad Reamur aufgewärmt, nachher soll die Reife der Milch ausprobiert werden; und je nach Erfordernis, wird ein gewisses Quantum Starter hinzugefügt.

Zum Schweizerkäsen ist nach meiner Ansicht das Lab von Kalbermagen das Beste. Man gebrauche so viel Lab, um die Milch in 20 bis 35 Minuten zu dicken. Ist die Milch dick, beginnt das Vorfüßen, bei welchem jeder Käser so viel Zeit anwenden sollte, bis er einen guten griffigen Bruch hat. — Nachher wird unter stetigem Rühren der Käse gewärmt, was je nach Erfordernis von 42 bis 47 Grad Reamur ist. Ist das getan, wird so lange ausgerührt, bis der Käse trocken ist, das heißt, bis der Käsemacher ihn als reif zum Herausnehmen findet.

Gerade hier liegt der Punkt, wo es Geschicklichkeit oder doch einigermaßen sachkundiger Hand erfordert, weil schon mancher sonst gut gelungener Käse durch das Herausnehmen verdorben wurde. Zum Beispiel: Es sollte der Käser darauf Acht geben, daß der Käse so im Tuch zu liegen kommt, wie er im Kessel liegt.

Sobald er im Jarb ist, wird er ungefähr 5 Minuten tüchtig geknetet und nachdem ein wenig gesperrt und dann geknetet. Nun bleibt der Käse ungefähr 18 Stunden auf der Presse, während dieser Zeit wird derselbe mehrere Male in trockene Tücher gewickelt und gefehrt. Jetzt kommt er in den Keller, wo er im Jarb gesalzen wird, in diesem bleibt er ungefähr 12 Stunden, oder länger, je nach Gutfinden. Nachher kommt er ins Salzbad, hierin bleibt er 2 bis 3 Tage, von wo aus der Käse auf den Bank kommt.

Es muß auch im Keller dem Käse große Aufmerksamkeit gewidmet werden, besonders im Anfangsstadium. Da die Nachfrage nach offenem Schweizerkäse immer größer wird, sollte auf jeder Käseerei ein Keller mit guter Seizung versehen sein.

The Woman's Auxiliary

Committee for 1918.

Mrs. Fred Gruenwald.

Mrs. Charles Dodge.

Mrs. Charles Young.

Miss Kathleen Calkins of the Extension Department of the University of Wisconsin gave demonstrations both afternoons of the convention to a large audience of interested women from every part of the county. She emphasized, in her talk, the need and value of wheat and meat substitutes.

Great stress was laid upon the necessity of conservation, by both the city and country housewives, even though the latter may have easy access to abundant supplies of those foods which our country needs.

One must not economize to such an extent that food values are lost sight of—for instance, if butter substitutes, suets and beef drippings are used in the diet, it is absolutely necessary that fats containing growth determinants still have their place in the diet. These fat solubles that are so essential to the health of everyone are found in milk, egg yolks, butter and cream. It is actually dangerous for a child to be deprived of these last named foods.

During the war, when prices of food are high it should be especially urged that the purchase of milk be continued even though the price may be as high as 15 cents a quart. The greatest factor in safe-guarding the health and nutrition of the most progressive nations of the world may be said to be the prevalence of the consumption of dairy products.

The girls of the High School Domestic Science Class under the direction of Miss Kate Slightam served an

excellent cafeteria dinner on Friday to the men and women attending the convention, in the Lincoln gymnasium where the women's meetings were held.

Miss Calkins prepared and served the following dishes:

Barley Bread.

2 cups boiling water, milk and water or milk.
4 teaspoons corn syrup or 2 teaspoons sugar.
2 teaspoons salt.
2 teaspoons fat.
2 1-3 cups barley flour.
4 $\frac{3}{4}$ cups wheat flour.
1 cake compressed yeast
 $\frac{1}{4}$ cup luke warm water.

Pour boiling water over salt, fat, corn syrup. When luke warm add yeast. Add 1 cup each of barley and wheat flour, beat thoroughly. Add the remainder of flour and knead. Let rise until double its bulk. Knead slightly and shape into loaves. Let rise until double its bulk and bake in a moderate oven 45 to 60 minutes.

Potato Yeast Bread.

1-3 cup hot water or milk
2 teaspoons salt
2 teaspoons fat
2 teaspoons sugar
3 cups mashed potatoes
6 cups flour
 $\frac{1}{2}$ cake compressed yeast
 $\frac{1}{4}$ cup luke warm water.

Put hot water, salt, fat and sugar in bowl, add mashed potatoes. Mix well. Soften the yeast in luke warm water and add to the potatoes when luke warm. Add 1 cup flour and knead in thoroughly, then add the second cup, kneading thoroughly, then the remaining cups. This dough will seem very stiff and difficult to knead, but all the flour must be added or the dough will be very soft

at the second kneading. Let rise until double its bulk (about 3 hours.) Knead slightly and shape into loaves. Let rise until double its bulk and bake in a moderate oven sixty minutes.

Oatmeal Yeast Bread

2 $\frac{1}{4}$ cups boiling water, milk and water, or milk.
 2 teaspoons fat
 2 teaspoons molasses or sugar
 2 teaspoons salt
 2 cups rolled oats
 5 cups wheat flour
 1 cake compressed yeast
 $\frac{1}{4}$ cup luke warm water

Put the molasses, rolled oats, fat and salt in bowl. Pour the boiling water over it and let stand until luke warm, about 30 minutes. Soften the yeast in luke warm water, and add it to the rolled oats. Add 2 cups flour and beat vigorously until smooth. Add the remaining flour and knead. Let rise until double its bulk. Bake in a moderate oven 45 to 60 minutes.

Less yeast may be used if a sponge is set the preceding night, or if a longer time is allowed for the first rising. If the sponge is set over night one cake of yeast foam may be used for four loaves of bread.

Barley Baking Powder Biscuits.

2 cups flour—barley
 2 tablespoons shortening
 2-3 cup sweet milk
 $\frac{1}{2}$ teaspoon salt
 4 teaspoons baking powder

Mix and bake as in making ordinary baking powder biscuits.

Corn Pone.

2 cups corn meal.
 One-half tablespoon sugar.

One-half teaspoon salt.

One-half teaspoonful soda.

One-half cup sour milk.

One-fourth cup vegetable oil or melted fat.

One-fourth cup boiling water, to moisten.

Sift together the cornmeal, sugar, salt and soda. Add boiling water and mix thoroughly. Add sour milk and melted fat or oil and beat well. Form into 6 rolls with the hands. Pace in a buttered pan and bake 20 minutes in a hot oven.

Barley Muffins.

1 cup sour milk.

One tablespoon sugar.

One egg.

One-half teaspoonful soda.

One-half teaspoonful salt.

2 tablespoons melted fat.

Two and one-fourth cups barley flour.

Two teaspoons baking powder.

Beat the eggs. Add sugar and soda dissolved in a little cold water. Sift flour and baking powder together, and combine with first mixture. Add melted fat and beat well. Bake in a well greased muffin pan until thoroughly done—about one-half hour, depending on the size of the muffins.

Tomale Pie.

1 cup corn meal.

One and one-half teaspoons salt.

Three cups boiling water.

1 small onion.

One tablespoon fat.

One teaspoon fat.

One teaspoon salt.

Six ounces cheese or round steak.

One cup tomatoes.

One-half small chopped pepper or speck cayenne pepper.

Make a mush by stirring the corn meal and salt into

the boiling water. Cook 30 minutes. Brown the onions in the fat, add the cheese and cook until melted. Add the tomato, pepper and salt. Grease a baking dish, put in a layer of corn meal mush, add the seasoned cheese or meat and cover with mush. Bake 30 minutes.

Bean Loaf.

Two cups ground cooked beans.

One-fourth lb. cheese, ground and cut fine.

2 pimentoes.

2 cups ground bread crumbs.

Mix well. Bake one-half to three-quarters of an hour.

Nut Cheese Loaf.

One cup nuts.

One cup cheese.

1 cup bread crumbs.

One egg.

One-half teaspoon salt.

Onion if desired.

Milk to thin slightly.

Grind or chop fine the nuts, cheese and bread. Mix together, add salt, egg and milk. Form into loaf. Bake 30 to 45 minutes.

The Latest Laws Regarding Our Cheese Industries

By **George J. Weigle**

Wisconsin State Dairy and Food Commissioner

Mr. Chairman, Members of the Southern Wisconsin Cheesemakers' and Dairymen's Association:

The subject upon which your worthy secretary has asked me to address you today is: "The Latest Laws Regarding our Cheese Industries."

When we carefully consider our dairy laws we find that they were constructed primarily to take care of certain conditions and requirements that existed at the time the laws were passed. They were not all made at one time, but as circumstances demanded to take care of emergencies that arose through natural or unnatural conditions and to regulate the industry as it developed. In the course of this development it was necessary to guard against unfair competition and fraud and to protect the honest consumer and producer.

When we consider the dairy industry in its pioneer days, and the men who fought its battles under the greatest difficulties without protection from the law, we often wonder how it survived and grew to what it is today. Responsible for many of the laws which brought about the greatest improvements in Wisconsin's dairy industry are such men as Gov. W. D. Hoard, Prof. Henry, Prof. Babcock, Wisconsin members of congress, members of the state legislature, my predecessors in office and members of such organizations as yours.

These laws will remain an everlasting monument to these men through whose initiative, foresight, persistence, determination and untiring efforts they were enacted. They saw the vision of Wisconsin as a wonder-

ful dairy state—the greatest dairy state in the union. These men had red blood in their veins and backbone to oppose anything and everything that meant harm to the industry. They wanted the cheesemakers to make cheese out of good cows' milk and not out of substances obtained from a rendering plant located somewhere in Chi-industry. They wanted the cheesemakers to make cheese some product made from pure milk and not out of tallow and cottonseed oil

First Dairy Laws in 1889

In 1889, under the leadership of Gov. Hoard and others, the first laws were enacted for the suppression of the fraudulent manufacture and sale of imitation butter and cheese. The annual production of cheese at this time was sixty million pounds, and at no time since has the honest manufacturer met with such dishonest competition. These men were loyal to the industry, not for personal gain, but because of pride in this great state. They did not want the two products sailing under the same flag; they wanted to put a guard around the industry, so that the reputation of Wisconsin might not suffer further through the unscrupulous and dishonest manufacturer. The fight against these counterfeiters brought about the standardization of butter fat in cheese.

Then came the sanitary laws, the laws relating to the under-reading and over-reading of the Babcock test and other laws of minor importance. Finally in 1915 the license law was enacted. This law I consider one of the most constructive measures ever enacted to place the cheese industry on a high plane. It made cheesemaking a profession. It requires character, ability and cleanliness. Under the licensing law the department has been brought in closer touch with every creamery, cheese-factory and maker in the state and has shown them that we are interested in their problems. More progress has been made to better conditions of cheese factories and creameries and also to better working conditions of the

makers. Licensing means closer supervision; it means more frequent inspection. The value of this inspection has at various times been questioned, but that attitude is not adopted by those who have a practical knowledge of the subject. The work may be, in the minds of some, very slow, because inspection is a big problem, and its economic aspects are serious; or it may not be possible to show results in convincing figures, but he who will take the trouble to go through the dairy districts, with an unbiased and open mind on the subject, and who is interested only in seeking the truth of the matter, will be astonished at the great amount of good accomplished by efficient inspectors.

Majority Court Inspection.

A few of the cheesemakers have been bitter because inspection has forced them to be more careful in the handling of their product, but in great numbers of cases, men competent and careful, and who appreciate the importance of cleanliness and purity in food for human consumption, are glad of the inspector's advice and abide willingly by his orders and those of the head of the department under which the work is done. The purpose of inspection is for the protection of the great dairy industry, for the education of those who lack knowledge and experience and to show correct methods of producing the best possible results in the best possible way; its purpose is also for the protection of the consuming public. Such knowledge is essential to public safety, and inspection is a factor in disseminating that knowledge both as to manner of handling the products and the laws governing their production under clean and sanitary conditions. We are making more progress today toward the ultimate goal for a better product, because of the campaign of education that we have carried on for the past few years. However, education alone is not sufficient. Conscientiousness in complying with the laws is needed to guard against the lapses to which human na-

ture is liable; official supervision is necessary.

Another law passed in 1915 was that standardizing butter fat in Elmenthaler or domestic Swiss cheese, by which the equivalent amount of fat was reduced to forty-three per cent. This action was taken in order that Wisconsin Swiss cheese might compete with the Swiss cheese that was imported. From all the information I have received from some of the prominent cheesemakers and dealers in Wisconsin, the law is working out satisfactorily to all who are engaged in the manufacture of Swiss cheese.

Whey Butter Law.

Another improvement brought about in the dairy industry in which I believe you cheesemakers will be interested, is the whey butter law. The production of whey cream should be encouraged, because whey cream is a highly valuable by-product of the cheese factory that can be converted into a source of revenue. However, greater efforts were needed to be put forth by the men directly responsible for the quality of this product, with respect to the manner in which it was handled. Whey butter of clean flavor was not produced, yet it entered into competition with pure creamery butter. The whey butter law fixed a standard for whey cream, and required that whey butter be labeled as such, thus protecting both the consumer and the creamery industry.

I know there was a great deal of criticism at the time this bill was passed, but I believe the producers of whey cream who feared the law were more scared than hurt. The law by no means prevents the manufacture of whey butter; it simply demands that the product be labeled with its true name. If the cheese factory operators in Wisconsin had always produced and offered for sale good, clean-flavored whey cream, this law would never have been born. As evils arise they must be regulated by legislation. The mixing of whey cream with pure cream would lower the value of creamery butter, and would

mean a loss of more than a million dollars annually—by no means a small item.

Cheese Moisture Law.

Another splendid law passed by the last legislature was the so-called cheese moisture law. This was another evil which was a detriment to the cheese industry. By incorporating more moisture than a good cheese should contain, the standard of American cheese was being lowered considerably. For this reason cheesemakers of the state conferred together, seeking protection by legislation so that Wisconsin cheese might not lose its reputation. This conference brought about the passage of the bill which fixes the standard of moisture in cheese at forty per cent. It is not necessary for me to go into detail regarding this law; you all know what a benefit it has been to the honest manufacturer of cheese, who formerly found it impossible to compete with those who incorporated as much moisture as they possibly could, irrespective of the quality of the cheese. The federal government also took the matter in hand, and placed the federal standard for moisture in cheese at thirty-nine per cent, one point below the Wisconsin standard.

Still another important law was passed at the 1917 session of the legislature, which has a bearing upon cheesemakers and dairymen. I refer to the pasteurization law, which requires that all by-products of cheese factories, creameries, skimming stations and condenseries, be pasteurized before they are returned to the farms. This law is under the jurisdiction of and will be enforced by the department of agriculture. I consider this law an important one, and it should be carefully complied with as a means of saving our cattle and hogs, and every animal on the farm, from tuberculosis as well as other contagious diseases. The law requires that such by-products be heated to a temperature of 145 degrees and held for at least twenty-five minutes, or heated to a temperature of 180 degrees. This treatment will kill the

bacteria which spreads contagious and infectious diseases among cattle.

Industry Responsible For Laws.

I have talked to you briefly of the laws passed by the 1915 and 1917 legislatures which are of particular interest to cheesemakers and dairymen, and before I go any further I want to say to you that the laws are on the statute books because you put them there. If you are not satisfied with the legislation in effect, do not blame the laws, blame yourselves. If you believe the laws now in force interfere with your industry instead of benefiting it, it is your business to see that they are repealed and taken from the statute books. But, since you have caused these laws to be passed, it is your duty to see that they are obeyed.

Just a few more words in conclusion; you men represent one of the great armies of patriots who are helping to increase the nation's supply of food stuffs, and thereby are doing much toward winning the war for democracy. It is your duty, as such patriots, to double your efforts to increase your production and practice conservation. It may mean a little more work and care for you to increase the quantity of your output, but I urge you to do it. Everyone must expect to encounter hardship during this war. The greatest hardship of all is being endured by our boys who are now on the battlefields of France. We can never repay what they have done and are doing for this nation. We, at home, must back them up with plenty of wholesome food and that is why greater production and conservation is urged.

Great Opportunity Afforded.

The producers of food have a great opportunity to demonstrate their patriotism and loyalty to our government in this time of its need for a spirit of loyalty and the accomplishment to back it up. Wisconsin must do her utmost in conserving and producing food to help

supply this nation and her allies, and by increasing her food production she will be able to do much toward that end.

There is an inspiring article in a recent number of a widely known magazine. Its title is "Patriotism and Food." It is a time, now, says the author, of rare and glorious opportunity. A time in which prosaic business and industry may be lifted to a high plane of national service. It is a new association—patriotism and food—but with food a problem in normal times, and a much more serious one in the abnormal time of war, patriotism is an essential factor in greater production and conservation.

In the excitement of a great national crisis, it is easy to be patriotic, to profess loyalty; but I believe that true patriotism may better be demonstrated in every day routine; in being careful to cut down waste to a minimum; in looking after the details of manufacture more carefully so that every ounce of available food material is profitably used. To be a patriot implies more than pride in a nation's greatness, a like for its institutions and habits of life. Loyalty should be of a more responsible and unselfish nature. It must serve as well as admire.

Wisconsin believes in loyalty; Wisconsin considers loyalty first, notwithstanding the many contradictory statements that have been made by some of its citizens. There is no man so great or so small a part of any structure or organization that he can afford to ignore the significance of loyalty. It brings out and presses in deep the fact of individual importance. Let us show our loyalty by all means in honoring and giving to our soldiers who are leaving in such great numbers to defend the cause of democracy and make this country as well as others safe from Prussianism; let us show our loyalty by all means by standing behind our president squarely and firmly; by signing loyalty pledges and subscribing to war bonds. But let us not forget also to show our loyalty by doing our best in every day life to conserve needed food products and in complying willingly with the requests of

the food administration for greater production and conservation. In doing these things we will also be doing our bit to help protect and preserve our government—the best government the world has ever known.

RESOLUTIONS

The following Resolutions were passed at the Eighteenth Annual Convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association:

WHEREAS, We believe the present method of dividing the proceeds or of selling milk at the cheese factory on the basis of weight regardless of quality is unfair and unjust, Therefore be it

RESOLVED, That this association put itself on record as favoring the division or sale of milk at the cheese factory on the basis of quality as determined by the butter-fat test.

WHEREAS, There is a law on the statute books of the state of Wisconsin which requires the branding as such of whey butter; and

WHEREAS, There is noting in the manufacture of whey butter which in any way conflicts with the standard for butter as defined under Section 4601-4a, paragraph 8, and

FURTHER—believing that the branding of whey butter in this state is of no value to the consumer but is detrimental to the Dairy Industry of this State,

THEREFORE, BE IT RESOLVED, That we, the members of the Southern Wisconsin Cheesemakers' and Dairymen's Association in convention assembled this 15th day of March, 1918, do hereby respectfully request the legislature of the State to repeal said law.

RESOLVED, That this association hereby respectfully tender its thanks to the Conley Foil Co., of New York City; to the Lehmaier Schwartz Co., of New York City; to the J. B. Ford Co., Wyandotte, Mich.; the General La-

laboratories, Madison Wis.; the Parker-Davis Co., Chicago, Ill.; the Creamery Package Manufacturing Co., Chicago, Ill.; Chris. Hansen's Laboratory, Little Falls, N. Y., and to the A. H. Barber Creamery Supply Co., Chicago, Ill., for the beautiful and useful gifts presented as prizes to the participants of the cheese scoring contest.

WHEREAS, The eighteenth annual convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association has been eminently successful in attaining the business, purpose and object of its organization,

THEREFORE be it resolved that we tender our heartiest thanks to our officers and directors for their untiring efforts to promote the cheese industry in the state; to the various individuals who have cheerfully contributed of their time and experience; to the Badger Orchestra; to the Monroe High School Glee Club; to all the actors in the pleasing 3-act comedy, and to all others who helped and assisted in making this convention the most successful in the history of the association.

Respectfully submitted,

C. R. SCHEPLEY,
J. C. PENN.

Prizes For Cheesemakers

Donated by the Marshall Dairy Laboratory, manufacturers of Rennet Extract, Madison, Wis.:

For first prize on Round or Block Swiss Cheese:

One twenty-five dollar gold watch, 17 jeweled Waltham movement. Conditions: Cheese to have been made with Marshall Rennet Extract. Cheese must score at least 95 points, and there must be not less than five exhibitors in the class. In case of a tie, the highest average score for flavor will get the prize.

Donated by the Conley Foil Co., manufacturers of Tin Foil, New York City, N. Y.:

1st prize on Limburger—Beautiful \$10.00 Clock.

2nd prize on Limburger—Excellent \$8.00 Clock.

3rd prize on Limburger—Fine \$4.50 Clock.

Donated by the Lehmaier-Schwartz Co., manufacturers of Tin Foil, New York City, N. Y.:

1st prize on Brick—Beautiful \$12 Leather Upholstered Rocking chair.

1st prize on Limburger—Dandy \$10 Upholstered Rocking chair.

Donated by the J. B. Ford Company, of Wyandotte, Mich., manufacturers of Wyandotte Dairymen's Cleaner and Cleanser:

2nd prize on Round Swiss—One Majestic Vacuum Bottle.

2nd prize on Block—One Majestic Vacuum Bottle.

2nd prize on Brick—One Majestic Vacuum Bottle.

2nd prize on Limburger—One Majestic Vacuum Bottle.

Donated by the General Laboratories, Madison, Wis., manufacturers of the celebrated Disinfectant, "B. K.":

1st prize on Round Swiss—One gallon B. K.

2nd prize on Round Swiss—One Gallon B. K.

3rd prize on Round Swiss—One gallon B. K.

1st prize on Block Swiss—One gallon B. K.

2nd prize on Block Swiss—One gallon B.K.

3rd prize on Block Swiss—One gallon B. K.

2nd prize on Brick—One gallon B. K.

3rd prize on Brick—One gallon B. K.

2nd prize on Limburger—One Gallon B. K.

3rd prize on Limburger—One Gallon B. K.

Donated by the Parke Davis & Company, Chicago, Ill.,
manufacturers of Curdalac, Spongy Pepsin, Etc.

1st prize on American—One Gallon Curdalac.

2nd prize on American—One Gallon Curdalac.

3rd prize on American—One Gallon Curdalac.

3rd prize on Brick—One Gallon Curdalac.

Donated by the Creamery Package Mfg. Co., Chicago, Ill.,
Manufacturers of Cheese Factory Tools and Supplies—

1st prize on Round Swiss—One 6-Bottle Babcock Milk
Tester.

Donated by Chr. Hensen's Laboratory, Little Falls, N. Y.,
manufacturers of Dairy and Food Preparations—

1st prize on Round Swiss—One Fancy Pocket Knife.

2nd prize on Round Swiss—One Fancy Pocket Knife.

1st prize on Block Swiss—One Fine Pocket Knife.

2nd prize on Block Swiss—One Fine Pocket Knife.

3rd prize on Block Swiss—One Fine Pocket Knife.

Donated by the A. H. Barber Creamery Supply Co., Chi-
cago, Ill., manufacturers of Cheese Factory Tools and
Supplies—

3rd prize on Round Swiss—One Extra Fine Cheese
Trier.

Donated by the Association—

Gold Medal or equivalent cash prize to the cheese-
makers having highest scores on Swiss, Block, Brick
or Limburger Cheese.

Silver Medal or equivalent cash prize to the cheese-
makers having second highest scores on Swiss, Block,
Brick or Limburger Cheese.

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