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Proceedings of the fourteenth annual meeting of the Wisconsin Buttermakers' Association : held at Fond du Lac, Wisconsin, Feb. 2-4, 1915.

Wisconsin Buttermakers' Association
[s.l.]: [s.n.], [s.d.]

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FOURTEENTH ANNUAL MEETING

**WISCONSIN
BUTTERMAKERS'
ASSOCIATION**

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MADISON



Held at Fond du Lac, Wisconsin

FEBRUARY SECOND TO FEBRUARY FOURTH
NINETEEN HUNDRED AND FIFTEEN

STEINBOCK

PROCEEDINGS of the
Fourteenth Annual Meeting

of the

Wisconsin Buttermakers'
Association

HELD AT
FOND DU LAC, WISCONSIN
FEB. 2-4, 1915

Compiled by G. H. BENKENDORF



H. E. GRIFFIN
Mt. Horeb

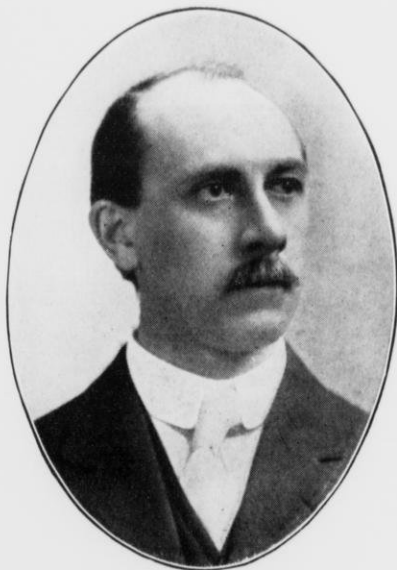


C. J. DODGE
Windsor

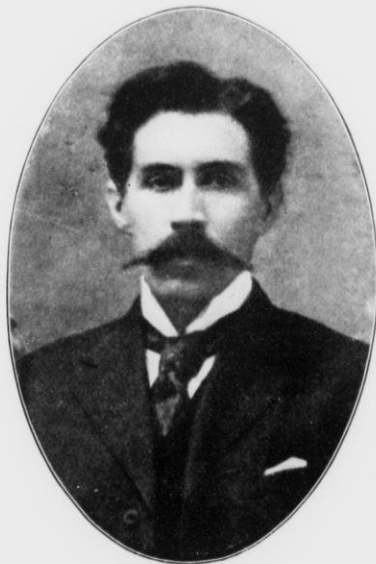


O. B. CORNISH
Fl. Atkinson

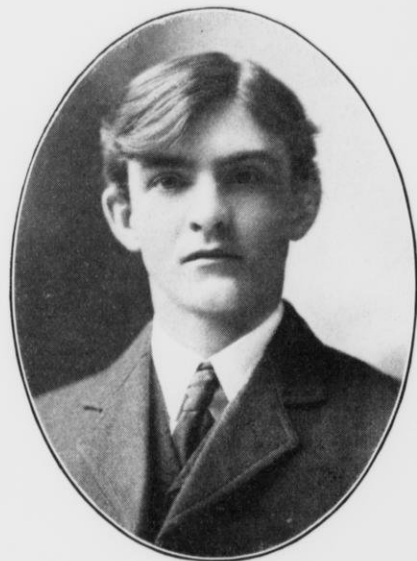
MEMBERS EXECUTIVE COMMITTEE 1915—1916



G. H. BENKENDORF
Madison, Secretary



ALLAN CARSWELL
Clear Lake, President



A. W. ZIMMERMAN
Norwalk, Vice President

List of Officers 1914-1915.

Allan Carswell, PresidentClear Lake
A. W. Zimmerman, Vice President.....Norwalk
G. H. Benkendorf, SecretaryMadison
Fred M. Werner, TreasurerWaterloo

Executive Committee.

O. B. CornishFt. Atkinson
C. J. DodgeWindsor
H. E. GriffinMt. Horeb

List of Officers 1915-1916.

Allan Carswell, PresidentClear Lake
Quirin Moersch, Vice PresidentPeebles
G. H. Benkendorf, SecretaryMadison
Fred M. Werner, TreasurerWaterloo

Executive Committee.

O. B. CornishFt. Atkinson
C. J. DodgeWindsor
H. E. GriffinMt. Horeb

LETTER OF TRANSMITTAL.

Office of Secretary Wisconsin Buttermakers' Association, Madison, Wis., 1915.

To the Officers and Members of the Wisconsin Buttermakers' Association: I have the honor to herewith submit the report of the proceedings of the Fourteenth Annual Convention held at Fond du Lac, February 2-4, 1915.

Fraternally yours,

G. H. BENKENDORF,

Secretary.

Names of Members of the Wisconsin Buttermakers' Association, 1915

Life Members.

NAMES	ADDRESSES
Cook, S. A.	Neenah, Wis.
Fulmer, F. B.	Moose Jaw, Sask., Canada

Annual Members.

Alexander, C. B.	175 W. Jackson, Chicago
Anderson, R. S.	Northland
Andreason, C. P.	Plain, R. D.
Anderson, M. H.	Kendall, R. D. 3
Anderson, Camilla	Weyauwega
Adams, E. L.	Oakfield
Anderson, A.	Marathon
Angone, J.	106 Wisconsin St., Milwaukee
Aderhold, E. L.	Neenah
Adams, M. J.	Waukesha
Amacher, H.	Stetsonville
Allen, Ford	225 W. Jackson St., Chicago
Brigham, R. J.	Burkett, Ind.
Butler, L. E.	Helenville
Bragg, B. E.	Preston, Iowa
Brookins, Roy	Oakfield
Bethhauser, J. A.	Coloma
Blumenstein, Frank	Sullivan
Brunner, M. E.	Ft. Atkinson
Bolstead, L. L.	Basco
Broecker, Geo.	Markesan
Benson, C. A.	Clear Lake, R. 3
Bartell, Hubert	New Holstein
Berge, Thos. J.	Northfield
Buechel, John	Chilton
Busch, L. C.	Fond du Lac
Boll, C. E.	Oak Center
Beck, W. A.	Theresa
Bouschard, Paul	Ft. Atkinson

LIST OF MEMBERS

NAMES	ADDRESSES
Bunke, Paul F.	379 25th St., Milwaukee
Barber, A. H.	223 W. So. Water St., Chicago
Bockelmann, Frank	216 W. South Water St., Chicago
Boerst, Elmer	Bonduel
Benkendorf, G. H.	Madison
Barlow, C.	Madison
Becker, Walter	Ft. Atkinson
Blood, Fred	Eau Claire
Brennan, T. W.	125 W. So. Water St., Chicago
Bennett, W. F.	272 South Water St., Milwaukee
Borden, J. C.	Chicago
Bires, A. R.	Camp Douglas
Buchner, Ed.	Antigo
Clark, W. J.	Lake Buelah
Christensen, Christ	Neillsville
Christianson, Hans	Rose Lawn
Christensen, Odin	Nelsonville
Christopherson, M.	New Franken
Cleaves, R. C.	Iola
Colwell, R. P.	River Falls
Cornish, O. B.	Ft. Atkinson
Crump, J. L.	Dairy Record, St. Paul
Cross, M. R.	c. o. Merrell & Eldredge Co., Chicago
Clark, A. V.	Ripon
Creamery Journal	Waterloo, Iowa
Christensen, W.	Klevenville
Christianson, Christ.	Sussex
Cole, C. L.	Minneapolis
Cameron, W. P.	St. Paul
Carswell, Robert	Menomonie
Carswell, Allan	Clear Lake
Cahill, J. J.	Green Bay
Coyne, D. J.	108 W. South Water St., Chicago
Cromer, C. E.	Fox River Butter Co., Chicago
Carver, C. A.	114 Wisconsin St., Milwaukee
Casperson, H. C.	Deer Park
Campbell, A. W.	Beaver Dam
DeGolier, H. M.	Cambridge
Dehn, W. J.	La Valle
Doolan, Hod	Marshall

LIST OF MEMBERS

NAMES	ADDRESSES
Dressler, Val	Louisburg
Day, Geo. E.	Osseo, R. 4
Dillon, H. P.	Oshkosh
Downing, Fred	Madison
Dexheimer, Geo. W.	Ft. Atkinson
Dibble, C. A.	Majestic Bldg., Milwaukee
Dodge, C. J.	Windsor
Damerow, E. C.	Fond du Lac
Davis, U. E.	S. S. Borden Co., Chicago
Duffner, C. J.	Milwaukee
Esker, Ole	Dallas
Else, R. J.	Helenville
Eckwright, E. R.	Bloomer
Edge, Sam J.	Patch Grove
Eschennbrenner, W. J.	21 Jay St., New York City
Eck, J. A.	Eck McNeil & Co., Chicago
Eckleberry, Harvey	Tavera
Farrington, E. H.	Madison
Finstad, A. N.	Albertville
Fjelsted, John	Elroy
Freiders, Carl	Antigo
Fox, Peter & Sons Co.	Chicago
Fitzgerald, Thos.	6203 Evans Ave., Chicago
Guse, Paul	Madison
Grawin, F. A.	Mt. Tabor
Grande, J. P.	335 Hermitage Ave., Chicago
Grosser, John	Geneva, Minn.
Griffin, H. E.	Mt. Horeb
Goodrich, J. S.	Fairchild
Garlid, Geo.	Roberts
Gierach, Otto	Thiensville
Garlick, R. A.	Neshkoro
Gibson, P. J.	LaCrosse
Green, R. C.	Albion
Gilchrist, G.	Oconto
Grell, Fred	Johnson Creek
Harles, U. A.	Stanley
Hiddie, E.	West DePere

LIST OF MEMBERS

NAMES	ADDRESSES
High, John	Berlin
Havens, J. W.	660 Monadnock Bldg., Chicago
Helgeson, Theo. F.	Holman
Hentz, H. M.	Knowlton
Hanna, J. R.	621 W. Randolph St., Chicago
Hoar & Stenger	174 W. So. Water St., Chicago
Hart, Chas. E.	900 Superior St., Milwaukee
Houglund, A. C.	Madison
Hass, B. A.	Wausau
Hanlon, T. J.	Prescott
Hanson, Lewis M.	Iron River
Hanson, J. M.	Greenwood
Hanan, G. F.	Eau Claire
Hartwig, Herman	Deerfield
Herreman, O. F.	Crandon
Hill, W. F.	Brandon
Harphold, E. V.	Wycena
Hansen, Hans S.	Sharon
Hahn, Paul	Wausau, R. 2
Hillstad, A. C.	Oregon
Hoeffke, Albert	Waterloo
Hanson, Ole	Hazel Green
Herreman, H. J.	Black Earth
Hill, F. L.	Menomonie Falls
Huth, F. W.	Seymour
Howe, J. H.	Antigo
Hanson, E. R.	Milwaukee
Jorgenson, Carl	Rose Lawn
Jones, F. H.	Fond du Lac R. 5
Johnson, Oscar	Clear Lake
Jochamson, H. C.	Bark River, Mich.
Jenson, Geo.	Saxeville
Johnson, M.	Kilbourn
Johnson, H. A.	Westby
Jenks, Geo.	Hunter, Walton & Co., Chicago
Judkins, C. W.	Fond du Lac
Johnson, G. A.	Oshkosh
Johnson, T.	Elmdale
Jones, O.	Wild Rose
Johnson, E. W.	461 La Salle St., Chicago

LIST OF MEMBERS

NAMES	ADDRESSES
Keppel, V. S.	Holman
Kleist, G. W.	Almond
Kelley, F. W.	c. o. Gridley Dairy Co., Milwaukee
Kumm, Otto	Bangor
Kohl, F. J. L.	121 W. Kinzie St., Chicago
Kochheiser, Don	Belleville, O.
Kothlow, G. H.	Edgerton
Krohn, Wm. F.	Whitewater
Kauffmann, F. B.	Ft. Atkinson
Koenig, H. C.	Plain, R. 1
Kipp, Henry T.	Cambridge
Kottke, Paul	Cedarburg
Koepsell, M. G.	Little Black
Kelley, Chas. D.	East Troy
Kielsmeier, Co.	Manitowoc
Kristensen, Axel	Luck
Korb, P. N.	Fairwater
Kielsmeier, O. A.	Manitowoc
Kircher, H. W.	Fisk
Kretzschmar, Julius	New Lisbon
Krueger, O. A.	Albion, Box 4
Kutz, Fred C.	Johnson Creek
Kelnhofer, A. N.	Blenker
Kiefer, P. H.	21 Jay St., New York City
Klooster, A. H.	67 West Water St., Chicago
Kelly, A. J.	119 W. So. Water St., Chicago
Kusel, L. H.	Watertown
Kachel, J. C.	Whitewater
Kuehnhold, Frank	Waupaca
Longteau, Earl	Green Bay
Larson, Olaf	Fennimore
Livingston, R. A.	Moquah
Lambert, Carl	Augusta
Lennartz, Theo.	Frederic
Lee, C. E.	Madison
Levy, Louis	Chicago
Leu, A. L.	Fond du Lac, R. 4
Leuthold, Alfred	Sheldon
Linn, Geo. W. & Son	Chicago
Lee, V. D.	Neillsville
Linsmaier, J. E.	Blenker

LIST OF MEMBERS

NAMES	ADDRESSES
Meyer, John	Slades Corners
Moyes, W. A.	Ironton
Mayenschein, Norman	Hillsboro
McCauley, Paul	Elmwood
Moody, Geo.	Arkdale
Mehleis, Wm. F.	Bangor
Melsby, Orwin	Durand
Miller, John H.	Baraboo
Merryfield, F. V.	Mukwonago
Mortenson, John	Camp Douglas
Moersch, Quirin	Peebles
Marks, A. C.	Shennington
Marvin, G. N.	Black River Falls
Moertl, Andrew	Seymour
Moldenhauer, A. J.	Neillsville
Meisner, Frank	Fennimore
Mathews, F. J.	Brill
Mattson, John E.	St. Croix Falls
Meismer, C. H.	Oshkosh
Moore, J. G.	N. Butler St., Madison
Mansfield, F. C.	Johnson Creek
Mazo, Fred	Fennimore
Moran, J. T.	402 W. Randolph St., Chicago
Meyer, Martin H.	W. Washington Ave., Madison
Mueller, A. A.	Johnson Creek
Meyer, R. A.	Birnamwood
Munshaw, F. A.	Eau Claire
Meinhardt, F.	W. D. Collyer Co., Chicago
Meier, W. R.	Janesville
Nachtwey, Robert	Dorchester
Nichols, Harry D.	Elkhorn
Newman, A. M.	Black Earth
Nielson, H. P.	Deerfield
Nachtwey, Anton	Dorchester
Nickel, Ed.	Seymour
Newgaard, W. S.	440 Gilfillin Blk., St. Paul
Naber, H. J.	2321 Cottage Grove Ave., Chicago
Nickel, Ed.	Wayne & Lowe, Chicago
Nelson, J. N.	Holman

LIST OF MEMBERS

NAMES	ADDRESSES
Oaks, S. E.	Sparta
O'Keefe, R. J.	DePere, R. 1
Ottow, Aug.	Brodhead
Olson, L. A.	Waupaca
Oestreich, A. L.	Rosendale
O'Hearn, Frank J.	Meirose
Olsen, Lauritz	West De Pere
Olsen, H. P.	Germania Bldg., Milwaukee
O'Dell, Claude	Wild Rose
O'Brien, J. P.	Hanson's Laboratory, Milwaukee
Packard, Frank D.	Deronda
Prust, Chas. H.	Montello
Page, C. W.	Elkhorn
Peterson, Louis	Bonduel
Peterson, Theo. R.	Weyauwega
Peterson, Axel R.	Turtle Lake
Peschke, E. J.	Fairwater
Pieper, John	Stoughton
Peterson, O. F.	Larsen
Priebe, E. H.	Princeton
Peterson, H. H.	Warren
Perschbacher, A. G.	West Bend
Paulson, W. F.	Phillips
Paynter, A. J.	Cross Plains
Peterson, P. E.	Hersey
Parker, John J.	Camp Douglas
Passmore, C. L.	Iola
Purvis J. L.	Berlin
Peterson, E. O.	Sheridan
Parkhurst, S. D.	416 La Salle St., Chicago
Refrigerating Sales Co.	Milwaukee
Rouu, Ben	Madison
Rentz, Henry N.	Westby
Reif, H.	Weyauwega
Russell, Herbert R.	Butternut
Respalje, D. W.	Waupun, R. 22
Rivard, W. J.	Emerald
Rank, J. P.	Rozelleville
Rasmussen, John	Wautoma
Roegner, Arthur	Chilton
Root, F. S.	Rudolph

LIST OF MEMBERS

NAMES	ADDRESSES
Ruland, Robert	Lomira, R. 2
Rasmussen, E. G.	Melvina
Ringger, Jacob	Durand, R. 4
Redine Co.	Sheboygan
Rittig, P. G.	Fond du Lac
Remel, Wm.	Mayville
Radtke, A. R.	Tigerton
Randecker, Chas.	Stoughton
Roughen, F.	Cudahy Co., Milwaukee
Roseman, W. P.	LaCrosse
Schulz, A. F.	Phlox
Sullivan, J. W.	Chippewa Falls
Schirmer, Jos.	Bloomville
Scheel, E. W.	Turtle Lake
Speich, Abe	Berlin
Schauwitzer, Louis	Sarona
Sleyster, R. L.	Endeavor
Schneider, Math. J.	Malone
Shepherd, Frank	Mt. Sterling
Sanford, Chas. M.	Amherst Junction
Sleyster, Robert V.	Cochrane
Schild, John	Fall Creek
Sieger, Wm.	Chaseburg
Stryker, I. W.	Nashotah
Steinkraus, R.	Ft. Atkinson
Stewart, G. M.	Mazomanie
Sauer, G. P.	Cedarburg
Skershutt, H.	Cedarburg
Sarauer, John	Clinton
Simenson, C. S.	Sharon
Sherwood, Malvin	Sauk City
Seaman, Ed.	Black Creek
Stenerson, N.	Wittenberg
Sorge, A. O.	Reedsburg
Speirs, Guy	Eau Claire
Sprecher, John U.	Madison
Schuknecht, H. F.	337 W. Madison St., Chicago
Sherman, P. A.	235 Third St., Milwaukee
Swits, Geo.	Ft. Atkinson
Schneider, Wm.	Johnson Creek
Slegg, John F.	30 W. So. Water St., Chicago

LIST OF MEMBERS

NAMES	ADDRESSES
Scheel, Louis	Neillsville
Schaupper, Geo.	Milwaukee
Smith, L. C.	W. J. Haire Co., Boston
Shumway, C. P.	102 Wisconsin St., Milwaukee
Schulz, R. A.	N. Y. Cent. Ry., St. Paul
Skinner, David	102 Wisconsin St., Milwaukee
Shilling, S. B.	134 W. Lake St., Chicago
Scheid, W. J.	Campbellsport
Spiegel, E.	Leeman
Schilke, G.	Bonduel
Somerville, T. A.	55 W. Kinzie St., Chicago
Somerville, J. S.	Chicago
Tyler, Guy	Cedarburg
Turner, L. W.	Montfort
Thul, J. J.	Amery, R. 4
Tank, Wm.	Van Dyne
Torsion Balance Co.	92 Reade St., New York City
Tisler, H. C.	Morton Salt Co., Milwaukee
Thompson, M. E.	Creamery Pkg. Co., St. Paul
Thomas, W. C.	Sheboygan Falls
Van Haden, C. L.	Suring
Vassau, J. N.	Amery
Von Liere, Martin	Troy Center
Van Ryn, W. J.	Marshfield
Vanderohe, G. F.	Reedsburg
Van Tilberg Oil Co.	Minneapolis
Van Sistine, Leo	West DePere
Whiting, H. H.	Johnson Creek
Wagner, Robt.	Sumner, Iowa
Warnke, Wm.	Kingston
Werner, F. M.	Waterloo
Warnke Bros., Creamery Co.	Kingston
Wheeler, H. A.	West DePere
Warner, T. J.	Rosholt
Winter, L. H.	Eau Claire
Will, Albert E.	Ft. Atkinson
Wallace, D. F.	Alma Center
Wolfram, Henry C.	Whitewater
Wellinghoff, E. F.	Cry. Pkg. Co., Minneapolis, Minn.

LIST OF MEMBERS

NAMES	ADDRESSES
White, A. J.	61 West Kinzie St., Chicago
Warner, Geo.	Fond du Lac
Whitmore, E. J.	Owatonna, Minn.
Williams, C. A.	Augusta
Wolzien, C. F.	443 S. Madison St., Green Bay
Wilson, Art.	Waupun
White, B. D.	Milwaukee
Weeks, Maud E.	327 S. LaSalle St., Chicago
Waldhart, Al.	Medford
Wyss, John	Medford
Waskum, Frank	175 W. So. Water St., Chicago
Young, Geo.	Nashotah
Yates, R. A.	Bryan
Yates, F. C.	Marshfield
Zick, Otto	Fond du Lac
Zimmerman, A. W.	Norwalk
Zick, H. O.	Tiffany
Zander, R. J.	Cross Plains

STENBOCK

ARTICLES OF INCORPORATION AND BY-LAWS

OF THE

Wisconsin Buttermakers' Association

ARTICLES OF INCORPORATION.

ARTICLE FIRST. The undersigned have associated, and do hereby associate themselves together for the purpose of forming a corporation under Chapter 86 of the Revised Statutes of the State of Wisconsin, for the year 1898, and the acts amendatory thereof and supplementary thereto, the business, purposes and objects of which corporation shall be the education of its members for a better practical knowledge of creamery operation, promoting progress in the art of buttermaking, in the care and management of creameries, the sale, transportation and storage of butter, and in the weeding out of incompetency in the business of buttermaking; the further object of the incorporation is to demand a thorough revision and rigid enforcement of such laws as will protect the manufacture and sale of pure dairy products against fraudulent imitations, and to suggest and encourage the enactment of such laws in the future as experience may from time to time demonstrate to be necessary for the public good of the dairy industry.

ARTICLE SECOND. The name of said corporation shall be the "Wisconsin Buttermakers' Association," and its principal office and location at Madison, Wis.

ARTICLE THIRD. The association shall be a corporation without capital stock. Any person who is a practical creamery operator, and such other persons as are connected or interested in the

manufacture and sale of pure butter may become members of this corporation by paying one dollar (\$1.00) annually in advance and signing the roll of membership.

ARTICLE FOURTH. The general officers of said association shall be a president, vice president, secretary and treasurer. The board of directors shall consist of three members of the association. The term of the officers of the association shall be for one year beginning July 1st, or until their successors are elected at the next annual meeting following their election, and until such successors qualify. At the first meeting of the members of the association, there shall be elected a director for the term of one year, a director for the term of two years, and a director for the term of three years, and thereafter there shall be elected at each annual meeting a director for the term of three years, and each director shall hold his office until July 1st or until his successor is elected and qualifies.

ARTICLE FIFTH. The principal duties of the president shall be to preside at all meetings of the board of directors and of the members of the association during his term of office. He shall appoint all necessary committees and sign all orders drawn on the treasurer, and perform such other duties as may pertain to his office.

The vice president shall discharge the duties of the president in the event of the absence or disability, for any cause whatever, of the latter.

The principal duties of the secretary of said association shall be to keep a complete and accurate record of all meetings of the association or of the board of directors, keep a correct account of all finances received, pay all moneys into the hands of the treasurer and receive his receipt therefor, and to countersign all orders for money drawn upon the treasurer. He shall safely and systematically keep all books, papers, records and documents belonging to the association, or in any wise pertaining to the business thereof. He shall keep a complete list of the membership, help formulate and publish the program for the annual convention, publish a full report of said convention after adjournment,

assist in such other matters of business as may pertain to the convention, and such other duties as properly belong to his office.

The principal duties of the treasurer shall be to faithfully care for all moneys entrusted to his keeping, paying out same only on receipt of an order signed by the president and countersigned by the secretary. He shall file with the secretary of the association all bonds required by the articles of incorporation or the by-laws. He shall make at the annual meeting a detailed statement of the finances of the corporation. He must keep a regular book account, and his books shall be open for inspection at any time by any member of the association. He shall also perform such other duties as may properly belong to his office.

The board of directors shall be the executive committee who shall audit all accounts of the association or its officers, and present a report of the same at the annual meeting. The executive committee shall assist in the necessary preparations for the annual convention and shall have sole charge of all irregularities or questions of dispute that may come up during any annual meeting. They shall determine the compensation that may be connected with any of the various offices.

The board of directors with the other officers of the association shall constitute the executive board, which board shall decide upon the date and place of holding the annual convention, premiums to be offered at said convention, and such other regulations as may be necessary for the success of the annual meeting.

ARTICLE SIXTH. The treasurer of the corporation shall give bond in the sum of two thousand dollars (\$2,000.00) for the faithful performance of his duties. The said bond to be approved by the board of directors before being accepted by the secretary. Whenever the corporation may so desire, the office of secretary and of treasurer may be held by one and the same person. This action can only be taken at a regular election of officers.

ARTICLE SEVENTH. These articles may be altered or amended at any regular session of an annual meeting of the members, provided proposed alterations or amendments shall have been read

before the association at least twenty-four hours previously, and provided the proposed alterations or amendments shall receive a two thirds vote of the members present.

ARTICLE EIGHTH. The first meeting of this corporation for the election of officers and directors shall be held on the 26th day of February, 1903, and such corporation shall hold a meeting of its members annually during each calendar year at such a time and place as may be determined by the executive board.

BY-LAWS.

ARTICLE FIRST. All elections shall be by ballot, except in the case of a single nominee, when election by acclamation may be substituted.

ARTICLE SECOND. This association may accept such special side premiums as in the judgment of the executive committee, may seem for the best interests of the members.

ARTICLE THIRD. Only one tub of butter may be entered from any one creamery for competition for any of the prizes or premiums; if more than one tub is so entered such entries shall be debarred from participation in all premiums.

The size of butter packages entered in competition at the association contest shall be no smaller than a twenty pound tub.

The butter so entered shall belong to the association. After the scoring contest has been completed the said butter is to be sold; the association will pay the express charges, the exhibitor's membership dues for the current year and such other expenses as may be connected with the butter exhibit, the balance remaining from the sale of the butter shall be deposited in the treasury and be devoted to the premium fund for the next annual convention.

ARTICLE FOURTH. The privilege of the association's butter contests are open to exhibitors outside of Wisconsin for compli-

mentary score only and any exhibitor exhibiting butter at these association contests for complimentary score shall, after deducting express charges and \$1.00 membership fee, have returned the balance for which the butter sold.

ARTICLE FIFTH. This association shall give such prizes for butter as may, in the judgment of the executive board, best suit the times and be of greatest service to the association and those who receive the same; said prizes to be announced in the annual convention program.

ARTICLE SIXTH, SEC. 1. The score that shall entitle an exhibitor to a share in the pro rata shall be determined by the executive committee in advance of each yearly meeting.

SEC. 2. The scores of those exhibitors not participating in the pro rata shall not be published.

ARTICLE SEVENTH. All points of parliamentary practice not covered by the Articles of Incorporation or these By-Laws, shall be governed by "Roberts' Rules of Order."

ARTICLE EIGHTH. These By-Laws may be altered or amended in the same manner as prescribed in the Articles of Incorporation.

The following resolutions were passed at the Fond du Lac Convention, Feb. 3, 1910:

Be it resolved: That the Butter, Cheese & Egg Journal be made the official paper of this association.

Whereas: the judging of butter at the Wisconsin scoring exhibitions and conventions by three judges, working independently has given universal satisfaction.

Be It Resolved: That this association in annual convention assembled, commend this system; and, be it further resolved: That this method of judging the butter at the National Creamery Buttermakers' Association be employed in the future.

Whereas; Parties having entered more than one tub of butter from the same creamery have caused the judges and officers of the association unnecessary trouble,

Therefore, be it resolved: That in the future, any butter-maker or creamery, sending more than one tub to compete for the prizes and premiums offered by this association, is to be barred from competing again for a period of three years.

Whereas: The Wisconsin Buttermakers' Association is now giving silver cups to County Buttermakers' Associations for the ten highest scores at the meeting of the State Association:

Be it resolved: That in case any such county association in possession of any such cup, shall for any reason discontinue their organization, said cup shall be returned to the State Association.

FOURTEENTH ANNUAL MEETING

OF THE

Wisconsin Buttermakers' Association

Held at Fond du Lac, Wisconsin, February 2 to 4, 1915.

OPENING SESSION, TUESDAY EVENING.

February 2, 1915.

Meeting called to order by Secretary G. H. Benkendorf, of Madison, President Allan Carswell, of Clear Lake, being unable to be present at this session.

Secretary Benkendorf called Mr. D. F. Wallace, of Alma Center, to the chair to preside during the session.

The program was opened with music furnished by Mr. George Wyatt, of Fond du Lac, which was generously applauded.

CHAIRMAN: The first will be the address of welcome by Mr. William Mauthe, President of the Fond du Lac Business Men's Association.

ADDRESS OF WELCOME.

By Wm. Mauthe, Fond du Lac.

Mr. Chairman, Ladies and Gentlemen: I am pleased to welcome you in behalf of the Business Men's Association, but when I came into the hall the mayor met me and asked me to say to you that he was not able to remain longer because he had a council meeting, but I should say that the city is glad you are here, and that if there is anything you want along the line of keys and the like that are usually given away, he has one for every man here.

Now, I take it that the greatest asset the Wisconsin butter industry has is the spirit of co-operation through organized effort. Without that probably all work toward making the butter industry better is largely in vain. Your industry may furnish a money prize for the individual, but that constructive fire, the spirit of co-operation through organized effort, must come from within. It must spring up in noble resolve as it must have done when this organization was formed, and now that you have such an effective organization it must never be allowed to die, never to wane, and never to waver. Everyone recognizes that the success of an organization of this kind usually falls heavily upon the more progressive men of that industry, but if we examine the lives and actions of the men and women who have made the work a success in any wholesome kind of activity, we will see that it was that same vital spark that has made all their achievements possible.

The future outlook for the buttermakers' industry of Wisconsin, seems to me, ought to awaken the ambition of every earnest and thoughtful person engaged in it. The very contemplation of the business throughout all the states because of the advertisement that the Wisconsin buttermakers have received as the result of the efficiency of production and high standard of quality, ought to awaken the ambition of every sincere man, and ambition to take some effective part in making it possible to further develop through organized effort such as this and make possible that the standard of product and the efficiency of production shall go on.

Things move swiftly these days along with increasing speed in transportation and communication. The whole motion of the world's activity is put on high speed. Theories which have bound this industry for years are parting like ropes of sand. Many things are needed in this industry, and it is the progressive men who see the business through organized effort that come to these conventions. We, here in Fond du Lac, recognize that the buttermakers who come to these conventions are the men and women who stand for that high standard of product which is

made in Wisconsin, the banner state for butter, of which we are all so proud, and in Fond du Lac we always read with pleasure when this association meets here, and I am here to say to you for the business men, professional men and every earnest and thoughtful person living here that whatever we have to make your stay comfortable is yours. Each one of us will do our share, will consider it our patriotic duty to help to make your stay pleasant.

Now I again thank you in behalf of the association and extend to you every courtesy that the city may have, and in behalf of the Council and the Mayor, who asked me to say this to you, I also extend to you a hearty welcome and thank you kindly for your presence, and hope your stay will be so pleasant that you will remember us in your future organized efforts. (Applause)

CHAIRMAN: The next is the response by Mr. C. J. Dodge, of Windsor.

RESPONSE TO ADDRESS OF WELCOME.

By C. J. Dodge, Windsor.

Mr. President, Mr. Mauthe, Ladies and Gentlemen, Fellow-Buttermakers: In behalf of the Buttermakers of this state now in convention here assembled, I wish to cordially thank Mr. Mauthe and through him, the citizens of Fond du Lac for this greeting. We have been here before; ten years ago we had a most profitable meeting here, again in 1910 we assembled here to consider questions vital to our interests. Today, for a third time, we have met to again renew old acquaintances, discuss present day problems and advance the cause of true buttermaking. Your fine city is a delight to us and we are indeed glad to be here again and enjoy your hospitality. A composite picture of us taken today would show up just as young, just as strong as one taken ten or five years ago, which argues we don't grow old, for with Nat Goodwin, "We'll never say die."

About 1890, the whole milk and factory separator system was fairly launched in this state. With the Babcock test as an

other mighty factor, it gave to the buttermakers as near a perfect butter for a few years as the world has ever seen. Then came along the every-other-day runs, farmers holding their milk, later the farm separators and holding of cream, all telling against quality, science stepped in, brought forward cultures and pasteurizing and other appliances to assist the buttermakers and there has been a steady warfare or evolution in these twenty-five years, and today we are still "evoluting"—when is it going to end? Well, today we are up against some problems and we are here to try and solve them if possible.

Two men recently drove up to my factory, one had five ten gallon cans of milk, the other had one. Said one, "How many cows do you milk?" "Nine, how many do you milk?" "I milk nine too." One had about 400 pounds of milk, a truly large amount, the other had 80 pounds, a truly small amount. One was an up-to-date dairyman; the other was an up-to-date tobacco man. One kept cows because they paid. The other kept cows because he couldn't raise tobacco without manure. He admits it as the reason.

That the state has many boarding cows, is only too true. I wonder what the price of butter and cheese would be if every dairyman were to find out and get rid of their boarders. But these are dairymen's problems, not ours. Ours is—how to make the best butter possible out of the cream our farmers produce for us. How to entice the farmers to give us a good cream. How to sell the butter to the best advantage—and there are other problems. We are like Germany in one respect. We have to do lots of fighting. A German farmer recently in discussing the war summed up the situation as he saw it, about like this. "There is Russia, she is an awful big country, but she is too slow. We'll lick her. Den France! Well, France she is purty goot, but look how we fixed her in 1871; by Shimmeny, we do it agin. Den dere iss England, yes; she is purty goot, no Army like de Germans. Ve fix her too by golly, but, I tell you, de whole trouble iss mit dem Allies." We buttermakers are fixed about like the Germans, we can handle anyone of our enemies alone but when they join

together, it makes us a lot of trouble, and, we are here to see what we shall do about it. Now, Mr. Mauthe, it may be of interest to your people to know something more about this organization and what we represent. We are a band of fellows that want to make the best butter possible. We represent those who have charge of the making of the butter of this great state. This state has about 1,600,000 cows, more than as many again as in 1890. The value of the dairy products of this state are about \$90,000,000 annually; nearly four times that of 1890. A large part of this \$90,000,000 that comes to this state is in payment for the butter that we men are making. When we send out \$1,000 worth of butter we send but a few cents worth of fertility from the farms, what we bring in for butter is a mighty gift to the state. It is scattered all over the state; everybody gets some of it. We are proud to represent an industry that is doing so much for the people of this commonwealth, retaining and adding to the fertility of her soil and adding to her wealth at the same time.

Butter, how could we get along without it. What a delight it is, good butter. Good butter won't keep, of course not, it is eaten up too soon. It's poor butter that will keep.

Mr. Mauthe, we again thank you for your cordial greeting and we are going to have a great meeting here and enjoy your hospitality to the fullest.

Ladies and gentlemen, I thank you for your kind attention.

Mr. Harold O'Halleran then sang several pieces of music which were much applauded.

CHAIRMAN: Mr. C. W. Price, Assistant to the Wisconsin Industrial Commission, will now speak on the subject of "Waste as a Result of Accidents in Industrial Establishments." Mr. Price spent some twelve years in the Harvester Company where he organized the work on safety and sanitation. During the past three years he has been connected with the Industrial Commission.

WASTE AS A RESULT OF ACCIDENTS IN INDUSTRIAL ESTABLISHMENTS.

By C. W. Price, Madison.

Mr. Chairman, and Ladies and Gentlemen of the Convention: I am to speak upon the subject of accidents in industries. I never think of this subject but what I recall my first experience way back in my shop days which awakened me to the realization of what accidents mean. I remember Mr. Brown, the claim agent of the plant, coming to me and saying, "Price, would you like to go to an inquest?" I told him that I would. We went over to the Italian quarter of the neighborhood and went into the rear of a basement flat. I noticed as I entered the door, the widow sitting at the left with her little children clinging to her skirts, and on the right sat the coroner and the jury. I looked in through the door leading to the front room and saw the dead man lying on the table covered with a lace curtain. He was thirty-five years of age and one of the most skillful men employed in the foundry of our plant. He was killed by the explosion of an emery wheel.

After the first inquest was over I said to Brown as we went out of the door, "Suppose that emery wheel had been equipped with a guard made of a piece of flat steel, say 4 in. by $\frac{1}{2}$ in. by 36 in. in length, costing \$2.00 for material and labor, would the accident have been prevented?" He replied that if such a guard had been attached securely to the frame of the machine and brought over the top of the wheel it would have been mechanically impossible for the man to have been killed. The accident cost the company \$4,000.00. The widow was left with the little children and was not competent to guide them, and from the last reports I received it looked as if some of them would become public charges. This accident, and the neglect of such primary points of danger as emery wheels represents the old condition in industry.

During the few minutes I am to speak I want to place before you some facts in regard, first, to the cost of accidents, and second, the causes of accidents, and then I wish to briefly outline

what is being done along the line of the prevention of accidents. During the year 1914 in the State of Wisconsin there were about 12,000 men, women and children, principally men, who were injured as the result of accidents and lost over seven days of time: 163 of these accidents resulted fatally. The compensation paid to the injured parties and the widows amounted to \$1,240,000. During the year 1914 the employers of the state paid premiums to liability insurance companies amounting to about \$1,800,000. There are some 500 employers in the state who carry their own



C. W. PRICE, Madison

risks. These employers paid out in compensation about \$300,000. Therefore, roughly speaking, accidents in Wisconsin during the year 1914 cost the employers about \$2,100,000.

I want to read some figures regarding the accidents in creameries and butter factories. During the year 1913-14 there were 65 accidents in creameries and butter factories, causing a total loss of time of 2819 days, and costing to the employers in

compensation and medical services a total of \$4,095.48. Here are the causes of these 65 accidents:

Belts	3	
Saws	1	
Feed Rolls	3	
Emery Wheels	1	
Elevators	2	
Escaping Steam	2	12, 1-5 of total
	—	
Other Burns	2	
Hit by Falling and Moving Objects	8	
Falling	14	
Slipping and Stumbling	9	
Handling Objects	10	
Trucking	2	
Animals—Kicks, etc.	3	
Tools and Hand Apparatus	1	
Stepping on Nails	2	
Bumping into Objects	2	53, 4-5 of total
	—	
Total	65	

You will note that twelve of the accidents, or about one-fifth happened were on machines, where in many cases guards would have prevented them, but fifty-three of the accidents happened in ways where in most cases it is impossible to prevent them by the use of guards; they can only be prevented by educational methods and by interesting the workmen in their own safety.

Here are some interesting facts regarding the insurance history for creameries and butter factories in Wisconsin which I had our statistical department make up for me. Before the Compensation law was passed the rate with stock companies for a limited risk of \$5000, for one injury, and \$10,000, for one accident, was 70c per \$100 of payroll. After the passage of the Compensation law, September, 1911, this rate suddenly jumped to \$1.75 per \$100 payroll for a risk of \$5000 for one injury, and \$10,000 for one accident. In neither case is there an entire cover-

age. In February 1913 the rate was reduced to \$1.40 for \$5,000 for one injury, and \$10,000 for one accident, and \$1.75 for unlimited coverage. In October 1913 the rate for complete coverage was reduced to \$1.38, and in September 1914 was further reduced to 98c for complete coverage by stock companies and 70c by mutual companies. Thus you will see that the present rate gives complete coverage for the same cost per \$100 payroll as employers were required to pay before the Compensation act was passed for very limited coverage under the common law. Rates have been reduced since September 1911 for compensation insurance nearly 50 percent, due largely to the agitation resulting from publicity given the studies of the actual cost of insurance by the Industrial Commission.

The payroll in 1913 for butter factories carrying their own risk was \$245,610. The compensation paid out by these employers amounted to \$135, or about 6c per \$100 payroll. In the state of Washington, which has a compulsory state insurance fund, for the three years ending October 1, 1914, the total payroll covered was approximately \$1,260,000; the compensation benefits paid amounted to \$2,774.03 or \$0.196 per \$100 payroll. The Washington Compensation act is fully as expensive as the Wisconsin act. In the state of Wisconsin there are some 500 manufacturers who carry their own risk.

During the last year the records of the Industrial Commission show that the average base rate for these 500 companies was \$2.22 on \$100 payroll. The actual cost of compensation and medical service amounted to 60c on \$100 payroll.

In Wisconsin there are five mutual insurance companies which are organized by employers on a non-profit making basis. The largest of these mutuals during the last year has been able to carry on its work with an overhead expense of 17 percent of the gross receipts from premiums, while the overhead expense of the stock companies has run from 35 to 60 percent. I wish to say that the Industrial Commission is interested in all efforts on the part of employers to form mutual insurance plans by which they may protect themselves at a minimum cost.

So much for the figures regarding the cost of accidents. I want to speak for a few minutes on the more hopeful side of the accident question, namely, the safety first movement which is now sweeping the country and which is familiar to all of you. It is probably true that no movement making for the conservation of human life has had such a sudden rise and has made such phenomenal progress in a few years as this safety movement. This movement is so new that it is only recently that statistics have been available to show what has been accomplished in reducing accidents, and what it has been proven it is possible to accomplish. During the last five years the manufacturing concerns which have been pioneers in the safety movement have demonstrated that it is possible to eliminate 75 percent of the deaths and serious accidents and to reduce the number of days lost on account of injury, at least one-half.

I recently received a blue print from the United States Steel Corporation, showing that during the seven years since 1906 and reaching down to the end of 1913, this corporation has saved 11,074 men from either being killed or seriously injured. An injury is classed as serious when some member is lost or when over 35 days of time is lost. The significance of these figures is revealed when you say that this represents a city of 50,000 men, women and children, in which city the head of every home has been saved either from death or serious injury.

The United States Steel Corporation was the pioneer in the present organized accident prevention movement and has without question made the largest contribution to the cause, not only in showing what it is possible to accomplish, but more important still, in demonstrating the most efficient methods of promoting safety.

The Illinois Steel Company, which is a subsidiary company of the United States Steel Corporation, has been the leader of the safety movement in the Central West. In 1906 this company reports that 43 percent of its employes were injured and lost over one day of time. The record for 1912 shows that 12 percent of the employes were injured and lost over one day of time. Since

1900, a reduction of 70 percent has been made in deaths and serious injuries.

A recent survey of the Wisconsin Industrial Commission reveals the fact that out of 245 industries in the state employing 200 or more employes, 219 have reduced the time lost on account of accidents so that the average during the year ending July 1, 1914 has been less than one day per employe per year. This means a cost of less than 30 cents on a \$100 payroll, for compensation and medical service. The significance of this figure can be appreciated when we consider that the average insurance premium in the state is now about \$2.00 per \$100 payroll.

The Fairbanks-Morse Manufacturing Company of Beloit since 1906 has reduced the number of days lost on account of accidents over 72 percent. The Bucyrus Company, Milwaukee, since 1911 has made a reduction of 46 percent in accidents. A. J. Lindemann & Hoverson Co., manufacturers of stoves in Milwaukee, have during the last two years made a reduction in the number of days for which compensation was paid, of over 65 percent. The Milwaukee Coke and Gas Company, which is nearly as hazardous an industry as the steel industry, has reduced the cost of compensation in 1914 over 1913 about 65 percent. The Consolidated Water Power & Paper Company of Grand Rapids, Wis., began a vigorous safety campaign some eight months ago. Instead of talking about reducing accidents they adopted the motto "No Accidents." Their record for the first three months of the campaign was three slight injuries, whereas before the campaign began they had averaged from eight to twelve injuries during the corresponding period.

One of the most remarkable stories in the history of accident prevention in the United States is the story of what the great railroads of this country have done. Four years ago the Chicago & North Western Railroad began to work out an efficient safety organization. During the four years they have reduced deaths to employes about 35 percent and injuries to employes over 25 percent. As a result of this remarkable record since the Chicago & North Western road began its work every great railroad in the

United States has taken up safety work and is now promoting it in an organized and efficient manner and remarkable results are being secured all over the country. This includes 200,000 miles out of a total of 245,000 miles of railroad. The "Frisco" road reports that during the first 11 months of its safety campaign it reduced deaths 33 percent and injuries 27 percent. The records of the New York Central lines reveal the fact that a reduction of 37 percent has been made in deaths from accidents comparing 1914 with 1912. A recent report of the El Paso Southwestern System states that during the fiscal year ending June 30, 1914, the decrease in fatal accidents was 41 2-3 percent and the decrease in injuries that caused a loss of more than three days of time was 32 percent.

Out of the five years' experience in the various industries which have made the largest reductions in accidents has come this striking fact which is agreed to by practically all of the safety experts: that not more than one-third of the reductions which have actually been made have been accomplished or could have been accomplished by the use of any mechanical safeguard or any mechanical equipment, while two-thirds of the reductions have been accomplished largely through organization and through education, in short, through reaching the workmen and securing their co-operation.

The statistical department of the Industrial Commission of Wisconsin has made a chart showing causes of accidents in industries of the State. This chart shows 7,908 accidents causing disability of over seven days which occurred from September 1, 1911, to November 1, 1912, a period of 13 months. Of these accidents, 2,511 occurred on machines and machine parts, that is, at points, let us say, where it might be possible in the majority of cases to use some sort of a mechanical guard to prevent the accident, 5,397 out of the 7,908 accidents occurred in ways where it is practically impossible to use any kind of a mechanical safeguard. A large number of accidents were caused by hot metals. Another group of accidents was caused by men being hit by chips, by hoisted and moved objects, by objects falling from piles, etc.

Another large group of accidents came under the head of falls down stairs, falls from ladders, falls into excavations, etc. Slipping and stumbling caused many accidents. A considerable number of men were injured in handling various heavy objects and in dropping heavy objects. The largest number of injuries was caused by handling various kinds of tools. The experience of all men who have studied accident prevention emphasizes the point that accidents similar to these 5,397 accidents can be prevented only by reaching the workmen on the job, by instructing them in regard to how accidents happen and the part that they must do in their prevention, a part which is beyond the power of the employer to do. This can only be accomplished by giving the workmen an active part in the promotion of safety.

The most important advance which has been made in the prevention of accidents in the past five years has been along the line of giving the workmen an active part in the promotion of safety. This is done by placing rank and file workmen on safety inspection committees which make an inspection once a week or once a month and submit a written report of their findings and recommendations to the foreman or superintendent. In many places this committee also investigates the more serious accidents and makes report in regard to the cause of such accidents and suggestions for the prevention of similar accidents. As a result of this first hand contact on the part of the workmen with the problem of safety, they get an insight into the causes of accidents and come to see as the superintendent and foremen know, what a large percent of the accidents cannot be prevented by guards but must be prevented by the workmen becoming really intelligent and really interested to protect themselves.

In a creamery or butter factory as I understand it there are only a few points of danger to be covered by guards. There are a few gears, two or three belts, a few set screws, perhaps a fly-wheel on the engine, and a revolving churn. From my observation I should say that the problem of building guards for the ordinary creamery is a very simple and a very inexpensive one. All of the guards required are of simple design and are easily

made by the owner of the creamery at a very small expense. I do not see why the ordinary creamery cannot be made almost "fool proof."

The Industrial Commission has arranged with the Dairy and Food Commission to make inspections of creameries and butter factories covering safety, and sanitation so far as water closets are concerned. The Dairy and Food Commission inspectors in their regular rounds will make these inspections and report them to the Industrial Commission. Judging by what Mr. Emery and his inspectors have told us regarding the conditions in creameries and butter factories I should say that the problem which needs attention first among the buttermakers in some quarters of the state is to make the water closets and out houses more sanitary. I should say that this is a more pressing problem even than safety, although this is always important. If you will look over the orders which embody the standards on sanitation issued by the Industrial Commission covering toilet rooms and privies I think you will agree with me that these standards are reasonable and necessary. They were not worked out by the Industrial Commission. They were worked out by a committee of practical shop men who have had experience in sanitation and who formulated these standards with one idea in mind—what is present good practice in plants where good sanitation has been established.

The Industrial Commission has received the most cordial co-operation from the various canning factories of the state. They have recently taken up with great interest the whole question of safety and sanitation and much good work has been done. The movement has reached the point where some of these canning factories are making the sanitary equipment of their plants a point in advertising their food products. I hope to see the day when all of the butter factories in the state of Wisconsin, which has so long been the leader in this industry, will be model factories from the standpoint of safety and sanitation.

I want to speak of one thing more in closing which is entirely apart from the subject assigned to me. As you know, the

Industrial Commission has charge of the Free Employment offices of the state. For a good many years there has been a chronic dearth of farm labor and every year there has gone up a cry from the farmers for help, especially in harvest time.

The Industrial commissioners have instructed me to say to you gentlemen that they are especially interested in aiding farmers to secure farm hands through the free employment offices. In 1913 there were 800 men out of Milwaukee placed on farms. In 1914 there were 1200 farm hands placed. As you are probably aware, many of these men are foreigners who came over to this country from the fatherland where they were raised on little farms and all their lives have been accustomed to tilling the soil. Very many of them are not acquainted with modern machinery, but the majority of these men will make good farm hands, and the experience of the farmers who have taken these men from the city is that in the great majority of cases they have made good.

You creamery men who are in constant touch with the farmers can help the commission in this good work. The commission would like to have you call to the attention of your farmer customers this opportunity of securing through the employment agencies, good farm hands. You can advise the farmers to write the Free Employment Office of the Industrial Commission, at Milwaukee, and they can do so by simply dropping a postal card, making their request for such help as they want. Many times it facilitates matters if they will enclose a draft or post office money order for the car fare of the man to be sent, because many of these men have no money with which to travel. The deputy of the commission in charge of the employment office will send the baggage of the man to the person who has forwarded the money, which baggage he can hold as security. I am told that some of these men are willing to work for \$15.00 a month for several months until they become accustomed to the work, and then they would ask only reasonable wages. The commission believes this is a worthy work and offers a good opportunity to help honest, industrious men who are not fortunately placed, to get a start in

the world and to become useful citizens. In helping these men you butter men are also helping your constituents.

I thank you. (Applause.)

CHAIRMAN: Prof. Benkendorf has a few announcements to make.

SECRETARY BENKENDORF: Ladies and Gentlemen, I want to call your attention to page 41 of the program which says "All buttermakers, managers or patrons from creameries having butter on exhibition are requested to register with the Secretary before six o'clock Wednesday evening in order to be eligible for a District Prize."

An announcement has been made in the program that we would have a meeting of the managers in this hall tomorrow morning at 10 o'clock. We hope as many of the managers as are in attendance will come here and see what can be done to better creamery conditions in Wisconsin.

I am glad to announce that everybody that is on the program for tomorrow is present, so we wish you would come here promptly so we can start the meeting at 2 o'clock sharp. Don't delay the meeting.

CHAIRMAN: I believe this closes the program for the evening. We thank you all for your attendance.

Meeting adjourned. _____

WEDNESDAY AFTERNOON SESSION.

Wednesday afternoon, 2 o'clock, meeting called to order by the President, Allan Carswell.

PRESIDENT: The first item on the program this afternoon will be an annual address by your humble servant.

PRESIDENT'S ANNUAL ADDRESS.

By Allan Carswell, Clear Lake.

On this the Fourteenth Annual Meeting of the Wisconsin Buttermakers' Association, it is a source of great satisfaction to

see such a large and enthusiastic crowd in attendance, showing very plainly that as the years go by the necessity of holding these Annual Meetings has not diminished, but on the contrary the troubles and responsibilities of the creamery men grow with the years and I hope that each one of you will go home better equipped to meet the complex conditions as they arise during the year.

I am sorry that I was unable to be present last night and feel that as your President I owe you an explanation if not an apology. The Annual Meeting of our Creamery was held yesterday and the question was up to the stockholders of erecting a new building and as our old plant was erected some 25 years ago I was naturally anxious to see the proposition go through, and am pleased to say that we are to have a new creamery this coming summer.

The year 1914 was a prosperous one for the creamery business in Wisconsin, but the same thing cannot be said of the cheese industry and in reviewing the cause we will see how conditions affecting these two branches of the dairy industry might very easily have been reversed, for if the nations in Europe had not gone to war, the south would have been able to sell her cotton at a good price and thus would have been able to have bought her usual amount of Wisconsin cheese, and on the other hand if it had not been for the war there would have been imported from Denmark, Australia, New Zealand and South America large amounts of fine high scoring butter and from Russia large quantities of medium grade goods, for even now with ocean freight rates and insurance premiums increased enormously Danish butter is being received almost every week in New York, and when this war is over, the buying power of the European nations importing dairy products, will be away below par and with the low duty now on butter I for one will expect to see vast quantities of butter dumped over here in this country.

In view of the conditions just stated the necessity of improving the quality of Wisconsin butter is imperative and the many excellent papers on the program by creamerymen of wide

experience on such subjects as Pasteurizing, Cream Grading, Starters, etc., together with the good discussions we expect to have, should be a wealth of information on the improving of our product, but there is one important particular which must ever be kept to the front and that is the source of supply of the raw materials, for unless milk and cream are produced under sanitary conditions all other efforts to make a pure first class dairy product will be in vain. The action of the creameries of La Crosse county in the hiring of an inspector is a step in the right direction and will certainly be a money maker for the creameries and their patrons, for we must realize that the force of state inspectors is totally insufficient to attempt inspection of the dairy farms as in the above proposal.

Next month we are to have one of the old fashioned National Conventions in Mason City, Iowa, and it is hoped that Wisconsin will make a showing of which we may feel proud, for with the efforts that Iowa and Minnesota are making to get every butter-maker in their respective states to do his best to send the best tub of butter that they have ever made, it is therefore up to the Wisconsin Buttermakers to start in now and do their very best to get the quality up around 98, and if we succeed it will be a big surprise to our Sister States and all the more gratifying to us. At this time I want to draw your attention to the fact that we have with us Mr. James Sorenson, Manager of Minnesota's State Creamery, and by judicious handling we ought to be able to obtain from him some of the facts that have enabled Minnesota in the past to carry off every National Banner but one. He will be on the program tomorrow afternoon, so don't fail to be on hand to hear him.

I have a few suggestions to make in regard to our association. One of these is that we miss the machinery exhibits and there is no reason why the manufacturing and supply companies should for the last few years refuse to make exhibits, especially in view of the fact that they are this week making an exhibit at the Illinois State Meeting and at the same time tell us that they spent so much money exhibiting at the Dairy Show in Chicago

that they cannot entertain the idea of an exhibit here. Also the time of holding our meeting in my opinion could be changed with advantage to all, for if held in October or November most of us, after a hard summer's work in the creamery, are in a condition that a few days' recreation would be very acceptable, the helpers who have worked with us all summer are still with us and it is a much more convenient time to get away, and from a pecuniary standpoint it comes before the time when we have to pay Wisconsin's taxes.

In conclusion let us make this a get-together as well as instructive meeting, for the better we get acquainted with one another the more good we are apt to derive, and make each one of us go home determined to live up to Wisconsin's watchword "Onward." (Applause.)

PRESIDENT: The next item on the program will be by Professor W. P. Roseman, Division Superintendent, University Extension Division, La Crosse, Wisconsin.

THE CREAMERY AS AN EDUCATIONAL AND SOCIAL CENTER.

By Prof. W. P. Roseman, La Crosse.

My topic, "The Creamery as an Educational and Social Center," emphasizes the importance of a closer acquaintanceship between the buttermaker and his patrons through social and educational meetings at the factories or at the nearby district schoolhouse. It points out how important it is for the buttermaker to have a general knowledge of all phases of dairying, in addition to his technical knowledge of the manufacturing process. It places the responsibility of imparting the whole dairy gospel to the individual farmer to a large extent upon the buttermaker, who is on the ground and in close touch with the man who milks the cow.

We must admit that the buttermaker's special problem is to manufacture the raw material that comes to the factory, perhaps

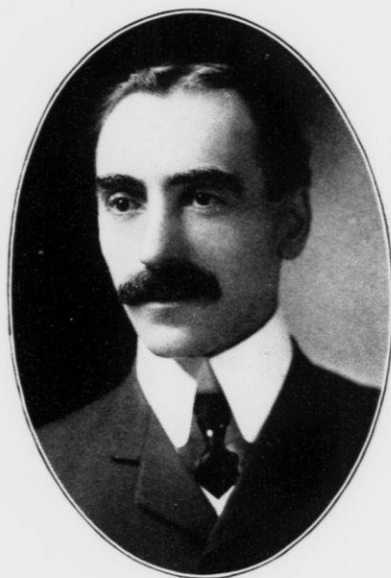
regardless of its quality. But in my opinion he holds such a unique position in his relation to the whole dairy industry that the position of leader naturally falls to him. He is the pivot of the dairy industry. All roads in that community lead to the creamery. Therefore it should be the clearing-house of the community for dairy knowledge—an exchange, if you please, for dairy ideas.

A dairy library should be accumulated. A number of copies of every bulletin that can be found on dairying, and a few of the leading dairy papers should be placed in this cupboard or on a reading table in an inviting corner of the creamery. A supply of signature cards should be on hand for those who wish to be placed on the regular mailing list for dairy bulletins. Pictures that talk and charts that convince should be on the walls, so if a farmer or his son should go inside he can be looking them over and getting some dairy inspiration and perhaps ask to take one of the bulletins home. (How many of you men who have looked at the pictures of those fine types of dairy cattle that hang on the walls of the dairy school at Madison, and studied those charts, have not felt better satisfied with the business that you are in?) The creamery should not be the barren, desolate place that some of them are. I wonder if the factories themselves cannot be made more suggestive of what we are aiming to bring about on the farm. It must be embarrassing to any buttermaker to recommend that barns be kept clean and well ventilated, when the creamery is not typical of this condition. The clean floors in our creameries are indeed commendable, but I wonder if there is something else we can do to make our workshops more inviting and instructive. Go into any manufacturing establishment today that you visited ten years ago, and you will not recognize it, because of the improvements in this particular.

The big problem today cannot be solved in meetings like this. Conventions are excellent things. They bring together men of broad education and large affairs, and their ideas are disseminated among those present and carried back to the many communities represented. But often they go no further than the

creamery. They should not rest there; they should be carried to the man who produces the raw material.

This Association has no doubt done much toward developing the dairy industry of this state. It has certainly brought the manufacturing end up to a high degree of efficiency. But our problem today is not so much in the manufacturing department as it was a few years ago. It is my impression that Wisconsin buttermakers rank high in the manufacturing of butter if they are furnished a good quality of the raw material. But the neces-



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sity of giving some attention to the production phase of the industry may not have occurred to some of us. The buttermaker's problem today, as I view it, is to teach the farmer how to produce more milk from the same number of cows, more and richer cream a cleaner and fresher product, how to market it at a less expense, and how to drive drudgery out of dairying, so that the farmer's boy will delight in it, instead of seeking the city in order to avoid

it. It is my contention that there is no class of men who hold a more ideal position to help to solve these problems than the Wisconsin buttermakers. They know where to find the dairy knowledge if they have not already acquired it. They are the foremen of the whole "community factory." They are in a position to become the great emancipators of the dairy drudgery and backwardness.

James J. Hill, the great railroad builder, once said "To make a success of any business and to make that business assure you a livelihood, you must have a knowledge of all phases of that business." If this be true, it is plain that to further the success of the creamery industry, to be certain that the industry will continue to assure the buttermaker a living, he should know not only how to make good butter, but he should also be able to assist the dairyman to produce more of the raw material and a better quality.

The one thought that this century has emphasized more than any other is "efficiency." This word has found a place in the literature of every counting house, in the catalogs of every manufacturer, and it is rapidly finding its way out to the farm and into the dairy. The possibility of making two blades of grass grow where one previously grew, is becoming the motto in all lines of endeavor, and it is up to the buttermakers in this state, and every other state, who occupy an ideal position in the dairy world, to assist the farmer to produce two quarts of milk for every one produced heretofore.

The farmers are beginning to appreciate the significance of this motto. Three years ago I heard of a man who made \$5000 selling seed corn. This man was making two ears of corn grow where one previously grew, and he had not the least notion of leaving the farm to take up city life. He was a comparatively young man who had gotten the corn growing inspiration from Professor R. A. Moore, of Madison, and through corn growing contests. I wonder what the buttermakers are doing to interest the boys in farm life, through dairy contests. I wonder if the boys who are leaving the farms on which they cannot grow corn,

for city life, can be persuaded to remain through an interest in the new dairy gospel. The boy who is interested in a milk sheet, the boy who is interested in a beautiful Jersey cow, who has a warm, comfortable barn in which to milk, will not leave the farm any more than the young farmer who made his \$5000 on seed corn.

After all that has been written in bulletins and agricultural journals, and said in institutes, one would suppose that dairying was being carried on in a very scientific manner. But I believe it will be found on investigation that the great majority of creamery patrons are still making dairying a side-line, that they are not quite sure that the new gospel of feeding and housing, breeding and weeding, etc., will bring the results that are claimed. It is difficult for the farmer to appreciate the fact that the old straw stack does not furnish proper food, and in many cases adequate housing. He is not quite convinced that he has been robbing the soil, and that the best way to pay back to Peter that which is Peter's is to go into the dairy business. He has no confidence in what he reads, and he must be told by someone in whom he places confidence, and the better he knows that person, the sooner he will be convinced.

The State Agricultural College and the Department of Agriculture at Washington have done much to build up the farmer's efficiency. These agencies have the pioneer work well begun, but they have to work at such a long range that much of their force is spent before it reaches the individual farmer who needs it most. The many bulletins published by the experimental stations are full of excellent suggestions, but the number of farmers who have confidence enough in what they contain to send for them, are few. The average farmer would rather be told things than to read them. Their interest must be aroused first, then their attention called to the particular bulletin that bears on their particular problem. What we need is a moving spirit in every community who is in personal touch with the farmer, to act as a leader, as a director of this educational process.

Who shall it be? Shall it be the buttermaker? Who else is

better fitted for the task? Is the city girl of eighteen summers, teaching at the cross-roads? Is the village preacher, who has been compelled to desert the country church? Is the city banker who is doing much in this direction, but whose business it is to handle money and not cows? None of those agencies upon whom the solution of these problems is being forced have sufficient knowledge of the dairy business to gain and hold the attention of the farmer. These agencies are doing wonderfully well in their attempt to help solve these problems, but the natures of the problems are so foreign to the line of business they are in, that they cannot present them in a convincing manner. In my opinion, the man who has the particular kind of knowledge necessary for leadership, the man who is best fitted for the task by training, environment, and position, and whose work is more closely and intimately related to the big dairy problem, is the buttermaker. It is the buttermaker who should be the central figure in the onward march of the dairy business in *his particular community*. It is he who knows the dairy business or who can acquire a knowledge of it with the least effort. It is he who is best qualified to be the leader, the foreman, or superintendent of the great "Dairy Community," co-operating and directing the activities of those other agencies who are willing to assist when they are properly directed. It is the buttermaker who is in the business to stay, and not the school teacher who is soon to be married, or the preacher, or the banker, because dairying is so foreign to the things that they have learned to do best.

If the buttermaker is a married man with a family, he should own a cow or two for his children to care for, and to help cut down living expenses, or to furnish him his supply of starter milk. His ambition should be to become a fixture, a leading figure and a dairy educator in his community. Should he feel that the duties incumbent on a buttermaker are going to be too exacting in his later years, he should plan to secure an option on a small dairy farm in the neighborhood that he can step into at any time, where his family can carry on the good work that he has so ably begun, and in this way perpetuate his influence in that commu-

nity. On first thought this goal may seem too ideal, and its path too difficult to follow. But it will be found to be an easy one if the buttermaker believes that he is the logical leader in *his particular community* in this great dairy movement, if he appreciates the fact that he is in a better position than anyone else and better qualified to carry on the pioneer work so well started by our experimental stations.

How is the buttermaker going to find time to be the educational dairy leader in addition to the duties incumbent on him in the manufacturing end of the business? From my experience in a creamery, and from what I have learned from the men in the business today, the average day in a creamery is from 5:00 o'clock a. m. to 3:30, and often 4:30 p. m. How, then, is the buttermaker going to impart all of this dairy knowledge to his patrons? Can he do it while the farmer is unloading and hurrying to get out of the way for others who are anxiously waiting? Certainly not! Only in a very casual way, perhaps if he finds a man interested in silos, he can have a bulletin on silos ready for him the next morning. If he finds sediment in the milk, he can have his sediment test ready for him the next time he comes to the factory, and in a diplomatic way advise him to use plenty of bedding, and to have a rag handy and wipe the udders of the cows before milking. There may be a number of other little points he can take up in this casual way, but he cannot touch upon the big problems.

Can the buttermaker go out to the dairies where his assistance is supposed to be most needed? In my opinion under present conditions this is impossible. He may be able to make a few social trips during the year and start something going here and there, but he has not the time to carry out any constructive program in this direction until the dairymen appreciate his worth as a leader, and until they feel confident that he possesses the knowledge they need to increase their bank accounts, and will vote to give him an assistant so that he can spend more time in this bigger way. That time, however, is not here, but it is coming, let us hope.

Then, how can the buttermaker assist in the production end of the dairy industry? During the winter months, when work is slack on the farm, he can call a meeting of his patrons at the factory for an afternoon. By writing the agricultural extension service bureau of the University, explaining his purpose, no doubt he can secure a man who can talk on, say, "Feeding and Housing" and "Alfalfa," if these are the problems that need first attention. If a speaker cannot be secured through the Agricultural Extension Department, he can get "Farmer Jones," one of his patrons who runs a model dairy, to do the talking. He has had practical experience as well as scientific knowledge on feeding and housing cattle, and the buttermaker knows it because of the raw material which he brings to the creamery. There must be one or two of these men in every community, but in case there is not, the man in charge of the agricultural course in the neighboring high school will be glad to attend the meeting and discuss one or both of these subjects. The high schools are beginning to place good men in charge of their agricultural courses, and their services should be solicited. The county agricultural agent, or the cow-testing agent, will no doubt respond to a call to assist in carrying out a program of this nature. The International Harvester Company, Harvester Building, Chicago, Illinois, I am informed, will give the services of a man free for an occasion like this, as it will result in greater intelligence, and therefore the purchase of more modern machinery.

Someone has said that the hand that rocks the cradle rules the world. While I do not wish to question this statement, I do believe that man's stomach has something to do with ruling the world. Therefore, a lunch and some sociability should be provided. After the program, the men should be given plenty of good bread and butter to eat, and fresh buttermilk to drink. Let them have an opportunity to touch elbows and exchange ideas on feeding, the value of keeping milk records, etc. This will give the buttermaker an opportunity to become acquainted and in a casual way advise them as to the best methods of taking care of cream on the farm, and how important it is to have fresh cream in or-

der to manufacture butter that will command the highest price. While they are in a receptive and thoughtful mood, their attention can be called to the bulletins on alfalfa, the silo, on scientific feeding, etc. They may become interested and ask to take one home.

The second question which may be asked is, "Where is the buttermaker going to get the money to pay for this lunch?" If he presents the matter to his directors in the proper way, they will no doubt vote to appropriate a dollar or two with which to provide bread, and allow him to use a part of his over run for that day with which to spread it;—nothing need be said about the buttermilk. If the directors have not caught the spirit of the big problem and refuse to allow the small amount asked, he should not become discouraged but go to the banker and relate his plans. The banker will not ask any questions but hand him the amount needed. Such meetings will mean larger bank deposits and greater possibilities for both the banker and the farmers. The bankers of this state are anxious to help in this movement, and are rapidly becoming leaders.

I believe that this program can be carried out, and so far the buttermaker has not found it necessary to be posted on any phase of dairying outside of his particular department. All he needs in addition to his scientific knowledge is a little managerial ability, and this is easily acquired if he does not already possess it. If he has faith in the business he is in, and has a little courage, leadership will come to him. Those who wish to make a study of certain phases of dairying outside of the manufacturing department, will find in the dairy library which they have collected, ample material for this purpose. Short papers or talks can easily be prepared on such topics as, the proper housing, feeding, and care of cows already on the farm, the keeping of record sheets, interesting the farmer boy in dairying, how to handle milk and containers on the farm, the establishment of cow-testing associations, the value of ensilage and different types of silos, the value of alfalfa as a food, and how to grow it, the value of dairy clubs, the importance of developing the same type of cattle in a

community, and how to develop a higher grade at the least expense, the importance of co-operation in marketing the finished product, etc.

Every buttermaker ought to be prepared to discuss a topic like, "Housing and Feeding," first, for the protection of the cow, and second, for the protection of the farmer boy. The boy who has a good, warm well-ventilated barn in which to milk, and who becomes interested in scientific feeding, will not seek the city, but the boy who has to milk in an open shed or on the sunny side of a straw stack, is apt to discourage dairying or seek other employment. In preparing a topic like this, it is advisable to illustrate the principal points by the use of charts, and show by example the results that have been obtained by the proper housing and feeding of cattle. Paper good enough for such chart work can be secured gratis from the express office or from the grocery store, and one of those large grease pencils used in freight depots can be purchased for five cents. With this material, examples can be worked out that will convince dairymen that warm stables and barns and proper feeding are some of the best investments that can be made. If the buttermaker gives this talk, and a man from one of the other agencies mentioned above has been secured, a very profitable afternoon ought to be expected. Ample time for the lunch, the rubbing of elbows, the exchanging of ideas, and shopping, ought to be allowed. At first, only two or three meetings during the winter should be planned, the last meeting to be held at Farmer Jones' barn, where the more skeptical may see how the theories they have been studying can be worked out in practice.

There should be at least one meeting for the farmers' boys and girls, at which the county superintendent, the director of the boys' contests from the Department of Agriculture at Madison, and the district school teacher, should be the principal speakers. For a balanced ration for those future dairymen and dairywomen, add to the men's bill of fare a bushel of apples and a half-bushel of peanuts. : It will be found that after one meeting, inquiries will be made as to the date of the next meeting.

A junior dairy club should be organized and arrangements made for a dairy contest some time during the year. The corn people are making excellent use of contests, but the buttermakers must not allow the boys to think that corn is the only thing Wisconsin can produce. The buttermakers' activities along this line should be so marked that if he stays in the same community a few years, he will see the youthful emigration that is now going from the farm to the city right-about face and go the other way. It is as much the buttermaker's problem to keep the boys on the farm as it is the problem of the agronomy man. A boy who becomes the possessor of a \$75 calf will forget all about the city, and in time be the creamery's most intelligent patron.

A meeting or two ought to be provided for the farmers' wives. For this program I am certain that a woman from the Home Economics Department of the College of Agriculture can be secured. Here is where the country school teacher will again give valuable assistance. A domestic science teacher in the neighboring high school will deem it a compliment to be invited to take part in this program. The buttermaker can be the man behind the gun, but he should see to it that the windows of the creamery are clean, and that no cobwebs are hanging from the ceiling, so that the ladies can tell their husbands. "He practices what he preaches." They can discuss such topics as, "How to lighten the household duties of the farmer's wife, the proper care of milking utensils, etc." The bill of fare may need to be changed but that can be left to the buttermaker's wife, the banker's wife, and "Mrs. Jones." Before the first meeting adjourns, a ladies' sewing club should be organized to meet at the neighboring schoolhouse or at "Mrs. Smith's" home, the first Tuesday of the following month. In addition to those meetings, there should be meetings of all the buttermakers in a county, to which the farmers are invited. Problems of vital interest to both the buttermaker and the farmer should be discussed, and rules formulated tending toward the general uplift of the dairy business in the county. These meetings should be held in different communities during

the year, so that all the dairy patrons of the county will have an opportunity to attend at least one meeting during the year.

These are only a few of the ways that will suggest themselves, after the buttermaker becomes the community dairy director, as to how the creamery can be made an educational and social center.

The third question that must be considered is, "Suppose the creamery is not arranged to accommodate such meetings?" The buttermaker in such a creamery should have faith and remember that where there is a will there is always a way. Of eighteen creameries visited by the writer within the last six months, thirty percent could be arranged to accommodate such gatherings by getting the lumber merchant to loan enough planks to furnish seating conveniences. This would be an easy matter if the problems were put before him in the right way, because he will know that meetings of this character will result in more modern barns, hence the purchase of more lumber.

In the seventy percent not equipped to accommodate such gatherings, the meetings can be held in the nearby schoolhouse, or in case the schoolhouse is not in a convenient location, the village hall or church can be used. "Farmer Jones" or the banker will be glad to transport the lunch from the creamery to the meeting place at the proper time, and the school teacher will be glad to have three or four of her older boys boil a large pot of coffee outside the building while the meeting is going on inside. She will enjoy a program of this sort better than teaching boys the latest in barn construction.

The buttermaker should by all means co-operate with the country school teacher in his community, because unless the boys who are now in school can be interested in dairying, the creamery industry is bound to wane. He should call a meeting of the teachers, explain a dairy record sheet, and formulate a few simple dairy problems—not catchy ones—based on such a dairy sheet, that they can give their pupils. He should encourage the teachers to have their pupils bring their old milk record sheets to school, so that they may be used to supplement the old arith-

metics that talk about the millions that are made in manufacturing steel and digging for oil. These old books that have the language of the city and the large manufacturing centers must soon be relegated from the country schools if the tide of emigration from the farm to the city is to be checked. The buttermakers should visit the schools which are near the creamery, and talk to the pupils on feeding, housing, dairy sanitation, and the great possibilities in this industry for the young man on the farm. He should take his charts and work out a few problems with the boys and invite them to visit his creamery. If the creamery is not too far from the school house, the teacher and the pupils should make the trip to the creamery and have the buttermaker explain the process of manufacturing butter.

The county agricultural agent and cow-testing agent should make the creamery their headquarters. If the county superintendent of schools passes a creamery in his county without stopping to talk over the future of dairying in that county, and how some of those problems can be worked out in the schools, he should receive a special invitation to call at the creamery on important business. The buttermaker should encourage him to allow credit for milking and feeding cows, in his home project program. A home project program prepared by a county superintendent a few days ago, read like this: 1 credit for baking 3 loaves of bread; 1 credit for 1 bushel of selected seed potatoes; 1 credit for selecting 10 best ears seed corn, etc. No credit was allowed for milking, feeding, and caring for cows. Why was this? It was an oversight, no doubt, on the part of the superintendent, and the buttermaker in that community was alive only inside the factory, and dead to everything going on outside.

The men who are in charge of the agricultural courses in the neighboring high schools, the county agricultural school teachers, and the county training school teachers, should be invited to accompany their classes to the creamery several times during the school year for practical lessons on the greatest industry of the state. The creamery should be considered part of the laboratory equipment of those schools whose main object it

is to fit teachers for the country schools and boys and girls for farm life. It is far more profitable for pupils of those institutions to spend their time in this way than to remain with backs bent all day trying to solve problems in insurance and compound interest.

On first thought it may seem that I have outlined a big program for the buttermaker, but this is not the case. All that we are asking is to have him do the thinking and managing, and have the other agencies do the active work. If the buttermaker acts as the manager of this bigger problem, he need not fear that the young men will continue to leave the farm, and that there will be no one left to milk the cows. The beef cattle movement in Wisconsin will be checked. The condensing factory men will not be around trying to get his job, and he will be entitled to a medal emblematic of greater courage and bravery than all the war emblems Europe can manufacture.

PRESIDENT: Are there any questions that anyone would like to ask Prof. Roseman at this time?

SECRETARY BENKENDORF: Let me say that anyone who has not registered may do so now. I have the blanks here. Everybody should be sure to register before he leaves the Armory.

PRESIDENT: The next item on the program will be "The Buttermaker and the Co-operative Creamery" by Carl Jorgenson of Rose Lawn.

THE ADVANTAGE OF CO-OPERATION AND WHAT THE BUTTERMAKERS CAN DO TO UNITE THEIR PATRONS.

By Carl Jorgenson, Rose Lawn.

Why is it that the farmers are willing to co-operate and build co-operative creameries? Is it done for pleasure alone? Surely not. The main object is to produce and manufacture butter of high quality; and secondly, to get a better market for their product. Co-operative creameries everywhere have been a suc-

cess and have accomplished a great deal for the advancement of the dairy industry. If co-operative creameries had not been built in Minnesota, Iowa and Wisconsin, would the industry have reached the present high state of advancement?

Rose Lawn Co-operative Creamery in Northern Wisconsin.

Some 56 patrons are united for the purpose of making the butter produced by their cows. My connection with this creamery dates three years back. The Annual Report for the past year is as follows:

Report.

Cream received from stockholders	266,733
From non-stockholders	6,498
Total cream received	273,231
Starter milk received, lbs.	41,761
Test of cream	29.3
Test of milk	3.8
Total butter fat received	81,740.8
Lbs. butter made	99,683
Per cent of overrun	21.9
Balance on hand Dec. 31st, 1913	\$76.83
Received for butter average price	28.13c
Average price paid stockholders	31.38c
Balance of cash on hand Dec. 31st, 1914	\$45.95
Average cost for making per lbs. butter	2.6

Our supplies now on hand are worth about \$250.00 higher than a year ago.

In the three years the expenses have been rather high, otherwise a still better price could have been paid; first year a new ripener, second a new boiler, and third a new churn. Now if this small creamery has been able to give those 56 patrons such an income through those years, what would it not mean for the whole state if it was all co-operative creameries, and all the profit returned back to the farmers that furnish the good raw material to the co-operative creamery. But right here I want to say some

co-operative creameries are co-operative in name only. Some of them have little or no co-operation between the board and the buttermaker, and again no co-operation between the buttermaker and the patrons. If four or five co-operative creameries were located in one community, also as neighboring creameries, and all of those creameries sent out wagons to beg cream from the farmers that are located 15 or 20 miles away from the creamery, while if these farmers had delivered their own cream to the nearby creamery, they would only haul their cream one mile, possibly two miles, and so it would be for the other creameries. Is that co-operation? Absolutely not, and such creameries should not set themselves up with the name of co-operative creamery, for there is none.

Uniform System of Cream Delivery.

To my notion our co-operative creameries should have some understanding as to collecting cream, namely, each one of the farmers inside three or four miles or more, would agree to bring his cream to his own co-operative creamery for a length of five or ten years. Each patron would get market price for his cream, and after the yearly running expenses were paid, he would get his share of the overrun distributed on the basis of butter fat delivered. By doing so each patron would get just what belongs to him, and the best of all the competition from other factories would in this way be cut out. We all agree that competition is the main cause for a low grade of raw material. I believe such an arrangement could be made in a good many of our co-operative creameries, if it was put up to the patrons at their annual meeting. In the creamery where I am employed we have been receiving cream two times a week during the winter and three times per week for spring and fall, and four times during the summer, but last fall we decided to receive cream three times during the winter. By doing so we would be able to make a better product; it is also understood that each and every farmer's cream is delivered each cream receiving day, in the winter before 11:00

a. m. and in the summer before 9:00 a. m. At our last annual meeting the 26th of January, we put up the question to our patrons, "Will you deliver your cream six times a week during the coming summer, also from May until November, and three times a week during the winter provided we can get enough for our butter to pay the extra expenses due to more frequent delivery?"

The Following Rules Were Adopted.

1. From May until November, cream must be delivered every morning except Sunday, the balance of the year, three times a week.



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2. The cream separator must be washed after each use.
3. The stables must be whitewashed twice a year.
4. Cream cans must be free from rust and kept clean.
5. Bad flavored or tainted cream that contains more than .3 of 1 per cent of acid will not be accepted at any price.
6. If cream tests less than 30 per cent of fat, the extra gain will be deducted from such patrons.

7. The buttermaker must be the judge in regard to the quality of the cream.

This is Co-operation.

We absolutely don't fear any competition from other factories. Two co-operative creameries inside 20 miles of ours had a hard time last summer to keep their patrons together, when cheese was so high, and butter rather low in price. One of the creameries lost about one-third of their run, and the other about one-half of their run, while our creamery lost only one stockholder, and in return for the one lost, we got two new ones.

It Is Up to the Buttermaker.

One thing buttermakers must do is to get the patrons to understand that the co-operative creamery is their property as well as any part of their farm, and that the buttermakers are working for their interests, cleanliness and neatness will do a great deal to get the patrons to come your way. Illustration of how I handled two patrons that produced defective cream without causing any trouble. A short time ago one patron delivered a can of poor cream. I wrote in this man's cream book, "Your cream was bitter, so bitter that I cannot use it." The next morning this farmer came to the creamery and wanted to know what was the matter. After talking with this man a few minutes, cabbage got the blame. The next can of cream was good. This man stopped feeding cabbage and the best thing about the whole deal, this farmer was not hurt. He understood that it was to his own interest that I objected to his cream.

The Second Illustration.

Sometime in December I received a can of cream with something in it. As soon as I saw the foreign object in the can I set it aside. After dinner I took the can of cream back to the farmer and told him just how things were. Some may think this man would get angry on account of taking the cream back, but I am sure he did not. This man was thankful that I brought back his

cream without saying anything about it to his neighbor, that brought the cream. I may add that this man always delivered good cream but accidents will happen. Those facts show that the co-operation between the buttermaker and the patrons of a truly co-operative creamery means a great deal.

Our Creamery is Well Managed.

I have already mentioned that we pay market prices for butterfat delivered, and the overrun is used to pay expenses, and the balance is left to the end of the year, when it is distributed on the basis of pounds of butterfat delivered. All of the cream is delivered by the patrons themselves, mostly in clubs of two to five, where neighboring farmers co-operate in cream hauling. The individual patron don't notice the extra bother of delivering the cream on regular days.

It may not be out of place to say that the monthly butter scoring held at Madison has been a great help for me in the past three years, in getting the co-operation from my patrons, by sending butter to Madison and let the patrons see the score card and letter returned by Professor Lee. By so doing the patrons will understand that it takes good cream to make good butter, and by co-operating with Prof. Lee, this Fall we were able to secure one-half to one cent more for our butter during the Winter than it was possible for us to get during the past Summer.

I will say at last but not least, the raw material is the foundation for good butter, and that co-operation is the foundation for good raw material.

I thank you.

PRESIDENT: We ought to have a little discussion on this paper of Mr. Jorgenson's.

DISCUSSION.

MR. H. M. DE GOLIER, Cambridge: I would like to ask Mr. Jorgenson if they take the entire overrun and retain that for run-

ning expenses for the year and what is over and above that they pay to the patrons and stockholders.

MR. JORGENSEN: Just among the patrons. We have only three that are not stockholders and they furnish only fourteen hundred pounds of butterfat in the year.

MR. DEGOLIER: I would like to ask what the average over-run is.

MR. JORGENSEN: Twenty-one and nine-tenths.

MR. C. J. STEFFEN, Milwaukee: I would like to ask what objections he has to buying cream with .3 of 1 per cent acid.

MR. JORGENSEN: If you get too high acid in the cream you can't make high grade butter.

MR. STEFFEN: Providing the cream is all right otherwise.

MR. JORGENSEN: You get more benefit out of your starter when the cream has a low acidity.

MR. JAMES SORENSON, Albert Lea, Minnesota: I was interested in Mr. Jorgenson's statement regarding the rules and regulations that were laid down at the annual meeting, about whitewashing the barns. My experience has been that farmers are very apt to make a lot of by-laws and then forget all about living up to them, and I was wondering whether his patrons are of the kind that will do what they agree to do. When I was in a creamery I told my stockholders that I thought we ought to have a by-law saying that cream should be delivered three times in the winter and four times in the summer time and the secretary said, "We already have such a by-law." I said, "For heaven's sake, why don't you live up to it?" I was wondering whether his patrons make a lot of by-laws that look fine and then don't live up to them. If they do, then I should say, make the laws a little less stringent, for instance, forget about the whitewashing, but simply tell them to keep their barns clean and then have them do something towards living up to it.

MR. JORGENSEN: The only thing I can say, come out there next fall and see for yourself and you will be satisfied it is done. When I first went to that creamery there were by-laws that they should deliver cream before 10:00 in the morning, it should be

sweet, and it should be delivered regular days. When I went into that creamery the first thing I did, I put my nose in the cream can. The farmer did not like it.

MR. SORENSON: What nationality are your people there?

MR. JORGENSEN: All nationalities. They simply understand that it is to their advantage to turn in good cream.

MR. SORENSON: Do you believe you could go into any community and make the farmers whitewash their barns?

MR. JORGENSEN: I don't know. The creamery will buy a sprayer and the neighbors will whitewash the barns in 20 minutes.

CHAIRMAN: Does your creamery furnish the sprayer?

MR. JORGENSEN: Yes.

MR. SORENSON: It seems to me you should have paid more for butterfat than you did. At the creameries in Minnesota they pay 33 or 34 for butterfat.

MR. JORGENSEN: This is a little creamery. We have put in a new churn.

MR. SORENSON: It is not fair to charge the tubs you are going to use this year, to last year's expense.

MR. JORGENSEN: The tubs are paid for.

MR. SORENSON: You can invoice your tubs and drop it from your running expense. That is not co-operation you have there now. If you talk co-operation, bring it down to the creamery. I know of co-operative creameries who at the beginning of a certain year have no coal on hand. The next year they only have to buy three carloads, as compared to five the year before, consequently, the patrons one year were paying for the coal for two years. I say that is not co-operation. I think any creamery should invoice their supplies at the beginning and end of the year and give proper credit.

CHAIRMAN: I believe Mr. Sorenson is right. If Mr. Jorgenson would invoice his supplies and carry that over on his inventory as cash on hand at the end of the year, that would be all right.

MR. JORGENSEN: Then you would receive about \$30.00 less on hand than last year. You can't get right down to every cent.

CHAIRMAN: Get as close as possible.

MR. SORENSON: I am not bringing up these points for the purpose of criticising Mr. Jorgenson, because I can see where Mr. Jorgenson has done something that very few buttermakers do, but at the same time, I believe by bringing out these points I will clear up some matters for the rest of you. I find some creameries that make a lot of money one year, but come to find out they had a carload of tubs and half a carload of coal that was paid for the year before and the next year gets credit for it. It does not cost much to invoice once a year, in fact, we invoice once a month. It is only 10 or 15 minutes work.

MR. JORGENSEN: We put in a new ceiling in the creamery and we charged it to the next year.

MR. SORENSON: What do you think about a sinking fund? Do you think every creamery should have a sinking fund for buying new machinery and erecting creameries? Is that feasible?

MR. JORGENSEN: I think it would depend a great deal upon the patrons.

MR. SORENSON: Supposing you buy a new churn. You pay for that out of one year's business. That is not right. That lasts for five or six years.

MR. JORGENSEN: How are you going to get around that?

MR. SORENSON: After you have run a creamery for a number of years, you ought to know what the approximate cost of up-keep is. A sinking fund will maintain that creamery indefinitely. As far as we know half a cent a pound will do that. We take half a cent all the time, so we are not charging the churn or ripener to any one year or any one month. It is scattered all along the line, and I say that is co-operation.

MR. ALBERT CROMBE, Fairwater: Mr. Chairman, I would like to ask the gentleman what luck he had in getting the patrons to wash their separators every day.

MR. JORGENSEN: That is something we haven't tried out yet. That is a new rule that they should be washed each day, and

it is going to be enforced. You could take a can of cream that is only one day old and if the separator is not washed, what are you going to do? You can't use that cream, because it is not in good condition.

MR. SORENSON: How are you going to do that? He will take his milk to another creamery.

MR. JORGENSEN: We have his bond, he can't get away.

PROF. C. E. LEE, Madison: Mr. Jorgenson realizes that there are some things he does not know, but he is modest about telling you what he has already done. Mr. Jorgenson went up there to a small co-operative creamery and I was surprised at what he has accomplished. If he tells his patrons, "You must do so and so," they know they have got to do it. They are not going to argue with him at all. They believe Jorgenson is on the right track. What has helped Jorgenson is the way he keeps his factory and the way he appears in the morning at the factory. You always find Mr. Jorgenson with a pair of wooden shoes and a clean pair of overalls every morning and everything in the factory is as white as snow. He always has on hand a barrel of slacked lime and if there is a little dirty spot on the door or the wall or any place, he can use that whitewash. I dropped in on him one day last Fall and I was really surprised that there was a factory in Wisconsin that looked like his. Don't you think his patrons are going to work with him? I know Jorgenson is going to get every farmer to whitewash his barn and wash his separator. He called a meeting of his patrons for 7:00 o'clock on Saturday night and 25 per cent of his farmers came out in the rain to a small meeting in the school house. We must give Jorgenson credit of giving you a sample of co-operation between the buttermaker and the patron.

PRESIDENT: We will have to cut this discussion short. The next will be "The grading of cream at a gathered cream factory," by V. S. Keppel, Holman.

HOW TO GET GOOD CREAM AT A CREAMERY.

By V. S. Keppel, Holman.

Mr. President, Ladies and Gentlemen: At the time I received word from our secretary, Mr. Benkendorf, requesting that I take part in the program of the fourteenth annual meeting of the Wisconsin Buttermakers' Association, prepare and read before the meeting a paper, the subject to be "How to get good cream at a creamery," I felt he had made a wise and up-to-date selection for a subject but missed it in the selection of the person to take charge, selecting as he did, yours truly. A scholar only of the school of experience, a school that issues no diploma. I am still a scholar attending that school. However, after due deliberation and not wishing to be found guilty of shirking, but rather be found willing to do my little mite, if called upon, to advance the cause of the dairy industry, I concluded to respond and make the best of the situation to the limit of my ability in the premises.

All of us owe to the public good the best there is in us to perform, whether we are in the private ranks or in an official position. No one has a right to offer less than the best there is in him. There is more truth than poetry in the old saying that the wise man learns from the fool and the fool learns from the wise man.

In the light of the foregoing I could see the possibility that I in my humble way might throw some ray of light on some phases of the dairy or creamery industry, the best and easily capable of being made the most remunerative of any single industry of this great state of Wisconsin.

The subject as above stated, forming the basis of what I shall hereafter treat, from a point of experience, is today receiving foremost consideration from the best and most competent men in the dairy or creamery industry. No other question equals it in importance. This is evident from the fact that word goes out today, and has for some time, from a large portion of the dairy and creamery press urging the grading of cream at the creameries and paying patrons accordingly to overcome most of the trou-

bles as to quality. Legislation has been tried, only to find that the problem cannot be satisfactorily met that way, although some good has been accomplished. Notwithstanding this the average quality of butter today is not equal to the average quality when legislation was first proposed and enacted.

That the average quality of butter today is not equal to the past is again evident from the complaints of the consuming public. Each succeeding year seems clearly more so. The increase in the sale and consumption of substitutes in the last few years un-



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questionably is in part due to this deficiency in the quality of much of the butter. Do what we may, it seems impossible to get away from the fact that the good is less productive of results than is the bad or undesirable. The good, to survive, must always receive special attention and care. It is possible to sow a field to wheat and harvest weeds. It is not possible to sow a field to weeds and harvest wheat. Eternal vigilance is the price of liberty, so to eternally be on guard is the price of business success.

Those of us in charge of the industry must get busy, very busy, and ascertain the cause for this uncalled for state of affairs. Once the cause has been definitely located, the remedy or remedies to most effectively meet the troubles will readily suggest themselves, and all who aim for and are desirous of better results must co-operate and actively assist in all movements that give promise of meeting the situation.

Fourteen years of experience as secretary and manager of our local creamery, during eleven years of which cream was graded and patrons paid accordingly with marked success, have convinced me that the grading of cream at the creamery is the big step essential to improve and maintain a standard quality of butter. All creameries could improve the quality of butter by a system of cream grading properly applied. It is, however, not a cure-all. There are patrons who seem unable by themselves to get out of a rut. Education, demonstration, diplomacy, three essential agents that help success in all business ventures, and help relieve many sore spots in creamery matters, must be applied.

Adopting a method of grading cream at a creamery is applying the same business methods in creamery matters that are applied in other business ventures. No one ever heard of a standard price paid or offered for all wheat offered or sold any given day at any given market; or oats, or corn, or live stock, etc. Market reports make this clear. Dairy market reports are no exceptions. The miller, to be able to maintain a standard quality for his flour, grades his wheat or buys such as is graded. What it is found necessary to do in the milling industry to maintain a standard quality for the product is equally necessary in the creamery industry; in fact, more so, for a more sensitive article of food than butter is not to be found.

Like offerings of farm produce or live stock at the respective markets, not all cream offered is of good quality. This is sometimes beyond the control of the parties offering it; in most instances it is in the control of the parties offering it. Whatever may be the cause or whoever may be to blame, poor butter will result from poor cream *without fail*. Good cream added to the

poor cream will not make the product therefrom a good product any more than mixing of good and poor wheat will make the mixture pass as good wheat. It is possible, however, to regrade such a wheat mixture in many instances. Such a possibility never occurs with a good and poor cream mixture.

For the benefit of my fellow associates in the dairy and creamery business, be they at the churn, in the field, or in the office, I will relate the practices at our local creamery. The Holman Creamery is a co-operative creamery, owned, controlled and operated in the fullest sense of the word by the farmers who furnish the cream. Under present methods the cream is delivered to the creamery by haulers hired by the creamery under contract at a given rate per hundred pounds of butter made from the cream delivered. They cover a given territory, usually for a term of one year, not less than two nor oftener than three times each week as the manager may direct. In the early days such haulers were hired at a given rate per day. It soon developed that some other method must be tried. Loads were complained of as too large, days as too long, etc. The next method was letting the routes by competitive bids on a given day. This method was found more satisfactory as compared with hiring by the day. This system was continued until six or eight years ago, when the competitive feature was dropped, and all old haulers who were satisfactory in all respects were given the first opportunity to renew contracts. This method is still in practice at the local creamery and is found as much superior to the competitive system as the competitive was to the per-day system of gathering cream. The last change in the method of securing cream haulers was adopted mainly for the purpose of protecting faithful cream gatherers and to enable the creamery to more effectively grade cream.

It was found in the course of time that often a competent and conscientious cream gatherer that faithfully took his orders from the man in charge of the creamery and complied with them in the same spirit, would be underbid when it came to the reletting of the route by some one who had a grievance against the gatherer, or opposition was induced by someone who had such a grievance.

In other words, the competitive system offered no reward for faithful performance of the contract obligations. The last change has proven satisfactory in all respects, and we would continue the practice even did we not grade cream. It aids materially to get the right kind of men for gatherers to begin with, because of the assurance on their part that the job is wholly dependent on their own efforts should they wish to continue. All gatherers receive their pay from the creamery on the basis of butter as stated before, not butter fat, and this is charged back to the patrons on the basis of pounds of cream furnished. Thus anyone sending 20 per cent cream is charged one-third more as his share of the cost of gathering when the final computations are made, as against anyone sending 30 per cent cream, and all other tests in proportion. This system of apportioning the cost of gathering was adopted for the purpose of inducing patrons to furnish a richer cream. It has helped some along that line in that some have taken advantage of the opportunity offered, and they of course get their reward, while more are falling in line.

In apportioning the cost of gathering the creamery territory as a unit is the basis that determines, notwithstanding some single routes cost 25 per cent more to gather than do some other routes forming part of our creamery territory unit. Most of the cream is gathered and delivered to the creamery two times a week. We have some which is gathered and delivered three times a week. We find it as necessary to grade the three times a week gathered and delivered cream as the two times a week gathered and delivered cream. If there is any difference it is in favor of the two times a week gathered cream. It is not occasionally so, but regularly, and that in itself is significant in that it demonstrates beyond a doubt that oftener gathering to get quality will not do it. More might be said along this same line, but I feel that a few remarks as to our method of grading cream are due before closing.

When our local creamery board adopted a system of grading cream at our creamery it did so in general terms. No fixed rules were established. The buttermaker was permitted to make his own

rules in the premises, conditioned only that such rules apply uniformly. Maximum results with minimum effort was the aim of the creamery board. Anything that looked promising was given a fair trial or consideration. One of the first things that became necessary was to number all of the gathering or route cans, so that each patron's cream could be identified when it arrived at the creamery to enable the buttermaker to trace defects when any were noticed. Gatherers were then permitted to take all cream offered, keeping the off-grade and that which appeared doubtful in separate cans and in such a way that the identity would not be lost. If in the opinion of the gatherer certain patron's cream might be scored off by the buttermaker, the patron was to be advised of that possibility to permit retaining for home use if desired. No patron is docked without warning. All first offenses are taken care of and assumed by the creamery. This has been the practice for eleven years at this creamery. No attempts even to abolish it have been made. All are a unit that grading cream at the creamery is a move in the right direction. The grading of cream at this creamery has come to stay because of the result obtained thereby. The next step necessary to reduce the make of inferior grade of butter is to be educational.

If the foregoing shall be the means of inducing others to adopt a method of grading cream at their creameries, similar to our method, I shall feel that my efforts at this convention are justified.

Wisconsin is the banner dairy state in the union. Let us try our best to hold that enviable position. By evolution which spells voluntary still further advance the quality of its dairy products rather than by revolution which impresses as not willing.

With the aid of the competent authorities offering assistance to all who welcome such, I feel confident that such co-operation can result only to cultivate good will and a higher quality of butter.

I thank you for your attention.

PRESIDENT: Are there any questions?

MR. F. S. STERRATT, Princeton: I would like to ask Mr. Keppel how they gather cream. You don't use a jacketed can?

MR. KEPPEL: It is jacketed, insulated with paper.

MR. STERRATT: How long are your haulers on the route?

MR. KEPPEL: All the way from five to six hours, some of them less time.

MR. H. H. WHITING, Johnson Creek: There is one other matter. You stated in the first of your article that the grades of cream had depreciated within a period of five years.

MR. KEPPEL: No, I don't think I made any such statement.

MR. WHITING: What I wanted to get was if there are any figures on that in any office, showing that condition to exist, how we could get at it to compare this year's grade with five years ago. I would like to know where I could get them.

MR. KEPPEL: There are years when the off grades are more than others. I attribute that to condition of weather. The year 1914 was one of the worst I had to contend with. We did not get the same grain. There was something in atmospheric conditions.

PRESIDENT: We have with us this afternoon a gentleman we would all like to hear from, and I will now call on him and we will conduct this discussion afterwards. We would like to hear from Mr. S. A. Cook, before he leaves the hall.

(Applause.)

MR. COOK: It is sufficient for me if I can have the privilege of visiting a few minutes with you. For a good many years, I have been, more or less, engaged in and interested in this same kind of business that you are, and I think it is only fair to expect that you, as young men, should improve on past methods and as most of you in this convention are young men, I have in mind a story that I trust will be appreciated by all present. A little girl sat on her father's knee where she could see both their faces in the glass, she said to him, "Father, did God make you?" "Yes daughter, he did." She looked again in the glass and finally said "Father, did God make me?" Her father said, "Yes, why do you ask that question?" "Well, she said, looking in the glass again at both faces, "I think God is improving in his work."

I appreciate this compliment, this honor, if you please, that you have extended in allowing me to break in on a business meeting which you have come here to attend. I have been for many years interested in this industry. Perhaps, I could make butter, "as I am a Cook," and I should try if I had to, but presume the quality would be such that I would have to be the one to use it and that might cause me to go out of business. I am in the paper manufacturing business. I can't make the paper, but I can hire brains to make it, and I look for results, and I am looking for results boys, as many of you are boys yet, I have been looking for results for twenty years and I have seen them. I don't believe there are very many in the state of Wisconsin who have had more satisfaction than I have had. I can go back very easily now and compare it with what it was twenty years ago, when the best of registered cows were selling at \$14.00, cheese at six to nine cents, butter at eleven and they called it good butter at the time. Some was good and some would hardly stand up to be shipped to the market. Much of it was spoiled in the making. God gave to each man certain capabilities, and if properly handled, properly used, good must result. No matter how humble the calling, if success comes by your own efforts, good comes of it, not only to yourself, but to the community you live in and the state and nation. The Creator never intended to give you just brains enough to make the best butter or best cheese and most of it from a certain amount of milk when you first commence the business and be satisfied because any man who thinks he has reached the zenith, whether if making butter or paper, unless he uses his brains to keep on going higher in his profession, is at once beginning to deteriorate, retrograde; his Creator intended he should go higher. If young men and women mark out a legitimate industry to engage in and say "I will succeed" you can do it by perseverance. The premiums, watches, chairs, etc., you win may be of some satisfaction to you, but the money value of the article is very small compared to your great help to the industry, the good name of the state of Wisconsin, and the good name of its butter in the markets of the world. Minnesota has no right to take away

any of your premiums, unless she does it fairly, and if she does then take off your hats to her for the time, but don't lay down. You can not win that way. You have the brains to do this with. Mr. Jorgenson is right when he said get together with the farmers. It depends largely on the raw material, as it does in our pulp and paper business. The better the raw material you get, the better material you can produce and the better it is for the farmer. Keep up the quality, but be dead sure to increase the quantity, it is quantity with quality that brings the revenue.

We are all consumers. There is no danger about a market for such material as you are making, and the high price is sustained largely by the high grade of butter you are making that can be shipped to the markets of the world.

You ought to have more farmers with you. I believe in co-operation, not to gain unwarranted profits, nor to control capital or material or over labor that produces it, I believe in organization for mutual benefit, to help each other, and legitimately build up the industry we may be engaged in. But as we can't have everything, I will further emphasize the fact with a story. "An eight year old child got to be so unruly, to use the term that is often used by us on the farm, her mother said to her daughter, "You have got to change your ways." She said, "what is the matter mother?" "what is the matter?" the mother said, "You are getting so headstrong, so unruly, your punishment is going to be very severe. You are so bad that you can't possibly go to heaven when you die." "Well," said she, "mother, I have been to Chicago and to two nickle shows and I can't expect to go everywhere." Buttermakers, go on with your good work. If you cannot have everything as you want it, just do the best you can and may God bless and prosper you in your every legitimate effort.

PRESIDENT: I call for a rising vote of thanks to Mr. Cook. The vote was unanimous.

PRESIDENT: Before resuming this discussion, I will call on Professor Farrington. He has to catch the train in thirty minutes time and we will continue with this discussion afterwards. Prof. Farrington. (Applause.)

THE ORGANIZATION OF CO-OPERATIVE CREAMERIES.

By E. H. Farrington.

About a year ago the secretary of this organization, Prof. Benkendorf and I, looked up the subject of organizing co-operative creameries and cheese factories in this state according to the present status of the Wisconsin laws. We also designed three creamery and three cheese factory plans having in mind, first, the needs of a new country where dairying is just developing, second, the building appropriate for a locality where the first factory has been outgrown and, third, a factory for the sections of the state where dairying is well established and a building adequate for the needs of a comparatively large business is wanted.

In this bulletin, which we hope will be published soon, an attempt has further been made to include helpful suggestions concerning the starting and the operation of a co-operative creamery as well as the organization of these associations.

Before I take up some of the points of this bulletin I want to make a brief report on two projects which I suggested at the last annual meeting of this buttermakers' association. You may remember that at that meeting I spoke of the marketing of eggs at a creamery, and I hope some of you have gathered a little information on this subject during the past year. My own observations have been confined to the efforts made at two creameries near Madison, and I will give you the results of the attempts to introduce the egg business at these factories.

After talking with the managers of each factory I wrote out the following statement which I thought might be an aid in getting the question before the patrons of the creamery.

The Creamery and the Cheese Factory as an Egg Market.

The more helpful the operator of a creamery or a cheese factory may be aided in this way to obtain a more permanent milk the better the business relation between the two will be and the factory may be aided in this way to obtain a more permanent milk

and cream supply because of the added interest which the farmers will have in this factory.

One of the ways in which these factories can help the farmers as well as themselves is to receive the eggs which the farmer usually delivers to the country store, or some other buyer, and forward these from the factory to a buyer who is willing to pay an advanced price for fresh, clean eggs. If the farmers and the factory operators will co-operate in this movement, it will be possible for the farmers to receive a considerable advanced price over the one they are usually paid for eggs both in winter and in summer. In order to make this co-operative plan successful it will be found helpful for the factory operator to draw up an agreement which each farmer who wishes to avail himself of this opportunity to sell his eggs, should sign.

The following is an outline of such an agreement:

1. As a patron of the () factory, I agree to deliver all the eggs I wish to sell to said factory for one year.
2. All the eggs I deliver shall be less than eight days old.
3. The eggs shall be sorted and placed in cartons, each one containing eggs of uniform size.
4. I will keep the eggs, between deliveries, in a clean cool cellar.
5. Brown eggs and white eggs will be placed in separate cartons.
6. Each egg shall be stamped with the date of gathering.
7. Each carton will be stamped with the rubber stamp supplied me by the factory.
8. All eggs shall be perfectly clean and fresh when packed in the cartons.
9. All eggs of uncertain age will be disposed of in some other way and never included in the packages sent to the factory.
10. I agree to pay a fine of \$1.00 for every egg delivered by me that does not come up to these specifications in every detail.

The cartons and rubber stamps used by the farmers for marking and delivering these eggs will be furnished him at the factory. The farmer will be expected to deliver his eggs at least

once a week and oftener if possible. The eggs will be paid for at the factory when they are delivered. As soon as a market is found where the uniform fresh eggs delivered by the farmers are in demand because of their guaranteed quality, it will doubtless be possible for the farmers to receive a much better price for their eggs because of the reputation the eggs from this factory have earned and the farmers will find by giving a trifle more attention to their poultry than formerly, that eggs are profitable and better care will be taken of the hens than ever before. This



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will undoubtedly greatly increase the egg production and will also obtain for the farmers a better price for their eggs than they have formerly received.

The price received by the factory operators for handling the eggs will probably not exceed one cent per dozen and any advanced price which the reputation of the eggs may bring to this factory will be received by the farmers delivering the same.

After the patrons have read and accepted the above agree-

ment the following suggestions about gathering and delivering the eggs to the factory were distributed to the patrons.

Kind of Eggs Acceptable at Creamery.

If the patrons of this creamery wish to market their eggs through the factory for the purpose of getting an advanced price for eggs of an extra quality, the following suggestions will be helpful in establishing a reputation which will command an advanced price.

1. Eggs must be gathered at the farm twice a day in hot weather and kept in a cool place before delivery.
2. Eggs from stolen nests should not be delivered.
3. Artificial nest-eggs only should be used.
4. All nests must be kept clean and well littered.
5. Dirty or washed eggs must not be delivered.
6. Cracked eggs must not be delivered.
7. All eggs must be delivered at least three time a week in egg cases.
8. All eggs should weigh 24 ounces to the dozen.
9. All male birds should be killed or separated from the flock on or before May 15.
10. Patrons are advised to make an egg candler like the one shown at the creamery and inspect all eggs carefully before delivery at the factory.

When eggs are delivered in egg cases (no other eggs will be accepted) the factory operator will grade the eggs, rejecting any heated, cracked, dirty and all eggs not strictly fresh. He will keep a record of all acceptable eggs and return those found to be defective.

The accepted eggs will be sorted according to color, keeping the brown and white eggs separate; these will be placed in new, clean cases and shipped to a dealer in eggs of extra quality.

The price received will depend on the carefulness with which these regulations are followed.

After the dealer has found that he can depend on the eggs coming from this creamery as invariably strictly fresh, an advance over the usual market price can be obtained.

The success of this enterprise will depend largely on the spirit with which each patron of the creamery will co-operate with the management in furnishing strictly fresh eggs every time.

Attitude of the Patrons.

At factory No. 1, the officers of the creamery were very enthusiastic when the plan was explained. They wished to begin at once and asked for information concerning the proper places to buy egg cases and the naming of a satisfactory firm to whom the cases of eggs could be shipped. They said they would place the matter before the patrons of the factory and in a short time would ask for instructions to be sent each patron concerning the candling of eggs at the farm.

After waiting a few days and hearing nothing from this creamery, I called them up by telephone and asked, "When did you send the first shipment of eggs from the creamery?"

Answer, "Well, we don't want to do that. *The farmers don't want to comply with the conditions.* Too much work. The buttermaker wants more pay for handling the eggs and the cream hauler wants pay for delivering the cases of eggs. Guess we won't try it."

The enterprise got no further at this particular locality, due largely to the lack of time or energy of some one person connected with the creamery who had the necessary managerial ability to make the enterprise a success.

Creamery No. 2. The buttermaker and the cream hauler were very enthusiastic. Both expected more pay for the additional work of handling the farmers' eggs. They distributed the circulars to the farmers and arranged to have a special room fixed up at the creamery for candling and shipping the eggs. In a short time, however, they were visited by the *local grocer*. He was strongly opposed to the plan, because he said the farmers do their trading at the country stores and run up a bill in winter

which they pay with eggs in the spring. If they got cash for their eggs at the creamery, this money would be sent to a mailorder house and not spent at the home grocery. One farmer, it was stated, had paid a \$40.00 bill for farm seed with eggs at the local store. It was further claimed that the grocer does not reject any of the farmers' eggs, but takes them as they come.

The opinion seemed to be that the farmer trades only with the country grocer when he has no money and the grocer cannot take the farmers' eggs and pay cash for them, but pays the farmers in country store supplies of all kinds, and at all times. Further, the statement was made that a mail-order house can fill a \$50.00 order from a farmer by simply taking goods off his shelves and this requires much less time than it took the country store keeper to sell the same farmer a \$2.00 pair of shoes.

A considerable number of similar statements were made to the effect that all the country stores would have to go out of business if the farmers sold their eggs at the creamery. In this particular locality, however, the agitation caused the local stores to raise the price of eggs to the farmers one cent per dozen.

The experience of these two creameries, illustrates some of the items of interest that will probably develop at any place where an attempt is made to put the plan into practice.

I think everyone will admit that theoretically the practice of marketing farmers' eggs through a creamery is an economically profitable one, but to successfully put the plan into operation requires the attention of a good manager who is able to follow up the business and to overcome the many obstacles that are sure to arise.

During the past year I have talked with at least two creamery men from other sections of this state who reported fair success in selling eggs through the creamery.

The Operation of a Laundry in Connection With a Creamery.

You will remember that at our last meeting I mentioned the plan that has been discussed more or less for a number of years in the past of conducting a laundry in connection with a cream-

ery. I also read a letter from Prof. Henry in which he offered to give \$300.00 "to the first co-operative laundry in connection with a co-operative creamery or separately."

I do not know how many creameries in this state have undertaken this line of work during the past year, but there are at least two creameries that have now built an addition to the factory purchased the necessary laundry machinery, and are doing the laundry work for the patrons of the creamery as well as for other people in the vicinity. At these two places the enterprise seems to be in successful operation at the present time.

The status of the laundry business at these two creameries may be partially understood by the following answers to questions I sent to each one of these creameries concerning the laundry they are now operating.

*Replies to Questions Concerning the Operations of a Laundry at
Two Creameries.*

Question 1. Are the officers of the laundry association the same as those of the creamery, that is, do the same set of officers attend to the details of both the creamery and the laundry management?

Creamery A. "Our president and secretary of the creamery and the laundry are the same, the rest of the board is different."

Creamery B. "The organizations are distinct but have co-operative arrangements."

Ques. 2. How is the laundry from the patrons of the creamery collected?

Creamery A. "The clothes are sent to the laundry by the patrons, generally on the cream wagon, and returned the same way from two to four days later."

Creamery B. "Farmers bring their bundles."

Ques. 3. Have you any kind of a package which is sent back and forth from the laundry to the farm as a container for the clothes before and after they pass through the laundry?

Creamery A. "The patrons furnish their own; some buy

baskets from the laundry, others just tie it up in a bundle and the laundry wraps it in paper when returning it."

Ques. 4. Does the cream hauler expect or receive any additional pay for collecting or delivering the laundry?

Creamery A. "No; we have not paid cream haulers. We haul in route and change each day, and you must do your neighbor's work as you would do your own, including shopping or anything else."

Ques. 5. How often is laundry work received from one farm and how soon is it returned to that farm?

Creamery A. "Generally once a week and can be had again in two days or sooner if it is wanted."

Creamery B. "Some every two weeks, some every week. Returned after two weeks generally. Can be returned the following day."

Ques. 6. How much of the total laundry work comes from within one mile of the factory?

Creamery A. "About one-twentieth. Looking over last week's work, there was—hotel 32 lbs., restaurants 17 lbs., 5 family washings 70 lbs., and bundle work such as collars, shirts and such, amounting \$3.53. You see our village people do not patronize it on account of being a co-operative plant."

Creamery B. "About three-fourths or better. We get a great deal of work from the city."

Ques. 7. What is the greatest distance from the laundry of any of the patrons?

Creamery A. "About eight miles, but by mail and express we get some over two miles."

Creamery B. "Twelve miles."

Ques. 8. Is laundry work done for anyone not sending milk or cream to the factory?

Creamery A. "Yes."

Ques. 9. What proportion of the total laundry work comes from the patrons of the creamery?

Creamery A. "About half."

Ques. 10. Is the laundry operated every day?

Creamery B. "Yes. We have a delivery for city patrons."

Ques. 11. Does the buttermaker or any man employed around the creamery have anything to do with the laundry?

Creamery B. "No. Except as the boiler is located at the creamery and furnishes both plants."

Ques. 12. Has the buttermaker of the creamery ever raised any objections to the laundry?

Creamery A. "Our buttermaker is quite a bit of an individualist and not much of a co-operator so he bucked us all the time we were organizing and also after we had started to operate. He did all in his power to ruin the laundry, both by knocking, shutting off the steam, wasting water and everything else that he could, also putting out false reports about the laundry to creamery patrons. One morning while working with a belt his hand caught and he was knocked down and injured so that he was unable to work for four months. We then left the creamery in charge of the helpers and from that day there was co-operation on the creamery and laundry. Our old buttermaker is back on the job again and everything goes lovely, but it took the kids to prove to the old man and the community that it could work."

Creamery B. "No."

Ques. 13. Is there any laundry odor in the creamery?

Creamery A. "There is not the least odor in the creamery from the laundry as they are in separate buildings."

Creamery B. "No. The buildings are separate."

Ques. 14. How do you determine the proportion of the fuel used in the creamery that should be charged for operating the laundry?

Creamery A. "The amount of fuel is determined by a month's test, a week's test, and a day's test before we started the laundry, and we have operated our creamery many years so we know just what that takes."

Creamery B. "Estimate from data at hand."

Ques. 15. In your opinion can a laundry at a creamery be

successfully operated when it washes and dries only without ironing a certain portion of the patrons' laundry work?

Creamery A. "Yes. I think a laundry at a creamery that only washes and dries can be a success, but I think when people first get that much it won't be long until they want it ironed also. Such a laundry could be equipped with one small washer and one two-compartment washer and a centrifugal wringer with necessary trimmings for about \$500.00 and one man could do a lot of washing alone. But there is more money in finishing at going prices than to rough dry for five cents a pound."

Creamery B. "Yes. Providing the patronage could be large enough to enable the charge to be made low."

Ques. 16. What would be the expense of the machinery and labor if a creamery laundry was supplied with the washing machine and the centrifugal drier only, as compared with the expense of different equipment and the necessary machinery and labor for ironing purposes?

Creamery B. "About one-half I should judge and if only one washer were used, about one-third. A dry room would be necessary."

Ques. 17. Are the laundry supply and labor accounts kept entirely distinct from the supply and labor accounts of the creamery?

Creamery B. "Yes."

Ques. 18. Can you send me a copy of a patron's statement on which is given the weight of milk or cream and other figures sent to each patron at the end of the month together with his check? That is, the monthly statement sent to each patron which would give both the creamery and laundry figures for this particular end?

Creamery A. "We have not got our laundry marked on our cream statement. I send you our monthly statement from creamery, the book the patron keeps and gets each delivery marked in until the end of the month when he leaves it at the creamery. The secretary compares book with cream sheet."

Creamery B. "On the 15th and 30th checks are issued. On

the 15th for the last half of the preceding month, on the 30th for the first half of the month. Butter used by patrons is deducted from checks."

Ques. 19. Is the charge for laundry work deducted from the milk or cream check when a farmer patronizes both the creamery and the laundry?

Creamery B. "No. But we hope to have such an arrangement made later."

Ques. 20. What sort of a statement do you send to patrons in order to collect pay for their laundry work?

Creamery A. "They drop in and pay when in town without settlement."

Ques. 21. How is the laundry work paid for?

Creamery A. "The laundry charge is paid direct at the laundry and not deducted from cream checks."

Creamery B. "Cash on delivery. Later we hope to arrange to collect through the cream checks."

Ques. 22. What are the prices you charge for laundry work?

Creamery A. "Five cents per pound for family washing, that includes all flat work ironed, and all starching done, if wearing apparels are to be ironed we charge twenty-five cents per hour, for each girl."

Ques. 23. Is there any other laundry in your town?

Creamery B. "No."

"We do shirt and collar work at standard prices. We believe the work could be done cheaper than we are doing it, but there is no harm in charging standard prices as all profits are divided on the patronage later. It is difficult to estimate at just what figure the work could be done as the run is apt to vary but when we have enough data and find that we can do it cheaper we shall probably drop and avoid piling up profits."

Ques. 24. What, if any, has been the opposition or objections made to your laundry either from the farmers or from any one else?

Creamery B. "There has been some little comment on the

work being expensive but people generally are willing to pay for high class work."

Ques. 25. How many of the patrons' families have raised the objection that they did not wish to have their clothes washed in the same machine with those of their neighbors?

Creamery A. "I have not heard that objection raised by anyone."

Ques. 26. What date did you begin operation?

Creamery A. "About May 10, 1914."

The Creamery Organization.

I have already referred to a bulletin written on this subject about a year ago and which we hope will be available for distribution sometime this spring. This bulletin gives considerable detailed information about the starting, operating, planning and scoring of creameries in this state. I do not intend to repeat all the discussion given in that bulletin but will confine my present remarks to the one point of organization.

When the farmers in a certain locality become interested in the starting of a creamery the first thing to be done is to make a canvass covering the surrounding country and find out the number of cows that can be depended on to furnish either milk or cream to the factory. The best way to accomplish this is to circulate a paper which must be signed by each farmer, pledging himself to send milk to the factory from a certain number of cows for a given number of years and of uniformly good quality. In order to insure the success of the factory it should start with at least 400 cows for a creamery with a prospect of increasing this number in the future.

After it has been found that there are cows enough in a certain location to make a creamery profitable, a meeting should be called of all persons interested in the enterprise. This meeting should be well advertised so as to get as large an attendance as possible.

If the sentiment at this meeting proves to be in favor of starting the factory, a temporary chairman and secretary of the

organization should be named and two or more committees appointed to collect information and report at a later meeting. One committee may have charge of circulating the organization papers and another prepare the articles of incorporation and by-laws of the organization.

The Co-operative Association.

The Wisconsin legislature in 1911 passed a law limiting the use of the term "co-operative" to such organizations as comply with the provisions of the bill (Section 1786e-17, Chapter 368, Laws 1911). A copy of this law may be obtained by writing to the Secretary of State, Madison. It is printed in the form of a six page circular and it should be used as a guide in organizing a co-operative association according to the latest revision of the law.

In a co-operative factory all of the profits are divided and the losses, if any, are borne by the stockholders, each one of whom owns cows and is a patron of the factory. The amount of money received by each patron is based on the quantity of milk or cream furnished rather than on the number of shares owned.

In such organizations a patron having twenty shares of stock and one cow does not get as much benefit from the business as another patron who may have one share of stock and twenty cows; they both receive the same percentage of dividend on the shares, but the one milking twenty cows has the advantage of the profits from manufacturing at cost a larger amount of milk or cream into butter.

In a co-operative factory the principal object to be obtained is the profitable manufacture of milk and cream into butter and not the payment of large dividends on shares of stock.

The following suggestions may be helpful to the committee having in charge the circulating of the organization papers:

Organization Agreement.

We the undersigned, do hereby agree to associate ourselves together for the purpose of forming a co-operative association

under Section 1786e-1 to 1786e-17 inclusive of the Wisconsin statutes. The purpose of this association is to (See article 2, Articles of Incorporation.)

We hereby agree to subscribe and pay for the number of shares of stock at par value to-wit: \$10.00 to \$100.00 per share set opposite our names.

We further agree to furnish the (milk or cream) from the number of cows set opposite our names, reserving the right to use such milk or cream as may be needed in our homes, for the period of.....years from the time the factory shall commence to receive milk or cream.

We further agree that the milk and cream delivered shall be sanitary, clean and conform to the by-laws which this association may adopt.

We further agree that we deliver our cream or milk or cause the same to be delivered at such times as the association through its Board of Directors may determine.

It is provided, however, that if.....cows and..... shares of stock are not secured before.....19.... this agreement shall be null and void.

Names	Shares	Cows	Date
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The careful preparation of satisfactory by-laws is an important matter and the following suggestions may be helpful to the committee having this matter in charge.

1. All certificates of stock shall be signed by the president and secretary of the corporation.

2. Certificates of stock shall not be issued to any subscriber until the stock subscribed for shall have been full paid.

3. The Board of Directors may accept part payment as low as one dollar per share subscribed for, upon payment of which the subscriber shall be entitled to vote, providing the subscriber gives the association a promissory note for the balance due on his subscription, said note to draw interest at a rate not exceeding six per cent per annum.

4. The Board of Directors may deduct from one to ten per cent of the stockholders' monthly milk check and apply it to the credit on any note held by the association. The amount deducted shall draw interest at the same rate as that of the note.

5. No stock shall be transferred on the books or new certificates of stock issued until all debts to the association by the stockholders are paid.

6. Every stockholder of this association shall be deemed a member of the organization.

7. All certificates of stock issued shall, at the time of issue, be registered on the books of the association in the name of the purchaser thereof, and may be transferred only by being surrendered and new ones issued in the name of the purchaser, who by acceptance thereof, agrees to all the by-laws and rules of the association, including also all amendments that may legally be adopted. He shall thereby become a member of the association.

8. If any stockholder in this association desires to dispose of his share, or shares, he shall deposit the same with the secretary of the organization, who within thirty days of such deposit shall offer the same for sale as the directors may decide, at not less than par for account of such stockholder. If the secretary shall not have sold said stock at the expiration of thirty days, then said stock shall be returned to the stockholder who may dispose of it without restriction or limitation. If a member removes from the locality and is no longer a patron of the factory, his membership in the association shall cease and the board of directors shall purchase the share or shares owned by the said non-resident member with money from the reserve fund.

Sections 5, 7, and 8 of this article shall be printed on each and every certificate of stock issued by this company.

9. New members shall be admitted upon recommendation of the Board of Directors and by a majority vote of the association. Members desiring to withdraw may do so in accordance with rule 8 of the by-laws of this association.

10. The duties of the respective officers shall be as follows:
The president shall preside at all meetings of the association.

He shall have power to call special meetings of the association whenever, in his judgment, the business of the association shall require it. He shall also, upon a written request of ten per cent of the stockholders or three members of the Board of Directors, call a special meeting of the stockholders.

The vice president shall perform the duties of the president when the latter is absent, declines, or is unable to perform the duties of his office.

The secretary shall keep a record of all the meetings of the association, make and sign all orders upon the treasurer and pay over to the treasurer all money which comes into his possession, taking the treasurer's receipt therefor. The secretary shall make a report to the annual meeting of the association, setting forth in detail the gross amount of milk and cream receipts, the receipts from products sold and all other receipts, the amount paid out for running expenses, the sums paid out for milk and cream, and all other matters pertaining to the business of the association. He shall give bonds in the sum ofdollars, the same to be approved by the Board of Directors.

11. The Board of Directors shall be elected at the annual meeting of the stockholders for a term of one year and shall enter immediately upon their duties. They shall attend to the general affairs of the association and appoint such agents or officers as, in their judgment, the interests of the association may require. They shall keep, or cause to be kept, a correct amount of all business of the association. They shall establish prices and have full power to direct the business of the association, and in all cases pursue such measures as, in their judgment, will tend to further the best interests of the organization. They shall make a full report of their work and a full statement of the business at each regular meeting of the stockholders or whenever called upon to do so by a vote of the stockholders.

The Board of Directors shall appoint one of their members manager, who shall have general supervision of the affairs of the association when the Board of Directors is not in session. He

shall as far as he is able carry out in every detail the wishes of the Board of Directors.

The Board of Directors shall keep minutes of all their meetings, provided due written notice is given to all directors they can arrange to meet at any time that they desire to transact business. The regular meeting of the Board shall be on the..... of each month, and all meetings of the Board shall be open to any member of the association.

A majority of the members of the Board of Directors shall constitute a quorum for the transaction of all business at meetings of the Directors.

Vacancies of the Board of Directors may be filled by the Board until the next annual meeting when an election takes place.

The Board of Directors shall appoint an auditing committee of three stockholders who are not officers of the association or members of the Board of Directors. The duties of this committee shall be to audit the books of the association and to file a report to the association at the annual meeting.

At each annual meeting the Board of Directors shall recommend the time and methods for the distribution of the net earnings of the corporation. The stockholders shall have the power to adopt, change or reject this recommendation.

12. The annual meeting of the association shall be on theeach year. Due notice as to the time and place of holding the annual or any special meeting shall be mailed by the secretary to each member of the association at least ten days before the meeting.

13. In case of absence of any officers of the association at any meeting of the stockholders or directors, the directors present may choose a temporary officer for the meeting.

14. At an annual or special meeting duly called, ten members shall constitute a quorum.

15. The order of the business at the annual meeting shall be as follows:

1. Call to order.
2. Roll call of officers.
3. Reading of minutes of last meeting.
4. Reports of officers.
5. Reports of committees.
6. Reports of education committee.
7. Reports of managers.
8. Communications and bills.
9. Grievances and complaints.
10. Consideration of reports.
11. Election of officers.
12. Filling vacancies.
13. Appointing of committees.
14. Unfinished business.
15. New business.
16. Discussion of the company's welfare.
17. Signing of minutes.
18. Adjournment.

These by-laws may be altered or amended at any regular or special meeting of the stockholders of the association by a two-thirds vote of all stockholders present at such a meeting, provided due notice of the proposed change was given in writing to the stockholders at least ten days prior to the meeting. This notice must also state the time and the place of meeting when the proposed change will be brought up for consideration.

Articles of Incorporation.

Forms of articles of incorporation, the original and verified copy, can be secured free of charge from the Secretary of State, Madison, Wisconsin. When asking for forms be sure to specify that you propose to incorporate under the co-operative association law.

The Permanent Organization Formed.

The Secretary of State will return the verified copy of the articles. This must then be filed with the Register of Deeds of

the county wherein the factory is located, and as soon as so filed the association is incorporated and ready for its first meeting. A fee of twenty-five cents is charged for filing the articles with the Register of Deeds.

First Meeting of the Association. The first meeting of the newly organized association may be called by any two of the signers of the articles and should be convened as soon as possible after incorporation is complete. After the election of a temporary chairman, and a temporary secretary, the by-laws, which regulate the method of electing directors, and officers and which, together with the co-operative association law and the articles of incorporation, embody the rules and regulations governing the association, should be adopted. Following the adoption of the by-laws, the directors should be elected and other business may be transacted.

Second Meeting. As soon as the canvassing committee is satisfied that a sufficient number of cows have been pledged and sufficient stock has been subscribed a meeting must be called for completing the arrangements for the permanent organization of the association.

This meeting should first receive and dispose of the report of the canvassing committee. If the outlook is favorable, the committee appointed to draft the articles of incorporation and by-laws should report. Typewritten sheets of the committee's report may be distributed among the members and each paragraph of the articles of incorporation and by-laws taken up and discussed in order that the patrons may be well informed as to their rights and their duties and also have an opportunity to suggest changes which may easily be made at this time.

After the articles of incorporation and by-laws have been read and discussed, the meeting should name five persons to sign the articles of incorporation and to forward the original papers and a verified copy of the same to the Secretary of State, Madison, Wisconsin.

A building committee should now be appointed and given the necessary power to build and equip the factory. This committee

should be selected with a great deal of care, and consist of broad-minded men who are experienced in business affairs and who will carefully consider the many details of a convenient and well located factory.

Raising Funds.

The association at one of its preliminary meetings must decide what shall be the capital stock of the company consisting of a certain number of shares at a certain par value. The par value of the stock usually ranges from \$10.00 to \$100.00. The amount of capital stock to be issued will depend upon the amount of money needed for the proper building and equipping the factory. Usually from \$3000.00 to \$5000.00 is the amount raised.

The simplest way would be for the patrons to subscribe for the stock and pay cash for the same. This, however, is not possible in some communities, and in such places some other way of raising the money must be provided.

Since it is desirable to get as many patrons as possible financially interested in the factory shares of small denominations, \$10.00 to \$25.00 each, may be issued. This will not prevent a patron who is financially able to subscribe for a large number of shares, but it will encourage many patrons to invest a small amount in the new enterprise.

If it is impossible for some patrons to pay cash for their stock, it is entirely permissible for them to subscribe for as many shares of stock as they see fit and give a note to the company for the stock, although no stock certificate can be issued to these patrons until the indebtedness is cancelled. An arrangement can be made with such patrons to deduct 5c or 10c for each 100 pounds of milk delivered to the factory and have the same apply on the note. The notes thus given can be used by the company as security at the local bank which probably will be willing to finance the local enterprise; and, this together with the money received from sale of shares of stock in the company will supply the necessary money for building and equipping the factory.

It is well to remember, however, that according to Section

11 of the law it is necessary to pay part cash for stock in order to vote. This part of the law can, however, easily be complied with by paying one dollar per share at the time the subscriptions are due. The balance can be paid for as described.

It is far better for the patron to subscribe for the stock and then pledge payment for it by giving a personal note to the company than it is to sign a joint note. By so doing, the owner of the stock is only liable to the amount of his note and not "jointly" for the entire indebtedness of the factory.

Apportionment of Profits.

In the management of the factory the Board of Directors may charge a fixed price for making the butter, or if this arrangement is not satisfactory the board may pay for the milk or cream on the basis of some market quotation. These charges must be such that after the running expenses of the creamery are paid there shall be a reasonable amount left in the treasury to be divided according to law. By the term "Running Expenses" is meant such amounts as labor, ice, coal, tubs, boxes, taxes, insurance, interest and general supplies. Such items as repairs on the building and machinery must be paid out of the reserve fund, commonly called the "Sinking Fund." If any expenses were incurred such as arranging for an educational meeting, they must be taken out of the educational fund provided by law.

It will be assumed in the following illustration that the factory was capitalized at \$5000.00, of which only \$4200.00 was paid up. The factory purchased milk and cream from the patrons to the extent of \$40,000 of which \$30,000 was delivered by stockholders and \$10,000 by non-stockholders. It will also be assumed that the income during the year was \$46,000. The running expenses were as follows:

Milk and cream	\$40,000
Labor	1,200
Supplies	1,500
Coal	300

Taxes	75
Insurance	25
Ice	150
	<hr/>
Total disbursements	\$43,250
Gross receipts	\$46,000
Total disbursements	43,250
	<hr/>
Net profits	\$ 2750

It will be noticed that no deductions were made for repairs, depreciation, or for any educational expenses. These items are taken care of by special funds provided by law.

It will now be necessary to divide the \$2,750.00 according to law as follows:

Dividend on \$4200 Capital Stock (paid in) at 6 per cent.	\$252.00
Reserve Fund (10 per cent of the net profit)	275.00
Educational Fund (5 per cent of net profits)	137.50
	<hr/>
Total deductions according to law	\$664.50

We now have \$2,750.00 less \$664.50 leaving a sum of \$2085.50 to be divided among the patrons and employees as follows:

Stockholders	\$30,000
Non-stockholders (one-half of 10,000)....	5,000
Employees	1,200
	<hr/>
Total	\$36,200

Dividing \$2,085.50 (the balance of the net profits after the legal deductions have been made) by \$36,200 we get a uniform dividend of 5.76 per cent leaving a surplus of 38 cents undivided, which small amount will remain in the treasury awaiting the next division. The distribution of \$2,085.50 can now be computed as follows:

Stockholders 30,000 x 5.76 per cent (uniform dividend)	\$1728.00
Non-stockholders 10,000 x 2.88 per cent (1/2 uniform Div.)	288.00
Employees 1200 x 5.76 per cent (1/2 Uniform Dividend)	69.12
	<hr/>
Total distributed	\$2085.12
Undivided Balance	.38
	<hr/>
Total to be divided	\$2085.50

In case it seems desirable to reduce the net profits to be divided at the end of the year, this may be done by charging less per pound for manufacturing the butter or cheese and paying the patrons more of the money received from the sale of products each month. This figure, however, should not be reduced so low as to leave a deficit at the end of the year, keeping in mind the reserve and educational funds and the proportionate division of profits with employees.

A distinction between stockholders and non-stockholders may be made by charging them different prices for making and the money thus obtained from the non-stockholders placed in the reserve fund. (Applause.)

PRESIDENT: Before we call on the next speaker, is there anyone that wants to follow up the discussion on Mr. Keppel's paper?

MR. WHITING: There is one question I would like to ask, how he accounts for the fact that his cream gathered three times a week is not so good as that gathered twice a week.

MR. KEPPEL: It is general neglect. Any defects in the milk develop in the care of the creamery, rather than in the care of the patron where they have three times a week delivery. It is a neglect that can for a limited time be hidden, that is our impression. I have seen cream four days old that the buttermaker would score way ahead of that two days old. To keep longer they have to take better care of it to have it pass O. K. Where they have to keep it for a short time they reason it will keep until the hauler comes. We consider it is general neglect.

MR. WILLIAM DREWS, Waupun: I gathered cream for about seven years. I used to put the cream in small cans, but I found it did not keep so well as it does in big cans. When I used the small cans, the buttermaker could see every farmer's cream that came in, now when I come along it all goes into the same can. What does the buttermaker know about it? If the farmer don't test good enough, I cut it off. I find some farmers can keep their cream just as sweet for four days as others can for one day. I have had experience. They say we have Dairy Commissioners or Inspectors in the state. I have not seen one in the last twelve years. (Applause.) I was through a place not long ago, I was there fifteen minutes, and if I had been an inspector, I would have made him clear out. The inspector should not go here and there, they should inspect everyone, I think. He should inspect me and the teamster and the buttermaker and the factory, everyone of them, not go here and there. When it is rumored that Mr. Aderhold is going around there is a general cleaning up, but he ought to go into some of these milk houses a few days after. Oh, my!

MR. EMIL SPIGAL, Leeman Creamery: I would like to ask how a person could remedy the farmers sending sour cream. It is sweet when they send it and yet when it gets to the factory it is sour, thick and lumpy.

MR. KEPPEL: We attribute that entirely to neglect. At the time the milk was either separated or at the early stages of the handling.

PRESIDENT: You put the blame on the patron?

MR. KEPPEL: Absolutely, if the can was properly cleansed.

MR. CHARLES FRIEDERS, Antigo: I would like to ask the gentleman if it is practical to grade cream at a small factory.

MR. KEPPEL: At any factory.

MR. FRIEDERS: Where a man was not making more than 50 tubs a week at the flush of the season?

MR. KEPPEL: I should think it would apply anywhere.

MEMBER: Do you make two grades of butter?

MR. KEPPEL: We do.

MEMBER: I would like to ask the gentleman when they were hauling this cream and delivering it, when they had a can that was only half full, what condition did that cream come in? Was it churned up?

MR. KEPPEL: The gentleman apparently has in mind over acidity. We want him to be impressed with the fact that there are other defects besides acidity. We find no difference between a full or only part full can.

MEMBER: I have been hauling cream for six years, sometimes we took the temperature of the cream at the time it left the farm and we found it ran from about 51 to 52 and up to 70 degrees. You take a can that is only three-quarters full and it is apt to churn. Last year we went to work and got jacketed cans. When they had a jacketed can full of cream, we got the best results and last year, there was not any churned cream that came in.

MR. KEPPEL: We use nothing but jacketed cans at our creamery, and there is no more trouble with the can being part full than the full can. All of the cream is weighted down by a float and all cans insulated with asbestos paper between inner and outer lining.

PRESIDENT: I am sorry I have to cut this discussion off. I will call on Mr. Shilling to read a paper on the Net Weight Law.

MR. SHILLING: Mr. President, Ladies and Members of the Wisconsin Buttermakers' Association, I am going to offer to compromise with this audience and not read my paper. I would first have to apologize to you for reading the paper, because I never did a thing of that kind before in my life, but in justice to you and myself, I have prepared a paper and I am going to read it to you, but I am perfectly willing to hand it in to the stenographer tonight and let it be printed in the proceedings. My wife read it for me and she said it was very good, and I would be perfectly willing to do that. And another thing, I may not be able to read it to you. I may be like the fellow that stuttered and he concluded that he would go to an institution and take treatment for the stuttering and after he got there, the manager asked him how much treatment he wanted to take, whether he wanted a full

course. He did not just know himself, but he said he wanted enough, so when he went into a florist's to buy a chrysanthemum he wanted to get the thing before it wilted. A paper was sent up to me from the audience which read like this, "If you talk too long, we will roll you in a snow bank tomorrow," signed by Joe Gordon. So in the face of all this and with the fact staring you in the face that you have to elect officers tonight, will you put this over? If you insist, I will read it tonight, but owing to the lateness of the hour, I am willing to compromise with you that way. It is up to the audience, but I would prefer putting it over.

MR. LAURITZ OLSEN, West DePere: I suggest that we have Mr. Shilling's paper about half past ten tomorrow morning. I make a motion to that effect.

Motion seconded.

PRESIDENT: There were several committees appointed this morning, who will meet tomorrow morning and the meeting of the managers is also called for tomorrow morning. The managers would like to hear Mr. Shilling's paper. Suppose we call this meeting for one o'clock or half past one.

MEMBER: Mr. Chairman, could not we transact some of our other business in the morning and let Mr. Shilling read that paper in the afternoon?

PRESIDENT: I think 1:30 would be a good suggestion.

SECRETARY BENKENDORF: The meeting tomorrow will be downstairs, right underneath this floor, and I might also say, that the butter will be sold tomorrow about 11:00 o'clock. We will drum up some auctioneer. The butter will be open for bidders tomorrow morning.

PRESIDENT: We will call the meeting tomorrow at 1:30 sharp.

The next thing on the program this afternoon is the election of officers. I will call on Mr. Shilling to take the chair.

Mr. Shilling in the chair.

CHAIRMAN: Nominations for President are now in order.

MEMBER: I nominate Mr. H. H. Whiting of Johnson Creek for President.

This nomination was seconded.

MR. KEPPEL: I nominate Allen Carswell.

This nomination was seconded.

MR. KEPPEL: I nominate this gentleman, Mr. Carswell, to succeed himself. I have no objections to this other gentleman who has been nominated and I think he can take his turn later on, but I think we owe it to Mr. Carswell to give him the nomination for next year.

A ballot was thereupon taken with the following result: 45 votes were cast, of which Mr. Allen Carswell received 35 and Mr. Whiting 10.

Mr. Carswell was thereupon duly declared President for the ensuing year.

CHAIRMAN: Who will you have for Vice-President?

MR. J. G. MOORE, Madison: I nominate Mr. Zimmerman.
Which nomination was duly seconded.



QUIRIN MOERSCH, Peebles

MR. OLSEN: With all due respect to Mr. Zimmerman, I believe this office ought to go to a man who is better able to get away. There is a man from Fond du Lac County who I think is fitted for the position and that is Quirin Moersch.

Which nomination was duly seconded.

MR. MOORE: At the request of Mr. Zimmerman and with the consent of the members I withdraw his name and move that the nomination of Mr. Moersch be made unanimous.

Which motion was duly seconded and unanimously carried.

CHAIRMAN: Who will you have for your Secretary?

MR. KEPPEL: I nominate Mr. Benkendorf.

Which nomination was duly seconded.

MR. MOORE: I move that the nominations be closed and that the President cast the ballot of this association for Mr. Benkendorf as Secretary.

Which motion was duly seconded and unanimously carried.

MR. MOORE: I nominate Mr. Fred Werner of Waterloo to succeed himself as treasurer.

Which nomination was duly seconded.

MEMBER: I move that the nominations be closed and the Secretary be instructed to cast the ballot of the association for Mr. Fred Werner as Treasurer.

Which motion was duly seconded and unanimously carried.

CHAIRMAN: You will have to elect a member of your Executive Committee to succeed Mr. H. E. Griffin.

MR. MOORE: I nominate Mr. H. E. Griffin.

Which nomination was duly seconded.

MEMBER: I move that the nominations be closed and that the Secretary cast the ballot of the association for Mr. H. E. Griffin as member of the Executive Committee.

Which motion was duly seconded and unanimously carried.

CHAIRMAN: The President will take the chair and appoint the Committees. Gentlemen, I thank you.

PRESIDENT: I want to thank you for the honor you have conferred upon me for electing me for the ensuing year, and I mean to do my best to live up to the reputation I have.

At this time I want to announce the Committee on Resolution, which will be Mr. H. H. Whiting, Mr. Keppel and Mr. Wallace. Anyone who has any resolutions to suggest should get in touch with the Resolution Committee. Mr. Secretary, is there anything else?

SECRETARY BENKENDORF: Merely this, that the buttermakers should not forget to sign up.

Meeting adjourned. _____

THURSDAY AFTERNOON SESSION.

Thursday afternoon, 1:30, meeting called to order by the President.

PRESIDENT: The Secretary, Mr. Benkendorf, has a few remarks to make.

SECRETARY BENKENDORF: I want to hand in my report because I may be called away, in a short time, to take care of the printing.

REPORT OF SECRETARY.

BUTTER ACCOUNT MADISON CONVENTION 1914.

1914		RECEIPTS	
Feb.	13	Coyne Brothers, 3788 lbs. butter at 27c.....	\$1022.76
	26	45 lbs. butter at 27c	12.15
	26	58 lbs. New Zealand butter at 26c.....	15.08
	26	H. C. Jochinson, excess complimentary ret'd.....	1.35
Mar.	7	U. S. Government 56 lbs. Australian Butter at 30c per lb.	16.80
			\$1068.14

DISBURSEMENTS

Feb.	7	F. W. Bowar, salary, butter supt.....	\$ 25.00
	7	W. H. Roussel, 127 lbs. imported butter at 31c per lb.	34.72
	13	F. W. Bowar, convention expenses, express, etc.....	85.66
	13	Excess butter—(money returned)	
		A. M. Newman	\$10.80
		H. D. Respalje	2.70

	John Rasmussen	10.80	
	Anton Nachtwey	10.80	
	J. S. Ulmer	10.80	
	C. F. Wolzien	10.80	
	R. F. Grunert	10.80	
	C. C. Coble	2.70	\$ 70.20
	<hr/>		
13	Complimentary Scores (Money returned)		
	H. C. Jochinson	4.05	
	F. C. Werner	1.00	
	Robert Wagner	4.05	
	J. Hutchinson	4.05	
	B. E. Bragg	4.05	
	W. F. Gerholtz	4.05	
	H. Bartelt	4.05	
	<hr/>		
			25.30
13	Transfer 176 Memberships to General Fund.....		176.00
13	G. H. Benkendorf, Sec'y, convention expenses.....		41.60
Mar. 11	Miss E. M. Henwood, clerk		10.00
June 30	Transferred to 1915 Premium Fund		599.66
	<hr/>		
			\$1068.14

PREMIUM FUND—1915 CONVENTION.

1914			
Feb. 7	Donation F. W. Bowar	\$	25.00
June 30	Undivided 1914 Premium Fund		7.56
30	Proceeds sale convention butter, less deductions.....		599.66
Dec. 15	Worcester Salt Co.		10.00
15	Diamond Crystal Salt Co.		10.00
	<hr/>		
			\$ 652.22

STATE FUND 1914-1915.

1914			
July 1	Allowed by state	\$	600.00
Nov. 6	Printing of stationery	\$26.14	
Jan. 23	Miss Jennie Boning, addressing envelopes, etc.		11.82
	<hr/>		
			37.96
	<hr/>		
	Balance	\$	562.04

GENERAL FUND.

1914		RECEIPTS	
Feb.	4	Reported at Madison convention	\$ 942.23
	7	Riley Hauk, half page adv.	4.90
	7	J. G. Cherry Co., one page adv.	10.00
	7	Hunter, Walton Co., half page adv.	5.00
	7	Marschall Dairy Laboratory, one page	10.00
	7	Fred C. Mansfield Co., one page	10.00
	7	Dairy Ass'n. Co., half page	5.00
	7	J. B. Ford Co., one page	10.00
	7	International Harvester Co., one page	10.00
	7	Northern Mfg. Co., half page	5.00
	7	W. D. Collyer & Co., one page	10.00
	7	Atlantic & Pacific Tea Co., one page	10.00
	7	Paul Guse, memberships	22.00
	7	F. W. Bowar, memberships	1.00
	7	H. P. Olsen, memberships	5.00
	7	Lauritz Olsen, memberships	19.00
	7	M. H. Meyer, memberships	5.00
	7	G. E. Jenks, memberships	18.00
	7	E. M. Henwood, memberships	6.00
	7	R. C. McMullin, memberships	115.00
	7	Geo. H. Swits, membership	1.00
	7	C. E. Hart, memberships	9.00
	7	O. B. Cornish, memberships	27.00
	7	G. H. Benkendorf, memberships	23.00
	13	Elov Ericcson, half page	5.00
	13	Geo. W. Linn, half page	5.00
	13	Quincy Market Cold Storage, 2 pages	20.00
	13	The Park Hotel Co., one page	10.00
	13	Preservaline Manufacturing Co., half page	5.00
	13	Lorenz Model Co., half page	5.00
	13	Transfer 176 butter exhibitors' memberships	176.00
	13	Cry Package Mfg. Co., one page	10.00
	26	George Mansfield Co., half page	5.00
	26	Blackmar Rotary Pump, one page	9.80
	26	Universal Storage Co., half page	5.00
Mar.	19	C. H. Weaver & Co., half page	5.00
	31	Cudahy Packing Co., half page	5.00
April	4	G. H. Benkendorf, membership	2.00
	18	Sturges & Burn, one page	10.00
	28	Milwaukee Cleaner & Cleanser, one page	10.00
May	4	Germania Publishing Co., half page	5.00

	4	United Refrigeration Co., one page	10.00
	4	Coop. Cry. Supply Co., one page	10.00
	8	P. F. Brown, one page	10.00
	11	Sharpless Separator Co., one page	10.00
Sept.	28	Wisconsin Coal Co., half page	5.00
Oct.	26	Hastings Industrial Co. (12 reports).....	3.00
Nov.	17	City of Madison (donation 1914 convention).....	300.00
Dec.	15	Northwestern Dairy Supply Co., half page.....	5.00
	15	Gude Brothers Kieffer Co., one page	10.00
	15	D. E. Wood Co., one page	10.00
	26	Peter Fox Sons Co., one page	10.00
	31	S. S. Borden Co., half page	5.00
Jan.	23	Dominion Chemical Co., donation	5.00
			\$1968.93

GENERAL FUND.

1914

DISBURSEMENTS.

Feb.	7	A. W. Zimmerman, salary	\$ 25.00
	7	G. H. Benkendorf, salary	250.00
	7	Robert Carswell, convention expenses	11.40
	7	Tracy & Kilgore, printing	18.75
	7	Whitehead Hoag Co., badges	98.59
	7	H. P. Olsen, printing and mailing 2000 programs.....	226.36
	7	Abel & Bach Co., ten \$6.50 traveling grips	65.00
	13	Democrat Printing Co.	10.00
	13	G. H. Benkendorf, expenses	57.55
	14	Theo. F. Dresen, prizes	110.48
	26	Jennie Boning, clerical help	12.44
	26	Fred Rennebohm, prizes	13.20
Mar.	7	Lauritz Olsen, convention expenses	25.09
	11	E. M. Henwood, clerical work	20.00
	11	Oscar Cornish, convention expenses	7.50
	19	A. W. Zimmerman, convention expenses	19.84
April	4	Louise D. Mason, stenographic work	75.68
Sept.	4	H. P. Olsen, printing report, etc.....	221.61
	4	G. H. Benkendorf, expenses at Madison.....	54.84
Dec.	31	Louis Otto, Neenah	5.00
Jan.	23	Tracy & Kilgore	4.50
			\$1332.83

SUMMARY.

Balance on hand as reported at Madison convention.....	\$ 942.23
Total Receipts	1026.70
	<hr/>
	\$1968.93
Total Disbursements	\$1332.83
	<hr/>
Balance on hand	\$ 636.10

RECAPITULATION.

General Fund, balance	\$ 636.10
State Fund, balance	562.04
Premium Fund	652.22
	<hr/>
	\$1850.36

G. H. BENKENDORF, Secretary.

The City of Fond du Lac gave us, this year, \$300.00. We put \$100.00 in the premium fund, two hundred of the \$300.00 goes toward the payment of the district prizes, etc., that we offer. We might not have made ourselves just as clear as we should have when we indicated that \$100.00 of that goes to the premium fund. We should have said \$200.00 more of that goes to the state and district prizes. The state allows us \$600.00 a year, so that we have on hand a balance of \$562.04 in the State Treasury that we can draw on. In former years, the state gave us \$600.00 a year and we put it in a general fund; but now they allow us to check against the state for \$600.00 every year. We are in good financial standing. These books were audited last night and the Executive Committee will probably make a report in regard to that matter.

PRESIDENT: What will you do with the Secretary's report? Shall we wait until the Auditing Committee reports?

MR. KEPPEL: I move that we lay it over until the Auditing Committee reports.

PRESIDENT: Now we will have the Treasurer's report.

MR. F. W. WERNER: I beg leave to make the following report:



F. M. WERNER

REPORT OF TREASURER.

The report of the Treasurer is as follows:

PREMIUM FUND.

Balance on hand 1914 convention	\$ 705.17
Received for exhibition butter	1022.76
Treasurer of United States	16.80
Butter sold at Madison	27.23
City of Madison, 1914 convention	100.00
Donations	56.35
Total	\$1928.31

DISBURSEMENTS.

Pro Ratio butter 1914 convention	\$ 807.61
Excess butter	70.20
Complimentary butter	25.30
Membership to General Fund	176.00
Australian and New Zealand butter	34.72
Exhibition expense	162.26
Total	1276.09
Balance	\$ 652.22

GENERAL FUND.

Balance 1914 convention	\$ 942.23
Received for advertising 1914 programs	297.70
City of Madison, 1914 convention	300.00
Membership	429.00
 Total	 \$1968.93
Orders drawn by Secretary and signed by President.....	1332.83
 Balance	 \$ 636.10

STATE FUND.

Received from State	\$ 600.00
Orders drawn on State	37.96
 Balance	 \$ 562.04

RECAPITULATION.

Premium Fund Balance	\$ 652.22
General Fund Balance	636.10
State Fund Balance	562.04
 Balance in Treasury	 \$1850.36

F. M. WERNER, Treasurer.

PRESIDENT: We will now call for the report of the Auditing Committee.

MR. GRIFFIN: We went over the books last night, as stated by the Secretary, and found them to be all right, three of the Committee, and signed the books.

PRESIDENT: What will you do with the Secretary's and Treasurer's reports?

MEMBER: I move that the reports of the officers be accepted as read.

Which motion was duly seconded and unanimously carried.

PRESIDENT: We will now have Mr. Shilling.

THE NEW NET WEIGHT LAW.

By S. B. Shilling, Chicago.

Mr. President, Ladies and Gentlemen: As I started in to say to you, last evening, I feel that I owe you an apology for appearing before you with a paper in my hand, which it is my full intention to read to you. I never did this before but, owing to the nature of the subject, and for your protection and for my own protection as well, I have thought best to do this. Owing to the nature of the law that I am to discuss and the little that is known of it, I do not want to be too broad or too positive in any statement. Whether I succeed in reading this paper or not I want to make this paper stand as what I have said.

There is one thing I would like to have go on record before I read the paper, which is not included in it and which comes up in the latter part of the paper which I propose to read to you, in regard to rates at the present time of the Trunk Line Association going east, and I think you will agree with me that I have taken the right position before I am through.

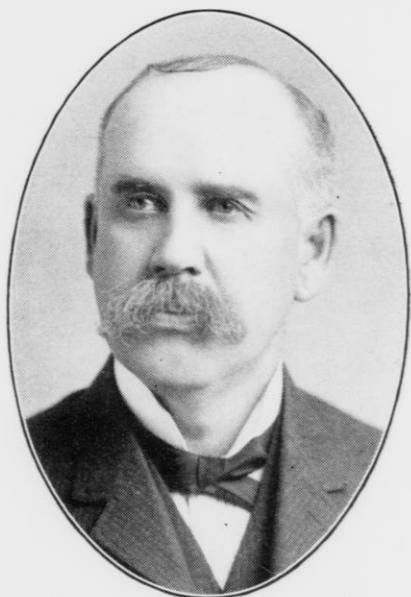
I think the railroads are entitled to full pay for their services and I believe a shipper has no right to defraud them out of the shipment. They are entitled to full car rates on a shipment but I do not believe they are entitled to any more than that. I want this to be my position and I want it understood they are entitled to full pay for the entire car's weight of the shipment of butter.

That question came up in a meeting recently. They told us at one time that we could ship on net weight and we billed out our butter for years on the net weight, and in addition to that they would come around once, twice or three times a year and give us a check for rebate. I simply wish to make myself plain on that, because I know it is a matter that is to come up in the future and it is a matter in which you are very much interested.

I haven't got a long paper. It is just about as brief as the farmer's wife's letter was to the school marm when Johnnie, who had charge of the barns, and the odor from the barns more or less permeated his clothing, got to school and many of the pupils

protested about it, at last the teacher wrote a letter to his mother and asked if he could not come in a little better, cleaner condition, and she wrote back: "Dear Teacher: Johnnie ain't no rose. Don't smell him, learn him."

When I consented at the request of your Secretary, Mr. Benkendorf, to accept a place on your program and undertake a discussion of the "Net Weight Law," I did so with considerable hesitancy, for the reason that I disliked to discuss a law whose provisions seem to be so little understood, and upon which there



S. B. SHILLING

is such a difference of opinion as exists in regard to this law. It seemed presumptuous upon my part, to undertake an explanation of a law, and the rules and regulations for its enforcement, upon which even the drawers of the law themselves and those who assisted in forming the rules and regulations do not fully agree. You will appreciate then the reason for the hesitancy on my part in undertaking a discussion of this question. I must ask you

then to accept what I may say to you as being my individual opinion, that I speak without authority or without any assurance that my conclusions are correct. The law is an amendment of what is known as "The Food and Drug Act," and was passed March 3rd, 1913. The law as passed became effective at once, but the penalties for its violation did not become effective until Sept. 3rd, 1914. The regulations for carrying out the law were signed May 11th, by the Secretary of the Treasury, Secretary of Agriculture and Secretary of Commerce, and the intent of these regulations was stated as being to compel manufacturers to make a clear statement of the weight, volume or contents, of their packages of food, and these regulations apply to food shipments in interstate commerce only or sold in the District of Columbia, or the territories. As the original law is made to cover everything sold in package form and includes liquids such as are sold by the gallon, quart, pint or fluid ounces, as well as things that are sold by dry measure, such as by the bushel, peck, quart, pint and half pint, and also that which is sold by numeral count, such as eggs by the dozen or half dozen and many vegetables, we will endeavor to eliminate everything from this discussion excepting where the law applies to butter, or possibly eggs. The law provides that everything sold by avoirdupois weight, (which covers butter) and which is sold in package form, must be plainly marked with the net weight of its contents. To be more explicit the exact words of the law section A says, "Except as otherwise provided by this regulation, the quantity of the contents in all cases of food if in package form, must be plainly and conspicuously marked in terms of weight measure or numeral count on the outside of the covering or container usually delivered to consumers," and this means the weight of the butter free from all wrappers or tubs, and it also means it must weigh the amount stated on the package when offered for sale to the consumer and not when it leaves the packing room or the creamery. Herein seems to be one of the weak points in the law. The main object of the law is to protect the consumer, and we believe the original intent was, that the net weight must be placed upon the package

of every food product purchased by the consumer, but our understanding is that a ruling has since been made that a creamery can sell and ship a tub of butter to a retail merchant, (the tub of course, having the net weight placed upon it,) but this retailer can ladle this out to the consumer in pounds, half pounds, more or less, and these do not come within the scope of the law, but if this same merchant was to cut this same tub of butter up into pound prints and place these prints in wrappers, then in cartons, and offer them for sale to these same consumers, they then come within the scope of the law and must have the net weight of each print marked upon the outside of the carton. We said that this seemed to be a weak point in the law, and the weak point lays in the fact that the same tub of butter sold to the same consumers and sold in two kinds of packages neither of which are described in the law, one is subject to the law, and the other is not. The weakness of the law lays in the fact that its main purpose, viz. (the protection of the consumer) in one case in the same tub of butter he is protected, while in the other case he has no protection other than is afforded by the municipal or State Law of the city or state in which he resides and where the purchase and sale is made. It would seem that these facts might make the law of a discriminating nature, and if so its constitutionality might be questioned, but we are informed that so far this part of the law has not been questioned. The law is very explicit in the way the weight is placed upon the package. It must be plain and legible and in no way must it be placed on or interwoven with any brand, stencil or design, or any marks other than the net weight itself, and the weight upon the package must be in terms of the largest unit contained in the package. For example, if the package contains one pound, it must be so stated and not stated as 16 ounces, or it must be one pound and six ounces if that be the correct weight. Then there must be no other statement except the word "net," as for instance, "one pound net" and not one pound net when packed, or if a tub it must be 60 pounds net, without anything of an explanatory nature. To again quote from the Law section, C. D. says, "The statement of the quantity of the con-

tents shall be plain and conspicuous, shall not be a part of or obscured by any legend or design, and shall be so placed and in such character as to be readily seen and clearly legible when the size of the package, and the circumstances under which it is ordinarily examined by purchasers or consumers, are taken into consideration. If the quantity of the contents be stated by weight or measure, it shall be marked in terms of the largest unit contained in the package. For example, if the package contains a pound, or pounds and a fraction of a pound, the contents shall be expressed in terms of pounds and fractions thereof; or of pounds and ounces, and not merely in ounces." The law up to this point seems to be very plain and explicit, and there can be but little excuse for misunderstanding it, but owing to the variable nature of some food products, it became necessary to make provisions for these variations, so that an injustice might not be done or a hardship imposed upon any one, and so the officials in making their rules and regulations, made what they have called tolerances and it is here that the chief difficulty of understanding the law has been experienced. In the packing of many foods it would be impossible, or else add unnecessary expense to the manufacture of some products to require the manufacturer to place an absolutely accurate statement of the amount of the food in every package, for while the package of butter might weigh one pound good and strong when shipped from the creamery, it might not weigh a pound six months later when it was offered for sale in New York or California, and for this reason the regulations permit tolerances or variations in package where the discrepancies are due exclusively to unavoidable errors in weighing, measuring or counting, which occurs in packing conducted in compliance with good commercial practices. This tolerance is allowed in order to permit the use of weighing and measuring machines which like human operators cannot weigh or measure with absolute accuracy every package. The regulations, however, provide that a run of such packages, such as a box of print butter, must show as many cases of overweight and as much excess in net weight as it does in underweight, and the same no doubt would apply to butter in

tubs. To be explicit, permit me to quote for your better information in this matter of tolerance the exact words of the law as it is in this, that there seems to be the greatest misunderstanding of the law. Tolerances are allowed as follows: 1st, discrepancies due exclusively to errors in weighing, measuring or counting which occur in packing conducted in compliance with good commercial practices. 2nd, (This section is devoted to liquids and liquid containers and has nothing to do with either butter or eggs). 3rd, discrepancies in weight or measure due exclusively to difference of atmospheric conditions in various places and which unavoidably result from the ordinary and customary exposure of the packages to evaporation or to the absorption of water. This paragraph applies to butter and being rather indefinite in its meaning, a foot note was added which says—the reasonableness of discrepancies under class No. 3 of this paragraph will be determined on facts in each case. It would seem by this that in the case of a box of print butter being found short in weight, when offered for sale, it will have to be taken up and investigated, and the guilt or innocence of the parties offering it for sale determined and that this will have to be done in each individual case, herein seems to be another uncertainty in regard to who is the responsible party when the short weights are found, the manufacturer or the dealer offering it for sale and this question has already been raised. So far as we have been able to learn, no decision has been made as to the creameries' responsibility in the matter, but the law stating that the law applies to the sale of food packages to the consumer makes it plain that the dealer offering it for sale would be held responsible, but what recourse this dealer might have upon the creamery putting the butter up, will probably be a question to be determined by legal action later on. This is one of the details upon which no reliable information is obtainable at the present time. In the case of the moisture content of butter law which is under the internal revenue department of the government, that department held both the dealer and the manufacturer to be liable, and there are several instances where the government collected fines from two and

even three different persons on the same lots of butter, that was found to contain an excessive amount of moisture. Nor has this even been changed, but we are of the opinion that this department has realized that the dealer is in no way responsible for this excessive amount of moisture, that he did not profit by it, and in fact knew nothing of it, and in many cases could know nothing of it, as he may never have seen the butter, having both purchased or sold it when it was in transit, and have not enforced it against them with the same vigor as they formerly did. There are other small details in the law that to the average creamery or dealer have no particular interest, such as that the law does not apply to a package of butter containing less than two ounces nor less than a half dozen of eggs. The law is somewhat indefinite in that action relating to the marking on the package, in that it does not specify the size or the kind of the letters or the figures to be used. Simply says that it must be plain and stand out bold, so as to be easily read. We are not fully prepared to say at this time whether the law is a good one or not, we are inclined to the opinion that it is. We believe we can see where it is a benefit to the creameries. The law is aimed at the dishonest dealers and manufacturers of food products in general, and it is in no way aimed especially at the creameries or butter trade. With them it is possibly a case of being found in bad company, and for this reason while we might condemn the law from our standpoint, we would be wrong when we condemned it as a whole. Its purpose no doubt is good, and we believe it should be lived up to. One thing that can be said favorably of the law and those whose duty it is to enforce it, is that they are showing no disposition to enforce it in an arbitrary manner, they are proceeding slowly and carefully and are trying to avoid imposing any hardships or inconveniences upon any one and seem to be willing upon the proper presentation of evidence that no intent to defraud was intended to condone any infraction of the law with the warning, don't do it again. We said we believed the law is a good thing for the creameries. Many of the creameries are complying with the law, and we believe to their profit, as they are weighing each tub and

are placing the correct net weight upon them in a perfectly legible manner. Others are weighing every tub and seem to be intent upon hiding the figures, they place them upon a certain hoop with a lead pencil, with figures so small they cannot be seen and one creamery coming under our observation placed them upon the side up at the top of the stave which was covered by the rim of the cover. This does not comply with the law as it is not plain and does not stand out plain and bold, and is not easily read. At the present time, under existing freight tariff, we would urge the weighing of every tub of butter and placing the gross weight, tare and net weight upon them. To comply with the net weight law, each tub must be weighed and the net weight placed upon it, but there is nothing that prevents the marking of the gross weight upon them also. Under the present freight tariff now in force where the gross weight is not marked upon the tub, the eastern railroads have assumed that they weigh 75 lbs., and they bill them at this weight, and if you are not weighing your butter and it goes east of Chicago you are paying freight on this amount, regardless of the actual weight. In this we believe there is an injustice being done, and the only way to evade this is to weigh each tub and place the gross weight upon the side of the tub, so as to be plainly read, then when you bill your butter, bill it at the exact gross weight. Our information is (and we believe it to be a correct one) that the largest and best creameries are now doing this, and are doing it with profit to themselves. In these days of sharp, keen competition when every creamery is putting forth every effort in the race to success, there is no room for guess work. You must know to a certainty what you are doing and you should know just how much butter you are shipping in each tub. Remember this, if you ship your butter unweighed and unmarked and it goes east of Chicago you must pay freight on 75 pounds per tub, or if you only place the net weight upon the tub, you will still have to pay the freight on 75 pounds per tub, as freight is collected on the gross weight and the railroads say they are not supposed to know what the tubs weighs. In conclusion we would again urge you to comply with the net weight law.

Place the net weight upon every tub that goes outside of your state, and also the gross weight as well. There is no excuse for the violation or the evasion of any law. While it may not seem to be just or apply to our individual case, still it may be just and even a necessity in many other cases. We know that in the case of print butter, there was a growing disposition on the part of manufacturers to shrink the weight. This practice was so common that most of the western states passed State laws which are now in force covering this, all compelling the placing of the net weight of the butter upon the packages offered for sale to the consumer. There is a question now raised as to whether the law applies to the creamery or the dealer at all or not, for the reason they do not offer it for sale to the consumer, when the law plainly says, "the package must be plainly and conspicuously marked in terms of the weight, measure or numerals count on the outside of the covering or container usually delivered to consumers." But the department has ruled that a butter tub and a cheese box are a package which might be and are offered for sale to the consumers which we believe does away with their claim that the law does not apply to them. So again we say obey the law, give it a fair trial, if it is found to work a hardship, start a movement for its repeal.

Now that is my paper but I want to carry this a little bit further. I might go a little further and urge that as one of the reasons for your organization that you are proposing to form in this state you could do a whole lot of good if you would carry your organization through completely and be able to work with us. I am a member of a committee to look into this matter and we visited a great many of the butter sellers and butter houses in Chicago. We have spent two half days doing nothing but going to the Chicago merchants and asking them for the privilege of weighing up their butter. I have got no authority to make a statement of this kind, and I do not want it to be considered in an advertising way, but that committee that went into these houses put the merchants in the city of Chicago to a severe test and knows what it is talking about.

I have in my pocket at the present time a sheet showing the weight of twenty pounds of butter shipped to New York, and it was weighed again down there and it shrunk, in seven days, one pound and thirteen ounces to the tub. One man weighed it at both ends.

One other thing is pending. There is a new rule pending at the present time which is supposed to go into effect and has been slated on two different occasions to go into effect, relating to railroads charging for ice used in the refrigeration of a car. That is pending at the present time. The carload shipper pays \$2.50 for the ice and the less-than-carload shipper pays more. These are questions your organization can take up and help people trying to adjust them.

I never undertook to dig anything out and to get something that I thought would do you some good that I have had as hard work over as I have had in this discussion of the net weight law; and I never appeared before my audience with a paper; but I did the best I could with the material I had to work with. I thank you. (Applause.)

DISCUSSION.

PRESIDENT: Are there any questions to ask Mr. Shilling?

MR. SORENSON: I would like to ask if a creamery man shipping east and his butter shrinkage was nearly two pounds to the tub, would he have to take that into consideration in marking his tubs?

MR. SHILLING: My understanding is that you would. It is when this butter is brought to the consumer. You have got to make allowance.

MR. SORENSON: Then it would be up to the buttermakers to know how much the butter shrinks. I happened into a creamery here, not long ago, and I asked the buttermaker how much shrinkage he had on the net weight. I said, "Do you weigh your butter?" He said, "Oh no, but the tubs generally hold 63 pounds" and they got returns from 63 pounds. The result was that more of the tubs held 65 pounds and even 65½ pounds. It was not due

to leaky butter. The body of his butter was as leaky as I have ever seen. I told him it might be well for him to practice working his butter. I happen to think of another instance, talking about this net weight law. A buttermaker offered to mark the weight on the tub—one of the creamery inspectors of the state told me this—and the buttermaker simply marked 62 pounds on every tub and he let it go at that.

MR. JORGENSEN: I would like to ask Mr. Sorenson where his man got his tubs.

MR. SORENSON: I am not informed, Mr. Jorgenson. We have had tubs at Albert Lea that held 66 pounds. A manufacturer that turns out a tub that varies everywhere from 62 to 66 pounds is not a good manufacturer, in my estimation.

MR. VAN KIRK: I would like a little further light on that. Every man who has handled butter to any extent knows that some churnings shrink more than others. How are we to know when we are making that butter what it is going to shrink?

MR. SHILLING: As I said in answer to Mr. Sorenson, we cannot expect a strict interpretation of that law when that tub is offered to the consumer with the net weight on there correctly. I told you, to start with, there are a whole lot of things that have not been worked out, and that is one of them; but we have got to, so far as possible, get that net weight on that tub.

PRESIDENT: In my opinion as a buttermaker it is up to us to make not only a uniform scoring piece of butter, but uniform in body by using, especially in pasteurizing, the same temperatures. If you do, the butter has practically the same body right along and the shrinkage will be practically the same. But, as I know myself, some little thing will happen and you get a leaky piece of butter and there is going to be a big shrinkage; but on an average if the temperatures are somewhere near where they ought to be there will not be very much shrinkage in your butter from one day to another. I believe that is what we will have to work for to get the body of the butter more uniform.

MR. SOMERVILLE, Chicago: Let me say to the buttermakers, from a dealer's standpoint, I do not think so long as the net

weight is low enough to suit the government it is necessary to have the gross weight on the package, because we pay no attention to the net weight. It does not make any difference what weight you put on, so long as you put it low enough to suit the government. I do not believe that this law applies to this business—that is, the wholesale end of it. I feel as Mr. Shilling does, that every creamery buttermaker should weigh his butter for his own protection. I think the law was made for the purpose of protecting the consumers only and it is no protection to the consumer at all. The package that is sold to the consumer should be plainly marked and I would like to see a test case made, either by the creamery man or by the dealers, on that point. I believe the courts would hold on that point that inasmuch as the original package never reaches the consumer the law does not apply to it.

MR. OAKS, Sparta: I would like to ask Mr. Shilling who the butter belongs to when you are selling F. O. B. shipping station to the commission man.

MR. SHILLING: I would imagine that would belong to the dealer that bought it before you placed it at the station. I would imagine that. I am not a lawyer by any means and, as I told you, that would be my impression.

MR. OAKS: Why, then, should a buttermaker be compelled to weigh his tubs?

MR. SHILLING: He is the man that sells it. I don't fully agree that the law was intended to apply to the manufacturer, still I believe that they intend it that way.

MR. LAURITZ OLSEN, DePere: May I have just a moment to present a resolution?

PRESIDENT: Yes.

MR. OLSEN: Ladies and Gentlemen and Buttermakers: I presume you all know that just at the present time there is a new name submitted to the senators of this state for dairy and food commissioner. Someone objected to the man—not from a business standpoint but because he was not connected with the dairy business. I think this Association ought to go on record in the same respect. The butter industry in this state is by far the

greatest and I think the man at the head of it ought to have some knowledge so that he could guide that industry throughout the state. I present this resolution now.

WHEREAS—the State of Wisconsin is conceded to be the leading Dairy State of the Union, having more creameries and cheese factories than any other state and—

WHEREAS—Laws for the protection, guidance and promotion of the dairy business are on the statutes of the State and—

WHEREAS—the enforcement of these laws is under the control of the dairy and food commissioner of the state, it is the opinion of the members of the Wisconsin Buttermakers' Association in convention assembled at Fond du Lac, that the office of dairy and food commissioner should be filled by a man who has had practical experience in the dairy business, therefore be it

RESOLVED: That we do not look with favor upon the appointment by the governor of a man who has had no practical experience with the business he would so largely control as dairy and food commissioner—

RESOLVED: Further, that we ask the senate to refuse confirmation of the appointment of Mr. Weigle—and the governor is hereby respectfully asked to nominate a man for this responsible position who has had practical experience and knowledge of the Dairy Business. Further be it—

RESOLVED: That the Secretary be instructed to forward a copy of these resolutions to the governor and each member of the senate at once—

(Applause.)

I move that it be adopted.

The motion was thereupon seconded.

MR. R. C. GREEN, Albion: Gentlemen of the convention: There is no one, perhaps, any more interested than I am in this matter, and I am interested in this great, old, good Wisconsin Buttermakers' Association. We have done a grand, good work since we organized in St. Paul years ago, and I was a member of that convention. Boys, I tell you I believe we are going to do

a bad thing if we put ourselves in a position politically in this matter.

We are not all suited with what Governor Phillips has done and I perhaps am not suited. At the same time, I believe we can not afford to take this position. I do not believe we can afford it at all. The appointment has been made, let us make the best of it. Don't mix politics and business. We will get in bad with the administration, we will get in bad with the people of the state and we can't afford to do it. I do believe it would be a bad, bad thing for us to do.

SECRETARY BENKENDORF: May I say a few words on this resolution at this time? I have been secretary of this association for the past five years. Yesterday I was once more highly honored with a re-election. I desire to take this opportunity to thank you for your vote of confidence and the honor you have again bestowed upon me. It has always been my aim to keep this association out of politics and you well know that I have had abundant opportunity to get mixed up in the same in the past. I don't want this association to get to dabbling in politics. What do we know about this man Weigle? I do not know him personally—how many here do? He may be a very good man, a fine man! Are you going to condemn a man simply because a few newspapers said he did not always vote right—on the corn syrup case particularly—when he was in the senate? What do you know about the merits of the corn syrup measure? Let me tell you, gentlemen, that that question is now up before the supreme court and they will decide that matter, and it is not for us to judge. How would you like to be censured and criticised by patrons of the factory when you accepted a new position before the patrons knew anything about you? Governor Phillips has selected him because he thought he was a good broad-minded man for the place. I have heard many good things about Mr. Weigle. They say he is a good executive and fair. We have heard he is interested financially in the dairy business. Do you want to condemn a man because you happen to know nothing about him? I do not favor this resolution at all and hope it will be voted down.

PRESIDENT: Are there any other remarks?

MR. MARTIN H. MEYER, Madison: I wish to say that I stand with Mr. Green and Prof. Benkendorf. I stand with them as a member of this association. I assure you that I shall assist this association in all I can, except in this matter of taking such a wrong stand, of which I do not approve.

PRESIDENT: Are there any further remarks. If not we will put it to vote.

SECRETARY BENKENDORF: I would like to see a further discussion of this question before it is put to vote. The question involved is an important one.

PRESIDENT: Apparently no one else wants to talk on the subject. We will take a rising vote.

Upon vote being taken the motion was lost, only two voting in favor and the rest of the house arose in opposition.

PRESIDENT: We will now have Mr. Nickel's paper on

REASON FOR USING STARTER.

By E. Nickel, Seymour.

When your Secretary asked me to work up the question and present it to this body of men, I did not expect to be able to tell the Buttermakers any new things; but I thought that I might perhaps say something that would be of mutual benefit to all of us. I have been down here at Fond du Lac for two days and I feel today somewhat like Mr. Shilling felt yesterday—I feel that I am slipping.

The object of ripening cream for buttermaking is to get a more pronounced butter flavor than will result if the cream is churned sweet.

It has been found that when the proper ripening ferments are present, they will add greatly to the keeping quality of the butter. Cream being a better food for the pure lactic bacteria than the butter, that when these pure bacteria are given a chance to develop in the cream they will be present in large numbers

in the butter that the acid they produce will prevent the development of injurious bacteria. Careful work is necessary to be successful with starters.

Buttermakers have found that carelessly handled starter will result in a poor quality of butter, that the road to success is along the lines of carefulness, cleanliness, and persistency, therefore, buttermakers should follow the directions of the manufacturers of the butter cultures as these directions are based on scientific as well as practical experience.



H. D. NICHOLS

The fact should always be borne in mind that the starter is alive and is made up of tiny plants or bacteria which are more sensitive to food, temperature, and clean surroundings than most of the beings of higher order.

They are an element of cleanliness found only in clean dairies and in good milk.

The milk to be used for starter should be best, not from

two to three days old, but should be fresh morning's milk and nature free from barn or cowy flavors.

Skim milk from the average run from the factory separators is not clean enough for a good starter, so the best way is to select good morning's milk from some patron who has been found to have good clean milk.

The objections to leaving the cream in the starter milk are, first, that we find more loss of fat in the buttermilk and second, the cream will to some extent cover up the starter flavor so it is more difficult to tell whether the starter is good or not, while on the other hand, whole milk gives the starter a more pleasant flavor which is no doubt carried over in the cream to some extent.

The preparation of milk for starter is made by heating the milk used to a temperature of 190 or 200 degrees Fahrenheit for about 20 minutes. This has been found to destroy all the bacteria in the milk that would prevent the development of a good starter.

Milk will acquire a scorched flavor and change its chemical properties by high heating so that the pure starter bacteria will not find as good food as they will find in good clean natural milk.

The milk should not be heated more than is necessary to make it pure enough for a good starter. Special attention should be given to the thorough cleaning and steaming of the starter cans or vats. They should be first well cleaned and then steamed for three or four minutes.

Where the creamery is run every other day, the starter milk may be pasteurized the first day and then repasteurized the second day, but in the meantime the milk is to be kept below 50 degrees Fahrenheit.

Milk for mother starter should be selected from the very best milk that is possible to be procured and should be pasteurized in bottles or glass cans that have previously been sterilized. For this work a small steam cabinet may be made in the form of a box lined with tin or sheet-iron large enough to hold six or seven two-quart jars, having a steam pipe connected to it and a cover

which is nearly steam tight. This kind of an outfit works nicely to make the mother starter in.

In setting the culture a can of milk should be pasteurized by heating at a temperature of 190 to 200 degrees Fahrenheit for twenty-five or thirty minutes and then cooled down to 80 degrees, in case the powder culture is used, or if liquid is used to 66 to 72 degrees. When the culture is added to the milk, it should be thoroughly agitated and set away to ripen at the above temperature.

The dry setting will not have its full vigor until its third setting and should not be used in the large can before the third propagation.

The mother starters should be used altogether for carrying over from one day to another.

The milk in the starter can or vat should be inoculated only with mother starter as this seems to be the only way of keeping the bacteria in good condition.

A ripening temperature of about 66 degrees in summer and 70 degrees in winter seems to give the best results.

Th milk for the large starter should be pasteurized at the same temperature used for the mother starters and cooled down to about 54 degrees at once, and held at that temperature until inoculated with enough mother starter to ripen it in time for adding it to the cream the next morning.

The mother starter should be well shaken up before adding to the new milk, and the mixture should be well stirred afterwards. It is important that the starter be neither overripe nor underripe, as that will both result in damage to the butter. The underripe starter being ineffective and the overripe developing sour metallic flavors, and also being inactive in cold weather.

If the starter cannot be used as soon as ripe it should be cooled to 50 degrees and held at that temperature until ready for use in the cream.

These same principles are involved in ripening the cream as in ripening the starter and mother starter.

The cream vat should be left open during the ripening process and the cream should be frequently stirred. Enough starter should be added to have the cream reach an acidity of 45 to 50 in three or four hours, the cream being held at a temperature of 70 degrees, that is if the cream has a fat content of 25 to 30 per cent, less starter should be used, as the cream increases in butter fat as only the milk ingredients are changed.

As soon as the proper acidity is reached, the cream should be cooled down to 48 or 50 degrees and held at that temperature for at least three or four hours before churning to give the fat globules time to harden so as to get the proper body in the butter.

(Applause.)

DISCUSSION.

PRESIDENT: Are there any questions?

MR. OLSEN: I would like to ask: Do you cool your starter by just leaving it alone?

MR. NICKEL: I stir it once in a while. Supposing that starter is ripe and your cream is not there to use it, what are you going to do? The tendency is to whey off. We don't have laboratory conditions in the field.

MR. SORENSON: I have always been told that you should not let your starter whey off.

MR. NICKEL: Certainly.

PRESIDENT: The next paper will be by an old time butter-maker, Mr. B. D. White.

PASTEURIZATION OF CREAM FOR BUTTER MAKING.

By B. D. White, Milwaukee.

Since the experiments by Pasteur in the destruction of lactic acid bacteria in milk by the application of heat, dairymen have known that the method was applicable to milk and cream on a commercial scale. Since that time various devices for doing the

work properly have been invented and put upon the market, and yet thousands of creameries throughout the United States have not availed themselves of the benefits from this method.

Pasteurization of cream is no more than heating the same to a given temperature, holding it for a definite time, and then again cooling it to the desired temperature. There is nothing intricate in the method, and any buttermaker who is competent to operate a creamery and do the rest of the work satisfactorily can also pasteurize cream satisfactorily. There are only a few details to be taken into consideration.

First—The apparatus to be used.

Second—The method of the application of heat.

Third—Temperature to which cream is heated and cooled and the time it should be held.

Fourth—The agitation of the cream during the process of heating and cooling.

Fifth—The cost of pasteurization and cooling.

Sixth—The safety of the product.

Most all creameries are provided with cream ripeners which may also be used for heating and cooling the cream, and very satisfactory results are obtained by this method, hence no special apparatus is required, and the creameries that do not have a ripener can scarcely expect their buttermaker to produce uniform and satisfactory results, as the ordinary cream vat is out of date, and can no longer be recommended, because of the lack of cooling facilities, and the inability to control the temperature.

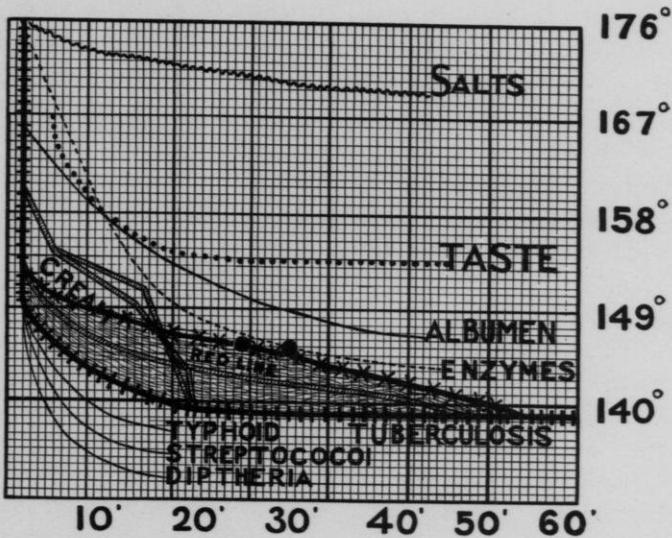
Live steam should not be used in pasteurizing, but instead water should be heated and circulated through the apparatus. The pasteurizer should be large enough so the temperature of the water is not too high, as cream coming in contact with a highly heated surface will take on a scorched flavor which is objectionable. However, a slight heated or scorched flavor may appear in the butter immediately after it is made, but will not be noticeable a few days thereafter. The temperature to which cream should be heated depends somewhat upon the character of the cream, and if the butter is to be sold within a reasonable time after

manufacture, or put into cold storage, a temperature of 140 to 145 degrees for 20 to 30 minutes is satisfactory.

There is a general impression among some buttermakers that heating cream to a temperature of 140 degrees destroys all the lactic acid bacteria, which however is not the case. Dr. S. H. Ayres of the Department of Agriculture, in his experiments has found that a temperature of 140 degrees only destroys certain species of the lactic acid bacteria. There are some kinds which will stand a much higher temperature, and in order to kill them it will require a temperature of 168 degrees. In case of making butter for cold storage, the work of the Department of Agriculture in supervising the manufacture of the navy butter for the past eight years has conclusively shown that when sweet cream is used and heated to a temperature of about 168 degrees, and cooled down immediately and held for several hours, and churned without the use of a starter the best possible keeping product is obtained. However, such butter will not have a high aroma, but will be mild, sweet, and clean. Butter for immediate consumption is considered of better quality if a starter is added to give it the desired bouquet flavor, and in such cases it is not necessary to heat to a temperature of 168, but 145 degrees is sufficient if held for 20 minutes at that temperature. The product thus made may be considered free from living pathogenic organisms, and will not have a scorched flavor, as when the cream is heated to 168 degrees. As the temperature is increased the time of holding may be reduced. The time of holding may be decreased one minute for each degree of raise in temperature above 140.

It should be understood that a temperature of 168 degrees does not destroy all of the bacteria, but only the pathogenic and the lactic acid kinds. In order to destroy the other organisms a much higher temperature is required, but these have less importance in the manufacture of butter.

The following chart by Dr. Chas. E. North of New York shows the temperature at which pathogenic organisms are destroyed:



In pasteurizing sour cream at hand separator creameries where starter is not available you can improve the quality of butter from two to five points without the use of a starter, although cream containing more than about three-tenths per cent of acid requires neutralization, to which I am opposed, and it is reasonable to assume that the practice now in vogue of doping old sour, stale, and putrid and sometimes rotten cream will not long prevail, but cream which is curdled and yet does not contain a high per cent of acidity and is pasteurized at a temperature of 140 to 145 degrees, and held at that temperature for 20 to 30 minutes leaving the cover of the ripener open to permit the escape of the volatile odors and then immediately cooled to the churning temperature or several degrees below, and held for several hours to allow the butterfat to solidify to assure a good body and exhaustive churning will give good results.

However, if a good starter is added to the cream a better flavor is the result, and I strongly recommend the use of a starter in all cream except sweet cream to be made into butter for cold storage.

Cream should be constantly agitated during the heating and cooling process. Without this that which comes in contact with the heated surface will be scorched, and some of it will adhere to the apparatus, reducing the heating efficiency, and make it hard to clean.

What will pasteurization do from a commercial point of view? First, it will improve the quality of the butter, second, improve the keeping quality, third, enable the makers to produce a more uniform quality from day to day. These three factors are obtained in the manufacture of pasteurized cream butter and if pasteurization was generally put into practice it would have a wonderful influence on the creamery industry of the country.

Making butter in a haphazard, indifferent, unscientific way must cease if the creameries expect to remain in existence. Receiving milk or cream and churning it into butter without pasteurization or the use of a starter can only result in an unsatisfactory product, as the maker is depending entirely upon the kind of bacteria in the milk or cream which he received, some days there may be a considerable number of the right kind of bacteria, and he will have a good quality of butter; other days there may be a larger per cent of undesirable bacteria which will produce butter lacking flavor, and keeping quality, which will soon deteriorate and become old and rancid. Most of the butter made from the raw material deteriorates so by the time it reaches the consumer it is inferior in quality, and if the buttermakers and the creamerymen turning out such a butter would have an opportunity of visiting the retail markets and see their product as it reaches the consumer, they would be ashamed of themselves, and I believe no better lesson could be learned by the creameries or buttermakers than to see their own product in the condition as it goes upon the tables of the consumers.

Every creamery can test the keeping quality to their own satisfaction by first keeping the butter in the refrigerator for a matter of ten days or two weeks, and then subject it to the room temperature for several days, which is about the average condition which butter passes through while in transit to the consumer.

The lack of uniformity in the product and lack of keeping quality has more to do with the failure of creameries and the losses sustained by many and the low prices paid to the farmers for butterfat than any other one thing, except the quality of the butter, and in many instances if butter runs uniform day after day and week after week, it will be accepted, though it does grade a point or two below extras, while on the other hand if butter is not uniform and will score 93 to 94 points one day with an uneven color and moisture and a variation in salt content, will not be accepted as readily as if it would score 89 to 90 points all the time and be perfect in workmanship. Therefore, more stress should be put on the uniformity of the butter manufactured, and the buttermakers have much to learn along this line, and it is high time that some of these matters be taken up with vigor and determination, or there will be more large and less small plants. The failure of most of the creameries can be mostly attributed to the lack of management, and lack of attention to details.

In this day of competition of the centralizing concerns, the local creameries must manufacture a uniform grade of butter and use as much skill in the manufacture of it as do the larger concerns; then they will have little to fear of competition from any source, unless it is of a discriminatory nature, and that should be handled by the state laws. Several states now have an anti-discrimination law, which seems to work quite satisfactorily, and we can point to the state of Iowa and Minnesota where local creameries a few years ago were being closed because of such unfair competition, but are now again taking new life, because they have found that by properly operating a creamery they can easily compete with those concerns who receive cream by rail, and in most cases pay the farmers more money for their product.

I cannot refrain from saying a few words in regard to the grading of cream, a subject in which I have been much interested, and have through the Butter, Cheese & Egg Journal said more or less, and I still advocate the grading of cream, but you perhaps have noticed the editorials in the above named publications with reference to the recent so-called Dairy Officials Conference,

held at Des Moines, Iowa, which however, instead of being a dairy officials conference turned out to be a conference of the centralizers with a few dairy officials, most of whom were not in sympathy with the action taken at that meeting, because they realized they were treading on dangerous ground, and were establishing a precedent of no value to the local creameries, and if the recommendations were enacted into a law, as it was intended, local creameries would again be at the mercy of those who chose to pay different prices for cream in different localities, as it would be practically impossible for any state authorities to definitely prove the grade of cream purchased, and it seems to me that there was a nigger in the woodpile at the conference, which was soon detected, and has been put to rout and the local creameries can feel fortunate that the so-called Dairy Officials Conference which was intended to be a permanent organization is a dead letter, and it is pleasing to know that Wisconsin did not participate in the meeting in question. However, every buttermaker should put forth his best efforts to establish some form of grading, and pay for quality at his creamery, but to the extent that this can be carried on will depend largely on competition or the acceptance of rotten cream by outside parties.

Many have thrown up their hands in horror when the term rotten cream has been used, and they say "Hush, we must not permit such terms to be used in connection with the creamery industry of this country." But let me tell you frankly, that it is a matter of fact, and we must confront it, and the sooner all facts become known the sooner there will be a change for the better, and I for one will do what I can to bring out the facts as they exist, and place the blame where it belongs, as I feel sanguine that it will be only a question of time until the creameries must return to the good old days of absolutely sweet cream or milk, but during this chaotic stage the creamerymen and buttermakers must be wide awake, and put up the best fight there is in them to bridge over this unfavorable time, and much can be accomplished by local organizations, but such organizations should be composed

of not only the buttermakers, but the officers and the patrons of the creameries.

Returning to the pasteurization of cream for buttermaking, the first question most of the creameries, regardless of the good that can be accomplished, will ask is "What will it cost?" and to this question I can only say that the creameries pasteurizing have found that their expense of fuel at the end of the year was not perceptibly greater than previous to pasteurization. This seems to me will settle the matter of the expense in a practical way. The amount of ice consumed is the next factor, but with a good supply of water which usually is in abundance in the state of Wisconsin and is at a temperature around 50 degrees, the cream may be cooled by the use of such water to 60 or 70 degrees, or about the temperature at which it ordinarily arrives at the creamery during the summer months, or colder than it flows from the separator, and during the winter time water may be used exclusively, as the atmospheric conditions are such that no ice is necessary, and with the use of the cream ripeners which are insulated, the amount of ice used in summer perhaps will be less than before the introduction of the cream ripeners.

The United States Department of Agriculture has conducted experiments to determine the exact cost of pasteurizing cream, and I will quote briefly from a bulletin on this subject:

"The cost of pasteurizing 100 pounds of cream will vary slightly in the different plants due to the varying conditions. The initial temperature of the raw cream varied slightly in the different plants, and also the final or pasteurizing temperatures. In order to make a comparison of cost it becomes necessary to put them all on an equal basis, so far as it is possible to do, and for this purpose it is assumed that the pasteurizing cycle consisted in raising and lowering the temperature of the cream through a range of 100 degrees F. all other conditions remaining the same. The cost of pasteurizing 100 pounds of

cream in the different plants is \$0.0469, \$0.065, \$0.0726 and \$0.1056 for tests Nos. 1, 2, 3, and 4 respectively.

You will observe that the cost of doing the work was from \$0.0469 to \$0.1056 in the experiments, which in my estimation is exceedingly low, and for the sake of argument, we will double the cost, and then multiply it by two, which will still be an infinitesimal amount when the benefits are taken into consideration.

Commission men and butter dealers generally have become interested in pasteurized cream butter, who in former years were not willing to concede that pasteurized cream butter was enough better to warrant an increased price, but since that time many of them have observed the improvement in the quality of butter coming from creameries after pasteurization was introduced, and are now willing to concede that pasteurized cream butter will sell at from a quarter to one cent per pound or even more when the work is done properly. So it only remains for the creameries and buttermakers to give this matter a little thought and possibly visit some creameries where pasteurization is satisfactorily done to learn how.

Personally I do not hesitate to recommend pasteurization as I would not consider the operation of any creamery or milk plant without pasteurizing all of the product.

I thank you.

(Applause.)

PRESIDENT: In view of the fact that a good many members have to leave shortly to make trains—

MR. SORENSON: If I understood Mr. White right, he said cream could be improved from two to five points by pasteurization.

MR. WHITE: Depending upon the character of the cream.

MR. SORENSON: And you also stated that you might get from one-half to one point better in price. It seems to me if it could be improved five points there should be more difference in price.

MR. WHITE: That has been the experience of creameries. I don't want to paint them too glowingly.

MR. W. F. PAULSON, Phillips: How long would you ripen your cream after pasteurization?

MR. WHITE: What kind of cream?

MR. PAULSON: Gathered cream, generally sweet.

MR. WHITE: I would not ripen it at all. I would pasteurize it, cool it down just as fast as I could and churn it, if possible, that evening. If you continue the ripening of that cream, you will only make bad matters worse.

MR. SORENSON: He said sweet cream.

MR. WHITE: If the acidity of the cream is down below .6 I would ripen down to the acidity you desire, which is at the present time .5, and in that case you use a good starter.

PRESIDENT: If there are no other questions, we will proceed with the program. The next will be a talk by Mr. James Sorenson, of Albert Lea, Minnesota.

ADDRESS.

By James Sorenson, Albert Lea, Minn.

Mr. President, Ladies and Gentlemen: It is unnecessary for me to say that I am pleased to be here at this time, nor is it necessary to say that I consider it a privilege and an honor to appear before this gathering of Wisconsin creamerymen. I do not know whether I have to make an apology or not. I have not prepared a paper for the simple reason that I have not had the opportunity of my friend White of getting acquainted with the stenographer and, consequently, have not been requested to prepare a paper.

I have no subject, hence I have the privilege of talking about anything I feel like. I hope I wont be in the position of the minister, who in walking down the street of a village in which he was not very well acquainted, met a little boy and asked him for the road to the postoffice. The little boy answered him in a very

impish tone, he thought it was funny he didn't know where the postoffice was. The minister said, "My little boy, you must not use such coarse language. I am going to have some meetings in the church down here this week and I would like to have you come down and I will show you the road to heaven." The little boy said, "Shucks, you show me the road to heaven? You don't even know the road to the postoffice." (Laughter.) So when I came here and attempt to tell you something about butter making and the creamery business, I will at least know something about it. I don't know whether it will be possible for me to say anything interesting to you, but I hope to at least interest you enough to start a discussion, if such is advisable when I am through.

I believe these conventions do a great deal of good and there is a reason why they do, because these gatherings are made up of the very best men in the business. That is true wherever you go. In Minnesota, Iowa, North Dakota, South Dakota or any other state, you will find that the creamery and the buttermakers, the best men in the business are at these conventions, and why should not there be some good results from these meetings? There is one thing I regret very much, I suppose most of you do, and I have no doubt many of you have given that some thought, and that is the men we want to reach, the men that need the information which is given out at these conventions are not here as a rule. They are back home. Some of them think they know it all. Some of them haven't got the ambition to come. This, being the fact, I believe it places the responsibility upon every buttermaker and creamery manager, or for that matter any other person, who does attend these conventions. I believe that each and every one of us should try and act as missionaries in the field and scatter this good information we get at these conventions to the four corners of your state. When you go home you can do something. You may suddenly meet a neighboring buttermaker, and may meet a dairyman, you can tell them something about progress, about what happened down at Fond du Lac at the convention. It may not be advisable for you to criticise them, because they may not

take that in the right spirit, but if you are tactful, you can tell them something that may be of some value to them and wake them up, if they are not already dead. I believe in the little district meetings. My experience has been that a good deal of good has been done, and I am pleased to know that you hold in different sections of your state now from time to time these district meetings. I find that is true in Minnesota. The little meetings where you get down close to the buttermaker, prove very helpful, because he cannot very well stay at home. We have our little



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meetings over in Minnesota and there are men who come to these meetings who have never been seen at the state convention, and I believe these little meetings should be encouraged. I believe in carrying the good things to them if they will not come after it.

The purpose of this convention to my mind is this—the big purpose—to solve problems, if you please. I believe that the buttermakers should come to these conventions for an object. It may

be more than one, but I believe they have this one object and that is to learn something that will improve them, that will make them better workmen, make them worth more money, possibly help them to get an increased salary. I believe also that two heads are better than one, as the old saying goes, and if that is true, I also believe that one hundred heads or two hundred heads are still many, many times better than one in solving problems. The chance for a satisfactory solution is much better where you get one hundred or two hundred wise heads together, than where one butter-maker goes off by himself. I believe a great many of the butter-makers who come to these conventions, do so, because they know that if they stay home all the time, they are going to get rusty. That is a good word, I like that word in that place.

You know that the position of a buttermaker is an isolated one in many instances. He is off and he don't get a chance to get in touch with his fellow buttermakers as he should. We find competition and lack of co-operation between the creameries of a locality. We find lots of jealousy among the buttermakers that should not be. I believe also the coming here of the buttermakers promotes the co-operation that should exist among the butter-makers in any community. You meet that buttermaker you thought was a bad fellow, and you find he is a pretty good fellow after all and you will feel much better towards him, and possibly you can co-operate in a way you never did before. These conventions I may say, start in that way. If you get the convention habit once, I guess you know what that means; it means you can't stay at home. That has been the case with me. There is something I like to call a convention spirit. I really don't know what it is, but there is something about it that draws you and you like to go again. I believe one of the most valuable things in connection with the convention is the sociability, getting together and meeting. I believe if we got nothing else out of these meetings but that sociability, good fellowship, we would be well paid for coming, at least that is the way I feel, although the meetings and the splendid papers and the discussion following them are of course of immense value.

When I left Albert Lea day before yesterday, I was very much in doubt as to what to talk about, because I had never attended a state convention in Wisconsin and I wondered if conditions were the same over here. I did not feel that I was capable of judging what I should say at this time, but after being with you yesterday and today, mingling with you, I feel safe in saying that your troubles are our troubles in Minnesota, and it would have been perfectly safe for me to go ahead and prepare the paper, because I don't believe it would have gone amiss, for anything fit for a Minnesota convention would apply very nicely at a Wisconsin convention. The only difference, if you can call that a difference, between Minnesota and Wisconsin, is that they have a great many more co-operative creameries than you have here. I don't know whether that has so very much influence on conditions or not.

Our troubles—when I say our troubles, I mean Minnesota and Wisconsin—may be summed up under three heads. I am not going to say I am absolutely right in this, but this is my diagnosis of the case. These are inefficient management of our creameries, inefficiency on the part of many of our buttermakers and the old, old problem of poor raw material. I will say this, that if we had what I call good management, the problem of poor raw material would be solved undoubtedly. I also believe this, that if we had the efficient buttermaker, that is the kind of a buttermaker I call efficient, we would not have much trouble with the raw material that is now giving us so much cause for complaint. In order for a creamery to be successful, there must be co-operation between the buttermaker and the patrons, between the buttermaker and the management. Where that co-operation is lacking, there is going to be more or less failure. I have found this, I don't know whether it is true in Wisconsin or not, but wherever you have found a buttermaker who is absolutely right, the kind of a buttermaker who goes outside of the creamery to do his work, who works with his patrons, invariably you will find that creamery is successful, I was going to say regardless of what kind of a manager. In a co-operative creamery it is the butter-

maker who does things and for that reason I claim there is a tremendous responsibility resting on the buttermaker. Tact is a word we have heard so much about. It is absolutely necessary for success in the creamery. A buttermaker without tact will stand but very little chance of building up a creamery or keeping it up. Tact in handling patrons, knowing how to gain the confidence of the patrons, so that they will know he is working for their interests as well as his own, knowing how to gain the confidence of the Creamery Board, so that whenever he needs new machinery or new appliances to do his work, he can get it.

I am going to mention to you two or three instances which I observed while acting as inspector with the Dairy and Food Department in Minnesota, several years ago. I am not going to mention the names or the towns. The buttermaker appeared before the board one day and told them how necessary it was for them to get new starter cans; told them how much better butter he could make if he could only get a starter can, and he had some tact, and he wanted the culture furnished once a week from which to make the starter. Now the Creamery Board, at this particular creamery, paid no attention to what he needed, they trusted to him. They were farmers, they were too busy, and for another thing, they did not know anything about the butter business. They knew as much about starter as a patron I had years ago, an old gentleman who used to furnish me with starter milk, and a mighty clean patron too. He used to come the first thing every morning, that is one reason why I used his milk for starter. One morning he came before I had started the separator, and he set his cans up on the platform. I was in the act of starting the separators by pulling the rope this way. The old man had never seen me in this act before and he said, "What are you doing?" I said, "I am starting the separators." He said, "I thought you used the starter." (Laughter). This is an absolute fact, that happened in my own creamery. This seems almost impossible.

By the way, I used to be a Wisconsin buttermaker. That story is no worse than one other I could tell about a patron in Minnesota. One of the patrons came in one morning and he said

to me, "What time is it?" I said, "I don't know, but my watch is in the engine room." He peeked in and looked at the steam gauge and he said, "Nine o'clock." This is also a fact and it happened up at the Cushing Creamery in Polk County and can be verified today. I didn't say anything. Of course, it happened in this particular case that it was just about nine o'clock.

These farmers, as I said, did not know what the buttermaker was doing. About three or four months after, this man had obtained his starter can. I came along and looked over the creamery. I naturally said, "Are you using starters here?" He said, "We did try here a while ago, but it didn't seem to do much good." I said, "Did you get a starter can?" He said, "Yes." I said "Where is your starter can?" He said, "Out in the coal shed." I went out in the coal shed—this was only three or four months after he had gotten that starter can—and it was actually covered up with coal, so I could see the edge of it sticking out, and on investigating his refrigerator, I found between thirty and forty bottles of culture that had never been opened and they were still coming. I said to him, "Are you still getting culture?" He said, "Yes, it comes every week." It is not much of a loss, \$50.00 possibly for the starter can, but here is the point, when that Creamery Board found out, and believe me they found out, that they had bought a starter can and had furnished culture for several months, simply for the buttermaker to throw it in the corner, when they found out, I say, that he lacked ambition even to tell them to stop the culture from coming, that buttermaker did not stay very long.

Another case. I went to a certain creamery in the spring. The buttermaker said, "Will you please help me to get the Creamery Board to get some sanitary pipes. I agreed with him at once. I went to the manager and some other members of the Board and told them that the buttermaker was right when he asked for sanitary pipes and that I believed it would be a good investment for them to spend \$75 or even \$100 to install these pipes. They said, "All right, if you think so, we will do it." They bought the pipes immediately. This was along in the spring. About September 1st,

or State Fair time, the Creamery Board or three or four members of the board called on me in the dairy hall and said, "Mr. Sorenson, you were up at our creamery a while ago and told us to buy some pipes. We bought the pipes, but the buttermaker has not put them in yet. We would like to have you come up and see if you cannot induce him to put them in." I went up there soon after and I said, "Well, you did not get the sanitary pipes." He started in saying, "No", but he had to change. He said, "Well, yes, we did get them." I said, "Where are they?" He said, "Up on top of the cooler." I went up on top of the cooler and there were the sanitary pipes. He had taken them in there and forgotten all about putting them in and there they had been four or five months. Could anyone blame the Creamery Board for not doing what he asked them to do again?

These are two instances and I could mention lots of them along that line. If a buttermaker wants to kill the little confidence the Creamery Board may have in his ability, go along that line.

Another one I may mention about a certain creamery. The buttermaker asked for a moisture test, so he could tell how much moisture he was incorporating in his butter. He said it was dangerous to ship the butter to market, and he induced the creamery to buy a moisture test. He used it twice and it was stored away in the corner. There was nothing thought about it, the creamery did not know anything about a moisture test, why should farmers know anything about a moisture test or what it is, and they can't stand there and watch him. The first thing they knew, the Federal Department at Washington told them they had seized the shipment of butter in the eastern market and it was up to them to pony up and it cost them something like \$800.00. Just as soon as the Creamery Board heard about this, they said, "It can't be possible, we bought our moisture test, there must be some mistake," but they finally put the buttermaker in the sweat box and they made him confess that he had only used it twice, but on his daily record he was marking 16, 15, 16, 15. That fellow, of course, also lost his job.

That is something I want to warn the buttermakers against.

That is why I am giving you these cases which I know about. There are many other ways in which you can kill the confidence of your Creamery Board and your patrons.

When we speak of the management of the creamery, there are many who mistake that word. Some think that means the buying of the supplies and the selling of the butter, and goodness knows that part of it is not looked after as well as it should be. But there are all these little things which go to make up successful creamery management, and that is where the good butter-maker, the fellow who can see all these things, shows his real value.

I believe many buttermakers fail to make as much of a success as they should, because they do not take advantage of doing things as well as they could. Lots of buttermakers could pasteurize their cream, but they don't. Why? One buttermaker will say, "I pasteurized cream here last spring and I sent it to the market and the dealer said at once the butter that is not pasteurized is better. I believe that is true in this case, because the buttermaker did it in any way. He got poor results and then he said, "It didn't pay to pasteurize." I agree with Mr. White in regard to pasteurization. I believe that this convention here assembled ought to go on record as favoring compulsory pasteurization. If anyone can advance only one reason against it, I would like to hear it. (Applause.) I think one reason is this: If we had compulsory pasteurization today, these poor sticks of buttermakers would lose their jobs and go out of business, and I claim that is an advantage, instead of a disadvantage. (Applause.)

The same can be said about starters. Why don't somebody say, "Use starters if you know that starters will improve your product, and if you don't use it, why don't you use it?" A buttermaker will say, "I can't get the milk." A certain buttermaker over in Minnesota has been telling me that for many years. Finally the creamery inspector made up his mind to find out if he could not get some good starter milk. He hired a team and bought more skim milk than that buttermaker would have wanted at

thirty-five cents a hundred. We have lots and lots of places like that. There may be places where you can't do much.

The same about testing, watching the composition of your butter. How many buttermakers are there that test every churning for moisture, something a buttermaker should do now-a-days. There was some excuse for me twenty years ago, because I had no moisture test and I might say, I did not know there was moisture in the butter. Now-a-days when we know what a tremendous loss the buttermaker can cause his creamery by not having a reasonable amount of moisture in his butter, there is no excuse, and that might also include salt. Another one is the weighing of the butter. I know lots and lots of buttermakers that now, even after this net weight law has gone into effect, who pay no attention to it. The shrinkage is not due to the commission man and the buyer, but to the poorly made butter. Butter will shrink two to three pounds if it is leaky. If butter is well made, and I agree with the President, it is possible to make butter from one day to another that would not shrink over quarter of a pound to the tub. Possibly once in a while they might have an accident. We have gone so far as to weigh the actual butter before going into the tub and strip the tubs after shipping and weigh it and the average shrinkage was less than quarter of a pound per tub. Generally speaking, it is possible to make butter that will hold a moisture and we will have a good firm waxy butter.

Another thing is keeping records. How many buttermakers—I don't dare ask them to stand up—keep records? I believe a man should get down to a business basis if he wants to be a buttermaker and wants to be a good one. There are five things that are neglected by many buttermakers. Just a few words about the value of scoring contests and then I am going to quit. I believe in the value of the scoring contests, and I am surprised that you boys over here in Wisconsin, don't send in more butter to your contest than you do. In Minnesota about thirty per cent of our buttermakers are sending their butter to the scoring contest, while in Wisconsin, as near as I can find out, there are only about ten per cent. Why don't buttermakers send their butter to the con-

test? Many people say, "The judges are not honest." Well the judges are correct, the judges know the butter. I had that point brought up to me more often before I did the judging than now. They feel more as though they were hurting my feelings. I dare say, there is not a competent butter judge in this country who would lower himself to score a tub of butter, if he knew who it belonged to he would not do it. I would like to have anyone dispute it if he can. I would absolutely refuse to score in a contest if I knew a single tub, or if anyone tried to show me, or tell me whose tub it was. I believe that holds good in any state, as far as the judges are concerned. I believe all of the butter judges today are as honest as any other class of men, and perhaps more so. They make mistakes, but we must allow for that. The butter judge must depend on his senses of taste and smell. Your senses may not be the same now and tomorrow. Your judgment may vary a little. If you are a little out of condition, you might judge butter a little differently than if you are in the best of condition.

The value the buttermaker receives from sending butter to the scoring contests, depends on the buttermaker himself. If he takes his butter out of his daily make, the contest is going to have much value to him. If a buttermaker writes down a lot of lies, says starter used when the starter was not used, says acid so much when he never had an acid test in the creamery, they are not going to get the benefit they would if they were honest. Sending butter to a scoring contest assists the buttermaker who is on the wrong track in making his butter. The letter sent out by the judge at the scoring contest assists the buttermaker in going to his patrons when the bad quality of butter is due to poor cream. Many of the buttermakers in Minnesota have made good use of these letters. A buttermaker who makes the best butter possible from the raw material he is receiving, is just as good a buttermaker if he makes poor butter, as if he makes good butter. I know some men scoring 90, whom I consider better buttermakers than some scoring 94. The scoring contest helps uniformity. Talk about Danish butter—that is uniform. That is where the contest will help, uniformity in package and possibly a little more

uniform in color. It will possibly help some to have a suggestion from the judge to use a little less color.

I can't speak without saying a word about grading. Until you give the farmer more money for good cream, you are never going to get it, and we find that the grading of cream, where the buttermaker grades the cream and not the patrons, is a success, but where the buttermaker sees the president coming and says, "First grade" before he ever sees the cream, it is not a success. You have got to have an honest buttermaker, and I believe they are almost all honest. It is the right way and I believe it will win out in the long run. I know of creameries receiving only five per cent of sweet cream, having increased it to ninety per cent. Some of you have heard of M. M. Sorenson. He is at Pelican Rapids. He is going to start grading again after working with the patrons for a certain length of time, and getting the patrons in the right frame of mind. See every patron and show him that it is all right to pay according to quality. It is up to the buttermaker. If he has the right kind of tact, and knows how to handle the patrons, grading is all right. I believe little organizations in the counties or in certain districts will help along.

Now I am going to tell you how we won the banner, nine banners out of eleven, and then I am going to quit. We are proud of them. I wish I could tell you how we won them. If I could, I certainly would, because we have some buttermakers in Minnesota, I am sorry to say, whose heads have swelled a little out of shape, on account of these banners, and some of these are the fellows that never helped to win them. That is the funny part of it. I do believe that the fact that 75 per cent of our creameries are co-operative creameries, has something to do with it. I explain it in this way. A buttermaker working in a co-operative creamery is placed in a different position to his patrons than a man who works in an individual creamery. When the farmer owns the creamery himself, the buttermaker can talk a little bit differently than he could to a man who has no interest in the creamery. There are 50 or 75 creameries that get a splendid quality of milk and cream. We have just enough of those fellows over there like

Jorgenson. We are going to keep you fellows guessing. I don't believe that the Minnesota buttermakers are any smarter than you are, that is, if looks go any way. I believe you could make just as good butter, could pasteurize just as well, could use starters and all that sort of thing just as well as the Minnesota buttermakers. Did you ever notice how near we came to losing that banner so many times? Just a little bit of a fraction of a point, so we have to say there is a little luck in there. I don't know whether or not we have a lucky star hanging over Minnesota, but there is to my notion a little luck. We have just happened to have one or two more high scoring tubs than Iowa and Wisconsin, but do not forget, we appreciate you boys and the Iowa boys will some day sweep us off the map, I was going to say, but that is too strong, but carry off the banner. It is a good thing for some of those fellows who have got their swelled heads.

I want to thank you very much for listening to me so attentively. I have tried to do the best I could. I hope you boys will have a chance to visit us at our Minnesota convention. I assure you if I have an opportunity to visit the Wisconsin convention, I shall not miss it. (Great applause.)

PRESIDENT: Are there any questions anybody would like to ask Mr. Sorenson?

MEMBER: Tell him to come again.

PRESIDENT: The time is getting short and we have another paper by Mr. Downing, of the Weights and Measures Department, but owing to the fact that some of the Resolutions Committee have got to leave in a few minutes, I think it would be a good thing to have the Resolutions Committee read their report now.

REPORT OF RESOLUTION COMMITTEE.

RESOLVED that the thanks of this association be extended to the Fond du Lac Business Men's Association for the many courtesies shown our officers and members and also for the liberal cash donation to our premium fund.

RESOLVED that the thanks of this association be extended to Mr. William Mauthe, president of the Fond du Lac Business Men's Association for the warm welcome extended us.

RESOLVED that the thanks of the association be extended to the speakers on the program who so freely contributed to the instruction and entertainment of this convention.

RESOLVED that the thanks of the association be extended to the officers for the able management of its affairs during the past year. Particularly do we wish to extend our thanks to Professor Benkendorf for his untiring efforts in promoting the welfare of our association.

RESOLVED that the thanks of the association be extended to the butter judges, the superintendent of the butter exhibit, C. J. Dodge, also to the Butter, Cheese & Egg Journal, and to the dairy press in general for the publicity given the convention.

RESOLVED that the thanks of the association be extended to the Hon. S. A. Cook of Neenah for his continued loyalty to our association, and for the beautiful chairs donated as prizes. Our thanks are also extended to the supply men and traveling men for their donations and assistance in the interests of the association.

RESOLVED that the thanks of the association be extended to Professor Farrington, in charge of the dairy school; and Professor Lee for the good work in conducting the scoring contests.

RESOLVED that we appreciate the critical condition of the dairy industry as a result of the poor raw material that is manufactured into butter, and we hereby agree and pledge our full support to any measure that tends to improve the general character of our butter product.

RESOLVED that we favor legislation which will permit district organizations the privilege of employing inspectors in

their respective districts at their own expense, said inspectors to have equal authority to enforce laws as those employed by the Dairy and Food Department. We request the legislature now in session to enact such legislation.

RESOLVED that we fully appreciate the danger to the dairy industry as the result of the encroachment of the sale of oleomargarine, and we commend the work of the National Dairy Union in its efforts to prevent any adverse legislation.

WHEREAS, the present dairy conditions bring new problems to be solved regarding the future policy of the National Creamery Buttermakers' Association, therefore, it is,

RESOLVED, that the president and secretary of the WISCONSIN BUTTERMAKERS' ASSOCIATION be requested to act as a committee to work jointly with the executive committee of the National Creamery Buttermakers' Association in adjusting the various problems that arise from time to time.

RESOLVED that it is the sense of this convention that a better enforcement of the laws regarding the anti-discrimination act should be enforced for the better protection of small local creameries.

WHEREAS, practical experience has demonstrated that butter made from pasteurized cream is uniformly of higher quality, and a safer product from a health standpoint may be made, it is the sense of this convention that the dairy industry of Wisconsin would be raised to a higher plane if all the butter in the state was made from pasteurized cream, therefore,

BE IT RESOLVED, that we believe that a law requiring pasteurization of all cream would be beneficial.

RESOLVED that the use of neutralizers for neutralizing the acidity of cream for butter be condemned and that we recommend the passage of a law prohibiting the same.

WHEREAS, The National Creamery Buttermakers' Association is holding their convention at Mason City, Iowa, and knowing that it is a great honor to have the N. C. B. A. meet in our state,

THEREFORE, BE IT RESOLVED, That we instruct Secretary G. H. Benkendorf to personally invite the N. C. B. A. to hold their next meeting in Wisconsin.

WHEREAS, Wisconsin is recognized as the greatest dairy state and the Wisconsin State Buttermakers' Association, the largest of its kind in the world, which constitutes about one-fourth of the following of the N. C. B. A., and that, in order that we may have a large attendance when they meet in our state,

THEREFORE, BE IT FURTHER RESOLVED, That we are in favor of holding a regular state meeting, omitting program only a business meeting, at the most convenient time, during the meeting of the National Association, for the purpose of re-electing officers and other matters that may need attention, and

WHEREAS, The dairy industry has been growing very great and complex during the last twenty-five years and this calling for the need of larger legislative powers, and a more far reaching organization,

THEREFORE, BE IT RESOLVED, That we favor the establishing of a standing national legislative committee or bureau in which shall be invested constructive legislative powers, in which our state is requested to have two members, the president and secretary of the association, and,

THEREFORE, We request that a copy of these resolutions be sent to the officers of the National Association and be spread upon our records.

Signed,

H. H. WHITING,

V. S. KEPPEL,

D. F. WALLACE, Committee.

PRESIDENT: What will you do with the resolutions? It seems to me there are some pretty important resolutions there.

MEMBER: Mr. Chairman, I move their adoption.

Which motion was duly seconded and unanimously carried.

MR. LAURITZ OLSEN: I have a few things to say. I think it is a pertinent time just now. You all know S. A. Cook, of Neenah. I have been requested by a good many to make a motion here to the effect that Mr. Cook be given a life membership in the Wisconsin Buttermakers' Association.

Which motion was duly seconded and unanimously carried.

MR. BARLOW, Madison: I hold before me a picture of a man you all know. Yesterday Mr. Cook made a suggestion to you that you men ought to act upon, because you are able to. The gratification that Mr. Cook would get from your adopting this suggestion would be worth to you all it would cost to you. He suggested that you have a thousand farmer cream producers here. I will just take a few seconds of your time, not being a buttermaker I am in no way interested myself. I talked to three or four managers and those men said they thought it would be best for their creameries to send to this convention two delegates. Let these delegates be sent as the result of competition. Mr. Cook would be glad to meet 100 of them here, as the result of that suggestion. I just make these suggestions as a stranger among you.

PRESIDENT: We will now proceed with the program, if there is nothing else to come before the meeting. I will call on Mr. Downing for his paper on Weights and Measures.

THE TESTING OF WEIGHING AND MEASURING APPLIANCES IN CREAMERIES AND CHEESE FACTORIES.

By F. P. Downing, Madison.

Ladies and gentlemen: I am glad to see that there are quite a few who have the temerity to remain here and have another paper inflicted upon them. It simply to my mind goes to show

that weights and measures is a subject that you are all interested in; you are alive to the situation of having accurate scales and glassware. Perhaps there is no industry in Wisconsin today that needs accurate scales and glassware more than the industry in which you are engaged. The raw material, the milk and the cream, as it comes to you must be weighed; the butter whether it is in prints or tubs must be weighed correctly; the fat content of the cream must be determined and you have got to have accurate glassware and accurate scales to do that.



F. P. DOWNING

I want to take up first the matter of glassware and follow that out. In making the Babcock test we have got to use the milk bottle or cream bottle and the cream test bottles. We have been doing a great deal down at Madison along the lines of testing this glassware. There are some things, perhaps, we do not thoroughly understand. Take for example, the testing of a milk pipette. We all know

that pipette must deliver 17.16 cc., and I want to dwell on the word "deliver"; not "contain," but "deliver." If that pipette is going to deliver that amount, the opening of that pipette must be controlled in a certain way. One pipette would deliver in three seconds and another one in eight seconds, but more will stick to the walls with a large opening than with a small. Dr. Babcock did not make it known when he carried on his original investigations in this line, it was not published generally that the length of that graduated column had something to do with that accuracy of the test. In our specifications we say that the length of the graduated columns must be 75 millimeters. What is the result?

I have here two samples of milk bottles. Even from a distance you can see that the neck of one is much narrower than the other. The length of the gradation in one is 92 while the gradations in the other is about 46 millimeters. Dr. Babcock's bottle in which he made all his investigations was 75 millimeters in length, and in making that test you don't get all of the fat out of the bottle. .2 of a per cent will remain in the bottle.

Take the matter of cream bottles. I may say here again Dr. Babcock had no intention that the manufacturers of glassware should put out a wide mouthed bottle of this sort. We have specifications in Wisconsin allowing five different types of test bottles. I would suggest buying either the 7-inch or the 9-inch 50 per cent.

To show you the importance of having this glassware tested, here is a bottle which was tested at our office which shows an error of $2\frac{1}{2}$ per cent. Here is another which shows an error of 5 per cent at 25, and 10 per cent at 50. Suppose that bottle got out into your creamery. Take this one here. Suppose you are making determinations on a hundred pounds of 30 per cent cream. The error on that amount would be about a pound and a half on that one determination. Multiply that through the year and you see what the loss would be. If bottles of this sort get out into the state, they will have a decided effect upon your overrun.

While I am on this subject, when you send bottles to Madi-

son to have them tested, don't send them in this condition. There is no use in testing bottles for accuracy if they are going to be used in such a condition as that, absolutely no use at all, as the fat remaining in there will make as much difference as the inaccuracy in the bottle itself.

The subject of cream test scales is the subject that most of you have talked over amongst yourselves or with the inspectors. We made an investigation on this subject and we found that there were certain types of cream test scales that were absolutely unfit to be used in weighing such a small sample as 9 or 18 grams. They were not much more accurate, in fact, than an 18 cc. cream pipette which is forbidden by law, and in our investigation, even with new scales and under ideal conditions, we couldn't get the results from 3 to 6 and 7 per cent.

Of course, the matter of speed is an important one with you when you have from 100 to 200 tests to make at a time. There is a demand for a 12 bottle scale, and there are now on the market two 12 bottle scales which will take the place of the old ones and which are very sensitive to even less than one drop of cream. It is not necessary to shut such a scale up in a cubby-hole where it is warm. Make a wind shield and prevent the wind from getting at it.

Just a word on the subject of large scales. It is up to you gentlemen to buy the scales to be used in the factory, and it is up to you to know something about the fundamental principles of scale construction, to know what is the proper type of scale to buy, what is the most trouble, and so on. In order to know that you have got to know what elements go to make up a good scale.

There are five elements every good weighing device should possess. First of all I should put accuracy, then sensibility, constancy, durability, and last of all speed. Let me repeat those, because you should know what those are: Accuracy, sensibility, constancy, durability, and speed. You will all agree that accuracy is fundamental. A scale that is not accurate is a false weighing device which should be either thrown out or sent to the factory

and repaired. But perhaps you are not aware that there is no such a thing as absolute accuracy. The weighers or sealers do not compare identically with the scales we have at Madison, and the ones we have at Madison do not compare identically with those of the Bureau at Washington. But the errors are so small as to be negligible. When we go out in your factory and test your scales we are really comparing your weights and your scales with those at Washington. There being no such a thing as absolute accuracy, it is necessary to have tolerance. That is a deviation from accuracy. Those tolerances must not be too much. They must be commercially accurate. And in the box here we have the tolerance with which both scales and weights must comply.

There is a very common belief all over the state and in all lines of business that a scale that is in balance is right. There could not be anything further from the truth than that. A scale can be in perfect balance and absolutely wrong. There could be a hundred ways in which that scale might be in balance and yet be inaccurate. I have here a beam out of an ordinary scale. I could have that in balance, slide it to 50, I could put a 50 pound weight on and it might balance and it might not. The poise should be absolutely right. Suppose I were to put a penny in the top of that. It would balance. If you allow butter or grease to accumulate on that poise, it is going to be wrong. Then the gradations on your beam may not be accurately graded. The counterpoise, that is, may not be right. The leverage on that scale may not be right. I might go on and mention others. So much for accuracy.

By sensibility, and that was one of the five, I mean the action in your beam responding to a small weight. A scale that will respond to a small weight is a sensitive scale. In the weighing of your cream it is essential for that to be very sensitive. A scale of this type should be sensitive to two of the smallest divisions on the scale, then it is sufficiently sensitive for the ordinary weighing of milk. That probably would not be sensitive enough when it comes to weighing an article like butter.

What goes to make a scale insensitive? A number of those factors you can't control, because it depends on the principle on

which the scale is manufactured, but there are a few things you have absolute control over. If you allow that scale to wear, if you allow the pivots underneath that scale to become worn or rusty through the action of steam, etc., you are going to have bearing something like this one. There is a large surface there, and with a heavy load on particularly, it is going to take weight to move that pivot. Here is a brand new one, sharp as a knife edge. When you see that even movement of the beam, then you have a sensitive and an accurate scale.

Just a word on your butter scales. You have butter printers, many of them very close to being accurate if you use them right, but you should have a scale to check up on the weight of your prints. Two weeks ago down in the western part of the state I dropped into a grocery store and found some prints made by the creamery in that town weighing from 15 to 15½ ounces. It is not possible to tell you what to do with those prints, but if I was in your place I would send them back. I said to the butter-maker, "What is the trouble here?" "Why," he said, "I got some butter back here yesterday because it was underweight." "When did you check up on that printer?" "When the inspector was here the last time." Our record shows that an inspector had not been there for some time. It is ridiculous to attempt to use a printer all that time without checking up on the weight of your prints. You ought to have a small scale there for doing that weighing.

With regard to durability, that is a point that is of vital importance to you. They all look alike to you, but buying a scale is just the same as buying a pair of shoes. You get a cheap pair, you wear them two or three times and they are worn out. Look to see if that scale has steel pivots. Buy a scale on which the maker is not ashamed to put his name. Don't buy a scale that goes by some fancy name, because it means they are ashamed to own up.

When I speak of constancy I mean that the scale must weigh the same at all times; today, tomorrow and every day. There is a chance for a variation, some of you have experienced changes.

You take some of the cheaper makes of portable scales. Take the spring scale. You are all familiar with the haulers' scale. It is the only thing that can be hung on the end of a wagon. It varies with the temperature. The Bureau of Standards made some tests. They took a 120 pound spring scale. They put it into an ice box at freezing temperature. They weighed 125 pounds. Then they took it out and put it in an oven at summer heat and there was a pound in every 125. The only thing I can say on these haulers' scales is this, when they are new they are fairly accurate, but the spring soon weakens and becomes lighter, the load weighs more than it ought and you are paying for more cream than you get. I would get a 50 pound weight and I would check that scale up and the moment I found that scale was getting off I would throw it away.

In regard to the last factor, the factor of speed. It isn't as important as the others.

I will not take any more of your time on this subject. If there are any questions you would like to ask I will answer them.

MR. WHITING: I would like to ask about the 9 gram 50 per cent bottle.

MR. DOWNING: The Attorney General in our state says that the 9 gram 9 inch 50 per cent is not a legal bottle.

MR. WHITING: This is a 6 inch.

MR. DOWNING: I think in the 6 inch the gradations are almost too close together. The law specifies that the unit shall be 18 grams. It is confusing.

MR. H. N. HINTZ, KNOWLTON: I want to ask you if it is against the law to use the 9 gram.

MR. DOWNING: The Attorney General has ruled that the 9 gram bottle is illegal.

SECRETARY BENKENDORF: The Business Men's Association of Fond du Lac made us a very generous offer this year, the use of rooms, halls, \$300.00 in cash, etc. They were very generous in their offer.

Mr. S. A. Cook has offered us four chairs. The man that gets the first prize will get the first choice. We have 182 tubs

entered. There was one tub lost, a tub coming from the southwestern part of the state. In addition to the prizes offered in the catalog the Dominion Cleaner and Cleanser Company have offered a prize and the S. S. Borden Company have also offered a prize.

I appreciate your kind co-operation in making this convention what it was, and I assure you that I really feel if we had had better weather we would have had a better convention.

We will distribute the district prizes in my office.

PRESIDENT: The convention is adjourned.

JUDGES' SCORES.

The Fond du Lac Business Men's Association provided the best arrangement for the care of the butter we ever had. The room in the armory was large, well ventilated, well lighted and provided with plenty of tables, etc., for the display of the butter. The judges were: Prof. C. E. Lee, Madison, H. C. Larson, Madison, and Wm. Schneider, Johnson Creek. On account of illness



PROF. C. E. LEE.

Mr. Larson was unable to be present and Mr. Schneider was caught in a snow blockade and did not arrive in Fond du Lac until Tuesday morning, too late to take part in the scoring.

DISTRICT NO. 1.

	Score
Wm. F. Krohn, Whitewater	92.00
C. W. Page, Elkhorn	92.00
Aug. Ottow, Brodhead	92.00
Chas. D. Kelley, East Troy	96.25
Harry D. Nichols, Elkhorn	95.5
J. J. Sarauer, Clinton	95.75
G. H. Kothlow, Edgerton	92.00
John Meyer, Slades Corners	95.00
W. J. Clark, Lake Beulah	95.50
Hans S. Hansen, Sharon	91.50
Henry C. Wolfram, Whitewater R. 3	90.00
Martin von Liere, Troy Center	94.00

DISTRICT NO. 2.

	Score
F. V. Merryfield, Mukwonago	94.50
I. W. Stryker, Nashotah	95.50
Geo. Young, Nashotah	94.50
G. P. Sauer, Cedarburg	96.00
H. Skerhutt, Cedarburg	94.00
F. M. Werner, Waterloo	95.00
Guy Tyler, Cedarburg	93.50
Albert Hoeffke, Waterloo	91.00
R. Steinkraus, Ft. Atkinson	90.50
R. J. Else, Helenville	92.50
Frank Blumenstein, Sullivan	94.50
Fred C. Kutz, Johnson Creek	91.50
L. E. Butler, Helenville	96.50
H. H. Whiting, Johnson Creek	97.00
H. M. DeGolier, Cambridge	96.00
Otto Gierach, Thiensville	91.50
F. L. Hill, Menomonie Falls	93.50
A. G. Perschbacher, West Bend	91.50
F. B. Kauffmann, Ft. Atkinson	95.50
M. E. Brunner, Ft. Atkinson	90.50
Albert E. Will, Ft. Atkinson	93.50
Paul Kottke, Cedarburg	92.00

DISTRICT NO. 3.

	Score
Robert Ruland, Lomira, R. 2	93.25
G. M. Stewart, Mazomanie	91.50
John Pieper, Stoughton	90.00
Hod Doolan, Marshall	95.00
A. J. Paynter, Cross Plains	90.00
O. A. Krueger, Albion, Box 4.....	92.00
L. L. Bolstead, Basco	96.00
H. E. Griffin, Mt. Horeb	93.50
Herman Hartweg, Deerfield	96.00
E. V. Harphold, Wycocena	92.50
H. J. Herreman, Black Earth	93.00
H. P. Nielson, Deerfield	91.00
A. C. Hillstad, Oregon	96.00
Henry T. Kipp, Cambridge	92.00
H. E. Griffin, Mt. Horeb	92.50

DISTRICT NO. 4.

	Score
Julius Kretschmar, New Lisbon	93.00
John Mortenson, Camp Douglas	92.50
W. A. Moyes, Ironton	94.50
Frank Meisner, Fennimore	93.00
Val Dressler, Louisburg	tub lost
L. W. Turner, Montfort	90.00
W. J. Dehn, La Valle	95.75
Olaf Larson, Fennimore	96.00
Frank Shepherd, Mt. Sterling	91.50
John H. Miller, Baraboo	95.50
C. P. Andreason, Plain, R. D.	90.50
Ole Hanson, Hazel Green	91.50
John Fjelsted, Elroy	90.00

DISTRICT NO. 5.

	Score
L. H. Winter, Eau Claire	94.25
Wm. Sieger, Chaseburg	91.50
Orwin Melsby, Durand	91.50
E. G. Rasmussen, Melvina	91.50
D. F. Wallace, Alma Center	96.00
Jacob W. Ringger, Durand R. 4	91.00
Wm. F. Mehleis, Bangor	91.00

	Score
H. H. Peterson, Warren	91.50
G. N. Marvin, Black River Falls	90.50
Carl Lambert, Augusta	91.00
F. A. Grawin, Mt. Tabor	91.00
M. H. Anderson, Kendall R. 3.....	92.00
A. W. Zimmerman, Norwalk	91.50
John Schield, Fall Creek	91.50
Geo. E. Day, Osseo R. 4	90.00
Robert V. Sleyster, Cochrane	91.00
J. S. Goodrich, Fairchild	90.00
H. A. Johnson, Westby	93.50
G. F. Hanan, Eau Claire	90.00
Thos. J. Berge, Northfield	91.50
Frank J. O'Hearn, Melrose	92.00
A. C. Marks, Shennington	92.00

DISTRICT NO. 6.

	Score
Anton Nachtwey, Dorchester	93.50
J. M. Hanson, Greenwood	94.00
Robert Nachtwey, Dorchester	92.50
Abe Speich, Berlin	90.00
Paul Hahn, Wausau, R. 2.....	94.50
F. S. Root, Rudolph	91.00
A. J. Moldenhauer, Neillsville	91.50
J. P. Rank, Rozellville	92.50
T. J. Warner, Rosholt	91.50
A. M. Kelnhofer, Blenker	92.00
Chas. M. Sanford, Amherst Jct.	92.50
Odin Christensen, Nelsonville	95.50
Christ Chistensen, Neillsville	96.00

DISTRICT NO. 7.

	Score
J. A. Betthausen, Coloma	95.50
L. A. Olson, Waupaca	91.50
R. C. Cleaves, Iola	92.25
Wm. Warnke, Kingston	94.50
Andrew Moertl, Seymour	91.50
E. H. Priebe, Princeton	92.50
O. F. Peterson, Larsen	95.00
John Rasmussen, Wautoma	95.50
R. A. Garlick, Neshkoro	91.50

	Score
Robert S. Anderson, Northland	93.00
George Jenson, Saxeville	93.50
Warnke Bros. Creamery, Kingston	95.50
Geo. Broecker, Markesan	92.00
H. W. Kircher, Fisk	90.00
Theo. R. Peterson, Weyauwega	92.00
Geo. W. Moody, Arkdale	92.00
Chas. H. Prust, Montello	91.00
R. L. Sleyster, Endeavor	92.00

DISTRICT NO. 8.

	Score
Earl Longteau, Green Bay R. 1.....	95.00
E. J. Peschke, Fairwater	92.50
P. N. Korb, Fairwater	93.50
E. L. Adams, Oakfield	91.50
Hubert Bartel, New Holstein	95.75
H. A. Wheeler, West De Pere	95.00
W. F. Hill, Brandon	92.00
Roy Brookins, Oakfield	92.00
O. A. Kielsmeier, Manitowoc	92.00
Wm. Tank, Van Dyne	92.00
F. H. Jones, Fond du Lac, R. 5.....	90.00
A. L. Oestreich, Rosendale	95.50
R. J. O'Keefe, DePere R. 1.....	92.00
Arthur Roegner, Chilton	93.50
D. W. Respalje, Waupun, R. 22	93.00
Quirin Moersch, Peebles	95.00
Otto Zick, Fond du Lac	91.00
M. Christopherson, New Franken	95.00
Math. J. Schneider, Malone	94.00
Lauritz Olsen, West DePere	96.00
Kielsmeier Co., Manitowoc	95.00

DISTRICT NO. 9.

	Score
E. W. Scheel, Turtle Lake	94.00
Axel Kristensen, Luck	93.50
J. J. Thull, Amery R. 4	95.50
Geo. Garlid, Roberts	91.50
Axel R. Petersen, Turtle Lake	94.50
R. P. Colwell, River Falls	90.00
Paul McCauley, Elmwood	91.50

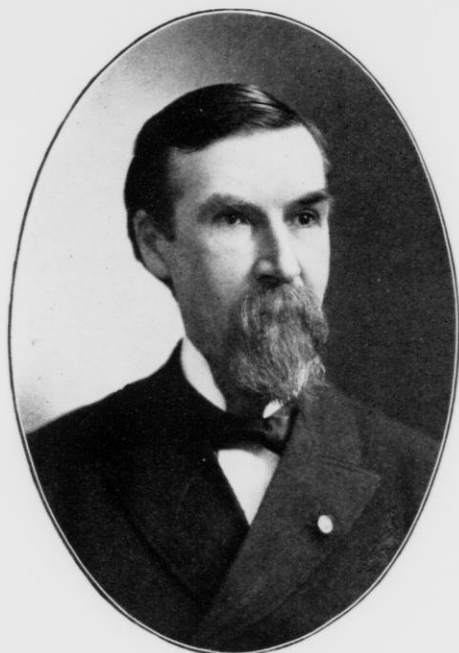
	Score
T. J. Hanlon, Prescott	92.00
Ole Esker, Barron	92.50
Oscar Johnson, Clear Lake	91.00
C. A. Benson, Clear Lake R. 3.....	92.50
J. N. Vassau, Amery	91.00
Frank D. Packard, Deronda	91.50
John E. Mattson, St. Croix Falls	95.50
Theodore Lennartz, Fredonia	95.00

DISTRICT NO. 10.

	Score
Herbert B. Russell, Butternut	91.00
A. N. Finstad, Albertville	95.00
M. G. Koepsell, Little Black	92.00
Carl Jorgenson, Rose Lawn	96.75
J. W. Sullivan, Chippewa Falls	92.00
Louis Peterson, Bonduel	93.25
Louis Schawitzer, Sarona	91.50
E. R. Eckwright, Bloomer	96.00
Lewie M. Hanson, Iron River	91.50
R. A. Livingston, Moquah	92.00
A. F. Schulz, Phlox	92.50
Hans Christianson, Rose Lawn	96.00
Jos. Schirmer, Bloomville	91.50
W. F. Paulson, Phillips	93.00
O. F. Herreman, Crandon	95.75

NON-RESIDENTS.

R. J. Brigham, Burkett, Ind.	90.00
H. C. Jochumson, Park River, Mich.	94.50
Robt. Wagner, Sumner, Iowa	92.00
J. P. Grande, 35 Hermitage Ave., Chicago	94.00
B. E. Bragg, Priston, Iowa	93.00
John Grosser, Geneva, Minn.	91.00



HON. S. A. COOK

One of the pleasantest recollections of the Fond du Lac convention will be the short talk given by Hon. S. A. Cook. The name of Mr. Cook is familiar to most Wisconsin buttermakers, but many had not had an opportunity to meet the man who has done so much for our association until his appearance at the convention. That his kindness and generosity are appreciated was evidenced by the cordial reception given him and the unanimous vote by which Mr. Cook was made a life member of the Wisconsin Buttermakers' Association.

STATE PRIZES.

The Hon. S. A. Cook of Neenah, who for many years has regularly donated three handsome leather chairs to this association, voluntarily came forward this year and offered four State prizes as follows:

First prize—Leather chair, value \$30.00.

Second prize—Leather chair, value \$25.00.

Third prize—Leather chair, value \$20.00.

Fourth prize—Leather chair, value \$15.00.

These chairs are of the best quality and workmanship and were awarded to the parties exhibiting the highest scoring butter at the convention. Surely our association feels grateful to Mr. Cook for his continued, unbounded generosity.

THE PRIZEWINNERS.

The following is a list of the exhibitors who were so fortunate as to win the prizes offered by the Association:

First prize—H. H. Whiting, Johnson Creek.

Second prize—Carl Jorgenson, Rose Lawn.

Third prize—L. E. Butler, Helenville.

Fourth prize—Charles D. Kelley, East Troy.

DISTRICT PRIZES.

District prizes will again be offered this year under the same rules as governed this contest at previous conventions. As there are ten districts there will be thirty prizes offered in all. They are as follows:

First prize—A twelve piece set silver knives and forks, best Community silver. Georgian pattern.

Second prize—A ten piece toilet set in nice leather case.

Third prize—Three piece stag horn carving set—sterling silver ferrules. Offered by the J. B. Ford Co., Wyandotte, Mich., manufacturers of Dairymen's Cleaner and Cleanser.

First district—Milwaukee, Racine, Kenosha, Walworth, Rock and Green counties.

1. J. J. Sarauer, Clinton.
2. W. J. Clark, Lake Beulah.
3. Hans S. Hanson, Sharon.

Second district—Jefferson, Waukesha, Washington and Ozaukee counties.

1. H. M. DeGolier, Cambridge.
2. F. B. Kauffman, Ft. Atkinson.
3. F. M. Werner, Waterloo.

Third district—Dane, Columbia and Dodge counties.

1. Herman Hartwig, Deerfield.
2. H. E. Griffin, Mt. Horeb.
3. H. J. Herreman, Black Earth.

Fourth district—Grant, La Follette, Iowa, Crawford, Richland, Sauk and Juneau counties.

1. Olaf Larson, Fennimore.
2. W. J. Dehn, La Valle.
3. John H. Miller, Baraboo.

Fifth district—Vernon, Monroe, La Crosse, Jackson, Trempealeau, Buffalo, Eau Claire and Pepin counties.

1. D. F. Wallace, Alma Center.
2. L. H. Winter, Eau Claire.
3. A. C. Marks, Shennington.

Sixth district—Marathon, Portage, Wood and Clark counties.

1. Christ Christenson, Neillsville.
2. Paul Hahn, Wausau.
3. J. M. Hanson, Greenwood.

Seventh district—Adams, Marquette, Waushara, Winnebago, Outagamie, Waupaca and Green counties.

1. Wm. Warnke, Kingston.
2. R. C. Cleaves, Iola.
3. Theo. R. Peterson, Weyauwega.

Eighth district—Fond du Lac, Sheboygan, Calumet, Manitowoc, Brown and Kewaunee counties.

1. Lauritz Olsen, West DePere.
2. Hubert Bartel, New Holstein.
3. A. L. Oestreich, Rosendale.

Ninth district—Pierre, St. Croix, Dunn, Barron and Polk counties.

1. Axel R. Peterson, Turtle Lake.
2. E. W. Scheel, Turtle Lake.
3. Axel Kristensen, Luck.

Tenth district—Burnett, Douglas, Washburn, Rusk, Chippewa, Sawyer, Bayfield, Taylor, Price, Ashland, Iron, Lincoln, Oneida, Vilas, Langlade, Shawano, Forest, Florence, Marinette, Oconto and Door counties.

1. Hans Christenson, Rose Lawn.
2. O. F. Herreman, Crandon.
3. Louis Peterson, Bonduel.

AN ACKNOWLEDGEMENT.

In addition to the state and the district prizes offered by the Association, the following concerns co-operated with our officers in an effort to make the Fond du Lac convention a success by offering special prizes:

S. S. Borden & Co., Chicago, Ill.

J. B. Ford & Co., Wyandotte, Mich.

The members of the Wisconsin Buttermakers' Association are certainly grateful for the interest manifested in the welfare of the organization by the above named firms.

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