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Proceedings of the twenty-ninth annual convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association held at Monroe, Wisconsin, Thursday and Friday, November 15 and 16, 1928. 1928

Southern Wisconsin Cheesemakers' and Dairymen's Association
Monroe, Wisconsin: Evening Times, 1928

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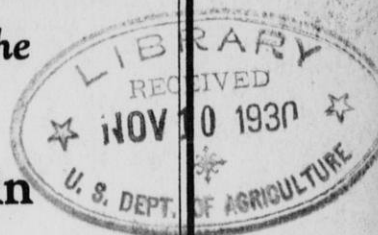
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1928

**Proceedings of the Twenty-ninth
Annual Convention of the
Southern Wisconsin
Cheesemakers' and Dairymen's
Association**



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**Held at Monroe, Wisconsin
Thursday and Friday, November 15 and 16
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Evening Times, Monroe, Wis.

MEMBERSHIP

of the Southern Wisconsin Cheesemakers' and Dairy- men's Association for 1928

Abplanalp, Alex, R. R. 1	Juda, Wis.
Anderegg, John, R. R. 2	Juda, Wis.
Aeschlimann, Jacob	Argyle, Wis.
Aebersold, Herman	Argyle, Wis.
Angliker, Adolph	Monroe, Wis.
Abplanalp, Adolph	Monroe, Wis.
Abplanalp, Mrs. Adolph	Monroe, Wis.
Aebersold, Albert	Argyle, Wis.
Aebly, Henry	Monroe, Wis.
Althaus, G.	Monticello, Wis.
Aeschlimann, John J.	Monroe, Wis.
Augsburger, Mrs. Martha	Monroe, Wis.
American Stores Co.	Monroe, Wis.
Acherman, Joseph	Monroe, Wis.
Armour Creameries	Monroe, Wis.
Augsburger, Gottfried	Monroe, Wis.

B

Brand, Franz, R. R. 5	Monroe, Wis.
Buholzer, Emil, R. R. 3	Juda, Wis.
Baumgartner, Emil	Monroe, Wis.
Buergisser, Nick, R. R. 2	Blanchardville, Wis.
Blum, Werner, R. R. 7	Monroe, Wis.
Bennett, E. W.	Milwaukee, Wis.
Bush, G. W.	Milwaukee, Wis.
Bregenzer, Edward	Monroe, Wis.
Bergezer, Walter	Blanchardville, Wis.

Burkhardt, Fred	Monroe, Wis.
Bauman, Emil	Monroe, Wis.
Block, Gust. A.	Monroe, Wis.
Bayrhofer, Ed.	Monroe, Wis.
Benkert, Fred E.	Monroe, Wis.
Blumer, Robert W.	Monroe, Wis.
Booth, Max G.	Monroe, Wis.
Blum, Bruce M.	Monroe, Wis.
Burke, Mrs. Belle	Monroe, Wis.
Bowen, Miss Mazie	Monroe, Wis.
Brown Swiss Dairy	Monroe, Wis.
Blum, Sam	Monroe, Wis.
Becker, Mrs. Dave	Monroe, Wis.
Bear, Dr. W. G.	Monroe, Wis.
Bleiler, George	Monroe, Wis.
Buholzer, Xaver B.	Monroe, Wis.
Bast, Ray T.	Monroe, Wis.
Blumer Products Co.	Monroe, Wis.
Burkhard, John J.	Monroe, Wis.
Bennett, Dr. C. W.	Monroe, Wis.
Baltzer, M. E.	Monroe, Wis.
Buehler, C. H.	Monroe, Wis.
Becker, Wm. A. Co.	Monroe, Wis.
Babler, J. L.	Monroe, Wis.
Bailie, Samuel R.	Monroe, Wis.
Benkert-Auburn Sales Co.	Monroe, Wis.
Burkhard, E. F.	Monroe, Wis.
Babler, Henry, Jr.	Monroe, Wis.
Bennett, Dr. Byron R.	Monroe, Wis.
Benkert, Jacob	Monroe, Wis.
Benkert & Stauffacher	Monroe, Wis.
Bauman Hardware and Implement Co.	Monroe, Wis.
Buri, Louis E.	Monroe, Wis.

C

Colonial Salt Co.	Akron, Ohio
Carolfi, Alfonso	Clarno, Wis.
Casanova, John	Monroe, Wis.

Chadwick, Howard W.	Monroe, Wis.
Caradine, Dr. Harold B.	Monroe, Wis.
Chambers, C. L.	Monroe, Wis.
Collentine, Frank	Monroe, Wis.
Clark, H. H. Drug Co.	Monroe, Wis.
Carter Machine Shop	Monroe, Wis.
Creasy, Dr. L. E.	Monroe, Wis.
Clark, M. Earl	Monroe, Wis.
Connors & Niles	Monroe, Wis.
Cunningham, Dr. H. F.	Monroe, Wis.

D

Dillon, H. P., Chr. Hanson Laboratory.....	Oshkosh, Wis.
Dettwiler, John	Monroe, Wis.
Dettwiler, Fred, R. R. 1.....	Monroe, Wis.
Donner, John	Clarno, Wis.
Dallenbach, Gottfried	Monroe, Wis.
Durst, Matt C.	Monroe, Wis.
Divan, E. L.	Monroe, Wis.
Deininger, John	Monroe, Wis.
Dodge, LaRoy	Monroe, Wis.
Durst, J. H.	Monroe, Wis.
Dempsey, P. J.	Monroe, Wis.
Discher, John C.	Monroe, Wis.
Dunwiddie, Wm.	Monroe, Wis.
Dunwiddie, J. D.	Monroe, Wis.
Dunwiddie, Brooks J.	Monroe, Wis.
Durner, Dr. T. L.	Monroe, Wis.
Day Brothers	Monroe, Wis.

E

Erb, Jacob	Monroe, Wis.
Emmenegger, Robert	Monroe, Wis.
Eaton, George	Monroe, Wis.
Erickson, R. E.	Monroe, Wis.
Elmer, Henry	Monroe, Wis.
Elmer, John H.	Monroe, Wis.

Evenson, Roy	Monroe, Wis.
Etter, John T.	Monroe, Wis.
Einbeck Bros.	Monroe, Wis.

F

Frehner, Emil, R. R. 5	Monticello, Wis.
Farrell, J. H.	Madison, Wis.
Frehner, Carl	Brooklyn, Wis.
Fritsch, John	Clarno, Wis.
Frankle, Ernest	Monroe, Wis.
Figi, John	Monroe, Wis.
Feldt, John & Sons	Monroe, Wis.
Fritz, David	Monroe, Wis.
Felder, Louis	Monroe, Wis.
Fitzgibbons, James	Monroe, Wis.
Fitzgibbons Bros.	Monroe, Wis.
Frautschy, E. D.	Monroe, Wis.

G

Grogg, Rudy, R. R. 2	Brodhead, Wis.
Geissbuehler, Fred, R. R. 1	Darlington, Wis.
Graham, F. W.	Madison, Wis.
Gudell, Arnold	Browntown, Wis.
Glauser, Fred	Monroe, Wis.
Geigel, John	Monroe, Wis.
Geiger, W. J.	Monroe, Wis.
Gillum, J. C.	Monroe, Wis.
Green County Lumber & Fuel Co.	Monroe, Wis.
Grinnell, Mark D.	Monroe, Wis.
Gnagi, Dr. W. B.	Monroe, Wis.
Gordon, Harold W.	Monroe, Wis.
Gifford, R. B.	Monroe, Wis.
Geigel Hardware Co.	Monroe, Wis.
Geigel, William	Monroe, Wis.
Geigel, Matt	Monroe, Wis.
Geigel, Jacob	Monroe, Wis.
Grode, R. J.	Monroe, Wis.
Goetz, Chester	Monroe, Wis.
Greenwald, S. R.	Monroe, Wis.

H

Herman, Ernest	Neillsville, Wis.
Heer, Fred	Monroe, Wis.
Hofer, Carl	Monroe, Wis.
Henn, William	Monroe, Wis.
Hirschbrunner, Albert	Monroe, Wis.
Heim, Jacob	Monticello, Wis.
Haldimann, John U., R. R. 1	Monroe, Wis.
Hinds, Thomas J.	Monroe, Wis.
Hotel Monroe	Monroe, Wis.
Hoffman, F. L.	Monroe, Wis.
Holsinger, C. A.	Monroe, Wis.
Hefty-Jones Co.	Monroe, Wis.
Hartnett, J. J.	Monroe, Wis.
Hartwig, Fred F.	Monroe, Wis.
Hess Meat Market	Monroe, Wis.
Hauser, John T.	Monroe, Wis.
Herold Printery	Monroe, Wis.
Haren, Dan H.	Monroe, Wis.
Heeren, J. B. & Son	Monroe, Wis.
Hughes, H. B.	Monroe, Wis.
Hodges, Dr. F. L.	Monroe, Wis.

I

Indra, C. M., N. Y. C. Lines	Milwaukee, Wis.
Industrial Co-operative Union	Monroe, Wis.
Ingold, Mrs. Ferdinand	Monroe, Wis.

J

Janke, L. F.	Madison, Wis.
Jackson, H. C.	Madison, Wis.
Johnson, George	Monroe, Wis.
Johnson, Katherine	Monroe, Wis.
Jaberg, Roy	Monroe, Wis.
Johnson, Walter A.	Monroe, Wis.

K

Koenig, Christ, R. R. 2	Browntown, Wis.
Kiechle, Julius, R. R. 2	Monticello, Wis.
Kummer, Adolph, R. R. 3	Monroe, Wis.
Kuenzi, Fred	Monroe, Wis.
Kleinmaier, Chas.	Monroe, Wis.
Koller, Oswald	Brodhead, Wis.
Kundert Bros.	Monroe, Wis.
Knoll, Paul	Monroe, Wis.
Knight, W. J.	Monroe, Wis.
Kundert Shoe Shop	Monroe, Wis.
Knipschild Bros.	Monroe, Wis.
Knipschild, John H.	Monroe, Wis.
Kohli, Louis H.	Monroe, Wis.
Karlen Bakery	Monroe, Wis.
Kohli, Chas. R.	Monroe, Wis.
Keel Everett	Monroe, Wis.
Knight, M. J.	Monroe, Wis.

L

Lauper, Walter, R. R. 2	Winslow, Ill.
Lingg, Vincent, R. R. 1	Argyle, Wis.
Lengacher, Rudy B., R. R. 2	Monticello, Wis.
Lichtenwalner, Farmer	Monroe, Wis.
Laesser, Sebastian	Monroe, Wis.
Lichtenwalner, John	Monroe, Wis.
Lichtenwalner, Hugh	Monroe, Wis.
Lengacher, Fred	Monroe, Wis.
Lehnherr, Jacob	Monroe, Wis.
Lamb, Chas. E.	Monroe, Wis.
Lengacher, Clarence	Monroe, Wis.
Loveland, Wm. A.	Monticello, Wis.
Lambole, F. E.	Monroe, Wis.
Lyford, Harry B.	Monroe, Wis.
Lengacher, John	Monroe, Wis.
Lanz, Fred	Monroe, Wis.
Luchsinger, Frank B.	Monroe, Wis.

Lynch Garage	Monroe, Wis.
Ludlow, Edwin	Monroe, Wis.
Ludlow, Willis	Monroe, Wis.
Lanz, H. E.	Monroe, Wis.

M

Mueller, Reinhard, R. R. 1	Clarno, Wis.
Matter, Otto	South Wayne, Wis.
Motz, Anton, R. R. 7	Monroe, Wis.
Minnig, John, R. R. 3	Monticello, Wis.
Mertz, Laverne, Lotz Rennet Laboratory.....	Lowell, Wis.
Marty, Gottlieb	Monroe, Wis.
Meythaler, William	Monroe, Wis.
Marty, Carl, Sr.	Monroe, Wis.
Marschall, A. K., Marschall Dairy Lab.....	Madison, Wis.
Marty, Carl, Jr.	Monroe, Wis.
Moe, H. H.	Monroe, Wis.
Matzke, Frank	Monroe, Wis.
Marty, Fred	Monroe, Wis.
Marty Company	Monroe, Wis.
Meythaler Bros.	Monroe, Wis.
Monroe Bakery	Monroe, Wis.
Magdal, S. H.	Monroe, Wis.
Monroe Laundry	Monroe, Wis.
Marty, Adam	Monroe, Wis.
Marty, Carl & Co.	Monroe, Wis.
Mason, H. W.	Monroe, Wis.
Metropolitan Store	Monroe, Wis.
McQuillan, O. E.	Monroe, Wis.
Miller & Weaver	Monroe, Wis.
Meythaler Electric Co.	Monroe, Wis.
Maurer, Rudy	Monroe, Wis.
Monroe, Dr. W. B.	Monroe, Wis.
Moore, Dr. L. A.	Monroe, Wis.
Miller, Walter A.	Monroe, Wis.
Montgomery Ward & Co.	Monroe, Wis.
Movie Inn	Monroe, Wis.

N

Niffenegger, Jacob	Darlington, Wis.
Naef, John, R. R. 4	Argyle, Wis.
Noble, B. M.	Monroe, Wis.

O

O'Brien, J. P., Rep. J. B. Ford Co.	Milwaukee, Wis.
Ohio Salt Company	Wadsworth, Ohio
O'Meara, J. B.	Monroe, Wis.
Olson, William	Monroe, Wis.

P

Peterson, B. E., Rep. Ruggles & Rademaker, Milwaukee	
Pulkrabek, G. M., Rep. General Lab.....	Madison, Wis.
Phenix Cheese Company	Monroe, Wis.
Penney, J. C. Company	Monroe, Wis.

R

Rechsteiner, John	Argyle, Wis.
Roelli, Adolph	Apple River, Ill.
Rubin, Fred	Monroe, Wis.
Reisser, Adolph	Argyle, Wis.
Rohner, Joe, R. R. 3	Juda, Wis.
Rosenberger, John	Monroe, Wis.
Rufenacht, Paul	Monroe, Wis.
Rohrer, Arnold	Monroe, Wis.
Regez, Jacob	Monroe, Wis.
Rote, Alvin F. Co.	Monroe, Wis.
Regez, Herman	Monroe, Wis.
Regez, Rudy	Monroe, Wis.
Roub, Dr. J. F. & Son	Monroe, Wis.
Roth, H. C.	Monroe, Wis.
Roderick, Claude A.	Monroe, Wis.
Rottler, R. G.	Monroe, Wis.
Redman, G. L.	Monroe, Wis.
Roth, Paulus A.	Monroe, Wis.

S

Stettler, Christ, R. R. 1	Monroe, Wis.
Stoller, Emil	Argyle, Wis.
Sulzer Bros.	South Wayne, Wis.
Schmid, August	Monroe, Wis.
Schober, Sam	Belleville, Wis.
Schlaginhaufen, Ernst, R. R. 2.....	Belleville, Wis.
Schepley, Chas. R.	Monroe, Wis.
Schindler, Thomas B.	Monroe, Wis.
Schoeper, John	Monroe, Wis.
Strauss, Christ	Monroe, Wis.
Stauffacher, Frank L.	Monroe, Wis.
Staempfli, Fred	Monroe, Wis.
Seeholzer, Alvin	Monroe, Wis.
Schindler, Herman L.	Monroe, Wis.
Schmid, Ernest, R. R. 7	Monroe, Wis.
Stauffacher, M. H.	Monroe, Wis.
Siegenthaler, Ernst, R. R. 5.....	Darlington, Wis.
Stauffacher, I. M.	Monroe, Wis.
Smith, Chas. J.	Monroe, Wis.
Sheboygan Dairy Products Co.	Monroe, Wis.
Stauffacher, George H.	Monroe, Wis.
Saucerman, W. T.	Monroe, Wis.
Siegenthaler, Otto	Monroe, Wis.
Stauffacher, Fred J.	Monroe, Wis.
Stauffacher, Glenn F.	Monroe, Wis.
Stuart, George W.	Monroe, Wis.
Schuetze, Wm. A.	Monroe, Wis.
Spoerri, Arthur	Monroe, Wis.
Schmid, Adolph	Monroe, Wis.
Strahm, John	Monroe, Wis.
Spaide, Clarence L.	Monroe, Wis.
Schneider, J. J.	Monroe, Wis.
Schindler, Dr. A. J.	Monroe, Wis.
Style Shop, The,.....	Monroe, Wis.
Shriner Bros.	Monroe, Wis.
Stauffacher, Wm. J. Co.	Monroe, Wis.
Schneider, Max	Monroe, Wis.

Solomon, Henry Coal & Iron Co.....	Monroe, Wis.
Scheidegger, Ernest	Monroe, Wis.
Service Garage	Monroe, Wis.
Schneider, George	Monroe, Wis.
Schwaiger, Jerome H.	Monroe, Wis.
Schober, Miss Clara	Monroe, Wis.
Schindler, Chas. A.	Monroe, Wis.
Schulze, Paul T.	Monroe, Wis.
Stillman, C. L.	Monroe, Wis.
Snodgrass, P. N.	Monroe, Wis.
Specialty Service Co.	Monroe, Wis.
Selck, George	Monroe, Wis.
Stubbe, Charles	Monroe, Wis.
Stoldt, Al.	Monroe, Wis.
Schmidt, Leon	Monroe, Wis.
South Side Drug Co.	Monroe, Wis.

T

Thule, Arnold	Hollandale, Wis.
Thuehler, August	Monroe, Wis.
Trumpy, Henry	Monroe, Wis.
Thomm, John	Monroe, Wis.
Thalmann, Ernest	Albany, Wis.
Teuscher, Alfred	Monroe, Wis.
Trumpy, Joseph	Monroe, Wis.
Thorp, George	Monroe, Wis.
Tschudy, J. J.	Monroe, Wis.
Times Printing Co.	Monroe, Wis.
Tschudy & Company	Monroe, Wis.
Tuttle, Harold W.	Monroe, Wis.
Tschanz, John	Monroe, Wis.
The Service Printery	Monroe, Wis.
Triangle Cheese Co.	Monroe, Wis.
Thorp, Ed. M.	Monroe, Wis.
Trukenbrod, W. F.	Monroe, Wis.
Trukenbrod, William E.	Monroe, Wis.
The National Tea Co.	Monroe, Wis.
Treat, Ben G.	Monroe, Wis.

U

Ufer, Walter	Argyle, Wis.
Universal Grocery Co.	Monroe, Wis.

V

Von Moos, Leo, R. R. 4	Argyle, Wis.
Vogel, Gottfried, R. R. 2	Brodhead, Wis.
Vogel, Adolph	Winslow, Ill.
Voegeli, Alfred B.	Monroe, Wis.

W

Wuetrich, Fred, R. R. 1	Juda, Wis.
Wirz, Eugene	Monroe, Wis.
Walser, David	Monticello, Wis.
Wagner, Fred, R. R. 6	Brodhead, Wis.
Willi, Joe	South Wayne, Wis.
Waeffler, Jacob, R. R. 3	Monroe, Wis.
Wyssbrod, Fred	Martintown, Wis.
Webster, C. S. (J. B. Ford Co.)	Milwaukee, Wis.
Wuetrich, Gottfried	Monroe, Wis.
Widmer, Arnold J., R. R. 3	Monticello, Wis.
Waelti, Gottfried	Monroe, Wis.
Weirich, P. J.	Monroe, Wis.
Wenger, Sam	Monroe, Wis.
Wenger, Ralph H.	Monroe, Wis.
Wenger, Will E.	Monroe, Wis.
Wisconsin Hydro-Electric Co.	Monroe, Wis.
Wisconsin Power & Light Co.	Monroe, Wis.
Waffle Shop	Monroe, Wis.
Wettengel, Fred W.	Monroe, Wis.
Williams, Dr. F. E.	Monroe, Wis.
Wilkinson, Geo. W.	Monroe, Wis.
White, Leland C.	Monroe, Wis.
Whalen, George	Monroe, Wis.
Wenger, Rudy Co.	Monroe, Wis.

Y

Yaussi, JohnBlanchardville, Wis.
 Young & CompanyMonroe, Wis.

Z

Zibung, Valentine, R. R. 4Argyle, Wis.
 Zurkirchen, JohnMonroe, Wis.

OFFICERS FOR 1929

President—Fred Marty	Monroe, Wis.
Vice President—John Deininger.....	Monroe, Wis.
Secretary—Henry Elmer	Monroe, Wis.
Treasurer—Joseph Trumpy	Monroe, Wis.

DIRECTORS

Jacob Lehnherr (for three years).....	Monroe, Wis.
Gottfried Waelti (for two years).....	Monroe, Wis.
Fred E. Benkert (for one year).....	Monroe, Wis.

JUDGES ON CHEESE

Fred Staempfli	Monroe, Wis.
Jacob Lehnherr	Monroe, Wis.
Adolf Abplanalp	Monroe, Wis.

COMMITTEE ON RESOLUTIONS

H. H. Moe	Monroe, Wis.
C. R. Schepley	Monroe, Wis.
Eugene Wirz	Darlington, Wis.

AUDITING COMMITTEE

Fred Glauser	Monroe, Wis.
Emil Buholzer	Juda, Wis.
Christ Koenig	Browntown, Wis.

ADDRESS OF WELCOME

By Paul T. Schulze

Vice-President First National Bank

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

Your secretary, Mr. Henry Elmer, no doubt wanted someone this year to extend a word of welcome who is not supposed to know anything about the cheese industry so he asked me to greet you.

It is indeed a pleasure to welcome you to Monroe for this 29th annual convention.

In the history of the Swiss Colony written by Judge and Banker John Luchsinger we read about the brave struggle the Swiss settlers made, and through whose effort the cheese industry was started.

The first cheesemaker was doubtless the wife of some Swiss colonist, for the first cheese presses were in the kitchens of the early home.

It is 60 years since the first cheese factory was put into operation in this section of Southern Wisconsin. Cheese making started after the first Swiss settlers were driven to it in desperation, after repeated crop failures, especially that of wheat.

I know that we are all glad that the Swiss settlers took up the making of cheese because they were trained along this line from the old country and therefore were able to make a success of the industry.

Farmers at first did not respond favorably to the factory system plan of making cheese as they believed it was not practical to work up milk in a large volume. However, experience proves that these opinions were wrong because from a very small beginning we now have a financial turnover of over six million dollars annually in the foreign type cheese alone, in Southern Wisconsin.

We must all recognize that it has not been any manufacturing influences that has made this prosperous section of Southern Wisconsin, but it was due primarily to our cheese industry. When we consider that Wisconsin manufactures over 72% of all kinds and styles of cheese and over 82% of foreign types made in the United States we must realize from these facts that Southern Wisconsin is truly the center of the cheese industry of America.

I am glad to see such splendid cooperation as you are demonstrating in your conventions which enables us all to learn to know the other man's viewpoint. For example:

Two Irishmen had just laid a wreath of flowers on a comrade's grave in France, and while crossing another section of the cemetery they saw a Jap lay some rice on the grave of a countryman. One of the Irishmen asked, "When do yez expict yer friend to come up and eat th' rice?" "When your friend comes to smell the flowers," was the quick reply.

We can always learn something from the other fellow. All men are worth knowing. Some that we may emulate the good in them and others that we may avoid their mistakes.

In Green county which has eleven banks there are over ten million dollars on deposit. These deposits are accumulated through the dairy industry, and a very large portion belong to our farmers and cheesemakers.

When a small city like Monroe can attract a crowd of over thirty thousand people for Cheese day, which was exemplified October 2, we all must admit that our cheese has more qualities of attraction than the mere smell. I firmly believe that the exhibit, in the Armory, did real constructive advertising for good for our cheese industry.

The necessity for advertising our cheese was demonstrated to me last summer when our Kiwanis Club was invited to Evansville, where several members of the club tried to buy some Swiss cheese and we went into every market and grocery store and were surprised to find in some of the places they did not even seem to know

what Swiss cheese was, and this is only 28 miles from Monroe.

In Fowler, Indiana, Tuesday, over twenty thousand people gathered to see the Championship Corn Husking bee. Demonstrations of this kind certainly show a healthful sign regarding the agricultural life of our country.

The cheese school such as many of you have attended at Madison, is another constructive force for good in the whole cheese industry.

Visits to the various factories by your representative, Mr. Fred Kuenzi, is also another sign of helpful service to the cheese industry.

The modern trend of our business life leads toward cooperation, consolidation and standardization. In the line of standardization one of the outstanding examples is the fruit industry of California. I dare say that almost everyone in our country is familiar with the brand "Sunkist Oranges." Along this same line, is it too much to hope that at some time in the near future, we may see our open Wisconsin cheese put into grades and thereby have a distinctive label. In this way our cheese can be recognized in all parts of the United States as being the highest grade and it will help to educate the public to call for and demand Wisconsin-made cheese.

You can do as much as you think you can,
But you'll never accomplish more;
If you're afraid of yourself, young man,
There's little for you in store.

For failure comes from the inside first,
It's there if we only knew it;
And you can win, though you face the worst,
If you feel that you are going to do it.

Success; It's found in the soul of you,
And not in the realm of luck.
The world will furnish the work to do,
But you must provide the pluck.

You can do whatever you think you can,
It's all in the way you view it;
It's all in the start you make, young man,
You must feel that you are going to do it.

It is therefore a pleasure to again extend to you a most cordial welcome to hold your convention in our beautiful City of Monroe.



Putting the holes in Swiss cheese.
MONROE, WISCONSIN.

RESPONSE TO ADDRESS

By J. H. Farrell

Associate of The Marschall Dairy Laboratory

Madison, Wis.

President Marty, Mr. Schulze, Ladies and Gentlemen:

It gives me a great deal of pleasure to respond in behalf of the Southern Wisconsin Cheesemakers' & Dairymen's Association to the friendly words of welcome of Mr. Schulze. For nearly thirty years Monroe has extended its hospitality to our Association and each time the greeting we have received has seemed heartier than the one before. We have come to look forward to these annual meetings knowing what a splendid sincere welcome always awaits us.

Everyone here is proud of the great foreign-type cheese industry of southern Wisconsin. We are proud of this Association and proud of Monroe, the Swiss Cheese Capital of America. It is only by united efforts that anything becomes great, and it is because the people in this part of Wisconsin have been willing to work together that the cheese industry has succeeded so well. Just a few weeks ago there was an example of this co-operation when all Monroe put its shoulder to the wheel to make cheese day the magnificent success that it was.

Monroe and its citizens can always be counted upon to do everything within their power to further the great industry which means so much to us. It will always be found behind the work of our Association. With a spirit of real gratitude, therefore, Mr. Schulze, we express to you as representative of the citizens of Monroe, our thanks and appreciation.

SECRETARY'S REPORT

By Henry Elmer, Monroe, Wisconsin

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

My report this year is shorter than usual for the reason that on account of money deficiency we were unable to hire a field instructor, therefore I had not so much corresponding to do as other years. Fourteen Swiss cheesemakers availed themselves to take the two weeks' course in Swiss cheese making. They are: Walter Zuber, Verona, Wis.; Joseph Roosli and Martin Blum, South Wayne, Wis.; Fred Meier, Ernst Leuenberger, Fred Zbaren, Gottfried Boss, Simon Zwald and Jacob Matti, Mt. Horeb, Wis.; John Egger, Argyle, Wis.; Robert Scheidegger, Klevenville, Wis.; Albert Kaegi, Darlington, Wis.; E. M. de K. Socec, Madison, Wis., and Rudolph Grogg, Brodhead, Wis. Jacob Leuenberger, R. R. 7, Monroe, Wis., took the course in American cheese-making. There were also six visitors for one day each. Probably most of the above mentioned cheesemakers, on account of taking the course, hired out to bigger factories. I sent out during the year 470 pieces of mail. Your directors and officers held two meetings during the year in the interest of the association and to make ready for the 1928 annual convention.

On account of having no instructor in the field this season our treasury grew. We have a balance of \$1992.21 on hand. Our treasurer, Mr. Joseph Trumpy, will give a detailed report.

Again I appeal to the cheese factory officers and the cheesemakers in southern Wisconsin to join our association. The cost for each one, that is the patron and cheesemaker of each factory is only a trifle, namely one dollar per year, but would give the association ample funds to carry on the business without the aid of the state, and the business and professional men.

I worked harder than ever in securing donations and prizes for the winners and other exhibitors in the cheese exhibit and through the kindness and willingness of the different cheese factory supply houses, wholesale cheese dealers, the three home banks and our association I was able to obtain the nice sum of \$534.50 which will be divided for first, second and third prizes and the pro rata plan. I would exhort the cheese exhibitors to buy from and deal with the different donators of prizes as much as possible.

I was glad to get the help of the K. P. Dramatic Club in Brodhead, Miss Marie Spec's Orchestra, the Monroe High School Girls' Glee Club, the well known Yodel Quartet and Ben Noble's Entertainers which gives positive assurance of one of the best entertainments ever presented in Monroe.

In conclusion I wish to extend my thanks to all who helped us, financially or otherwise, to make this convention a great success.

TREASURER'S REPORT

Joseph Trumpy, Treasurer

RECEIPTS

Balance December 8, 1928	\$1,324.99
By Membership	354.00
Admission Tickets	46.25
Foreign Cheese Dealers' Assn., Monroe.....	80.00
De Laval Separator Co., Chicago	40.00
The Sharples Separator Co., Westchester, Pa...	25.00
The Marschall Dairy Laboratory, Madison.....	20.00
Chr. Hanson Laboratory, Inc., Little Falls, N. Y.	15.00
E. C. Zurcher & Co., Chicago	10.00
R. Gerber & Co., Chicago	5.00
B. H. Baker Ohio Salt, Chicago	5.00
Midland Foil Co., Chicago	5.00
Morton Salt Co., Milwaukee	5.00
The Ohio Salt Co., Chicago	5.00
Cheese Sold	24.41
Seven Cheesemaker's Books	9.80
Interest	67.62
State Appropriation	1,000.00
<hr/>	
Total	\$3,042.07
Disbursements	1,049.86
<hr/>	
Balance November 15	\$1,992.21

DISBURSEMENTS

759—Turner Hall	\$ 60.00
708—Newcomer 3-Act Play	101.00
771—St. Louis Button Co.	32.98

709—Miss Marie Spec, Music	55.00
714—Reinhard Mueller	35.00
765—The Service Printery	120.00
762—Fred Marty, Salary \$50.00, Postage and Telephone \$3.00	53.00
763—Henry Elmer \$200.00, Postage \$12.00	212.00
727—Leo Von Moos	7.98
735—John Eschler	8.06
721—Werner Blum	7.76
731—Fred Wuetrich	4.21
718—Fritz Locher	5.00
746—Jacob Leuenberger	3.98
747—Fritz Rufenacht	3.95
730—Alfred Buehlman	9.22
726—Franz Brand	8.22
715—Christ Koenig	20.00
725—Fred Glauser	4.07
716—Fred Glauser	10.00
712—Badger Cheese Co.	5.00
702—Jacob Lehnherr	1.00
706—Monroe Evening Times	14.50
768—Joseph Trumpy	2.00
769—Jacob Lehnherr	2.00
767—John Deininger	1.00
760—Jacob Gempeler, Jr., Sec.-Treas.....	5.00
764—Adolph Abplanalp	2.60
761—Paul T. Schulze	25.00
707—Miss V. L. Sweet	15.00
741—Eugene Wirz	3.91
733—Jacob Niffenegger	4.10
723—Fred Wiessbrod	5.76
748—Joe Willi	3.84
739—Otto Blaser	3.94
743—Herman Aebersold	4.15
722—F. H. Kaufman	4.30
756—Alfred Schober	7.53
732—Jacob Aeschliman	10.16
720—Martin Suter	5.00
705—The Service Printery	5.75

754—Otto Hohl	4.12
710—C. L. Chambers	5.00
704—F. E. Benkert	2.00
711—Miss Maud E. Wenger	5.00
749—Emil Frehner	6.48
724—Albert Rysen	4.19
752—Jacob Waeffler	6.91
736—Paul Brog	4.02
713—Bert Savings	8.00
745—John Ammacher	4.02
750—John Minnig	4.18
717—David Weber	10.00
758—Jacob Henna	7.23
753—Rudy Lengacher	4.14
738—Alex Abplanalp	3.96
744—Sam Schober	9.34
755—August Wirz	4.12
740—Fritz Brog	3.93
728—Fred Geusbuehler	12.97
751—August Theuler	4.16
757—Jacob Conrad	9.03
742—Valentine Zibung	3.81
719—Fritz Marty	15.00
729—E. R. McIntyre	4.50
737—Adolph Abplanalp	3.98
734—Robert Kummer	4.10
Miscellaneous Accounts	2.70

\$1,049.86

We, the undersigned Auditing Committee, examined the treasurer's report and found it correct.

Fred Glauser
Emil Buholzer
Christ. Koenig

Respectfully submitted,
, JOSEPH TRUMPY, Treasurer.

ANNUAL ADDRESS

By Fred Marty

President of the Association

We are again assembled in this, our Twenty-Ninth Annual Convention of the Southern Wisconsin Cheesemakers' and Dairymen's Association, combining business and pleasure, a sort of a rehearsal of past experiences and laying plans for the coming year. All who are interested in this great cheese industry should be present at today's and tomorrow's program. Your time will be well spent to listen to the men who are on the program.

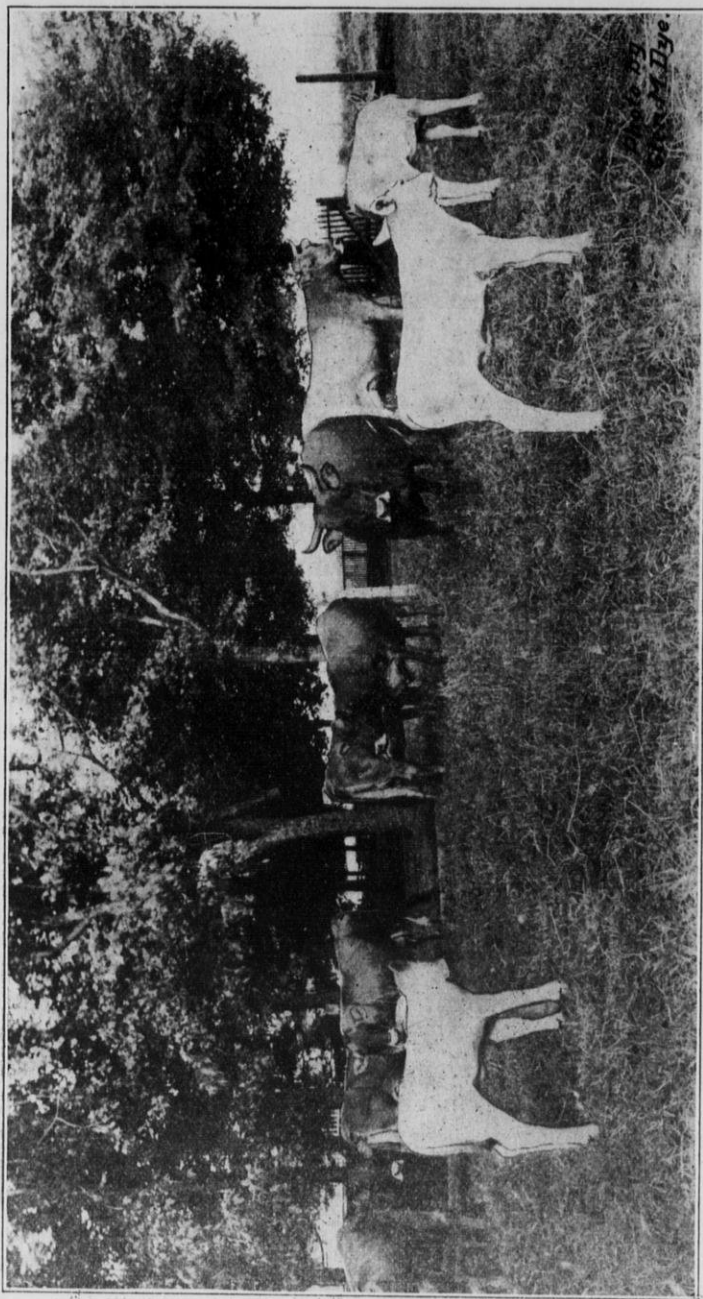
For twenty-nine years this organization has stood for the advancement of our cheese industry, in matters of improvement, such as introducing the whey separator which alone brings an annual income of 8 to 9 million dollars; preventing the enforcement of a cream law that threatened to classify the whey cream from milk cream; the establishing of a special course at the Dairy University for improved methods of manufacturing Swiss cheese, and so it is only through united action and organization that we are able to protect in a legislative way our interest, and further the advancement of our cheese and dairy industry.

Premiums For High Quality Cheese.

It is encouraging to know that the spirit of quality cheese is still paramount—this fact is in evidence by the liberal donation of the Foreign Cheese Dealers' Association, and as per program, all the rest who have so liberally donated as an incentive to promote high quality cheese, and it is with pleasure that I extend, in the name of the Association, our hearty thanks for the combined premium fund of considerably over \$500.00.

Branch Cheese School.

Some 8 or 9 years ago an effort was made on the part



A HERD OF BROWN SWISS CATTLE

*Photo by
Geo. H. Dye*

of this organization to start a movement in co-operation with the Wisconsin Dairy School, and U. S. Department of Agriculture, for the establishment of a Branch Swiss Cheese School, but because of seemingly lack of a united effort this plan has fallen by the wayside. I am bringing this up again as I still believe we need it, and I also still believe that with a united effort it can be accomplished.

Quality Cheese Big Future Factor.

From present and future intended activities along dairy and cheese manufacturing development of certain sections of this nation, Wisconsin, the leading cheese manufacturing state in the union, may have reasons to look into the future with considerable concern—personally I do not like a pessimist, but “seeing is believing” and I could not help but note what is going on while attending the National Dairy Exposition held in conjunction with the Memphis, Tenn., Tri-State Fair in 1927 and 1928. Many questions were asked, why the National Dairy Show was held in the south, there are no cheese factories and creameries down there, and the answer would be that there were none then, but there are now, and there are going to be more of them, if the prevalent activities of college professors of practically the entire south who were in attendance have anything to do with it, also the fact that the National Dairy Association has signed a contract with the city of St. Louis, Mo., right in the heart of intended dairy development for a term of five years, with a yearly guarantee of \$75,000 and a certain amount more each year if the exposition needs it.

Two Wisconsin well known dairy leaders, whom I met in Memphis this fall, who were on a tour calling on cheese factories, stated that they were surprised to find factories of such large capacities, from 25 to 40 thousand pounds of milk a day. Quality of cheese already seems to be the topic of debate, and you can hear such points advanced, that we may have the best of them during a few months of the summer season, while they will have the best of us during the long winter months. It may be of interest to

you to know how their cheese compares with cheese from other states. Following are scores taken from the exhibit at the National Dairy Exposition at Memphis, Tenn., 1928 on American cheese:

Minnesota with only one entry, captured the gold medal, score 96.75. All other states highest score winning silver medal were: Wisconsin 95.25; Tennessee 95.00; Michigan 92.50; Illinois 93.25; Nebraska 93.00; Washington, 92.50; Oregon 92.25; Texas 93.75; Nevada 92.50; Oklahoma 92.00; Louisiana 93.50; New York 92.25; Mississippi 94.00.

In connection I am pleased to report that this particular section made a clean sweep, and respectively won the gold, silver and bronze medals on Swiss, Brick and Limburger cheese.

Summing up the present program of the south with the National Dairy Show in their midst for the coming five years, to promote and advance the dairy and cheese industry, we should not rest our hopes too strong on a high tariff, as our real competition now, it would seem, will come from within our own national borders, and therefore quality alone will be our only salvation, as the price of the predominating class of cheese, has in the past ruled the prices of all classes of cheese.

Therefore, makers should avail themselves by attending the special course given at the Dairy University at Madison, which topic will be thoroughly explained this afternoon by Prof. H. C. Jackson in charge. By so doing, it will be much easier for our instructor to help those along who have taken the course and have acquainted themselves with the different tests that are applied in the new methods, as it is the intention of this organization to again have a man in the field this year, which is now financed by this organization and the Foreign Cheese-makers' Association.

Legislative Committee

The Wisconsin legislature will be in session by the coming January, 1929, and therefore this organization

should during this convention appoint a legislative committee, which should be prepared to take an active part in bills that may come before the coming legislature, that may be either beneficial or detrimental to the state dairy industry. This organization may again defend its annual appropriation.

BE SURE TO HEAR MR. H. KLUETER, PH. G., Chief Chemist, Dairy and Food Commission, on "Quality and Composition of Milk to Cheese Making" on tomorrow's program.

Cheesemakers' Discussion Friday P. M.

Tomorrow afternoon we will have a general discussion on cheesemaking immediately after the talk on latest test applied to the manufacture of Swiss cheese by Mr. Emil Buholzer. This discussion will be led by members of the Foreign Cheese Makers' Association, and I wish to announce that this discussion is open to the manufacturers of Swiss, Block, Brick and Limburger cheese and I hope that all Cheesemakers will feel at liberty to make this discussion beneficial to all interested.

Farmers You Are Interested In Feed and Feeding

Come and hear our well known L. F. Graber, Professor of Agronomy, the man who started you out on alfalfa, who will talk to you Friday P. M.

In conclusion, let me say, lest we forget, that much praise and thanks are due the following civic organizations: Our Chamber of Commerce, Kiwanis Club, Cheese Day Committee, the Press, Monroe Air Board, Farm Bureau, Cheese Council and the Foreign Cheese Makers' Association, who in such a splendid public spirited way contributed to our cheese industry, by boosting and advertising our delicious cheese to the general consuming public, and last but not least, to the cheesemakers that brought home, and backed up our claim of quality cheese, by bringing home the national highest honors on Swiss, Brick and Limburger cheese. Three cheers for Wirz, Vogel and Lengacher.

I thank you.

"T. B. Test In Southern Wisconsin"

By William Olson

Secretary Green County Farm Bureau

Monroe, Wisconsin

Mr. Chairman, Fellow Members of the Association,
Ladies and Gentlemen:

When the officers of this association asked me to discuss the subject of the T. B. test in Southern Wisconsin they no doubt had in mind a general discussion of Bovine Tuberculosis as it affects the southern part of our state. As is perhaps well known by those present, there remains at the present time only four counties in our state that have not either tested or have filed their petitions with the State Department of Agriculture and are on the waiting list to be tested. These remaining counties are Calumet, in the central part of the state, and Green, Lafayette and Iowa in the southern part, the latter the three greatest foreign type cheese producing counties, not only in Wisconsin but in the United States.

For a brief discussion, this subject can be divided into at least two parts. **FIRST:** Is Bovine Tuberculosis transmissible to humans through the medium of meat, milk and milk products? and **SECONDLY:** How does the presence of Bovine Tuberculosis in the herds of these remaining counties affect us financially?

Not being a bacteriologist or even a doctor or a veterinarian, I am compelled to depend for much of my information on the first part of this subject on experts who have made a careful study of this whole question. Let us conduct a hearing and call in a few witnesses.

Dr. Pollander, What would you say if you could speak to us today? "In 1849 I discovered by the use of a powerful microscope the germ that causes Anthrax."

What was the effect of your discovery?

"It started other doctors and scientists in search of the cause of other diseases, with the result that today it is generally agreed that all diseases, whether in humans or animals, are caused by and spread through the medium of germs or bacteria."

Dr. Villemin: "In 1865 I proved by experiments that consumption, as this disease was first called, was a contagious disease and by inoculating one animal with the material from the tubercles of another animal sick with the disease, caused the same disease in the animal so inoculated."

Dr. Koch: "In 1882 I discovered, saw and cultivated the germ that causes consumption and I called it the 'Tubercle Bacillus.' It is the germ that causes the disease now commonly called tuberculosis."

It should be stated here that a number of years after Dr. Koch discovered this germ, he denied that the bovine T. B. germ was transmissible to humans or that the T. B. germ in humans was transmissible to animals, but after further research and being strongly contradicted by other groups of scientists, one group working under the direction of the British government over a period of nine years unanimously agreed that bovine tuberculosis spreads to man through infected milk and meat. The Pennsylvania Livestock Sanitary Board, the Bureau of Animal Industry at Washington, D. C., and the New York City Laboratory all agreed that Bovine Tuberculosis is transmissible to humans.

Drs. Fraser and Stiles, working on surgical cases in the Royal Edinburgh hospital for sick children, found that 62 percent of bone and joint tuberculosis cases owed their origin to the bovine type.

Dr. D. C. Lockhead, speaking for Dr. C. H. Mayo of Rochester, Minn., at the Second Annual Midwestern Tuberculosis conference at Omaha, Neb., June 29, 1926, said on this subject: "Tuberculosis in cows is a cause of tuberculosis in humans; it is necessary to reiterate that because there are still people, some of them pseudo-scientists who deny it, and also while it is an old story to



all of us and all people generally have been told it many times, human nature is prone to forget."

I could continue all afternoon giving facts and statistics to prove that tuberculosis in humans is traceable in thousands of cases to the bovine type, but I must hasten to take up the second part of this discussion.

How does the presence of Bovine Tuberculosis in the herds of these remaining counties affect us financially?

Statistics for the year 1927 show that 52 percent of the income on Wisconsin farm comes from Milk, 13½ % from hogs and 11 % from cattle and calves. It is easy to understand then that anything that affects the health and vitality of the animals producing this large percent of our income, directly affects our finances, in addition to the danger of transmitting to our children, tuberculosis through the medium of unhealthy milk. Time was when the farmer produced little more than his family requirements and the small surplus that he had was usually traded to the merchant for the necessities of life that could not be raised on the farm, but with the increased acreage and increased efficiency in production of today, our surpluses have multiplied many times and the question of disposing of this surplus becomes a serious problem. Then again through constant research and discoveries of the causes and effects of disease, the dissemination of this information to all the people through the medium of our schools, magazines and newspapers, the purchasers of dairy and farm products are becoming more careful about the kinds and quality of the products they buy. Does any one in this audience or elsewhere think for a moment that the consuming public is not well informed on what is taking place in all parts of the world? They know how many states and which ones are taking an active part in the eradication of Bovine Tuberculosis; they know just where to go to get the purest, healthiest and best milk, cheese, butter and dairy cattle. They have been watching the maps and charts of each state as they are prepared by the Department of Agriculture, showing the progress of bovine tuberculosis

eradication.

Yes, and I think right now they have got their eyes fixed on Green, Lafayette and Iowa counties, three of the largest dairy counties in the United States, and I am sure they are wondering what idea has possessed the dairymen of these counties that they were not the first, instead of the last to reduce to the lowest possible point, Bovine T. B. infection.

Southern Wisconsin is easily within the fluid milk district of Chicago, Milwaukee and other large cities, but they have served notice on us that they will not accept any fluid milk or cream from untested counties, unless it comes from regularly tested herds, and it is my opinion that it is only a question of a short time until the requirements now applied to fluid milk and cream will be applied to butter and cheese, and if we cannot comply with these requirements, they will go where they can get what they want. It is also a well known fact that a large percent of the purchasers of dairy cattle stay away from the nontested counties, and when they are purchased in these counties they are very careful about their selection and because of the lack of competition among buyers in nontested counties, they are as a rule purchased at a lower price than in the tested counties.

The last report from the United States Department of Agriculture shows that every one of the forty-eight states are getting well along with their T. B. eradication work, even those that are not strictly dairy states.

We frequently hear discussions on the street corner and among the farmers about conditions in Switzerland, the country from which we import nearly as much Swiss cheese as is manufactured in the United States, and the question seems to arise, how is it that they can manufacture and export to this country so much cheese when it is a known fact that a high percentage of their cattle are tubercular?

My answer is that while they do at present export to the United States a large amount of cheese they are headed for trouble, if not before, it will be when cheese

consumers find out the true condition of their dairy cattle.

In circular No. 23 issued in February, 1924, by the University of Nebraska, Prof. L. Van Es of the Department of Animal Pathology and Hygiene, among other figures on the percentage of tubercular cattle in various countries of Europe, gives the following figures on the percentage of T. B. infected cattle in the Canton of Zurich, Switzerland as revealed by tuberculin tests:

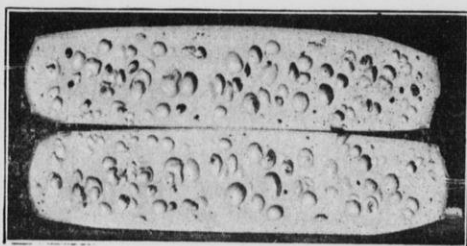
Calves, 3 to 6 months old	14.7%
Young cattle, 1½ to 1 year old	17.2%
Young Cattle over 1 year old	21.5%
Cows less than 4 years old	28.7%
Cows 4 to 7 years old	35.9%
Cows over 7 years old	50.7%

In commenting on these figures Prof. Van Es said, "In the majority of the cantons of Switzerland the morbidity rates are high, while the abattoir statistics place the amount of tuberculosis animals at 19% of the cattle slaughtered, tuberculin tests reveal the infection of 40 to 50% of the animals tested."

Why do I mention these facts regarding Switzerland? Because they are our strongest competitors in our American markets for Swiss cheese, and my contention is that as soon as we have applied and completed the T. B. area test in our Swiss cheese producing counties of Wisconsin and have driven the percentage of infection down to less than one-half of one percent, we can go to the Swiss cheese consumers of the United States and ask them what kind of cheese they prefer, the imported Swiss cheese coming from a country where such a large part of their cattle are tubercular, or do you want Swiss cheese made from milk coming from a T. B. free area and from T. B. free cows? The answer is very plain.

Yes, the opportunity lays before us to capture the Swiss cheese markets of the United States and the world. We are now well along in getting the necessary 60% to sign up in this Swiss cheese section, let us finish the job,

so that the demand for our Dairy Cattle and Dairy products will increase and command a more satisfactory price in the markets of the world.



"The Relationship of the Cheesemaker to a Marketing Program."

By J. H. Vint

Commissioner of Markets, Madison, Wis.

A cheese convention meeting at this particular time has a very important significance. There are various reasons for this. One is that the dairy industry is expanding not only in Wisconsin but in the country as a whole. It is true that the production of cheese and butter has somewhat decreased recently as compared with former years, but much milk has been diverted to other uses with the result that the dairy industry is not only expanding but is being diversified as well. The consequence is that in addition to our old problems new ones have made their appearance. I do not think I will be guilty of exaggeration if I state that Wisconsin is going at present through the most important period so far as its dairy industry and particularly its cheese industry is concerned.

In order to realize the full import of the problems with which Wisconsin dairymen are concerned, it is essential to understand the significance of the place of the dairy industry in our agricultural economy and the trend of its development in this country. It is evident that I can not do full justice to this subject within the limits of the present address. I will only touch on the high spots of this development insofar as they have a bearing on present day problems, and I will discuss them particularly in reference to Wisconsin which presents one of the best examples of this development and its consequences.

As cheesemakers you are particularly interested in all the questions relating to the dairy industry. You occupy a strategic position in the production of cheese and to a certain extent you are the only point of contact be-

tween the farmer whose milk goes into cheese and the outside world. Occupying such a position you can exercise more influence on the problems which confront our dairy business than the other agencies who are interested in the production and marketing of cheese, beginning with the farmer and ending with the ultimate consumer.

Let me, therefore, diverge for a few moments and tell you how it came about that Wisconsin has been occupying for a number of years a dominant position in the dairy world.

Wisconsin began to develop as a dairy state during the latter part of the past century. Up to that time it has been largely a wheat growing state. The continual cropping to wheat had two very undesirable consequences. One of these was that the soil became exhausted and the other that the farmer of Wisconsin having to rely upon one crop found himself in distress whenever the crop failed or whenever the market was glutted with it.

The remedy which the Wisconsin farmer thought of was diversification. Diversification in his belief was to bring about the regeneration of the Wisconsin soil because it allows a rotation of crops which is so essential to the maintenance of soil fertility. It gives him, moreover, an opportunity in case of a failure or over-production of one crop, to rely upon some other crop. The industry which is best fitted to a diversification program is the dairy industry; it furnishes natural fertilizer, and it is dependent upon a variety of crops which can be rotated so as to bring results from the point of view of the maintenance of soil fertility.

The Wisconsin farmer's expectations have been fully justified. The development of dairying has not only brought back the fertility of the soil but has enabled the Wisconsin farmer to go through periods of general depression in a much better shape than the farmers who relied upon other crops for their livelihood. This was true not only of Wisconsin but also of other regions where

dairying constitutes the backbone of farming pursuits and in this lies one of the dangers which threatens Wisconsin dairying, particularly its cheesemaking.

The advantages of dairying have become so obvious that a number of other states have been in recent years expanding their dairy production. Thus during the past year in addition to the establishment of new cheese factories and creameries in states like Indiana, Kentucky and Tennessee, 28 cheese factories were established within a certain freight zone in the New Orleans territory besides the establishment in some southern states of 2 cheese factories of 100,000 pound capacity each by one of the largest cheese corporations in the country. This is also true of the western, particularly the north-western states. The time has come when all those interested in the welfare of Wisconsin dairying feel it necessary to analyze the whole situation with the purpose of finding out the possible weaknesses in our present system of production and marketing and make a concerted effort to eliminate such weaknesses. The best way to approach it is to analyze the advantages which the other states have over us and the disadvantages under which they labor.

As to this point there is no question that we have tremendous advantages over other states, particularly the southern states. Our climate is milder and this is an invaluable asset when it is taken into consideration that the greatest handicaps in the production of articles such as cheese and butter are connected with excessive warm weather. In addition to this advantage we have an invaluable asset in the experience and efficiency of our dairymen, whether farmers or cheesemakers. I do not think I need to dwell at length on this particular factor, for anyone who is at all acquainted with methods of farming in Wisconsin and some other states will readily perceive that from the point of experience and efficiency we are way ahead in the procession because of the experience of our farming population, and the fact that the prevalence of independent farm ownership and the ex-

tremely small percentage of tenancy as compared with certain other states have instilled in our farmers the business initiative which is a prime prerequisite for success in this competitive world.

We have thus a good starting point in many respects. While this is an advantage it may easily become a handicap because it may lead to over-confidence which very frequently results in carelessness and gives the competitor an invaluable advantage in the struggle for markets. In such a case reputation, efficiency and years of experience will not save us from losing our present dominant position on the markets of the country.

The struggle for markets for dairy products promises to be a bitter one. For one thing, a number of other states feel the necessity of changing their agricultural methods for reasons similar to those which have compelled Wisconsin to take up dairying. In this struggle for markets the stronger competitor will win. I told you a while ago that we have certain advantages over our competitors to start with. But our system of production and distribution also has a certain weakness which must be taken care of and it is of such a nature that it will have to be given strict attention. I am referring to the quality of the product and I will confine myself in this paper to the question of quality of cheese.

Speaking concretely a very interesting change is taking place in certain states which have constituted up to the present time our best market for so-called offgrade cheese. These states have realized that they can save a great deal in freight rates by manufacturing such type of cheese themselves. The result will be that we will have to devote more attention to the markets where quality counts and emphasis on quality will be the measure of success in our cheese industry.

Quality is the basis and the foundation of successful marketing. This is true not only of cheese but of all other farm products as well. It should be pointed out that in spite of all the difficulties connected with obtaining the proper quality of cheese, the cheesemaker

has a greater measure of control over quality than the producers of most of the other farm commodities. The quality of cheese depends greatly upon the extent to which the cheesemaker will use care in manufacturing the cheese and upon the care which he will devote to the various phases of curing it. Such factors as the quantity of moisture and the length of the holding period make up the greater part of the problem of quality and they depend entirely upon the judgment and conscientiousness of the individual cheesemaker.

I have stated above that quality is the foundation of successful marketing. Besides quality there are other factors which have an influence on marketing, such as transportation, holding cheese in storage, consumer's demand, and so on. All these factors have to be taken into consideration in a program of marketing that aims at obtaining the highest possible return to the producer and the best service to the consumer. However, it must be remembered that these factors will be of advantage to the cheese industry only insofar as the cheese that is being transported, held in storage or put on the market is of the right quality. Let me explain this by discussing the problem of holding cheese in storage. The cold storage problem is intimately related to the question of efficient marketing because it is the medium through which the seasonal production is spread throughout the year and the supply and demand equalized. The holding in cold storages for the purpose of such equalization loses all its effect if the cheese that goes into storage is not made according to the best standards of cheese manufacturing. Only cheese of good quality, one that has been made right and was in a proper condition for paraffining, can be kept in cold storage for any length of time without deteriorating and losing its essential characteristics of flavor, color and composition which determines its saleability. As to another factor which I mentioned above—consumer's demand—quality is absolutely essential. Consumers are willing to pay premiums for quality products, while low quality articles have a ten-

dency to decrease consumption as well as price.

I do not want you to misunderstand me. I do not wish to convey the idea that the quality of the Wisconsin cheese has been deteriorating of late. I do not think that there is more poor cheese made now than in years gone by. But along with good cheese there is much poor cheese sent to the market and very frequently there is not sufficient discrimination between good and poor quality in the marketing of cheese which results in lack of uniformity. The most nefarious consequence of the lack of uniformity is that the reputation of the "make" of a whole region is seriously injured, the price level decreased and an opportunity is given to the competing regions to gradually drive off the market the "make" even of an old established cheese industry. And this is exactly the situation in which Wisconsin will find itself in regard to its competitors if a program is not adopted and adhered to whereby the make of cheese will be improved and a more orderly marketing introduced.

Now, the fundamental condition of orderly marketing is a rigid adherence to standard grades. Because of certain variations in the efficiency of individual producers, in soil and climate there can be no orderly marketing without standardization of products. One of the chief advantages of standardization is that it should make possible the separation of high quality from off grade cheese which results in premiums on good quality and in a general increase in prices. Only when we adhere rigidly to standards set for cheese we will be able to obtain the best results from cold storage holdings and transportation to distant markets the importance of which was brought out earlier in this address.

I wish to conclude this part of my address by pointing out to you that, if we do not make serious efforts to keep up our reputation on the markets of the country by marketing quality products, our supremacy in the cheese industry will be a question of the past, and this in spite of the superior advantages which we have over competing states.

Besides the question of outside competition there is another element in the present situation which should challenge our attention. I am speaking of the tendency which has developed within the past few years of diverting milk from one branch of the dairy industry to another according to where prices happen to be higher. This should by all means be discouraged. The welfare of our dairy industry as a whole demands a proper balance between its various branches. Continual diversion of milk from one branch to another is liable to cause overproduction with a consequent decline in price. This situation seems to have particularly affected the cheese industry, and it is worth while to devote a great deal of effort to correct it and prevent the decline of the cheese industry which will come about when more and more milk will be diverted to other branches such as condensed and market milk. The important problem in the diversion of milk from one branch of the dairy industry to another is the question of price. The milk producer, whether his milk goes into condensery, creamery or cheese factory is entitled to the price corresponding to that of raw milk. If prices go below this level, milk will be diverted to that branch of the dairy industry which pays best. Such a diversion as I said above is not only harmful to the industry from which milk is diverted but it is demoralizing to the entire dairy industry. In this case as in that of outside competition the best way out of the dilemma is production and marketing of good quality, for good quality will contribute substantially towards attracting and keeping the demand and will secure premiums to the producers of a quality product.

In conclusion I wish to repeat what I have said in the opening of my address; that the cheesemaker, because of his close touch with the farmer and because of his functions in the manufacturing of cheese, occupies a strategic position in the cheese industry and it is upon his attitude toward this problem of quality and his willingness to observe the rules of the game that the progress of the industry rests. The cheesemaker should re-

member that unless the farmer gets a fair price for his milk, the latter will be diverted to butter, condensery or fluid milk market. It is essential for the cheesemaker to keep the farmer's patronage and it is, therefore, a matter of life and death to him, so far as his business is concerned, to obtain a price for his cheese that will compensate him for his labor and give him a decent return for his investment. Under present conditions there is nothing that will save him from ruin except the production of quality cheese. Quality will bring the price and the price will keep the business going.

I am well aware that my statement "quality should bring the price" will be laughed at by many cheesemakers. They will point out that they have had a great deal of experience with buyers who refused to pay a premium for good quality cheese and that this is true of the cheese industry as a whole. To this I will reply that I did not say that quality **will** bring a premium, but that it **should** bring a premium. I am fairly well acquainted with the conditions which obtain in the cheese business at the present time and I know how difficult it is to obtain a premium on a good quality product. The reason for this is that we have not been sending to market cheese that would comply with the requirements of a standardization program. A standardization system involves one thing, the one thing only, that if you put a stamp on a piece of cheese you guarantee that the quality of that cheese complies with the requirements which are involved in that particular stamp. For instance, if you place on a piece of cheese a stamp containing the word "fancy" you guarantee that the cheese which is so stamped complies, so far as flavor, color, texture and other factors are concerned with the requirements of a "fancy" standard. If you do that you have the right to expect a premium because of superior quality. However, as we all know, in the majority of cases this is not done and you do not get a price corresponding to quality. One does not need to go far to look for a reason for this condition. The trouble lies in the fact that during the six

years in which the standardization law was on the statutes it was not complied with. Stamps were put on cheese in any old way, without much regard to the actual relation between the cheese and the designation on the stamp. Such a procedure, continued through six years brought about a condition where the buyers became dubious as to the accuracy of the whole standardization system, in other words, it brought about a situation where a grade stamped on a cheese means next to nothing. And that is the very reason why you do not get a premium on the higher grades of cheese—simply because of lack of faith in the designation stamped on your cheese.

A grade or a standard should have the trustworthiness of a currency bill. If a currency bill is designated as \$5.00 it means that it is worth exactly \$5.00, not a cent less and not a cent more. The same should be true of a cheese grade. If it is stamped fancy, it should be a fancy. If it is stamped fancy and if it is not a fancy, then the thing is a fraud and the man who stamps it so is a forger. He may get away with it, but he contributes to the ruin of the whole industry and his own ruin as well. Among the worst practices of stamping cheese is the one which consists in stamping the cheese with the exact grade in seasons of low production and allowing a great deal of cheese to go out with a higher grade than the case justifies in seasons of high production. Such a practice is not only wrong because after all it is fraudulent, and it gives the whole cheese industry a black eye. There is only one way in which we can put the cheese industry of Wisconsin on its feet again—and that is through honest and careful grading.

"Our Dairy Industry"

By H. C. Jackson

**Professor of Dairy Husbandry, College of Agriculture,
Madison, Wis.**

The subject chosen for this talk to you is "Our Dairy Industry." It seems fitting at a meeting of this kind to use the term "our" when speaking of the industry. Everyone gathered here is interested in this greatest of enterprises and to the extent of that interest you surely have the right and privilege of saying "our" industry. If you do not look upon it as yours' the future does not hold much in store for it.

It is difficult to find words that will fittingly describe or that will give a true picture of dairying. Mere recital of figures showing the millions of pounds of dairy products manufactured is inadequate to depict it. Some idea of its greatness may be gained by thinking of it in terms of dairy herds, dairy farms, and the money invested in them. This, however, falls far short. There must be included in this picture the dairy manufacturing plants, the storage warehouses and the vast selling organizations. Then too on this physical side must be included those manufacturing plants that fabricate dairy machinery, those plants that make rennet, cheese color and other dairy supplies. In addition the banks and business houses of our towns and cities like Monroe must have their places in the picture. Dairying has made it possible by creating this new wealth to build churches, schools, hospitals and good roads. In fact it reaches out so far and has so many ramifications, that it is difficult to know what to leave out of the picture. The dairy farmer offers one of the best markets for manufactured products such as electrical appliances, radios, automobiles, farm machinery and the like. The picture has its human side too. Here is included an army of dairy farmers,

their wives and children whose health, wealth and enjoyment of life are intimately associated with dairying. Mention should be made of the cheesemakers, buttermakers and other dairy employees and their families that depend for their living upon the dairy cow. Cheese dealers, processors and others in the marketing agencies as well as dairy supply men, salesmen of machinery and the organizations manufacturing these products must be included. Then we must not forget the specialists in our schools, colleges and experiment stations who are engaged in scientific research, teaching and extension work. It is only as we see our oneness and our dependence upon the industry and one another that we are able to interpret the meaning of this vast enterprise, and get a true picture of its greatness and real worth. As we view it in this manner we begin to see and understand how vitally it affects each and every one of us. It seems then that it behooves us to safeguard it both from within and without. It is not going to remain stationary, it will either move ahead or recede. What becomes of it rests largely within our hands.

Some of you may have read the dairy history of this section. If you have, you must have been impressed with the fact that dairying was born in adversity and of necessity and not alone through choice. It has been possible only through patient toil and hard work to build the industry up to its present size. Those that have labored in the past have been amply repaid and those of the present have a rich heritage. Much talk is heard about the good old days, but from what I read, I am glad I am fortunate enough to be living in the present. This does not mean that there is not hard work in store for us right now or that the time will ever come when we are not faced with new problems.

Some may say: Suppose we did not have this dairy business, some other form of agriculture would have taken its place and we would have our fertile farms, our good roads, our fine churches, schools, hospitals and our places of business that we now have. I think not. Just

glance at the history of this section, just talk with some of the older ones whose memories go back to the pre-dairy days. Such a review will make us anxious to hold fast that which we have and will quicken us to build for the future.

It was my good fortune to be in Monroe on your famous "Cheese Day." It is needless to describe the impressions that such an event makes. People that attend for the first time are wholly unprepared for what is in store for them. It was one of the first events I heard about when I came to Wisconsin.

To people that are so interested in dairying and who can stage such an event, it may not seem necessary to endeavor to stir up more interest in their own industry. But this Cheese Day is a gala day, an event to be looked forward to, while milking cows and making cheese is an every day occurrence.

In an organization of this sort we can well afford to consider from time to time what we may do to further the interests of dairying. In other words we may have to change our program from year to year to meet changing conditions. In order for any plan to succeed and bear fruit, it needs the loyal support of all whom it is to benefit. Before this support can be given, it is necessary that everyone be fully acquainted with the plan and then learn the part he is to play. In order to do this, intelligently, each individual in the group whether he be a dairy farmer, a cheesemaker or a dealer, must have a full understanding of each other's problems. Sometimes because of misunderstanding we expect the impossible. It is only when we realize how dependent we are upon one another and when we understand the part we are to play in the plan that we are able to have an eye, single, to the welfare of the industry. It is always necessary to bear in mind that, in the long run, any move that we make that does not contribute to the well being of the industry as a whole, will not contribute to our success. We all have to play our part and look upon this as a collective enterprise rather than an individual one.

The community at large who in a measure are not so intimately associated with the industry and yet who are enjoying its fruits must familiarize themselves with our problems and our aims.

This community and organization have been forward in taking up with movements that have had for their purpose the improvement of dairying. There never comes a time, however, when we can indulge in a cessation of activity. There are many things to consider, some old and tried, some new.

Herd Improvement Association Records bring out interesting information. The men in charge of this work in Wisconsin present the following figures. These are taken from actual records made by Association members.

No. Cows	Av. Fat	Cost of Pro-	Cost of Prod.	
		duction 1 lb. Fat	1 Cwt. Milk	Net Profit
6893	200	47c	\$1.80	\$ 8.00
9599	300	37c	\$1.40	\$40.00
2641	400	28c	\$1.10	\$72.00

For years it has been known that it only pays to milk cows that are economical producers. According to some actual herd improvement records, it has been demonstrated that one good cow will average more than \$140 over feed costs, while it takes two medium cows to average \$127 over cost of feed and five poor cows will only produce \$153 over feed cost. The good cows averaged 450.5 pounds of milk fat per year, the medium cows averaged 250.8 pounds of fat per year while the poor cows averaged 156 pounds of fat. The only way to find out to which class a cow belongs is to weigh and test her milk. This is done easiest in a herd improvement association.

According to the last available statistics there were approximately 77,700 producing dairy cows in Green and Lafayette counties which produced in a year 392,-910,000 pounds of milk, an average yearly production per cow of 5,056. If this milk averaged 3.5% fat, each cow produced 176.96 pounds of fat per year. This of course is an average figure. Some would do better than

this and others would not do as well. Supposing then that by weeding out some of the poor individuals and by feeding according to production this average could be raised to 250 pounds of fat per cow per year, the amount the medium cow recorded above produced. It would take only 55,007 sows to produce as much fat as the 77,700. Think of the saving this would effect in time and money. This improvement could be brought about in a comparatively short time through herd improvement association work.

Herd improvement association work not only succeeds in weeding out the unprofitable cows but also aids in correct feeding. That is feeding for economical production. In many instances, it shows the necessity for a better sire to head the herd.

There is no more expensive animal on a farm than a poor herd sire, a scrub bull, expensive because of lost profits. As the progressive farmer has aptly said he is sired by "mistake" and damned by every law-abiding, self-respecting dairyman from Penobscot Bay to the Golden Gate.

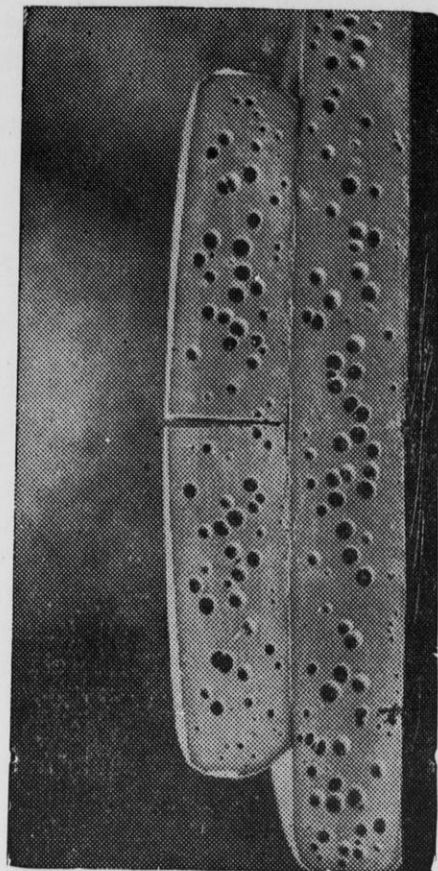
When a herd sire is selected, this selection should be based on his ability to increase the production of the herd. A scrub bull's chances or bringing this improvement about within the herd is mighty slim. Pure bred bulls stand a much better chance of doing it than do scrubs. Pure bred bulls that are "proved" are the only safe ones to use. The effect on production exercised by a good bull may be illustrated by some figures from the Wisconsin Experiment Station. These figures are taken from actual records in one of the best dairy counties in the state. One herd sire was used with six cows who had excellent records as high producers. The daughters of this bull produced 3693 pounds less milk and 168.7 pounds less fat per year than their dams. In the same herd another bull was used with six cows whose records for production were not as high as the above mentioned group. His daughters produced 4672 pounds of milk and 147.1 pounds of fat more than their mothers.

In the August, 1928, issue of the bulletin put out by the Agricultural Commission of the American Bankers' Association, an illustration is given of the worth of a good sire. A grade Holstein cow having a production record of 11,000 pounds of milk and 375.8 pounds of fat was bred to a scrub bull. The daughter of this mating produced 6274 pounds of milk and 238.9 pounds milk fat. The same cow when bred to a pure bred bull had a daughter that produced 14,071 pounds of milk and 476.6 pounds of fat.

Some studies made by the Bureau of Dairy Industry at Washington of the records of 200 pure bred bulls shows the power that a bull has of transmitting increased production to his offspring. This study showed the following: That in nine instances when a pure bred bull was used in herds with an average fat production of 200 pounds everyone of the daughters showed increased productions over the dams. Out of 49 bulls which were used in herds that averaged from 200 to 300 pounds fat, 44 increased and 5 decreased production. Of the 85 bulls used in herds averaging 300 to 400 pounds fat per year 57 increased and 28 decreased production. Out of 57 bulls used in herds averaging 400 pounds of fat and over 28 increased and 29 decreased production. When the herd average is high, it takes better bulls to continue to improve the herd production. If pure bred bulls fail sometimes in herds of high production what chance does a scrub bull have even in herds of average production?

In case the herds are large enough a good pure bred sire should be maintained. If the herds are small, bull associations may be formed and a pure bred bull maintained cooperatively.

If finances are lacking to pay for the importation of superior dairy cows or herd sires, effort may be made to interest bankers in special financing plans. It pays to have faith in our industry and good stock will pay good dividends. If no facilities are available, machinery may be set up to care for the purchase of new and better lines



"GREEN COUNTY'S GOLD—SWISS CHEESE"

of breeding where necessary.

Another movement which should continue to have our support is the eradication of contagious diseases of our cattle.

One of the greatest scourges of dairy battle is that of tuberculosis. The task of tuberculosis eradication in the United States is now half completed. The statement has been made that the losses due to tuberculosis have been cut in half in the last ten years. There are still some of our counties in Wisconsin that have not progressed very far in this work, Calumet, Iowa, Lafayette and Green. This eradication work should not be considered from the standpoint of economic reasons alone although it does pay to have tuberculosis-free herds. It should be considered from the human welfare side, as well. It has been estimated that 25% of the deaths among children under sixteen years of age from tuberculosis are caused from animal infection.

It has been stated that the losses in dairy herds from contagious abortion have been doubled in the past ten years. At the present time the knowledge of the control of this disease is still in the experimental stage. The methods of diagnosing the disease, however, are well worked out. As fast as new information is available, it should be brought to the attention of the producers. This organization may aid by doing this. The sad part about it all, is that many producers who have not had any trouble do not realize the seriousness of the situation. If a man has a clean herd, he should be told how to safeguard it from infection by testing all animals coming into it.

This organization may help in getting improved methods and practices adopted in all of our factories. The Babcock test is an invention of our own dairy school. The industry as a whole has considered it to be one of the greatest aids in placing the dairy business on a firm financial basis. There are still some factories that do not use this test. Then there is the question of pure cultures and starters to be considered.

Another question that merits consideration is the one of quality. No permanent improvement is possible until some definite program of grading or selection of milk for cheesemaking is established. Grading by smell and taste do not go far enough. There are many quality tests that may be used in selecting milk. One of the simplest and one that works very well is the Methylene Blue Test. Improved methods of grading or selecting milk for cheesemaking is only one step in the program of quality. Hand in hand with this must go the latest and most improved methods of manufacture. One of the greatest incentives that the producer of milk and the maker of cheese may have to improve quality, is the recognition that this improvement is accorded, by the buyer in payment for cheese. This means definite grades and payment by grade. It surely would be a wonderful step in advance if this question of quality improvement could be worked out to the mutual satisfaction of all concerned. It is safe to predict that this will never be accomplished until all the dealers, makers and producers can get together and have a complete mutual understanding of the problems involved.

In going over the production figures for the manufacture of Swiss and brick cheese, it is seen that there has been a gradual decrease in the amount manufactured. It is safe to say that the cheese industry has been badly handicapped by the small size of its plants. This makes it difficult on the average for the cheese factory to compete successfully with the large milk plants. Of late there has been a definite swing in the creamery business from gathered cream plants to whole milk plants. This has been handled by the creameries by the utilization of the skim milk manufacturing by-products. When the cheese business has found the best means of utilizing its by-product, whey, a long step will be taken in the advancement of our industry. Considerable experimental work is being carried on at the present time to solve this problem. A full utilization of the whey in the future will mean larger cheese factories.

In closing then I would like to say again that it is necessary for us to get a true picture of our industry and think of it in terms of human interest and to see the relation that we have to it. A clear understanding of each others problems will help us in planning for the future. We may all help by getting behind every movement that is started for the good of the industry. This organization may help by interesting the producers in better methods of production, the makers in the most up-to-date methods of manufacture and the dealers in paying for grade. Last of all any practice which does not work for the benefit of the whole industry will not in the long run work out for the benefit of the individual.

“Relation of the Quality and Composition of Milk to Cheesemaking.”

By Harry Klueter, Ph. G.

**Chief Chemist, Dairy and Food Department,
Madison, Wis.**

Stated another way, cheesemaking may be said to be dependent on the quality of the milk used and its composition. There is nothing new or startling about this, but all too often we dismiss failure with a so-called blanket excuse when in fact we ought to seek diligently for causes of failure. Quality milk free from adulteration is essential to the making of high grade cheese, but it is by no means the only essential. The knowledge and skill of a good cheesemaker working faithfully in a suitably equipped sanitary cheese factory are just as essential. The proper relation between the dairy farmer and his cheese maker is essential, and a proper understanding of not only their own problems but those of each other is conducive to such an understanding.

Since quality is mentioned first in relation to cheese making, let us consider milk from that standpoint before going into its composition. The quality of milk aside from adulteration by skimming or the addition of water is dependent on one or more of several factors.

To be better able to understand some of the more important of these factors, let us ask ourselves what constitutes high quality milk. What are some of the outstanding characteristics of this much sought for product of the dairy farm? Flavor perhaps stands at the head of the list and this is, of course, dependent on more than one condition.

Milk should have an agreeable and pleasing flavor, be mildly sweet, and possess richness due to the characteristic nut like flavor of milk fat. It must be free from

foreign flavors such as are imparted by absorbed barn or barnyard odors or such as are imparted by foreign feed, such as weeds, wild onions, mouldy silage, and the like. The flavor of milk ought to be fresh and clean, free from contamination brought about by the use of unclean milking machines, milk pails, cans, or strainers, and it must be free from acidity. Another outstanding characteristic of high quality milk is its keeping quality for this is an index of the care taken in its production and storage. Freedom from foreign substances as chaff, hair, barnyard manure, is essential.

Milk as it comes from the udder of a healthy cow if properly collected and handled in clean utensils, and properly cooled and stored, should be quality milk.

Sources of contamination are first, the cow—udders, fecal and urinary discharges, buccal and nasal discharges, matter from the coat, that is, hair, skin, plants, barnyards; second, immediate environment—air, ceilings, ledges, floors, feed, such as mouldy hay, smutty straw, manure, and sand used for bedding rather than clean straw, shavings, corn stalks, sawdust, or other suitable materials; utensils, such as pails, strainers, milking machines, coolers, cloths; third, man baccal, aural, and nasal discharges; anal, urinary, and skin eruption discharges, cloths; and fourth, domestic animal vermin and flies.

“It must be apparent that with so many sources of milk pollution deserving attention, it is a difficult matter to reduce dairy sanitation to such simple terms that the precautions deemed essential will seem reasonable to, and be adopted by the ordinary dairyman. Probably most authorities would agree that wiping cows’ udders, milking with dry hands, the use of small top pails, the thorough cleansing and sterilization of utensils and the cooling of the milk to 50 degrees F., are all necessary to the production of clean, wholesome milk.”

There is to my knowledge no more perishable article of food than milk. This is due in a large measure to its composition. Spoilage, decomposition and deterioration

of organic substances like milk, meat, fruit juice, and many other of our foods, are due to the presence of bacteria and favorable conditions of growth such as proper temperature, presence or absence of air, and the absence of direct sunlight. Bacteria are the lowest form of plant life and consist of single cells. They grow rapidly, and as they grow, or more properly, as they reproduce, destroy either by use or by change constituent parts of the foods with which they come in contact. Thus lactic acid, bacteria convert lactose (milk sugar) into lactic acid. This we call lactic acid fermentation and is one of the important reactions essential to cheese making.

According to Van Slyke, milk in which the normal form of lactic acid fermentation occurs produces a firm curd free from gas bubbles. When agitated the curd breaks apart readily into small particles, which settle slowly and leave a clear whey. The milk should have a pleasant, clean, acid taste, entirely free from anything resembling a tainted flavor. While normal lactic acid fermentation is a necessary and desirable thing, there are bacteria which may be grouped with lactic acid bacteria because they decompose milk sugar with formation of lactic acid, but these organisms produce gas and may produce volatile products of an offensive nature. In addition to objectionable gas-forming organisms, we have so-called digesting bacteria which curdle milk without souring and slowly dissolve the curd through the production of an enzyme. This type of organism is widely distributed and is found in stable filth, in soil, water, and floating particles of dust. They are frequently responsible for much of the serious trouble in cheese making. Objectionable bacteria and yeasts so abundant and widely distributed are the cause of a large share of our troubles. They cause bitter flavors, fruity flavors, off flavors, such as rancid or butyric acid flavors, stable or cow-manure flavors, fishy flavors, hydrogen sulphid flavor, and when these develop so as to become very strong they are according to Van Slyke and Publow called "stinkers."

It is the introduction of these various objectionable types of bacteria and yeasts through some one of the sources of contamination already mentioned that destroys the properties of quality milk, and make it just milk.

This seems to be the logical place to take up briefly at least some of the practical preventive measures available to producers of milk interested in quality. What about barns, are they of proper construction? Is there an abundance of natural light for work by day and have you the necessary amount of artificial light for work before daybreak and after dark? Electricity should be made available for every farm. Ventilation is another important item, means for frequent changes of air are highly desirable not only from the standpoint of the health of your animals but to assist you in keeping down to a minimum offensive and objectionable odors. Floors and gutters should be properly constructed from suitable material. The most convenient methods of removing manure should be installed. Filthy calf pens and horse stalls should be removed. In short, conditions in your barn ought to be such as to change the doing of chores from the classification of drudgery to that of a pleasant occupation. A dairy barn is a dairy farmer's work shop and its condition should be inviting to the worker.

You will need a proper dairy house in which to properly care for your milk and the various pieces of apparatus used, such as cans, strainers, pails, and the like. You should have means for not only properly washing utensils but they should be liberally treated with boiling water if steam is not available. The liberal use of slacked lime in and around the dairy barn will do much to sweeten up the premises. Our motto in dealing with objectionable odors due to accumulation of decaying substances—manure and drains, should be remove the cause and the effect will disappear. Smelly disinfectants with low germicidal powers are not preventive measures.

Effect of temperature upon the keeping quality of milk is an important factor. The production of milk in a cleanly manner is but one item, immediately cooling of milk and holding it at a low temperature is also necessary. We must always remember in dealing with deterioration or spoilage by bacteria that temperatures and time are important elements. The standard of quality of milk can be improved more by proper cooling than by any other single item. Cool milk at once to 50 degrees F. and store at or near that temperature. A single germ or organism in milk allowed to cool naturally will multiply several thousand times in twelve hours, while in milk properly cooled and stored an organism multiplies but a few times in the same length of time. The quality of the milk you need for the production of excellent cheese should be the equal of high grade table or city milk, and until we adopt some of the more important methods of production used in its production we must content ourselves with not infrequent losses in the production of cheese because of poor quality.

You will note that the title of this paper deals with the composition of milk as related to cheese making. Since to my knowledge no one has advanced the idea that high grade Limburger and brick cheese could not be made from even the richest of milk we need devote no time to the relation of the various ingredients of milk to each other for such cheese making. In the manufacture of Emmenthal cheese, however, we are dealing with a different problem. In the making of Emmenthal cheese we need the highest grade of milk possible so far as freedom from bacteria is concerned because we expect to employ methods of manufacture quite favorable to bacterial life. We expect to produce openings or so-called eyes of proper size and form with quite regular distribution throughout the cheese. This can only be accomplished through regulated bacterial action. In the development of eyes, however, we must avoid the production of glaesler cheese or accept the penalty of a cut in price for our cheese. The theory has been advanced

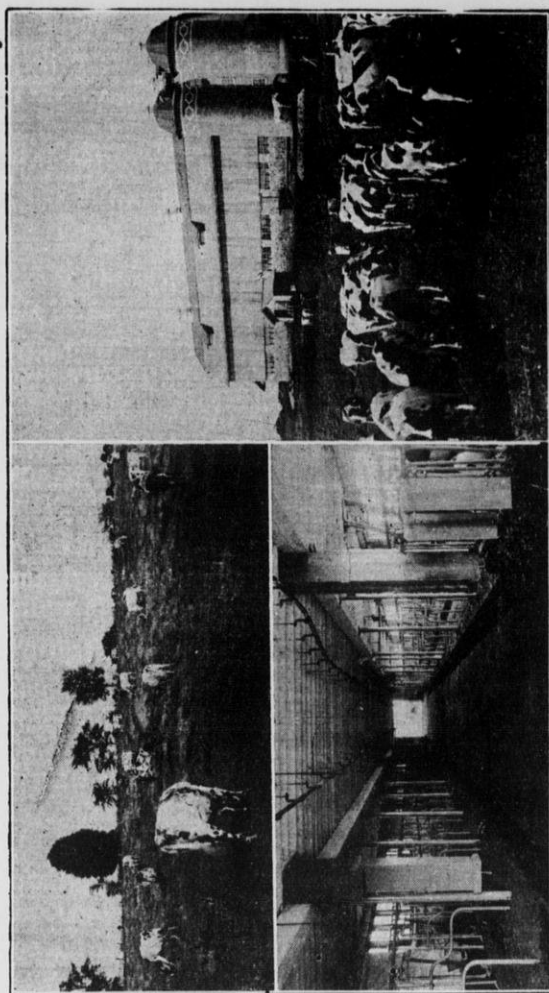
that a certain definite ratio of casein-to-fat is required, and experiments have been conducted which lend weight to the theory although the person making the experiments in discussing them, added, "Undoubtedly there are other factors that may cause glaesler cheese aside from a low casein-to-fat ratio." We cannot go into the causes of glaesler cheese in a short paper of this kind but the claims made do go to the composition of milk for Swiss cheese making. Dr. S. M. Babcock, who needs no introduction to anyone in touch with milk and milk testing, gives the composition of milk as follows:

Milk Fat	-	-	3.6 %
Solids not fat	-		9.1 %
Water	-	-	87.3 %
<hr/>			
Total	-	-	100.0 %

The solids not fat consist of:

Nitrogen containing bodies	3.8 %
Milk Sugar	- - - - 4.5 %
Citric Acid	- - - - 0.1 %
Ash	- - - - 0.7 %

He gives as the casein content of this milk 3.0 % and it therefore has a casein-to-fat ratio of 0.81 to 1. In work carried on by the dairy and food department in your section of the state and in other sections we do not find factory milk as a rule to contain as much casein as reported by Dr. Babcock, and it may be a fact that the composition of cheese factory milk has changed. Our work shows ratios of casein to fat of 0.68-to-1 up to ratios of 0.84-to-1. With milk of a casein to fat like the second of the two given there can be no call for standardization for Swiss cheesemaking but with milk of the type containing only 0.68 parts of casein to one part of fat, a slight removal of fat may be desirable and even necessary. It is highly desirable that this matter be thoroughly investigated but not only from the standpoint of fat and casein but from the standpoint of moisture content in relation to protein content as well. In



GREEN COUNTY BARNYARD AND PASTURE VIEW
WITH INTERIOR VIEW OF MODERN COW BARN.

as much as fat is insoluble in moisture, or light salt brine, the form in which moisture occurs in cheese, but many of the protein compounds formed from casein are soluble in light salt brine, it may be that the character of or the percentages of salt brine soluble proteins play a much more important role in the prevention of glaesler cheese than does the fat content of milk.

Enough has been said to show the importance of knowing the fat and casein content of milk used for cheese making. But to know the composition of your raw material is but one phase of the subject. Every cheesemaker should know his fat loss in the whey, the fat test of the whey cream he sells and finally he should know the fat and moisture content of the cheese he makes. The trend of business activities today, be they manufacturing, distribution, or selling is toward consolidation, leading to larger units, and it is not difficult to see the advantages in such an arrangement.

Perhaps with the advent of good roads which are equivalent to shortening the distances, several of the smaller factories may be brought together into a larger organization of the same type thus making it easier to carry on many of the necessary tests to establish not only fat and casein, but also the quality of the milk.

In closing let me urge each dairy farmer to use every means at his command to help in the production of better milk. And let me urge every cheesemaker or factory manager to obtain the necessary equipment to make such tests as the Babcock fat test, the casein test, the Wisconsin curd test and the Methylene blue test.

"The Latest Tests Applied in the Manufacture of Swiss Cheese."

By Emil Buholzer

Newman Factory, Juda, Wis.

Members of the Southern Wisconsin Cheesemakers' and Dairymen's Association and Friends:

It is my great pleasure to say a few words to you cheesemakers and farmers about the latest and newest methods of testing milk in the manufacturing of Swiss cheese.

I, myself, am no orator or politician to talk to you for an hour or two, but I will do my best to tell you in a few brief words all I know about it.

First of all, we like to have a clean supply of milk, and it is the duty of the cheesemaker to get the full co-operation from the farmer. If a cheesemaker is a diplomat and knows how to handle his farmers, he is able to get a good quality of milk, most of the time.

It takes a clean and sweet tasting milk to make a No. 1 Swiss cheese.

Besides getting a good milk, the cheesemaker should know something about the latest tests.

In order to gain this knowledge every cheesemaker has the opportunity to go to Madison, and attend a course which is given by the Dairy Department of the State University.

I attended the course in 1924 when 62 cheesemakers kept Prof. Sammis and his instructor jumping around. The course is very beneficial and everybody has a chance to learn something new, if he intends to go there for that purpose. I would advise anybody and especially the young cheesemaker to attend a course of two weeks.

Last winter and early spring our own association, which is the Foreign Type Cheesemakers' Association,

had four well attended meetings, when each time a different test was demonstrated and explained.

But only by demonstrating and explaining, the tests will not be of any use to the cheesemaker if he does not apply his knowledge at home in his own cheese factory. And whenever you try it at home don't expect to be perfect the first time. It needs practice for every test, and the more you do the different tests the more experience you are getting out of it, and each time something new will come up and keep your interest awake.

By making only one test the real trouble cannot be found, therefore I would advise you to make several different kinds, and a duplicate of each and compare them with each other, then you can draw your conclusions and locate the trouble. I recommend the following tests:

1. Sediment test.
2. Methylene Blue Test.
3. Curd Test.
4. Fat and Casein Test.

“The Feed Situation In Green County”

By L. F. Graber

**Professor of Agronomy, University of Wisconsin
Madison, Wisconsin**

It's pretty hard to talk about profitable feeding of dairy cattle unless the barn is full of good alfalfa hay and the silo full of first class corn silage. Feeding without these primary requisites is an expensive proposition at best. It would be remarkable if cows could be profitably fed entirely upon purchased feed. This rarely has been true. I doubt if it ever will be generally true. It is true, however, that the most profitable feeding is done on those farms where an abundance of alfalfa hay is grown. This cuts down the cost of feed and builds up the profits.

We must first lay the foundation for profitable feeding with home grown feeds, particularly in the form of alfalfa hay, silage and some grain. With these, it is well enough to talk about the “why, how, when and where” of using concentrates in the dairy regions. Without rich hay and silage the feed bill is bound to be high.

Green County Must Fight Winterkilling Losses.

Unfortunately, the past two winters have been very unfavorable for alfalfa. Last winter in particular, about one-half of the acreage in south-western Wisconsin was wiped out by the unfavorable weather. There are ways with which we can avoid these heavy losses. We must come to use hardy kinds of alfalfa seed like the Grimm. I have advocated hardy alfalfa seed for more than fifteen years. We must come to use it. Grimm alfalfa will live through hard winters when the common ordinary western grown alfalfa will be completely killed out. There are other alfalfas that are about as hardy as the Grimm

such as the Cossock and the Canadian Variegated, but I mention Grimm alfalfa because the seed of this variety is now most abundant. There will be available some Canadian Variegated which is a good alfalfa and some imported Turkestan. The latter is a very hardy seed but it does not yield as well as Grimm. This seed is imported from Russia and will have ten per cent of the seeds stained red to indicate that the seed has come from foreign lands. I mention these varieties because the solution of the winterkilling problem must come first with the use of hardy alfalfa seed.

The next big step in preventing winterkilling losses is to cut only twice a year. Two cuttings a year will always give more hay with less work. For example, in 1924, 1925, 1926, 1927 we cut Grimm alfalfa twice annually and secured a total yield of 12 tons of hay per acre for the four year period, while three cuttings annually only gave $9\frac{1}{2}$ tons. With common alfalfa, we obtained during the same four years a total of $8\frac{1}{2}$ tons with two cuttings annually but only $6\frac{1}{2}$ tons for three cuttings per year. Both common and Grimm alfalfa were badly thinned out by three cuttings while the plots cut twice, especially the Grimm, were still good stands. It is foolish to cut alfalfa more than twice a year when you want the fields to last. Three cuttings mean more work, less hay and short lived alfalfa. Late fall cutting is very hard on alfalfa.

Winter Killing Can Be Controlled.

That the use of hardy seed and the two cutting system in handling alfalfa will prevent winterkilling losses to a great extent is well illustrated by a comparison of the growth of alfalfa acreage in two adjacent counties—Green Lake and Fond du Lac. Since 1924 the alfalfa acreage in Green Lake county has grown steadily until in 1927 the county had practically three times the acreage which obtained in 1924. County Agent, James Lacey, built up this acreage with Grimm alfalfa and the two cutting system. In Fond du Lac county farmers have

been using the cheaper common alfalfa. They have cut their alfalfa three and sometimes four times annually. Since 1924 their acreage has decreased pronouncedly. In 1927 they had but little more than half the acreage of 1924. I cite this example to indicate the importance of hardy seed and the two-cutting plan if we are going to make dependable the growth of good high protein feed on dairy farms in Green county. We must come to this. To bring about a general appreciation of the importance of hardy seed and the two-cutting plan, Green county needs educational leadership such as has been so ably provided in Green Lake county.

Feeding Poor Cows Good Feed Is Costly.

Mr. A. J. Cramer, who has charge of the Cow Testing associations in Wisconsin, has made some studies on 40,000 cows in Wisconsin whose annual production of milk and feed costs have been obtained and recorded through numerous cow testing associations. He has grouped these cows in the order of their production and has determined the average cost of feeding for each animal in such groups. Four hundred and three cows out of 40,000 only produced 109 pounds of butter fat in a year worth \$53.99. The total cost of feeding and keeping these cows, however, was \$82.61. Instead of a profit they lost \$28.62 per head. Another group of 3267 cows gave an average production of 156 pounds of butter fat worth \$77.66. The feed cost and upkeep amounted to \$87.68. These lost \$10.02 per head. Profit began only when the annual production was above 200 pounds of butter fat. For example, 10,551 cows produced an average of 250 pounds of butter fat and made a net profit of \$23.75 per head. Ninety-six hundred cows producing an average of 300 pounds of butter fat made a net profit of \$41.69. Twenty-six hundred forty-one cows producing an average of 400 pounds of butter fat made a net profit per head of \$73.07. Two hundred ninety-two cows producing 494 pounds of butter fat made an average net profit of \$101.73. The lesson is plain. It is hard to feed

poor cows and make a profit. Scientific feeding avails nothing unless the cows are fair producers.

Good Cows Need Concentrates.

With a good herd there is ample profit to warrant feeding concentrates. Alfalfa hay and silage are not sufficient for the best results with high producing herds. Many balanced rations designed to fit almost every situation will be found in the special circular entitled "Feeding Dairy Cows," which can be obtained on request by writing to the Extension Service of the College of Agriculture, Madison, Wisconsin. A copy of this should be in the hands of every progressive dairyman.

The Pasture Situation.

Just as alfalfa hay and corn silage have become primary requisites for maintaining the dairy herd with a cheap supply of winter feed so too will the utilization of sweet clover, winter rye and other supplementary pasture crops become essential in the development of an adequate summer feed supply.

We have depended too much upon permanent pastures. In fact, these have become relegated to the roughest and the poorest land on the farm. In addition, they have been badly mistreated by the dairyman. They have been constantly overgrazed. From the first spurt of growth in the spring, the grasses which make up our permanent pastures are eaten off continuously and closely all during the months of May and June. Then we complain that bluegrass does not provide grazing during July and August. I cannot over-emphasize how harmful close, premature grazing is on the subsequent growth of bluegrass, redtop, and in fact all pasture grasses. If we fully understood how a plant grows, we would appreciate the importance of allowing bluegrass to head out before it is grazed closely or heavily. It is during the time that bluegrass heads out that it provides the material which is needed for making root growth. Where the plant is grazed off constantly, being given no opportunity to ma-

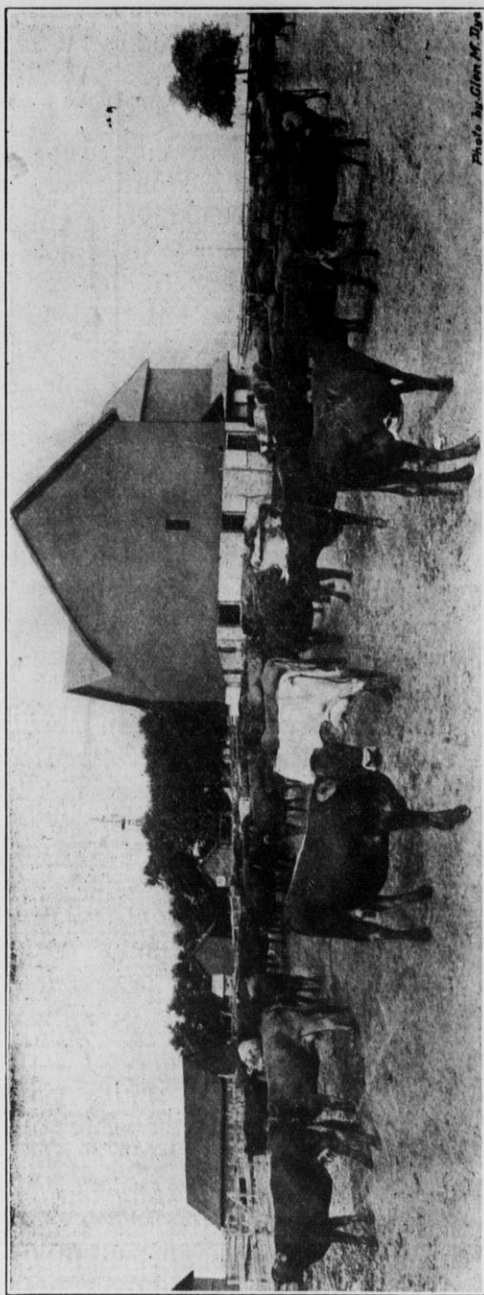


Photo by Glenn Mt. Day

A GREEN COUNTY FARM SCENE

ture, the root growth is greatly limited. Such treatment weakens the grass, eliminates the supply of grazing during July and August, and may cut down the productivity of the pasture by 50 per cent or more.

A Bluegrass Experiment.

For example, in 1924 and 1925 I cut plots of bluegrass with a lawn mower frequently throughout the year while other strips of the same grass were allowed to mature at which time they were harvested. It is interesting to know that the one cut at maturity of bluegrass yielded double the frequently cut plot taken with a lawn mower. But this is only half the story.

After Effects of Frequent Cutting.

In 1926 the plots which had been cut frequently in 1924 and 1925 and those which were cut at maturity in these same two years were all allowed to mature before they were cut. The difference in yields was tremendous. The plots which were cut at maturity in 1924 and 1925 gave a yield of from four to five times that obtained from the plots which had been previously cut frequently with a lawn mower.

Grazing a Besetting Sin.

The great difficulty in pasture management is premature overgrazing. Many of our bluegrass pastures barely return enough to cover the taxes levied on them. For this we are largely to blame. We have not given the grass an opportunity to build up a good strong root system. We have not allowed that maturity of the plant to occur which makes for productivity and which makes for a good strong root growth. The result is that every summer we see our fine bluegrass pastures filled with ragweeds and other types of weed growth that is unpalatable to livestock. With the elimination of premature overgrazing we will avoid these difficulties and greatly increase the summer feed supply.

Supplementary Pastures a Necessity.

To relieve the heavy strain of premature overgrazing on bluegrass, we must come more and more to use such supplementary pasture crops as winter rye and sweet clover. Winter rye can be sown in corn at the last cultivation. It has an extremely early spring growth and can be grazed until about the 10th of May when the plot can be plowed and planted to corn or some other crop. By this time the sweet clover may be in condition for grazing so that heavy grazing of the bluegrass can be avoided until about the middle of June when it has headed out. It is true that the sweet clover and alfalfa can be sown with the oats as a nurse crop and the nurse crop can be pastured on after it has begun to head without hurting the stand of alfalfa or sweet clover. This may be another means of relieving bluegrass pastures. For summer feeding, however, sweet clover is a most remarkable plant. It will furnish excellent grazing throughout the hot months when bluegrass even with the best treatment may fail to produce succulent grazing. Every farm will have to work out its own grazing problems but surely it will require the use of these special pasture crops such as winter rye, sweet clover and possibly grains which are used as nurse crops for alfalfa and sweet clover.

A New Feature of Pasture Improvement.

I think one of the most promising phases of grass land improvement will come with the growth of sweet clover in bluegrass pasture sod. For four years I have successfully established in an old pasture on the University farm sweet clover. The combined yield of the second year's growth of sweet clover and bluegrass in which it grew averaged nearly three times that obtained from adjacent bluegrass in which no sweet clover was sown. Scarified and inoculated sweet clover seed was sown at 30 pounds per acre on frozen ground in the latter part of the period of alternate freezing and thawing which occurs during March and April and which on the heavy soils

where sods are not too thick covers the seed effectively without any form of seed bed preparation or cultivation. It was found, however, that in order to attain success, grazing of the seedling plants of sweet clover grazing had to be eliminated during the first year in order to give the plants a chance to become started. It has also been found that on heavy dense sods it is necessary to disk or cultivate with a spring tooth harrow in order to provide for a soil contact for the seed. This is not necessary on very thin sods because the soil is near enough to the surface to cover the seed. However, in any case considerable accumulations of old grass should be burned off before seeding. These details are important. Generally speaking, it is safest to disk the sod before seeding and then harrow after seeding. This whole idea is still rather new and before anyone attempts the plan he should be sure that his soil contains enough lime to grow sweet clover. He should inoculate his seed before sowing. He should disk the sod when the surface is sufficiently thawed for this purpose. He should use heavy amounts of seed and if he will drop a letter to me at the College of Agriculture, Madison, Wisconsin, I will be glad to supply detailed information based on four years of experience and experimentation.

Rest assured, if sweet clover can be successfully established in bluegrass, it will justify fencing off a portion of the permanent pasture to eliminate grazing the first year. It will warrant allowing the sweet clover to become knee high in the bluegrass during the second year before grazing is begun. I say it will justify these practices, for not only will the feeding capacity of the sweet clover and bluegrass be more than double that of bluegrass in which no sweet clover was grown but the fact that the sweet clover will add so much nitrogen fertility to the soil that the bluegrass on which it grew will become exceedingly productive after the sweet clover has ceased to grow.

In actual trial, bluegrass in which sweet clover was grown for three years has yielded double and treble that

in which no sweet clover has ever been grown. I regard this method of grass land improvement as a feature which will become one of the great land marks of pasture improvement in the years to come.

RESOLUTIONS

1. The committee on Resolutions beg leave to again remind the members of the Cheesemakers' and Dairymen's Association that its aims have always been to advance the best interests of the cheese and dairy industry. That we may have a continued prosperity based on sound business principles we urge again the importance of a few fundamentals such as proper sanitation and cleanliness in connection with all milk food products. Let every one strive for a clean and sanitary dairy barn, clean milk utensils, clean and sanitary cheese factories, healthy dairy cows, tuberculin tested, and properly cooled milk. These fundamentals are essential to high grade dairying. To aid this association in these undertakings we invite and urge dairymen and retired dairymen with the cheesemakers of Southern Wisconsin to become members of this Association.

2. Whereas, We have on our statutes a law compelling the labeling of a pure and wholesome article of food with the label "Whey Butter," which label is detrimental to this kind of butter because it arouses curiosity and suspicion among the consuming public, and drives our cream out of the state to be manufactured into butter and reshipped into Wisconsin as creamery butter.

Therefore be it: Resolved, That we instruct our member of the State Legislature to work for the repeal of this law.

3. We heartily commend the dairy school and the work done at the College of Agriculture of the University of Wisconsin. We urge all cheesemakers to avail themselves of this opportunity as far as possible.

4. We recommend that this association co-operate with the U. S. Department of Agriculture and that the service of a competent cheese instructor be secured if possible.

5. Whereas, Divine Providence has removed an able leader and supporter of the dairy industry in Wisconsin in deceased J. Q. Emery, a former Dairy and Food Commissioner and former State Superintendent of Public Instruction, be it

Resolved, That we deeply regret the loss we have sustained and we extend to the members of his family our sincere and heartfelt sympathy and condolence. And that the secretary be instructed to send a copy of this resolution to his family.

It has also pleased the Almighty to remove from our midst a faithful member in George Switz, of Fort Atkinson, who for many years has been a faithful attendant.

6. Resolved, That the thanks of this association are hereby tendered to the officers and members; to exhibitors and donators of special prizes; to speakers on our programs and entertainers who assisted in making this convention a success.

H. H. MOE
C. R. SCHEPLEY
EUGENE WIRZ

Donations of Premiums and Special Prizes.

- Adolph Angliker, Monroe, Wis., 4 double thread cheese cloths, 1 14-4, 1 13-4, 2 11-4; 2 single thread cheese cloths, 10-4; 10 yards burlap; 1 gallon Marschall Rennet Extract; 5 pounds Base Copper Polish and 1 imported Cheese Brush.
- A. H. Barber-Goodhue Co., Chicago, Ill., One pair wooden soled shoes.
- Cream City Chemical Works, Milwaukee, Wis., One 50 pound pail E. Z. Kleen Washing Powder.
- Foreign Type Cheese Dealers' Association, Monroe, Wis., For the pro rata fund, cash \$80.00.
- General Laboratories, Madison, Wis., Five one-gallon jugs B. K. Disinfectant.
- Green County Lumber & Fuel Co., Monroe, Wis., Twenty Cheese Boxes.
- Chr. Hansen's Laboratory, Inc., Little Falls N. Y., Cash \$15.00.
- D. F. Kusel Company, Watertown, Wis., Six bottles Pronto Fire Extinguishers.
- Lavo Company of America, Milwaukee, Wis., Four 35-pound pails of Mirific Crystal Wash Powder.
- Lotz Rennet Laboratories, Madison, Wis., Six one-gallon jugs Rennet Extract.
- Gottlieb Marty, Monroe, Wis., Cash \$3.00.
- Monroe Lumber & Fuel Co., Monroe, Wis., One Barrel Diamond Crystal Cheese Salt.
- Morton Salt Co., Milwaukee, Wis., Cash \$5.00.
- Regez Cheese Company, Monroe, Wis., 15 Cheese Boxes.
- Ruggles & Rademaker, Milwaukee, Wis., Regez Cheese Co., Agents, Six 100-pound sacks Cheese Salt.
- Herman L. Schindler, Life Insurance Agent, Monroe, Wis., Cash \$5.00.
- H. B. Stanz Co., Milwaukee, Wis., One box, 12 jars Grated Sap Sago.

- Southern Wisconsin Cheesemakers' and Dairymen's Association, Monroe, Wis., for the pro rata fund, Cash \$70.00.
- Stoelting Brothers Co., Kiel, Wis., One 15-Gallon Welded Milk Can.
- The Citizens Bank, Monroe, Wis., Cash \$10.00.
- The Colonial Salt Co., Chicago, Ill., Cash \$5.00.
- The Commercial & Savings Bank, Monroe, Wis., Cash \$10.00.
- The Creamery Package Manufacturing Co., Chicago, Ill., One White Duck Suit.
- The DeLaval Separator Co., Chicago, Ill., Geigel Hardware Co., Agent, Cash \$40.00 and 11 Gallons Power Separator Oil.
- The First National Bank, Monroe, Wis., Cash \$10.00.
- The J. B. Ford Company, Wyandotte, Mich., Four Stag-horn Handled Carving Sets.
- The Johnston Tin Foil and Metal Co., St. Louis, Mo., C. R. Schepley, Agent, One genuine good Leather Grip; 1 wool and cotton mixed Blanket and one cotton and little wool mixed Blanket.
- The Marschall Dairy Laboratory, Madison, Wis., Cash \$20.00.
- The Midland Metal Co., Chicago, Ill., Regez Cheese Co., Agent, For Exhibitor Prize, 1 42-piece Set of Dishes and for the pro rata fund, Cash \$5.00.
- The Ohio Salt Co., Wadsworth, Ohio, Cash \$5.00.
- The Sharples Separator Co., West Chester, Pa., John Zurkirchen Co., Agent, Cash \$25.00.
- Vacuum Sediment Tester Co., Madison, Wis., One Vacuum Sediment Tester.
- Adolph Vogel, Winslow, Ill., One 1-gallon Dipper, 1 24-quart Factory Pail, 1 Syphon Strainer, 1 Curd Pail.
- C. E. Zuercher & Co., Chicago, Ill., Cash \$10.00.
- John Zurkirchen Co., Monroe, Wis., 20 Cheese Boxes, 1 Wooden Scoop, 1 Thermometer, 1 imported Cheese brush.

CHEESE EXHIBIT PRIZE WINNERS.

The following Cheesemakers received premiums and special prizes:

SWISS CHEESE

Sulzer Bros., Knight Factory, South Wayne, 96.7 points

One 14-4 double thread cheese cloth, donated by Adolph Angliker; one gallon B. K., donated by General Laboratories; 100 pounds cheese salt, donated by Ruggles & Rademaker; three dollars, donated by the Colonial Salt Co.; twenty-five dollars donated by the De-Laval Separator Co.; five dollars, donated by the Marshall Dairy Laboratory; one Vacuum Sediment Tester, donated by Vacuum Sediment Tester Co.; one wooden scoop, donated by John Zurkirchen Co. Total value \$57.65.

John Anderegg, Maple Grove Factory, Juda, 96 points

Two 10-4 single thread cheese cloths, donated by Adolph Angliker; one gallon B. K., donated by General Laboratories; one gallon rennet extract, donated by Lotz Rennet Laboratories; three dollars, donated by Gottlieb Marty; one 100 pound sack cheese salt, donated by Ruggles & Rademaker; five dollars, donated by Herman Schindler; two dollars, donated by The Colonial Salt Co.; one carving set, donated by The J. B. Ford Co.; one thermometer, donated by John Zurkirchen Co. Total value \$26.35.

Fred Geissbuehler, Brunkow Fact. Darlington, 95.5 points

One 11-4 double thread cheese cloth, donated by Adolph Angliker; one gallon B. K. donated by General Laboratories; 1 gal. rennet extract, donated by Lotz Rennet Laboratories; three dollars, donated by Morton Salt Co.; three dol-

lars, donated by the Commercial & Savings Bank; seven dollars, donated by the Sharples Separator Co.; 1 gallon dipper, donated by Adolph Vogel; one imported brush, donated by John Zurkirchen Co. Total value \$23.15.

Reinhard Mueller, Wuethrich Factory, Clarno, 95.3 points

Ten dollars, donated by the DeLaval Separator Co.; pro rata money \$5.08. Total value \$15.08.

Alex Abplanalp, Health Valley Fact., Juda, 94.5 points

Five dollars, donated by the DeLaval Separator Co.; pro rata money \$5.04. Total value \$10.04.

Ernest Hermann, Neillsville, Wis. - - 94.5 points

Pro rata money \$5.04.

Jacob Aeschlimann, Flint Factory, Argyle - 94.5 points

Six dollars, donated by the Sharples Separator Co.; pro rata money \$5.04. Total value \$11.04.

Valentine Zibung, Wells Factory, Argyle 93.8 points

Pro rata money \$5.00.

Eugene Wirz, Vinegar Branch Factory, Darlington,

Wis. - - - - - 93.3 points

Pro rata money \$4.97.

Emil Buholzer, Newman Factory, Juda - 92.5 points

Pro rata money \$4.93.

Emil Baumgartner, Advance Factory, Monroe, 92.3 points

Pro rata money \$4.92.

Christ Koenig, Davis Factory, Browntown, 92 points

Pro rata money \$4.91.

Emil Stoller, River Bend Factory, Argyle - 89.8 points

Pro rata money \$4.79.

Franz Brand, Pfund Factory, Monroe - 89.5 points

Pro rata money \$4.77.

Fred Wuetrich, Giese Factory, Juda - 89.5 points

Pro rata money \$4.77.

Jacob Nieffenegger, Darlington Factory, Darlington, Wis. - - - - - 88.8 points

Pro rata money \$4.74.

Christ Stettler, Whitehead Factory, Monroe, 88.5 points

Pro rata money \$4.72.

John Rechsteiner, Mud Branch Fact., Argyle, 88.3 points

Pro rata money \$4.71.

Leo Von Moos, Spring Valley Factory, Argyle, 88 points

Pro rata money \$4.69.

Rudy Grogg, Spring Brook Factory, Brodhead, 87.3 points

Pro rata money \$4.66.

BLOCK CHEESE

Walter Ufer, Willet Factory, Argyle - 93 points

One 13-4 double thread cheese cloth, donated by Adolph Angliker; one gallon B. K., donated by General Laboratories; five block boxes, donated by the Green County Lumber & Fuel Co.; five dollars, donated by Chr. Hansen's Laboratory, Inc.; one five-gallon can Power Separator oil, donated by the DeLaval Separator Co.; five dollars, donated by the Marschall Dairy Laboratory; one 24 quart factory pail, donated by Adolph Vogel. Total value \$28.45.

Fred Geissbuehler, Brunkow Fact., Darlington 92.3 points

One 11-4 double thread cheese cloth, donated by Adolph Angliker; one gallon B. K. donated by General Laboratories; 1 gal. rennet extract donated by the Lotz Rennet Laboratories; five block boxes, donated by Regez Cheese Co.; two dollars, donated by the Citizens Bank: one white duck suit, donated by the Creamery Package Mfg. Co.; two 1-gallon cans Power separator oil, donated by the DeLaval Separator Co.; six dollars, donated by the Sharples Separator Co. Total value \$24.90.

Walter Lauper, Augsburgur Fact., Winslow, Ill., 91 points

Ten yards burlap, donated by Adolph Angliker; two bottles Pronto fire extinguisher, donated by D. F. Kusel Company; one 35 pound pail Mirific Crystal W. powder, donated by Lavo Company of America; one gallon Rennet Extract, donated by the Lotz Rennet Laboratories; five dollars, donated by the Commercial & Savings Bank; one gallon Power separator oil, donated by the DeLaval Separator Co.; six dollars donated by the Sharples Separator Co.; five block boxes, donated by John Zurkirchen Co. Total value \$25.00.

Herman Aebersold, Apple Grove Fac., Argyle, 90.3 pts.

Pro rata money, \$4.82.

August Schmid, Jenny Factory, Monroe - 90.3 points

Pro rata money \$4.81.

Arnold Thuele, Fairview Factory, Hollandale, 89.3 points

Pro rata money \$4.76.

David Walser, Holstein Prairie Factory, Monticello,

- - - - - 88.3 points

Pro rata money \$4.71.

BRICK CHEESE

Otto Matter, Murphy Factory, South Wayne, 94 points

One gallon Marschall Rennet Extract, donated by Adolph Angliker; five brick boxes, donated by Green County Lumber & Fuel Co.; five dollars, donated by Chr. Hansen's Laboratory, Inc.; one barrel Diamond Crystal Cheese Salt, donated by Monroe Lumber & Fuel Co.; 100-lb. sack Cheese Salt, donated by Ruggles & Rademaker; carving set, donated by the J. B. Ford Co.; five dollars, donated by the Marschall Dairy Laboratory; three dollars, donated by the Ohio Salt Co. Total value \$28.00.

Ernst Schlaginhaufen, Stone Hill Factory, Belleville - - - - - 93.7 points

Five pounds Copper Polish, donated by Adolph Angliker; 35 pound pail Mirific Crystal Wash Powder, donated by Lavo Company of America; one gal. Rennet Extract, donated by Lotz Rennet Laboratories; five brick boxes, donated by Regez Cheese Co.; 100-pound sack cheese salt, donated by Ruggles & Rademaker; one box, 12 jars grated Sap Sago, donated by the H. B. Stanz Co.; two dollars, donated by the Citizens Bank; two one-gallon cans Power separator oil, donated by the DeLaval Separator Co.; two dollars, donated by the Ohio Salt Co.; five brick boxes, donated by John Zurkirchen Co. Total value \$23.15.

Nick Buergisser, Horse Shoe Bend Factory, Blanchardville - - - - - 93 points

One imported brush, donated by Adolph Angliker; two bottles Pronto fire extinguisher, donated by D. & F. Kusel Company; one 35-lb. pail Mirific Crystal Wash Powder, donated by Lavo Company of America; one gallon Rennet Extract, donated by Lotz Rennet Laboratories;

two dollars, donated by Morton Salt Co.; one gallon Power separator oil, donated by the De-Laval Separator Co.; five dollars, donated by the First National Bank. Total value \$17.10.

Joe Willi, Crosby Factory, South Wayne - 92.3 points

Pro rata money \$4.92.

Sam Schober, Myrland Factory, Belleville, 92 points

Pro rata money \$4.91.

Fred Wagner, Scotch Hill Factory, Brodhead, 91.2 points

Pro rata money \$4.86.

Gottfried Vogel, Mt. Hope Valley Factory, Brod-

head - - - - - 90.8 points

Pro rata money \$4.84.

Vincent Lingg, White Oak Springs Factory, Argyle

- - - - - 89.8 points

Pro rata money \$4.79.

LIMBURGER CHEESE.

John Minnig, Loveland Factory, Monticello, 92.5 points

One pair wooden soled shoes, donated by A. H. Barber-Goodhue Co.; five Limburger boxes, donated by Green County Lumber & Fuel Co.; five dollars, donated by Chr. Hansen's Laboratory, Inc.; 100 pound sack cheese salt, donated by Ruggles & Rademaker; 15 gallon welded milk can, donated by Stoelting Bros. Co.; two dollars, donated by the Commercial & Savings Bank; carving set, donated by the J. B. Ford Co.; one genuine leather traveling bag, donated by the Johnston Tin Foil & Metal Co.; five dollars, donated by the Marschall Dairy Laboratories; five dollars, donated by C. E. Zuercher & Co. Total value \$42.35.

Julius Kiechle, Hefty & Zum Brunnen Factory, Monticello - - - - - 92 points

One 50 pound pail E. Z. Kleen washing powder, donated by Cream City Chemical Works; five Limburger boxes, donated by Green County Lumber & Fuel Co.; 100 pound sack cheese salt, donated by Ruggles & Rademaker; five dollars, donated by the First National Bank; one carving set, donated by the J. B. Ford Co.; one wool and cotton blanket, donated by the Johnston Tin Foil & Metal Co.; one syphon strainer, donated by Adolph Vogel; three dollars, donated by C. E. Zuercher & Co. Total value \$27.40.

Anton Motz, Bayrhofer Factory, Monroe 91.8 points

Two bottles Pronto Fire Extinguisher, donated by D. & F. Kusel Co.; one 35-pound pail Mirific Crystal Wash Powder, donated by Lavo Company of America; six dollars, donated by the Citizens Bank; one cotton and wool blanket, donated by the Johnston Tin Foil & Metal Co.; one curd pail, donated by Adolph Vogel; two dollars, donated by E. C. Zuercher & Co.; five Limburger boxes, donated by John Zurkirchen Co. Total value \$20.60.

Fred Wyssbrod, Martintown Factory, Martintown - - - - - 91.5 points

Pro rata money \$4.88; five Limburger boxes, donated by Regez Cheese Co. Total value \$7.08.

Rudy B. Lengacher, Wittenwyler & Burgy Factory Monticello - - - - - 91 points

Pro rata money \$4.85; five Limburger boxes, donated by Regez Cheese Co.; one set dishes, 42 pieces, donated by the Midland Metal Co. Total value \$17.05.

Emil Frehner, Wittenwyler & Babler Factory, Monticello - - - - - 90 points

Pro rata money \$4.80.

Werner Blum, Wyss Factory, Monroe - 90 points

Pro rata money \$4.80.

August Theuler, Tschudy Factory, Monroe 90 points

Pro rata money \$4.80.

Jacob Waeffler, Green Valley Fact., Monroe, 87.5 points

Pro rata money \$4.67.

Total amount paid to cheese exhibitors, \$534.50.

SECRETARY'S NOTES.

On the first convention day, November 15, we had a beautiful day, but three factors cut down the attendance considerably, namely:

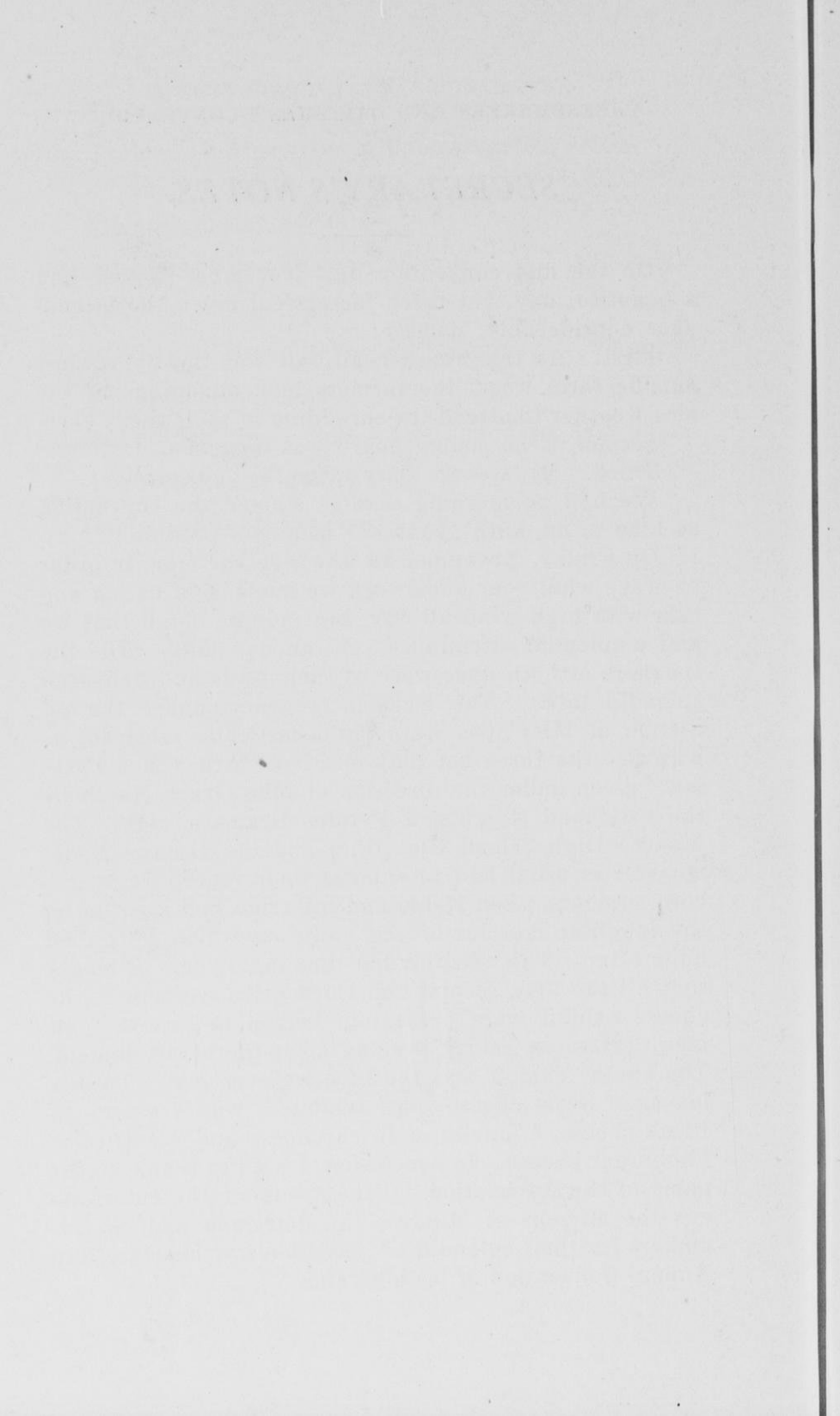
First. As the weather all fall was mostly against outside farm work, the farmers took advantage of the nice weather to attend the shredding of their shock corn.

Second. The county board was in session.

Third. Mr. George Carr's funeral took place.

We had no morning session, started the convention at 1:30 p. m., with about 125 members present.

On Friday, November 16, the weather man, in order to prove what poor guesswork we made, sent us fog and rain with high wind all day, but in spite of all that we had a splendid attendance of about 250. All the speakers of both days were at their posts and delivered splendid talks. The musical programs under the direction of Miss Spec were enthusiastically received, as was also the three act play entitled, "Are You a Pythian," given under the direction of Miss Grace Marsh by the Brodhead Knights of Pythias Dramatic club. The Monroe High School Glee Club and the Monroe Yodel Quartet as usual had to enlarge their repertoire by encore numbers. Ben Noble and his army had a string on the laughter muscles of the audience which he pulled quite often. This was the first time in 20 years or longer that all the first, second and third prize winners in the cheese exhibit were present in person to receive their many prizes on Friday evening after the entertainment. The cheese exhibit was the best we ever had. Twenty loaves of Swiss cheese were exhibited, with 7 entries of Block cheese, 8 entries of Brick cheese and 9 entries of Limburger cheese. In conclusion, I wish to thank, in the name of the Association, all the speakers, the entertainers, the citizens of Monroe, the dairymen and cheese-makers for their splendid co-operation to make this 29th Annual Convention of lasting value.



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