

WISCONSIN CURD TEST APPLIED TO CITY MILK SUPPLIES.

"The Wisconsin curd test is a practical means of tracing the source of tainted conditions in milk. The test is made by adding rennet to milk; after curdling, the curd is cut into small pieces, thus allowing the whey to separate as in cheese making. The drained curd is then incubated at about blood heat to facilitate the rapid growth of gas-forming bacteria. Organisms capable of producing a gassy curd are thus able to overcome the lactic bacteria, so that within six or eight hours the presence of possible taints may be demonstrated. Taints caused by other than gas-forming organisms may also be detected by this forced development. Curds made from good milk occasionally show large, irregular, so-called mechanical holes due to the lack of pressure on the curd particles, while poor milks contain innumerable small pin holes and possess a decidedly bad odor."

Figure No. 1 represents a curd from a good milk. The large holes are mechanical. Such a curd has a smooth, velvety appearance, close, firm, even texture and a clean, agreeable flavor or odor and indicates that there are no deleterious bacteria present, that the milk has been produced under cleanly surroundings and has been suitably cared for.

Figure No. 2 represents a curd from a tainted milk. The numerous small "pin holes" are due to gas formed by the rapid development of sugar-fermenting bacteria. Such a curd indicates an imperfect milk. Those bacteria that find their way into the milk through the introduction of filth and dust are particularly prone to produce this kind of curd. This type of fermentation is very often found during the summer months.

Figure No. 3 is a curd from a foul milk. When received this milk showed no abnormal symptom; but the foul odor and spongy texture were demonstrated in six to eight hours.

The presence of taints in milk that are caused by the development of living organisms can be detected with certainty by this test. Bad milks, or milks produced under unclean or unsuitable conditions, will betray the presence of gas-producing bacteria in varying degrees by the spongy texture and the off flavor of the curd.

Gas-forming bacteria are so frequently found in milk that tests usually show the presence of a few gas holes, if the climatic conditions



FIG. 1.

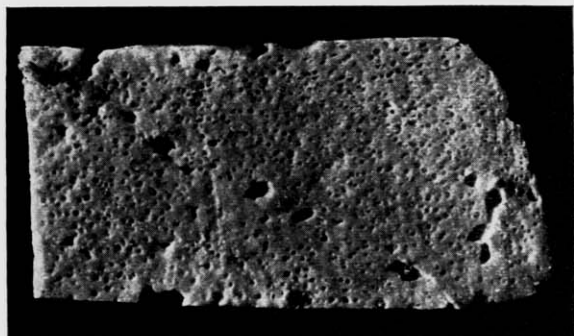


FIG. 2.

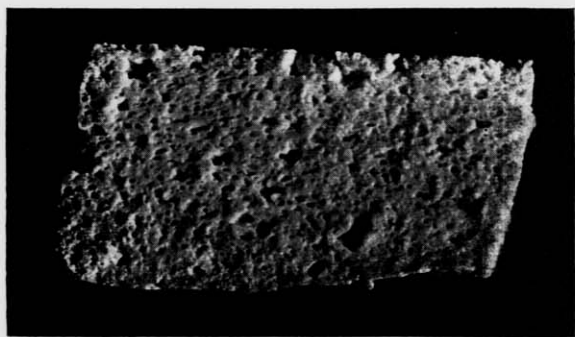
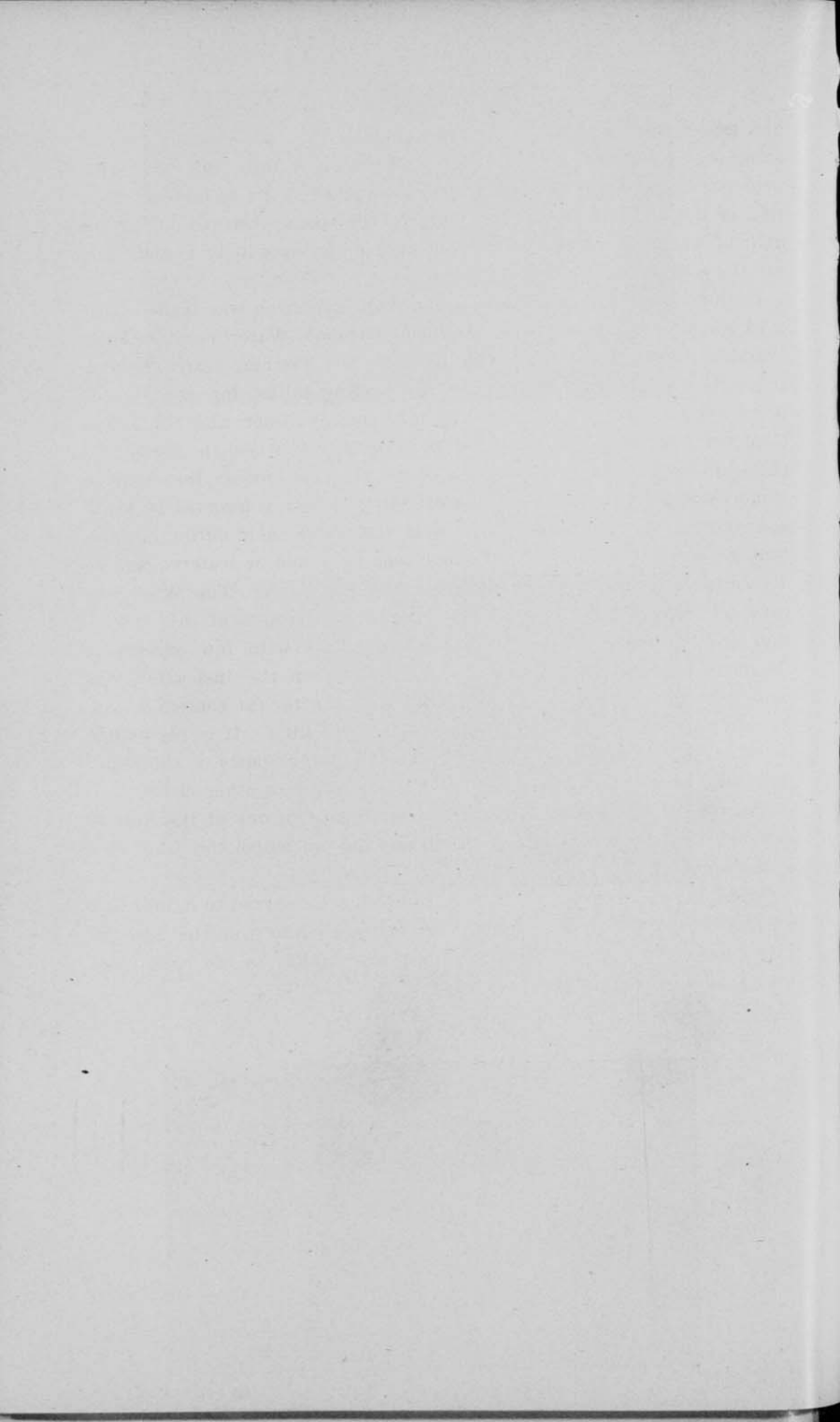


FIG. 3.



are especially favorable for growth, as is often the case in the hot summer months. Milks, therefore, which show only the occasional presence of gas holes are not to be condemned. The imperfect condition of the milk is revealed not only by the spongy texture but by the odor of the curd. Sometimes an off odor or flavor will be evident and yet the texture of the curd be fairly good.

During the month of August a thorough inspection was made of the milk supplies of the cities of Madison, Baraboo, Watertown, Oshkosh, Wausau, Grand Rapids and La Crosse. Dr. Fischer, state chemist, improvised a portable laboratory for testing milks for the various preservatives. Mr. U. S. Baer, assistant commissioner, and Mr. James G. Moore, creamery inspector, and Dr. Fischer comprised the force. All these inspected the milk supplies of all of these cities; the commissioner was present and Mr. Carswell, dairy inspector, assisted in Madison and Baraboo. All the milks were tested for their butter fat content, to determine whether they had been skimmed or watered and to determine whether any preservatives had been used. The Wisconsin curd test was applied to all these milks. The results of this inspection are published below and demonstrate that with few exceptions the milk supplied these cities on the days when the inspection was made was of a high order of excellence as to butter fat content, cleanliness and freedom from preservatives of every kind. It is reasonable to infer that as these cities are located in different parts of the state, they may be taken as typical of the milk supplied to other cities.

The test of the Madison city milks was made on one of the hottest days of the season, a day hotter than any day on which the other city milks were tested.

Where the curds from the various samples are referred to figures 1, 2 or 3, it is not meant that the half-tone cut was made from that specific curd; but that the curd there specified was similar to the curd from which the half-tone picture was made.

August 16, 1904—Madison, Wis.

- F. J. Main: Louis Anderson driver, bottle; per cent butter fat, 3.95; flavor clean; texture close, firm; see figure 1.
- J. Capaul: Can, per cent butter fat, 4.4; flavor badly tainted; texture spongy; see figure 3.
- J. Capaul: Bottle, per cent butter fat, 4.2; flavor clean; texture close, firm; see figure 1.
- J. J. Pfister: Bottle, per cent butter fat, 4.45; flavor bad; texture spongy; see figure 3.
- J. J. Pfister: Can, per cent butter fat, 4.4; flavor clean; texture close, firm; see figure 1.
- A. Frisch: Bottle, per cent butter fat, 4.0; flavor clean; texture close, firm; see figure 1.
- A. Frisch: Can, per cent butter fat, 4.1; flavor badly tainted; texture spongy; see figure 3.
- Wlechmann Bros.: Bottle, per cent butter fat, 3.6; flavor fair; texture fair.

- W. W. Welch: Bottle, per cent butter fat, 3.8; flavor clean; texture close, firm; see figure 1.
- W. W. Welch: Can, per cent butter fat, 5.1; flavor clean; texture close, firm; see figure 1.
- Eken Bros: Can, per cent butter fat, 4.05; flavor clean; texture close, firm; see figure 1.
- H. A. Steinhauer: Bottle, per cent butter fat, 4.35; flavor clean; texture close, firm; see figure 1.
- H. A. Steinhauer: Can, per cent butter fat, 3.85; flavor tainted; texture soft, mushy.
- E. Busse: Bottle, per cent butter fat, 4.5; flavor clean; texture close, firm; see figure 1.
- Top Notch Dairy: Fred Buhler, driver, bottle, per cent butter fat, 4.45; flavor clean; texture close, firm; see figure 1.
- L. H. Kleinheinz: Joe Kleinheinz driver, can, pasteurized, per cent butter fat, 3.7; flavor fair; texture fair.
- Wm. Doerfer: Ed. Doerfer driver, can, per cent butter fat, 3.65; flavor tainted; texture spongy; see figure 3.
- L. W. Gay: John Beale driver, can, per cent butter fat, 3.85; flavor clean; texture close, firm; see figure 1.
- Model Creamery: John Hagan driver, can, pasteurized, per cent butter fat, 6.1; flavor fair; texture fair.
- Joe Pearson: Ed. Lawrence driver, can, per cent butter fat, 4.8; flavor badly tainted; texture spongy; see figure 3.
- Otto Toepfer: Can, per cent butter fat, 3.95; flavor clean; texture close, firm; see figure 1.
- Otto Toepfer: Can, per cent butter fat, 3.55; flavor clean; texture close, firm; see figure 1.
- Wichmann Bros.: Bottle, per cent butter fat, 4.0; flavor not clean; texture soft and mushy.
- L. W. Gay: A. C. Sykes driver, can, per cent butter fat, 3.8; flavor fair; texture fair.
- A. B. Clayton: Can, per cent butter fat, 4.15; flavor clean; texture close, firm; see figure 1.
- Model Creamery: Con Stellingware driver, can, per cent butter fat, 4.1; flavor tainted; texture spongy; see figure 3.
- Cardinal Creamery: John Kleinheinz driver, can, per cent butter fat, 3.75; flavor clean; texture close, firm; see figure 1.
- H. Hatfield: Can, per cent butter fat, 4.25; flavor tainted; texture spongy; see figure 3.
- Mr. Pyre: Bottle, per cent butter fat, 4.5; flavor badly tainted; texture spongy; see figure 3.
- L. W. Gay: John Gay driver, bottle, per cent butter fat, 3.5; flavor clean; texture close, firm; see figure 1.
- E. Bruns: Can, per cent butter fat, 4.4; flavor clean; texture close, firm; see figure 1.
- L. Roth: Can, per cent butter fat, 4.3; flavor clean; texture fair.
- H. Harbort: Can, per cent butter fat, 5.05; flavor clean; texture close, firm; see figure 1.
- Joe Pearson: Joe Pearson driver, can, per cent butter fat, 4.10; flavor clean; texture close, firm; see figure 1.
- Wm. Oldenburg: Can, per cent butter fat, 3.70; flavor badly tainted; texture soft and spongy; see figure 3.
- Model Creamery: Faucet store, per cent butter fat, 4.8; flavor badly tainted; texture spongy; see figure 3.
- Model Creamery: Walter Nunn driver, can, per cent butter fat, 4.1; flavor clean; texture close, firm; see figure 1.
- C. Lapaul: Can, per cent butter fat, 4.1; flavor tainted; texture spongy; see figure 3.
- Cardinal Creamery: Store, per cent butter fat, 4.55.

August 18, 1904. Baraboo City.

- H. H. Wordelman: Louis Wordelman driver, bottle, milk, per cent butter fat, 4.60; flavor clean; texture close, firm; see figure 1.
- H. H. Wordelman: Bottle, cream, per cent butter fat, 40.00.
- H. H. Wordelman: Can, milk, per cent butter fat, 5.30; flavor clean; texture close, firm; see figure 1.
- Geo. H. Holmes, bottle, milk, per cent butter fat, 3.50; flavor clean; texture close, firm; see figure 1.
- Geo. H. Holmes: Bottle, cream, per cent butter fat, 20.75.
- Geo. H. Holmes: Can, milk, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- C. H. Varnell: L. I. Stillson driver, bottle, milk, per cent butter fat, 5.00; flavor clean; texture close, firm; see figure 1.
- C. H. Varnell: Bottle, cream, per cent butter fat, 28.50.
- C. H. Varnell: Can, milk, per cent butter fat, 5.20; flavor slightly tainted; texture somewhat spongy; see figure 2.
- Geo. H. Holmes: Can, milk, night, per cent butter fat, 3.90; flavor fair; texture close, firm.
- Rudolph Schumacher: Can, milk, per cent butter fat, 5.70; flavor clean; texture fair.
- Rudolph Schumacher: Bottle, cream, per cent butter fat, 26.00.
- W. E. Brown: Can, milk, per cent butter fat, 4.00; flavor clean; texture close firm; see figure 1.
- W. E. Brown: Bottle, cream, per cent butter fat, 24.00.
- Geo. H. Holmes: Can, milk, morning, per cent butter fat, 4.20; flavor clean; texture close, firm; see figure 1.
- M. J. Tyler (Van.): Can, milk, per cent butter fat, 4.60; flavor clean; texture close, firm; see figure 1.
- M. J. Tyler: Cream, bottled, per cent butter fat, 22.00.
- M. J. Tyler: Can, milk, per cent butter fat, 5.10; flavor clean; texture close, firm; see figure 1.
- A. G. Glover: Harvey Ott driver, can, milk, nights, per cent butter fat, 3.70; flavor clean; texture close, firm; see figure 1.
- A. G. Glover: Bottle, cream, per cent butter fat, 20.25.
- A. G. Glover: Can, milk, morning, per cent butter fat, 4.20; flavor clean; texture close, firm; see figure 1.
- F. W. Simons: Can, milk, per cent butter fat, 5.90; flavor clean; texture close, firm; see figure 1.
- F. W. Simons: Can, cream; per cent butter fat, 30.00.

August 19, 1904. Watertown City.

- H. L. Gillis: Can, milk, per cent butter fat, 3.20; flavor clean; texture close, firm; see figure 1.
- H. L. Gillis: Bottle, milk, per cent butter fat, 3.80; flavor tainted; texture somewhat spongy; see figure 2.
- H. L. Gillis: Bottle, cream, per cent butter fat, 23.00.
- E. Marquart, Prop. Spring Valley Dairy: A. H. Leuck driver, bottle, cream, per cent butter fat, 21.50.
- E. Marquart, Prop. Spring Valley Dairy: Can, milk, per cent butter fat, 3.60; flavor clean; texture close, firm; see figure 1.
- Wm. Frederick: Can, milk, per cent butter fat, 4.80; flavor slightly tainted; texture fair.
- Clover Leaf Dairy: Can, milk, per cent butter fat, 4.20; flavor clean; texture close, firm; see figure 1.
- J. C. Harrison, grocer: Cream, bottled, per cent butter fat, 25.00.
- J. C. Harrison: Bottled milk, per cent butter fat, 3.60; flavor clean; texture close, firm; see figure 1.
- John E. Heismann, grocer: Bottled cream, per cent butter fat, 18.00.

- John E. Heismann, grocer: Bottled milk, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- Julius Doar: Can, milk, per cent butter fat, 3.60; flavor clean; texture firm; see figure 1.
- H. Bargainz: Can, night's milk, per cent butter fat, 3.60; flavor clean; texture, close, firm; see figure 1.
- H. Bargainz: Can, morning milk, per cent butter fat, 3.80; flavor clean, texture, close, firm; see figure 1.
- H. Bargainz: Can, morning milk, per cent butter fat, 4.00; flavor clean; texture, close, firm; see figure 1.
- Jim Enright: Can, night's milk, per cent butter fat, 4.40; flavor tainted; texture spongy; see figure 3.
- Jim Enright: Can, morning milk, per cent butter fat, 4.40; flavor fair; texture close, firm.
- Mrs. M. Herzog: House, milk, per cent butter fat, 3.30; flavor clean; texture close, firm; see figure 1.
- J. Dobler: Can, milk, per cent butter fat, 4.10; flavor clean; texture close, firm; see figure 1.

August 23, 1904. Oshkosh.

- P. Faust: cream, bottle, per cent butter fat, 21.00.
- P. Faust: Milk, bottle, broken.
- W. D. Owen: Milk, bottle, per cent butter fat, 5.40; flavor clean; texture close, firm; see figure 1.
- W. D. Owen: Cream, bottle, per cent butter fat, 24.00.
- W. D. Owen: Milk, can; flavor clean; texture close, firm; see figure 1.
- A. Grundman, milk, bottle, per cent butter fat, 4.0; flavor clean; texture close, firm; see figure 1.
- A Grundman: Cream, bottle, per cent butter fat, 19.5.
- E. Wiczkosky, milk, bottle, per cent butter fat, 3.40; flavor clean; texture close, firm; see figure 1.
- Oshkosh Pure Milk Co.: Milk, bottle, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- Wagon No. 2: Milk, bottle, per cent butter fat, 4.80; flavor clean; texture close, firm; see figure 1.
- Wagon No. 2: Cream, bottle, per cent butter fat, 26.0.
- Wagon No. 2: Cream, bottle, per cent butter fat, 26.0.
- G. Hafeman, milk, bottle, per cent butter fat, 4.60; flavor clean; texture close, firm; see figure 1.
- G. Hafeman: Cream, bottle, per cent butter fat, 18.0.
- M. J. Ditter: Milk, bottle, per cent butter fat, 3.70; flavor clean; texture close, firm; see figure 1.
- M. J. Ditter: Cream, bottle, per cent butter fat, 25.0.
- Oshkosh Pure Milk Co.: Milk, bottle, per cent butter fat, 4.10; flavor clean; texture close, firm; see figure 1.
- Oshkosh Pure Milk Co.: Cream, bottle, per cent butter fat, 26.0.
- Oshkosh Pure Milk Co.: Cream, bottle, per cent butter fat, 27.0.
- A. Schroeder: Milk, bottle, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- A. Schroeder: Cream, bottle, per cent butter fat, 26.0.
- J. Ruth: Milk, bottle, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- J. Ruth: Cream, bottle, per cent butter fat, 19.60.
- G. Sparks: Milk, bottle, per cent butter fat, 3.70; flavor clean; texture close, firm; see figure 1.
- G. Sparks: Cream, per cent butter fat, 16.0.
- R. Lake: Milk, bottle, per cent butter fat, 6.20; flavor clean; texture close, firm; see figure 1.

- J. Hewitt: Milk, can, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- A. C. Atwood: Milk, bottle, per cent butter fat, 4.30; flavor clean; texture close, firm; see figure 1.
- A. C. Atwood: Cream, bottle, per cent butter fat, 20.0.
- J. C. Rothenbach: Milk, can, per cent butter fat, 4.20; flavor clean; texture close, firm; see figure 1.
- A. W. Gore: Milk, can, per cent butter fat, 3.70; flavor clean; texture close, firm; see figure 1.
- G. M. Kenfield: Milk, can, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- E. A. Zillmer: Milk, can, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- H. W. Gerdes: Milk, bottle, per cent butter fat, 5.20; flavor clean; texture close, firm; see figure 1.
- H. W. Gerdes: Cream, bottle, per cent butter fat, 19.0.
- Oshkosh Pure Milk Co.: Cream, bottle, per cent butter fat, 30.0.
- Wagon No. 4: Cream, bottle, per cent butter fat, 27.0.
- Oshkosh Pure Milk Co.: Milk, bottle, per cent butter fat, 4.0; flavor clean; texture close, firm; see figure 1.
- Oshkosh Pure Milk Co.: Milk, bottle, per cent butter fat, 5.0; flavor clean; texture close, firm; see figure 1.
- E. D. Nichols: Milk, can, per cent butter fat, 3.70; flavor clean; texture close, firm; see figure 1.
- Geo. Hotchkiss: Milk, can, per cent butter fat, 4.50; flavor clean; texture close, firm; see figure 1.
- Geo. Hotchkiss: Milk, bottle, per cent butter fat, 3.50; flavor not clean; texture slightly spongy; see figure 2.
- Geo. Hotchkiss: Cream, bottle, per cent butter fat, 24.0.
- F. Doernel, milk, bottle, per cent butter fat, 3.30; flavor clean; texture close, firm; see figure 1.
- F. Doernel: milk, can, per cent butter fat, 3.60; flavor clean; texture close, firm; see figure 1.
- W. Schroeder: Milk, bottle, per cent butter fat, 4.0; flavor clean; texture close, firm; see figure 1.
- W. Schroeder: Milk, can, per cent butter fat, 4.0; flavor clean; texture close, firm; see figure 1.
- W. Schroeder: Cream, bottle, per cent butter fat, 22.0.
- A. Luebke: Milk, can, per cent butter fat, 3.50; flavor clean; see figure 1.
- A. Luebke: Milk, bottle, per cent butter fat, 3.40; flavor clean; texture close, firm; see figure 1.
- F. T. Gunning: Milk, bottle, per cent butter fat, 5.0; flavor clean; texture close, firm; see figure 1.
- F. T. Gunning: Milk, can, per cent butter fat, 4.6; flavor tainted; texture slightly spongy; see figure 2.

August 24, 1904. Wausau.

- Chas. Morgenroth: Bottle, per cent butter fat, 4.50; flavor clean; texture close, firm; see figure 1.
- Chas. Morgenroth: Cream, bottle, per cent butter fat, 20.50.
- Chas. Morgenroth: Milk, can, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- Marathon Co. Dairy: Bottle, per cent butter fat, 4.25; flavor clean; texture close, firm; see figure 1.
- Co. Wagon No. 2: Cream, bottle, per cent butter fat, 23.00.
- H. Menret: Milk, bottle, per cent butter fat, 5.00; flavor clean; texture close, firm; see figure 1.
- H. Menret: Milk, can, per cent butter fat, 5.10; flavor clean; texture close, firm; see figure 1.

- E. E. Means: Milk, bottle, per cent butter fat, 5.30; flavor clean; texture close, firm; see figure 1.
- Old Reliable Dairy: Milk, can, per cent butter fat, 3.50; flavor clean; texture close, firm; see figure 1.
- Old Reliable Dairy: Cream, bottle, per cent butter fat, 25.50.
- Marathon Co.: Milk, bottle, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- Dairy Co.: Cream, bottle, per cent butter fat, 21.20.
- G. W. Witter: Milk, can, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- G. W. Witter: Milk, bottle, per cent butter fat, 4.80; flavor clean; texture close, firm; see figure 1.
- J. J. Bean: Milk, bottle, per cent butter fat, 5.00; flavor clean; texture close, firm; see figure 1.
- J. J. Bean: Cream, can, per cent butter fat, 21.00.
-

August 25—Grand Rapids.

- Chandos & Jellitt: J. Knouse driver, milk, bottle, per cent butter fat, 3.50; flavor clean; texture close, firm; see figure 1.
- Chandos & Jellitt: Milk, can, per cent butter fat, 3.40; flavor clean; texture close, firm; see figure 1.
- Huberty & Ehlenbeck: J. Gnos driver, milk, bottle, per cent butter fat, 4.30; flavor clean; texture close, firm; see figure 1.
- Huberty & Ehlenbeck: J. Gnos driver, cream, bottle, per cent butter fat, 21.75.
- Huberty & Ehlenbeck: Cream, per cent butter fat, 16.00.
- Huberty & Ehlenbeck: Milk, can, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- O. Doughty: Milk, bottle, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- O'Doughty: Cream, bottle, per cent butter fat, 40.00.
- J. T. L. Bittner: Milk, bottle, per cent butter fat, 4.00; flavor bad; texture somewhat spongy; see figure 2.
- J. L. T. Bittner: Milk, can, per cent butter fat, 4.30; flavor bad; texture somewhat spongy; see figure 2.
-

August 26, 1904.—La Crosse.

- L. Casperson: Milk, can, per cent butter fat, 3.50, 3.70; flavor clean; texture close, firm; see figure 1.
- L. Casperson: Cream, per cent butter fat, 16.50.
- D. Heslip: Milk, can, per cent butter fat, 5.10; flavor clean; texture good; see figure 1.
- D. Heslip: Milk, can, per cent butter fat, 4.10; flavor clean; texture good; see figure 1.
- J. C. Kempson: Milk, can, per cent butter fat, 3.70; flavor clean; texture good; see figure 1.
- B. P. Lee & Co.: Milk, can, per cent butter fat, 3.70; flavor clean; texture good; see figure 1.
- W. Zierke: Milk, can, per cent butter fat, 3.40; flavor clean; texture good; see figure 1.
- A. Muller: Milk, can, per cent butter fat, 2.90, 2.60; flavor clean; texture good; see figure 1.
- J. Buchner: Milk, can, per cent butter fat, 3.40; flavor clean; texture good; see figure 1.
- F. Keppel: Milk, can, per cent butter fat, 4.40; flavor clean; texture good; see figure 1.

- Mrs. E. Sablwitz: Milk, per cent butter fat, 3.60; flavor clean; texture good; see figure 1.
- Delphinch & Kneifer: Milk, per cent butter fat, 3.70; flavor clean; texture good; see figure 1.
- Hildreth: Milk, can, per cent butter fat, 3.80; flavor clean; texture good; see figure 1.
- E. Richter: Milk, can, per cent butter fat, 3.80; flavor poor; texture somewhat spongy; see figure 2.
- S. Larson: Milk, can, per cent butter fat, 4.00; flavor good; texture close, firm; see figure 1.
- Mrs. Fillner: Milk, can, per cent butter fat, 3.40; flavor good; texture close, firm; see figure 1.
- Submitted by Dr. Holmes: Per cent butter fat, 3.30.
- N. Jenson: Milk, can, per cent butter fat, 3.60; flavor fair; texture fair.
- N. Jenson: Cream, can, per cent butter fat, 16.00.
- K. Zweifel: Milk, can, per cent butter fat 4.80; flavor clean; texture close, firm; see figure 1.
- C. H. Baker: Milk, can, 2.70, 2.70; flavor bad; texture somewhat spongy; see figure 2.
- C. H. Baker: Cream, can, per cent butter fat, 18.50.
- A. Swenson: Milk, can, per cent butter fat, 4.00; flavor clean; texture close, firm; see figure 1.
- J. P. Dorais: Milk, can, per cent butter fat, 5.00; flavor clean; texture close, firm; see figure 1.
- J. P. Dorais: Cream, can, per cent butter fat, 20.50.
- A. Keppel: Milk, can, per cent butter fat, 7.50; flavor sour, clean; texture short, mealy.
- L. Koch: Milk, can, per cent butter fat, 3.40; flavor clean; texture close, firm; see figure 1.
- E. Almos: Milk, can, per cent butter fat, 3.90; flavor clean; texture close, firm; see figure 1.
- Seller Bros.: Milk, can, per cent butter fat, 3.10; flavor clean; texture close, firm; see figure 1.
- Seiler Bros.: Cream, bottle, per cent butter fat, 20.00.
- C. H. Farman: Milk, can, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- J. Lindsey: R. Smalley, driver, milk, bottle, per cent butter fat, 4.40; flavor clean; texture close, firm; see figure 1.
- J. Lindsey: R. Smalley, driver, cream, can, per cent butter fat, 19.00.
- W. Fredrichs: Milk, can, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- W. Fredrichs: Cream, bottle, per cent butter fat, 27.00.
- W. Murphy: Milk, can, per cent butter fat, 3.80; flavor clean; texture close, firm; see figure 1.
- A. Zeggler: Milk, can, per cent butter fat, 4.70; flavor clean; texture close, firm; see figure 1.
- A. Zeggler: Cream, can, per cent butter fat, 20.00.
- Seiler Bros.: Milk, can, per cent butter fat, 6.60; flavor clean; texture soft, mushy.
- C. H. Lindsey: Milk, bottle, per cent butter fat, 4.40; flavor clean; texture close, firm.
- C. H. Lindsey: Cream, bottle, per cent butter fat 19.00.
- G. Kolb: Milk, can, per cent butter fat, 3.60; flavor clean; texture close, firm; see figure 1.