Biennial report of the Dairy and Food Commissioner of Wisconsin. For the period ending June 30, 1912. 1912

State Dairy and Food Commissioner
Madison, Wisconsin: Democrat Printing Company, State Printer, 1912

BIENNIAL REPORT

OF THE

Dairy and Food Commissioner

OF WISCONSIN

For the Period Ending June 30, 1912

J. Q. EMERY
Dairy and Food Commissioner
Ex-officio
State Superintendent of Weights and Measures

MADISON, WIS.
DEMOCRAT PRINTING COMPANY, STATE PRINTER
1912

DAIRY AND FOOD COMMISSIONERS OF WISCONSIN

H. C. THOM	May 29, 1890, to May 28, 1891
D. L. HARKNESS	May 28, 1891, to June 11, 1894
THOMAS LUCHSINGER	June 27, 1894, to Feb. 7, 1895
H. C. ADAMS	Feb. 7, 1895, to May 1, 1902
J. Q. EMERY	Dec. 24, 1902, to .....

ORGANIZATION OF THE COMMISSION

J. Q. EMERY,
Dairy and Food Commissioner,
Ex Officio State Superintendent of Weights and Measures
RICHARD FISCHER, Ph. D.,
Associate Director of Chemical Laboratory
U. S. BAER,
Assistant Commissioner
H. C. LARSON,
Second Assistant Commissioner
HARRY KLUETER, Ph. G.,
Chemist (from August 7, 1911)
Assistant Chemist (to August 7, 1911)
A. E. KUNDERT, M. S.,
Chemist (to August 7, 1911)
Assistant Chemist (from August 7, 1911, to March 9, 1912)
FRED P. DOWNING, A. B.,
Assistant Chemist (to July 11, 1911)
Chief Inspector of Weights and Measures (from July 11, 1911)
FLORENCE Q. NORTON,
Secretary
ETHEL D. THOMAS,
Stenographer, Office of Weights and Measures (from Sept. 18, 1911)
Stenographer and Confidential Clerk (to Sept. 18, 1911)
M. LORAINE WALTER,
Stenographer and Confidential Clerk (from Oct. 2, 1911)
W. A. BRANNON, M. A.,
Assistant Chemist (resigned July 3, 1911; reappointed April 1, 1912)
IRVING R. HOWLETT,
Assistant Chemist (from Sept. 21, 1911)
•_____,
Assistant Chemist
F. M. BUZZELL,
Chief Food Inspector
F. E. CARSWELL,
Cheese Factory, Dairy and Food Inspector
E. L. ADERHOLD,
Cheese Factory, Dairy and Food Inspector
J. D. CANNON,
Cheese Factory, Dairy and Food Inspector
FRED MARTY,
Cheese Factory, Dairy and Food Inspector
P. A. LARSON,
Creamery, Dairy and Food Inspector (resigned April 20, 1911)
JAMES VAN DUSER,
Cheese Factory, Dairy and Food Inspector
W. F. SCOTT,
Food Inspector
R. B. SOUTHARD,
Cheese Factory, Dairy and Food Inspector
S. J. DUFNER,
Creamery, Dairy and Food Inspector
W. A. VOIGT,
Sealer of Weights and Measures (from Nov. 6, 1911)
Creamery, Dairy and Food Inspector (to Nov. 6, 1911)
P. W. GUSE,
Creamery, Dairy and Food Inspector
J. B. LINZMEYER,
Cheese Factory, Dairy and Food Inspector
WILLIAM WINDER,
Sealer of Weights and Measures (from Nov. 6, 1911)
S. B. COOK,
Creamery, Dairy and Food Inspector (from Nov. 6, 1911)
J. E. BOETTCHER,
Sealer of Weights and Measures (from Nov. 6, 1911)
H. L. BORNHEIMER,
Sealer of Weights and Measures (from Nov. 6, 1911)
GEORGE WARNER,
Sealer of Weights and Measures (from Nov. 6, 1911)
W. J. KRAMER,
Sealer of Weights and Measures (from Jan. 25, 1912)
•_____,
No appointment made to fill this position

LETTER OF TRANSMITTAL

His Excellency, FRANCIS E. MCGOVERN,

Governor of Wisconsin.

SIR:—I have the honor to submit herewith, in compliance with law, the report of the dairy and food commissioner for the biennial period ending June 30, 1912.

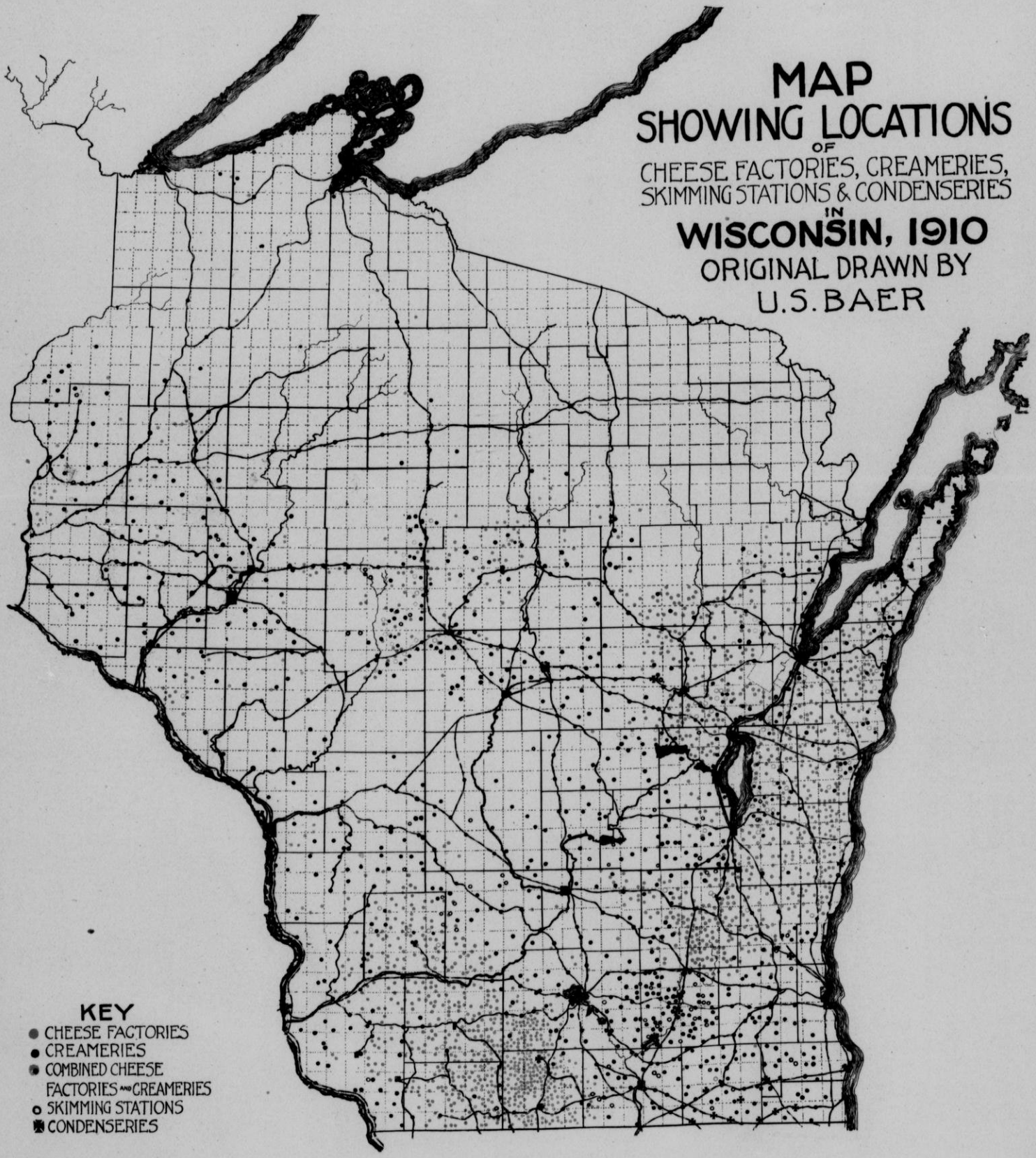
J. Q. EMERY,

Dairy and Food Commissioner,

Ex-officio State Superintendent

of Weights and Measures.

ILLUSTRATIONS.


MAP
SHOWING LOCATIONS
OF
CHEESE FACTORIES, CREAMERIES,
SKIMMING STATIONS & CONDENSERIES
IN
WISCONSIN, 1910
ORIGINAL DRAWN BY
U.S. BAER
KEY
CHEESE FACTORIES
CREAMERIES
COMBINED CHEESE
FACTORIES AND CREAMERIES
SKIMMING STATIONS
CONDENSERIES

REPORT OF COMMISSIONER.

This report covers the period from June 30, 1910 to June 30, 1912. The law requires that in each even numbered year, within sixty days after June 30, the dairy and food commissioner shall make a report to the Governor and give therein an itemized statement of all expenditures incurred by him and of all fines collected, with such statistics and other information and suggestions as he may regard of value.

The following is a summary of analyses, inspections, etc.:

Food samples		
Milk and cream tests at creameries, cheese factories, etc.	4,213	
Milk and cream tests, city supplies	1,527	
Chemist's analyses	1,614	
Total		7,354
Sanitary inspections of groceries, meat markets, etc		9,565
Cheese factory inspections		1,526
Creamery inspections		1,236
Cream route inspections		34
Dairy inspections		1,317
City milk supplies		180
Prosecutions		255
Convictions		246
Per cent of prosecutions resulting in convictions		96.08

The inspection work of this department under existing laws extends to more than 3,000 cheese factories, creameries and skimming stations, and their 123,000 patrons or more; 8,000 groceries and general stores; over 2,000 meat markets; upwards of 2,000 drug stores, and other places where foods, including beverages, are manufactured, stored, offered or exposed for sale, estimated at 12,000, and totals 150,000 units of inspection; and like the compound eye of the fly, each of these units comprises a large number of smaller units.

To attempt to give the percentage of adulterated or misbranded samples would be impracticable. Such percentage would not represent the conditions of the food market of the

state, for as a rule only samples suspected of being adulterated or misbranded are sent to the chemists for analysis. No complete inspection has been made covering the entire state on any particular kind of food. In many cases only specified adulterants have been suspected and looked for. In many other cases suspected misbranding as to percentage of ingredients has been the object of investigation. For a proper understanding of the work done in the chemical laboratory of this department, the report of the chemist, Mr. Harry Klueter, should be studied. For more detailed information relative to the various lines of work carried on by the department, the reports of Assistant Commissioners U. S. Baer and H. C. Larson and of the different inspectors published elsewhere in this report should be consulted, all of which reports contain matters of much interest and importance.

What was stated in the last biennial report of the dairy and food commissioner as a brief summary of what has been accomplished by the department in the past decade is as applicable and appropriate in this report as it was in the former report:

"During the decade terminating with this biennial period, food laws have been enacted and enforced in Wisconsin whereby the cloak of fraud and deception in the sale of a multitude of food products has been removed and the statement of the truth on the label has been compelled.

As a result of the work done by the inspectors of the dairy and food department among the cheese factories and creameries of the state and their patrons and in the city and village milk supplies, the health of the consuming public has been safeguarded and many thousands of dollars have been annually conserved.

The masquerading of oleomargarine in the garb of butter has been practically stopped and the selling of oleomargarine for what it is and at oleomargarine prices has been compelled as the universal practice.

The sale of glucose, a product made by treating starch with hydrochloric acid, as and for sorghum, pure Louisiana molasses, fancy table syrup, honey, honey drips, etc., has been halted.

The sale as and for maple syrup of a product that never formed any part of a maple tree, a practice once common, is now almost entirely done away.

The fraudulent sale of a product consisting of glucose and the extracted juice of cores and skins of apples rejected in drying, artificially colored with coal tar dyes to resemble genuine fruit products and sold as fruit jellies, jams and preserves, has been throttled.

The fact that drugs below standard were being sold as genuine has been exposed to public scorn, and offenders have been prosecuted and fined.

Saccharin, a coal tar derivative, and a fraudulent substitute for sugar in beverages and other food products, has been driven from its hiding.

Pure pepper has been given the place on the Wisconsin market formerly occupied with a product adulterated with fifty to eighty per cent of ground olive pits, cocoanut shells, mustard hulls, or cereals.

Laws have been enacted and enforced that have squeezed the kerosene oil out of linseed oil and the barites and other adulterants out of white lead and zinc white.

Notwithstanding the opposition of special interests formed into great state and national organizations, food laws making wrong-doing hard and right-doing easy have been enacted and enforced, having as their object the only legitimate purpose of such legislation, viz., the protection of the consuming public against the harmful consequences of the manufacture and sale of adulterated or misbranded articles of food.

Food products loaded with poisonous or deleterious chemical preservatives have been almost completely driven from the Wisconsin market."

This latter statement means in part, that salts of copper, acid, lead and decayed substances have been eliminated from canned goods; that red lead and chromate of lead are no longer ingredients of cayenne pepper; that artificial essences and dyes and chemical preservatives no longer masquerade in the garb of jams, jellies and preserves; that aniline dyes and impure essence of almond are not common constituents of ice cream; that caustic lime is no longer used to whiten lard; that chromate of lead, sulphate of lime, Martius yellow, gypsum, and terra alba are no longer deleterious adulterants of mustard; that boric acid, borax, salicylic acid and formaldehyde are no longer milk adulterants; that sodium sulphite, borax and aniline dyes are eliminated from chopped meats and sausages; that salts of copper are no longer constituents of canned peas; that sand and red clay have been expelled from black pepper; that poisonous colors and flavors, terra alba, talc, barytes, chrome yellow, arsenic, sulphate of copper, prussic acid, fusel oil and aniline dyes have been driven from candy; that salts of tin, salts of lead, terra alba, sand and gypsum have been driven from sugars; that sulphuric, hydrochloric, and pyroligneous acids are no longer constituents of vinegar; that artificial flavors, coal tar dyes, chemical preservatives, salicylic acid and hydrofluoric acid and saccharin have been driven from ciders; that saccharin and salicylic acid have been expelled from pops; that poisonous wood alcohol is no longer found in Jamaica ginger, lemon and other extracts and in tinctures; that boric acid and borax are no longer used to embalm fish and oysters. In short, it means that the health of the people of the state of Wisconsin has been greatly conserved.

Elsewhere in this report is included a statement made at some length by the dairy and food commissioner, under date of December 20, 1911, to the Secretary of the State Board of Public Affairs, relating to the "Inception, Growth and Work of the Dairy and Food Department". In this connection, it may be stated that it is there shown that the work of the dairy and food department, in safeguarding the public against adulterations and frauds in food products, has resulted in a saving to the purchasing public of the state for the past considerable number of years of upwards of $6,000,000 annually.

Likewise, it is there shown that the dairy and food department has by its work saved to the users of linseed oil upwards of $112,000 annually for the past several years.

Statistics for 1911, obtained by the same method as was used in obtaining the figures for 1909 in the statement before mentioned, conclusively show that the work of this department in improving the sanitary conditions of creameries, cheese factories and places where milk and cream are produced, saved to the producers of butter and cheese approximately $3,000,000 or an average of $24 for each cheese factory and creamery patron in the state.

In this connection attention is called to the following statistics published in the Yearbook of the Department of Agriculture, Washington, D. C., for 1911:

AVERAGE PRICE RECEIVED FOR BUTTER BY FARMERS ON THE FIRST OF EACH MONTH OF 1911.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Illinois.....	27	22	21	22	21	19	20	22	23	23	25	27
Michigan.....	28	24	22	22	20	19	19	20	22	23	25	28
Wisconsin..	**30**	**27**	**24**	**24**	**22**	**21**	**22**	**23**	**25**	**25**	**28**	**31**
Minnesota	29	24	22	23	21	20	20	22	24	24	27	30
Iowa.....	27	22	21	21	20	19	19	22	23	24	25	28
United States.	27.8	24.1	22.7	22.6	21.4	20.3	20.4	21.7	23.1	23.8	25.2	27.4

Averages of these monthly figures indicate that the patrons of Wisconsin creameries received 1⅓ cents a pound more for their butter during the year 1911 than did the patrons of Minnesota creameries; 2¼ cents a pound more than did the patrons of Michigan creameries; 2½ cents a pound more than

did the patrons of the creameries of Iowa and Illinois. They are confirmatory of the contention of the wholesale dealers in Wisconsin butter, that the producers of Wisconsin creamery butter are receiving considerably more a pound for their butter directly due to the work of this department in improving sanitary and other conditions under which it is produced than they otherwise would.

As the wholesale market price of butter is dependent upon quality, the statistics above quoted from the Yearbook of the U. S. Department of Agriculture for the year 1911, confirm the contentions repeatedly made in the reports from this department that the quality of Wisconsin commercial creamery butter excels that of her neighboring states.

In the first biennial report of the dairy and food commissioner of this state, in 1890, occurs the following statement under the subject "Cheese":

"Sixty million pounds of cheese is annually made in this state. There is not an article of commerce that requires greater skill in handling in order to secure favorable markets. No industry has been so perverted. No business exists that has been so falsely manipulated, and no article of food has been so degraded by counterfeiters. In no time has the honest manufacturer met with such dishonest competition. Matters have come to such a pass that the genuine article is under the ban of suspicion at home and abroad. The result has been that the subject has been thoroughly investigated by importers and steps have been taken to reduce the exportation of filled cheese from the United States."

In striking contrast with the foregoing statement are the following:

In 1909, at the National Dairy Show in Milwaukee, Wisconsin cheese won first, second and third premiums in all classes exhibited.

In 1910, at the National Dairy Show in Chicago, Wisconsin cheese won first, second and third premiums in all classes exhibited.

In 1911, at the National Dairy Show in Chicago, Wisconsin American cheese won first and second; Wisconsin Swiss cheese won first, second and third; and Wisconsin Brick cheese won first and second.

In 1911, at the International Dairy Show in Milwaukee, Wisconsin cheese won first, second and third premiums in all classes exhibited.

In 1911, at the nineteenth annual session of the Wisconsin Cheese Makers' Association at Milwaukee, Wisconsin cheese

won first, second and third premiums in all classes exhibited, six other states competing.

In 1912, at the twentieth annual session of the Wisconsin Cheese Makers' Association at Milwaukee, with five states competing, Wisconsin American Cheddar cheese won first, second and third premiums in all four classes; Wisconsin Brick cheese won first, second and third premiums; Wisconsin Swiss cheese won first, second and third premiums; and Wisconsin Limburger cheese won first, second and third premiums.

Wisconsin is now producing in great variety and in quality unexcelled anywhere, upwards of 164,000,000 pounds of cheese annually for which, including by-products, the producers are receiving upwards of $24,000,000.

Wisconsin's Rank as a Dairy State.

In the amount and value of her dairy products, Wisconsin now ranks first in the Union. In the quality of her cheese, she excels all other states, and in the quality of her commercial creamery butter and market milk, she is unsurpassed by any other state. The value of Wisconsin dairy products of all kinds for the year 1911 is conservatively estimated at $85,500,000.

In 1911, Wisconsin ranked second only to New York in the number of cows, the number in Wisconsin being 1,473,505, or 36,089 less than the number in the Empire state. In the same year there were in Wisconsin 449,489 calves or 11,365 more than in New York.

Estimated Value of Wisconsin Dairy Products for the Year 1911.

	Lbs.	Value.
Creamery and farm-made butter	133,995,426	$34,032,156
Other creamery products sold	.....	1,848,300
Factory and farm-made cheese	164,363,626	21,776,146
Other cheese factory products sold	.....	266,785
Milk condenseries	31,580,055	5,424,490
Milk produced other than that furnished cheese factories, creameries and condenseries	.....	9,807,000
Estimated value of milk and cream shipped to Chicago, St. Paul, Minneapolis, Dubuque and other points outside of Wisconsin	.....	2,854,500
Skim milk	.....	7,219,600
Whey	.....	2,329,000
Total		$85,557,967

The foregoing figures were obtained as follows: For the number of pounds of cheese produced in factories and of butter produced in creameries respectively, the U. S. census figures for 1909 were used, increased by a percentage corresponding with the average annual percentage of increase for the years 1905 to 1909 inclusive, as shown by the U. S. census, and the value estimated to correspond with the decrease in the price of butter and cheese in 1911 as compared with 1909.

The figures for the items "Other cheese factory products sold", "Other creamery products sold", "Estimated value of milk and cream shipped to Chicago, St. Paul, Minneapolis, Dubuque and other points outside of Wisconsin," "Skim milk", and "Whey" were obtained by adding the above designated percentage of increase to the amounts reported under the respective headings in the biennial report of the dairy and food commissioner for 1909–10. The figures for farm-made cheese and farm-made butter were those of the U. S. census as reported for the year 1909. The figures for milk condenseries were obtained directly from those establishments.

The figures for the item "Milk produced other than that furnished cheese factories, creameries or condenseries" are the same as those given for the year 1909 in the biennial report of the dairy and food commissioner for 1909–10. This item is estimated as the amount used for family consumption by the total population of the state. In estimating this amount, the data given by Major Alvord, former chief of the dairy division of the bureau of animal industry, U. S. Department of Agriculture, derived from the census of 1900, have been used. Major Alvord found that there were consumed 290.1 lbs. of milk per capita per annum.

In estimating the value of skim milk, the Gurler method, recommended by Prof. W. A. Henry as the most reliable method, has been used and is as follows: The value of skim milk when fed with corn is one-half as much per hundred pounds as shelled corn is per bushel; and the value of whey is one-half of skim milk.

Inception, Growth and Work of the Dairy and Food Department.

The following report was made in compliance with law by the dairy and food commissioner, December 20, 1911, to the

Secretary of the State Board of Public Affairs on his request, and is here published with the consent of that board:

The initiative for the establishment of the dairy and food department was taken by the Wisconsin Dairymen's Association at its fifteenth annual session in 1887, when the following resolution was adopted:

"Resolved, That this association ask of the legislature a law with proper police authority, to prevent the manufacture and sale of any form of adulterated cheese, for the pure article. That any adulterated cheese shall be branded and sold for what it is. That any violation of this law shall incur a penalty of not less than $100 for the first offense. There must be a suppression of the practice of adulteration of cheese or the cheese industry of Wisconsin will suffer almost irreparable loss."

At the sixteenth annual session of the Wisconsin Dairymen's Association the following resolution was adopted:

"Resolved, That in the opinion of this association, the time has arrived in the history of the state for the passage of a law similar to that in existence in Minnesota, Ohio, New York and other states, and the providing for a dairy commissioner, whose duty it shall be to ferret out and prosecute all adulterations of butter and cheese, and the sale of the same, as well as other foods, and we respectfully ask the next legislature to enact such a law and establish such a dairy commission."

At the seventeenth annual session of the Wisconsin Dairymen's Association held in 1889, the following preamble and resolution were adopted:

"Whereas, Imitations of butter are being sold in Wisconsin in violation of laws, to the prejudice of honest goods. Cheese is being made in large quantities, robbed of its natural fat, filled with lard or other foreign fats, and not stamped as the law provides. Adulterated and impure milk floods the market of towns and cities, drugs are made useless, drinks made more poisonous and nearly every article of human food diminished in value by adulteration; therefore,

Resolved, By the Dairymen's Association, that as dairymen and citizens we hereby earnestly express to the state legislature our unanimous request for the passage of bill No. 444, A., providing for the establishing the office of food and dairy commissioner, and for the execution of all laws aimed at adulteration."

In his message to the legislature in 1889, Governor W. D. Hoard urged the establishment by the legislature of a commission, clothed with the necessary power and means, for the suppression of the fraudulent manufacture and sale of imitation butter and cheese as well as the sale of adulterated, impure or diluted milk, and the widespread and rapidly increasing adulteration of the food of the people. He pointed out that the then existing laws on these subjects were practically inoperative, because there was no well established agency for their enforcement. He also called attention to the fact that the neighboring states were in advance of Wisconsin in this matter. He quoted facts and statistics to sustain his recommendation.

By chapter 452 of the laws of 1889, the legislature created the office of dairy and food commissioner for the state of Wisconsin and authorized the appointment of two assistants, one of them to be an analytical chemist.

It was made the duty of the commissioner to enforce all laws that then existed or that might thereafter be enacted, regarding the production, manufacture or sale of dairy products, or the adulteration of any article of food or drink or of any drug; and personally or by his assistants to inspect any article of milk, butter, cheese, lard, syrup, coffee or tea, or other article of food or drink or drug, made or offered for sale within this state which he might suspect or have reason to believe to be impure, unhealthful, adulterated, or counterfeit, and to prosecute, or cause to be prosecuted, any person or persons, firm or firms, corporation or corporations, engaged in the manufacture or sale of any adulterated or counterfeit article or articles of food or drink or drug, contrary to the laws of this state.

In 1897 the legislature provided for the appointment of an inspector at $3.00 a day and expenses, and for a stenographer and confidential clerk at a salary of $900, and reduced the salary of assistant commissioner to $1600.

EXTRACTS FROM MESSAGES OF GOVERNORS AND LEGISLATION IN RESPONSE.

In his message to the legislature in 1899, Governor Edward Scofield said:

> "While much attention is still devoted by this department to the dairy industry and the enforcement of the laws against the manufacture and sale of impure dairy products, more and more attention is coming to be paid to the general subject of food adulteration. There is a great field here for the department, and its work in the future will necessarily experience a large growth. The protection of the people against adulterated and deleterious food is a duty which may well claim serious attention from the state."

In his message to the legislature in 1901, Governor R. M. LaFollette made the following statement:

> "The importance of safeguarding the people of the state against the dangers of adulterated food products, as well as the wisdom of protecting the honest products of the state against competition with cheaply produced counterfeits, will warrant all reasonable provision to extend and improve the work of this bureau."

In 1903 Governor LaFollette in his message to the legislature, in referring to the dairy and food department, made the following statement:—

> "The work of this department has been greatly increased with the growth of the dairy interests in the state and by the multiplying demands for inspection of the deleterious and adulterated foods. Leaving out of consideration the commercial aspect of the question, the thorough inspection of creameries and cheese factories of the state, and the examination, analyses and branding of adulterated foods, may rightfully be urged as entitled to most serious consideration.
>
> "That adjoining states have passed Wisconsin in the quality of some of the products of the dairy can be accounted for upon no better ground than a more thorough inspection in the field. This is not chargeable to any want of diligence upon the part of Wisconsin officials, but is due to the fact that, where Wisconsin employs one, a neighboring state employs ten inspectors. While reluctant to encourage any increase in the number of employees of any branch of the public service, I do not hesitate to recommend that the law be amended to provide for the appointment

of at least two additional inspectors in the dairy and food department, and for an assistant to the state chemist.

Provision should also be made authorizing the dairy and food commissioner to publish a bulletin for distribution among the dealers in food products in which there may be printed, at least quarterly, a list of the condemned foods ascertained upon analysis to be adulterated. It is fair to dealers that they should be notified in seasonable time that foods officially found to be adulterated must not be offered for sale. The expense for such publication can be provided for in the same manner that the publication of bulletins from the Agricultural Experiment Station is now authorized."

The legislature of 1903 made provision for two additional inspectors at $3.00 per day, and an assistant chemist when needed at $50.00 a month.

In 1905, Governor LaFollette in his message to the legislature had the following to say:—

"The work of the dairy and food commission concerns every citizen of the state. Its function is upon the one hand, to promote our great dairy interests, and upon the other, to protect the consuming public against adulterated dairy and other food products. Its work being technical in character, it is a source of much gratification that the present membership, including its chief, and every other member of the commission, is strongly equipped, not only with the practical experience and knowledge but also with the expert technical skill for the special line of work each is required to do, and that the work of each in the public service is as faithful and conscientious as it is competent. I believe it but just to say that never before in the history of this department has its official force been so completely identified in practical and scientific training with the great industry which it so ably represents.

The total annual income from our dairy industry is estimated at upwards of fifty million dollars. The annual income from our cheese factories, creameries, and city milk supplies is estimated at more than twenty-eight million dollars. Suitable inspection of the three thousand cheese factories and creameries and of the milk delivered to them as well as of the milk supply of our cities is a wise and just concern of the state from the standpoint, both of promoting our dairy interests and of the public health. For it is well known that danger to health lurks in unclean or unsanitary milk.

It must be conceded that the expansion of the dairy and food commission, since its organization in 1889, has not been commensurate with the extent or the importance of the interests committed to it nor to the growth of other departments of our state government, nor has it kept pace with the growth of similar departments of our competing neighbors. In addition to the commissioner, the assistant commissioner, the chemist and assistant chemist, the Minnesota commission has fourteen inspectors, the Michigan commission has seven inspectors and the Illinois commission has six; Wisconsin has three. Yet Wisconsin has about three thousand creameries and cheese factories combined; Michigan, three hundred; Illinois, five hundred twenty-seven; Minnesota, eight hundred fifty. The Province of Ontario has one thousand cheese factories and sixteen traveling cheese instructors are provided. In the Province of Quebec, fifty traveling cheese instructors are provided and only about thirty factories are assigned to each instructor.

I recommend that the dairy and food commission be provided with a force sufficient to furnish adequate inspection for the cheese factories, creameries and city dairies and thus put Wisconsin second to none in the quality of her dairy products, and second to none in the protection afforded to her citizens against adulterated food products. The efficient inspection of cheese factories and creameries calls for expert knowledge and technical skill of a high order. Therefore, a law providing for this inspection should provide that to be eligible to the office, each cheese factory or creamery inspector should be an expert cheese maker or butter maker, a competent judge of cheese factory or creamery products, skilled in all the technical work of cheese factories or creameries and versed in modern scientific and practical dairy knowledge.

Some changes are needed in the food laws for the purpose, in some cases, of removing ambiguity; in others, of making them more workable; in others of removing doubt as to their constitutionality; and in still others to give added powers to the commission to protect the public against food adulteration. These will be ready for submission to the respective committees of the legislature by the dairy and food department at the pleasure of the committee."

The legislature of 1905 made provision for the appointment of a second assistant commissioner at a salary of $1600, and assistant chemist and eight inspectors, each at a salary of $1200.

Governor Davidson in his message to the legislature in 1907, considered the dairy and food department in the following language:

"Wisconsin ranks among the foremost dairy states in the Union. In the extent and variety of her dairy products she is excelled by none. They yield an annual income of upwards of $57,000,000 going to enrich the farmers of the state. The importance of this industry extends beyond the producers and affects the entire population. Suitable inspection of the methods and materials used in the manufacture of these products is a matter of concern to the state both from the standpoint of promoting the dairy industry and protecting the public. Not only is the inspection of dairy products absolutely necessary, but all foods during the last few years have been subject to adulterations, which in many instances have placed the health and the lives of our people in jeopardy. It is a matter of common knowledge that the simplest and plainest foods have been so treated with chemicals as to make it a matter of grave doubt whether the article purchased is in fact such as for which payment is being exacted. The extent of adulteration and the danger therefrom nas been greater than the public has ever suspected.

The legislature of 1905 gave evidence that this state was to adopt a broad and comprehensive food and dairy policy, adequate in some just sense to our needs. Ten officers were added to the department who were required to be experts in their field of dairy and food inspection. Not until the passage of the foregoing provisions by the legislature, and by amendments to previously existing statutes, did Wisconsin enter upon a comprehensive protective policy.

The report of the dairy and food commissioner for the last biennial period shows a result which must be most gratifying to the people of the state. A total of 16,187 samples of food products have been analyzed by the chemist of the commission; 12,986 samples of milk have been tested by the dairy experts; 4,200 in-

spections of cheese factories, creameries and skimming stations have been made; 6,000 meat markets, groceries and other places for the sale of foods were inspected; and the milk supply of sixty cities and villages was thoroughly examined. For the violation of the dairy and food laws 235 convictions were secured and fines imposed, which together with the inspections and other lines of work by the commission have resulted in a revolution in food matters in Wisconsin.

Needed amendments to existing food and dairy laws should be made, necessary new laws enacted and the commission so strengthened that the important duties entrusted to it may be so discharged as to give the largest measure of protection to the public."

The legislature of 1907 made provision for the appointment of an additional chemist at a salary of $1200, a secretary at a salary of $1200 and two additional inspectors at a salary of $1200 each.

In 1909 Governor Davidson, in his message to the legislature, made the following statements:—

"The object of the dairy and food laws and their enforcement is protection of the public health, and security to the consuming public against fraud and deception in the manufacture and sale of dairy and food products. Mere figures give but an imperfect idea of the beneficial work of that department. That there has been effective enforcement of these laws and great progress made in driving adulterated and misbranded food products from the market is common knowledge. Improvement in the quality of dairy products is such that investigation by United States officials for the year of 1907 shows that patrons of Wisconsin creameries received a higher price per pound for butter fat than those of any other state investigated. Wisconsin cheese of the best grades is the equal of such product in any market of the world and commands a corresponding price. The dairy industry of the state yields an annual estimated revenue of approximately sixty millions of dollars.

The bulletins and report of the commissioner will show the character, scope and volume of the work of the dairy and food commission. Fourteen thousand samples of food and drug products have been analyzed and tested by the food chemist and other experts. Three thousand inspections have been made of creameries and cheese factories and of the milk and cream supplied to them. Eight hundred inspections were made of barns where milk and cream are produced for family use in cities and villages and as food for children. The milk supply of nearly all of our cities and villages has been inspected. Of the four hundred fifty prosecutions brought for violations of the dairy and food and drug laws, there were four hundred thirty-six convictions. That is, of each hundred prosecutions, there were ninety-seven convictions. Thousands of complaints have been investigated and inspections of various kinds made that called for no prosecution.

Amendments to the dairy and food laws required to correct technical defects which experience has shown to be necessary should receive due consideration."

The legislature of 1909 made provision for the appointment of an additional assistant chemist at a salary of $1200.

In 1911, the message of Governor McGovern to the legislature contained the following:

"Investigations recently conducted in a number of the larger cities of the state show that nearly half the scales used in

weighing ordinary merchandise were wrong, in practically every instance giving short weight, while of the measures tested over one-fifth were condemned for like reason. The trouble with the present law is that responsibility for its enforcement is divided among a great many public officials and its administration is so hampered by defective provisions that little or nothing can be accomplished under it. For example, it contains the provision that in order to justify conviction the state must show that the person prosecuted *intended* to commit a fraud. Of course, this cannot be satisfactorily shown in one case in a hundred of underweighing or short measuring. An effective weights and measures law is needed, which, when impartially enforced will save the people many millions of dollars each year now lost in short weights and measures. Such frauds are especially to be condemned as the injury thereby perpetrated naturally falls most heavily on poor people who buy frequently in small quantities, precisely the class of persons who can least afford to be swindled in this way."

The legislature of 1911 made radical amendments to the law relating to weights and measures, made the dairy and food commissioner ex-officio state superintendent of weights and measures, provided for one chief inspector of weights and measures at a salary of $1600, one stenographer at a salary of $1200, and five additional dairy and food inspectors at a salary of $1200, and made assistant dairy and food commissioners and cheese factory, creamery, and dairy and food inspectors ex-officio state sealers of weights and measures when so designated and authorized by the state superintendent of weights and measures.

GROWTH OF THE DEPARTMENT.

It will thus be seen that established in 1889 with a force of only three officials, the dairy and food department was increased to five in the year of 1895, to eight in the year 1903, to eighteen in 1905, to twenty-two in 1907, to twenty-three in 1909 and to thirty in 1911. The expansion of this department has not been merely accidental, but has been the result of deliberate consideration and determination on the part of the legislature, as experience and investigation have brought conditions to light, to provide the means for eradicating, or holding in check, or reducing to a minimum the harmful consequences of the widespread adulteration and counterfeiting of dairy and food products and of drugs.

SOME RESULTS OF THE WORK OF THE DEPARTMENT.

A statement of some of those conditions, as well as the result of the work of the dairy and food department in lessening these evils is called for.

OLEOMARGARINE.

Referring to the wide-spread sale of oleomargarine as butter, the first dairy and food commissioner of the state in his first annual report to the Governor in 1890, made the following statement: "No corner of the state is too remote for its presence; no table too humble, no dining room so grand, no lumber camp so rough, that oleomargarine will not walk upon and into, with a deceitful bow and a brazen smile, with the claim that its name is butter." He adds the following statement: "Ninety-nine out of every hundred pounds of oleomar-

garine that is consumed is so consumed under the supposition that it is honest butter."

National statistics show that in the year 1890, the year of his report, there was produced in this country 30,960,286 pounds of oleomargarine. As the population of Wisconsin was at that time 2.7% of the population of the United States, it is fair to estimate that 2.7% of the entire production of oleomargarine for that year, or 835,927 pounds, was marketed in the state of Wisconsin.

The average price of butter on the Elgin market for the year 1890 was 22⅜c. It seems a perfectly fair statement, that for oleomargarine palmed off in Wisconsin as butter during that year, there was a profit of 10c. a pound to one so disposing of it, and a cheat of the same amount to the consumers thereof. Assuming the correctness of the statement of the first dairy and food commissioner of the state in his report for 1890, that at that time 99% of the oleomargarine was consumed with the supposition that it was genuine butter, we have these figures: 827,567 pounds of oleomargarine palmed off as butter at a cheat of 10c. a pound, $82,756.

Wisconsin was one of the first states, if not the first state, to undertake to regulate by law the manufacture and sale of oleomargarine.

The first of such laws was enacted in 1881, but proved ineffective. In 1885, the legislature again grappled with the problem, but the resulting law proved ineffective in preventing the sale of oleomargarine as butter. In 1889, another ineffective effort was made by the legislature to enact a law that would prevent the fraudulent disposal of oleomargarine as butter. It was while this law was on the statute books, that the report of the first dairy and food commissioner of Wisconsin was made, as above quoted. Another effort by the legislature in 1891 also proved ineffective. Thus fourteen years of strenuous effort to drive the fraud out of the oleomargarine business had proven comparatively ineffective and oleomargarine continued to masquerade through the state as butter.

But in 1895, the legislature decided to make the color of oleomargarine its own open declaration as to its lawful or unlawful character. This law placed a ban upon oleomargarine that should be in "imitation of yellow butter," but legalized the sale of oleomargarine that should be free from coloration or ingredient that causes it to look like butter and in such form as to advise the consumer of its true character. A vigorous campaign for the enforcement of this law was inaugurated by Dairy and Food Commissioner H. C. Adams. Prosecutions were brought against violators of the law and convictions secured, which resulted in unmasking in a large measure the fraud that had been for years practiced in palming off upon the consumers oleomargarine as butter. The same vigorous campaign was continued by his successor, the present dairy and food commissioner, culminating in the Meyer and Nowack case which was carried to the Supreme Court. The decision of this case by the Supreme Court in 1908 resulted in a practical vindication of the contention of the dairy and food department as to the meaning of the law.

Resulting from this decision of the Supreme Court, there has since been a very general compliance with the provisions of the law, so that in his report for 1910, the dairy and food commissioner stated in striking contrast with what was said by the first dairy and food commissioner: "Under the Wisconsin law as enforced, the laboring man or any other man who wants oleomargarine, can now get it and at oleomargarine prices. And if he wants butter, he is practically sure to get butter and not oleomargarine at butter prices. This is the end sought by legislation on this subject."

The following gives added meaning to the foregoing statement: According to the government statistics, for the year 1910, there were produced in this country 136,263,444 pounds of oleomargarine. As the population of Wisconsin for that year, as shown by the United States census, was 2½% of the total population of the country, it is fair to estimate that 2½% of the total amount of oleomargarine produced in the country, or 3,406,586 pounds, found a market in Wisconsin. From the investigations and inspections made by the dairy and food department, it is believed that since the decision of the Wisconsin Supreme Court in the Meyer and Nowack oleomargarine case, the percentage of oleomargarine disposed of in this state as butter has been so small as to be almost negligible. Nevertheless, if it be conceded that 25% of this amount of oleomargarine was disposed of to the consumer as butter, there still remains 75% of that amount, or 2,554,938 pounds disposed of to Wisconsin consumers as oleomargarine.

The average price of butter on the Elgin market for the year 1910 was 29.8c.

Estimating the difference in the price of oleomargarine and butter at 10c. a pound, it is an extremely conservative estimate that the work of the dairy and food department in the enforcement of the state oleomargarine law, saved in 1910 to the consumers in Wisconsin, $255,493, an amount five and one-half times the cost of maintaining the dairy and food department for that year.

While I do not undertake to estimate the amount saved to consumers by the dairy and food department, during the entire time of its existence, the foregoing estimates indicate that such saving has been immense.

MARKET MILK.

In the biennial report of the dairy and food commissioner for 1909-10, an estimate is made of the market value of milk consumed in a year by the entire population of the state. It is estimated as $9,483,369. It is a conservative estimate that one-third of this amount, or $3,161,123, was paid by the citizens of the cities and villages of the state. It is also a conservative statement based upon our years of experience in inspecting, that the work of the dairy and food department in the enforcement of the dairy and food laws of the state, saved to these purchasers and consumers of milk in the cities and villages of Wisconsin at least 2½% of the market value of genuine milk, that otherwise would have been paid for worthless adulteration by watering and skimming. This amounts to $79,000, and is approximately one and three-fourths times the highest cost for the maintenance of the dairy and food department for any year of its existence, and approximately five times the average annual cost of the department from the time of its organization until June 30, 1911. This does not take into consideration the lives of infants that have been saved and the health that has been conserved by the elimination of chemical preservatives from milk and the very great improvement in the cleanliness and consequent sanitary condition.

FILLED CHEESE.

To eliminate the "filled cheese" fraud from Wisconsin was one of the objects especially set forth by Governor Hoard in his message, to be accomplished by establishing and maintaining the office of dairy and food commissioner. That fraud has been completely eliminated from the state. The dairy and food department has not found a pound of "filled cheese" manufactured or sold in Wisconsin during the past ten years.

STATISTICS.

Wisconsin has not been surpassed by any state in the Union in the vigor of her dairy laws and in the enforcement of these laws, with the result that Wisconsin is unsurpassed by any state in the Union in both the quality and quantity of her commercial dairy products.

In the biennial report of the dairy and food commissioner for 1909-10, page 4, there was published the following:

WISCONSIN DAIRY STATISTICS FOR THE YEAR 1909.

	Lbs.	Rec'd for or valued at
Cheese of all kinds produced in factories	145,171,235	$20,706,749
Other cheese factory products sold	.....	234,022
Cheese produced on farms	1,433,702	90,118
Butter produced in creameries	105,307,356	29,466,363
Other creamery products sold	.....	1,739,650
Farm-made butter	7,952,480	1,750,948
Products of milk condenseries	.....	3,771,600
Milk produced other than that furnished cheese factories, creameries or condenseries	.....	9,807,000
Estimated value of milk and cream shipped to Chicago, St. Paul, Minneapolis, Dubuque and other points outside of Wisconsin	.....	2,595,000
Skimmed milk	.....	6,795,600
Whey	.....	2,043,000
Total		$79,000,050

CHARACTER OF CHEESE FACTORY AND CREAMERY INSPECTIONS.

Following are sketches indicating the kind of work done by the dairy inspectors at creameries and cheese factories and with patrons of the same, and in relation to the city and village milk supplies, the particular kind of inspection made in each instance depending upon the conditions and necessities:

The inspector goes to the creamery or cheese factory to examine carefully, and inquire into, conditions present in that creamery or cheese factory. He goes early in the morning. He procures a list of the names of the patrons. He has bottles ready for taking a sample of each patron's milk as delivered. He examines the scales to ascertain that they are accurately balanced. He stands by the weigh cans and inspects the work of the man who receives the milk or cream, as well as the milk or cream and the condition of the cans containing the same. He scrutinizes the method of taking the samples of milk or cream for testing and how the composite samples are cared for. He observes carefully whether or not the man who takes in the milk or cream receives any unsanitary or otherwise unlawful product, and if unsanitary or otherwise unlawful milk or cream is offered by the patron and received by the creameryman or factoryman, he warns both alike concerning the unwise and unlawful practice. At times, he instructs the patron as to the proper way to wash and care for his cans and the proper method of caring for his milk or cream. He shows him how the quality of the product, and therefore the price, and hence the profits to the patrons are ulti-

FIGURE 1.—CURD FROM GOOD MILK

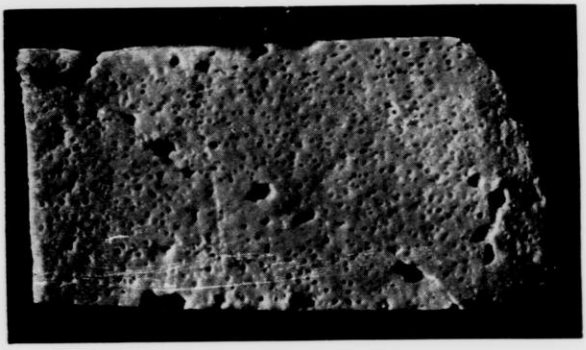


FIG. 2—CURD FROM TAINTED MILK

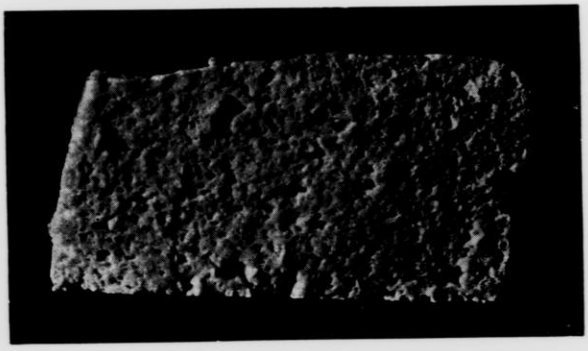


FIG. 3.—CURD FROM FOUL MILK.

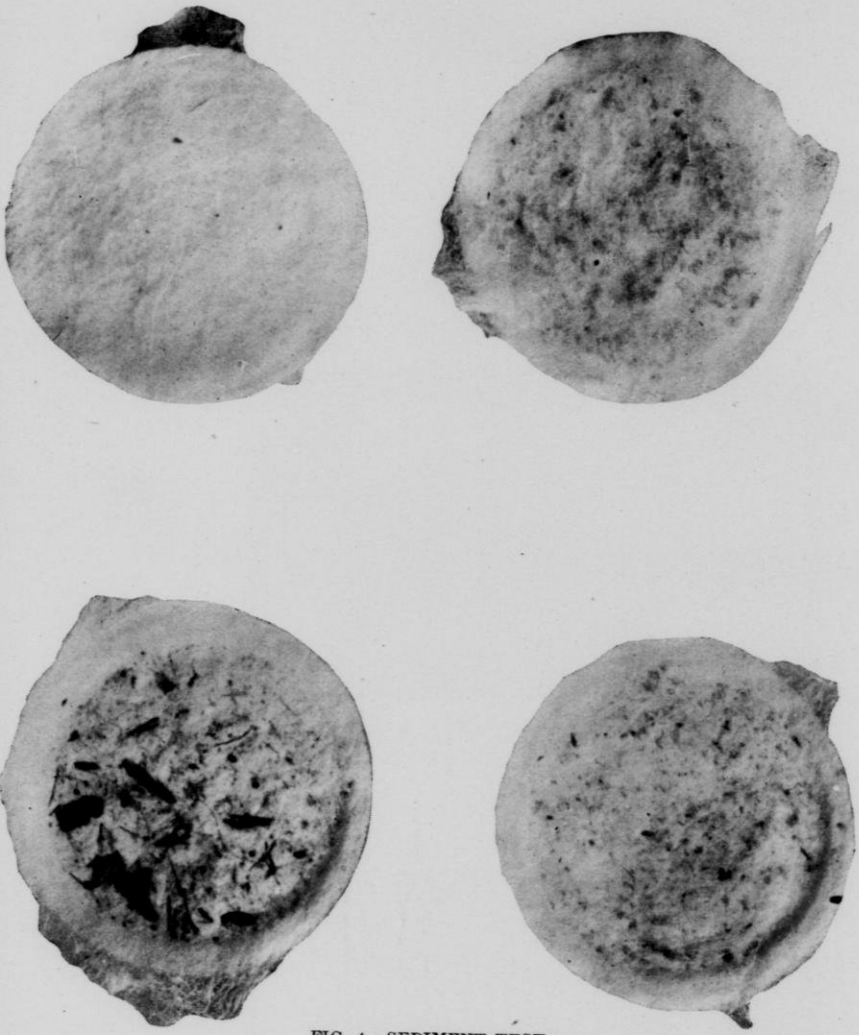


FIG. 4.—SEDIMENT TEST

mately dependent upon the clean and sanitary character of the milk furnished by each patron. He discloses to the patron how bad milks affect the flavors of the dairy products in quality and value, showing how a few may impose a loss upon all the patrons. In case of emergency, he requests the patrons to meet him at the factory late in the afternoon or early evening. With the samples taken, he proceeds to make the Babcock test for butter fat, the lactometer test for watering or skimming, and the Wisconsin curd test to determine the character of the milk of each patron as to its cleanliness or the kind of care it has received. When the patrons meet him later in the day, he makes known to them the per cent of milk fat found in each patron's milk. If he has reason to suspect watering or skimming of the milk by any patron, he furnishes a sample to the state chemist for analysis. He exhibits to the patrons the sample as shown by the Wisconsin curd test, which indicates the character of each patron's milk. Here they see from one patron's milk a curd that is of a fine velvety, firm texture, having a clean agreeable flavor. This demonstrates that the patron's milk from which this curd was formed was produced under clean conditions, quickly cooled and otherwise properly cared for. (See Figure 1.) He exhibits the curd from another patron's milk that has in it many gas holes or pin holes so-called, and has a tainted flavor. He explains that this peculiar texture and flavor are due to gas-forming bacteria that thrive in uncleanliness of some sort. (See Figure 2.) He shows them a curd from another patron's milk that is spongy in texture, and has a very offensive flavor or odor. He explains to them that this is due to conditions worse than those from which No. 2 resulted. (See Figure 3.) He explains to them that it is impossible to make the best quality of butter or cheese from such milk, and further explains to them the great loss that will be sustained by the butter or cheese factories due to such bad milk or to bad cream. He lets them see the curds produced from each patron's milk, that each may see and know for himself that there was a difference in the quality of the milk furnished by the different patrons, both as to butter fat content and cleanliness. He explains to them how the good milk and the unsanitary milk are each produced, and he warns them against the supplying of unsanitary milk as being unlawful and wrong and liable to lead to prosecution. Having taken samples of milk from the last gallon or two of the patrons' milk as delivered from the cans, and having passed that milk through filtrates of absorbent cotton or through filter papers, he exhibits to them the actual filth, if any, thus taken from their milk on the morning of his inspection. (See Figure 4.) He illustrates and explains the use and reliability of the Babcock test when skilfully used. He explains the requisite conditions for securing accuracy by that test. He has instruments which he uses to test the pipettes used by the butter maker or cheese maker to see if their pipettes are correct as to size. He tests the calibration of the bottles to determine their accuracy or inaccuracy. He applies his speed tester to the Babcock test to ascertain if the operator is running it at the rate of speed to give accurate results. He tests the sulphuric acid to find if it is of the correct strength. He ascertains at what temperature the operator reads the test and if he measures the fat column correctly. He tests the skim milk, buttermilk and whey for butter fat content. He ascertains if the scales and weights used for weighing the cream in testing are accurate. He inspects the weigh-cans, pipes, pumps, churns, vats, vat gates and everything connected with the factory to ascertain if they are kept clean and in good sanitary condition; and he does the same as to the floors and walls, as well as the surroundings. In his inspection of the surroundings he gives especial atten-

tion to the drainage, and where that is defective he suggests means for securing adequate drainage. If conditions are found unsanitary or otherwise unlawful, he warns the manager or maker that they must be changed within reasonable time, or that prosecution must necessarily follow, and he prosecutes if the change is not made. The Wisconsin curd test gives him a cue as to what patrons need his inspections at the barns, and so he goes to the premises of the patrons who furnish the most unsanitary milks and points out to them the changes that should be made. If he finds the milk at the factory below the legal standard of butter fat or otherwise unlawful, he visits the farm and takes samples there for testing. The discrepancy, if any, between the tests of the milk at the factory and those at the farm determines the course to be pursued.

PEN PICTURES OF COW BARNS BEFORE AND AFTER INSPECTION.

In the absence of photographs taken before and after barn inspection, I can do no better than furnish brief pen pictures. The following pictures cow barns before inspection or at first inspection: A building containing not a single window, consequently without light; the ceiling festooned with dusty cobwebs; the earth floor has no covering, it is not cleanable and contains sags in which liquid manure stands continually; or it may be a saturated, leaky plank floor, hiding a big mass of old filth underneath or literally floating on liquid manure which spurts up through the cracks as one walks across it. There are accumulations of manure over the floor and in the stalls, the latter being so arranged that the cows are compelled to lie in dung, of which they carry thick coats all the winter. (See Figure 5.) There being no provision for ventilating, the air is so charged with impurities and strong odors as to be stifling. The cows are compelled to breathe this air, and the milk on its way from the udder to the pail travels through this air, which adheres to the streams of milk and is carried beneath the surface of the milk in the pail and rises in minute bubbles. The milker in this case, sitting between two cows, has dung beneath him, behind him, in front of him and above him and manipulates a filthy surface above the milk pail.

This sort of cow barn and equipment was not designed to promote healthfulness and good sanitation. It was meant for shelter only.

The following pictures the barns after inspection and law enforcement: On two or more sides of the building, a number of large windows have been inserted; the ceiling and walls have been whitewashed; a good cement floor, containing gutters for manure, has been constructed. The stalls have been so arranged that they furnish clean beds for the cows; the latter are groomed and look sleek and clean. (See Figure 6.) The manure is all removed from the barn at least once daily, and suitable ventilators carry out the impure air, replacing it with fresh air. There are no disagreeable odors. The barn has a pleasing, healthful appearance. It is suitable for shelter and for a "food factory" as the dairy barn of today can rightfully be named.

PEN PICTURES OF CHEESE FACTORY CONDITIONS BEFORE AND AFTER INSPECTION.

Following is a pen picture of conditions more or less prevalent at cheese factories before the vigorous work of inspection, in recent years, of the dairy and food department was carried on:

Faulty systems of whey and sewage disposal constituted a prolific source of unsanitary conditions. The old style whey tanks

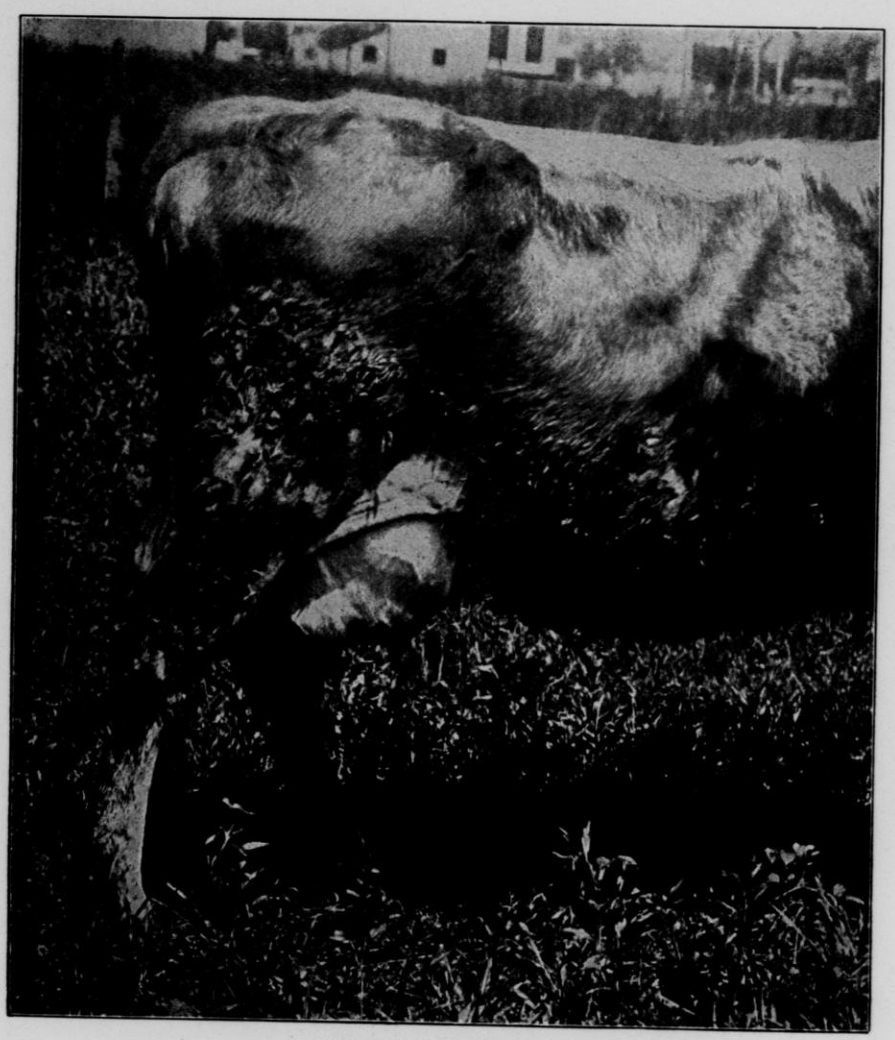


FIG. 5.—FILTHY COW.

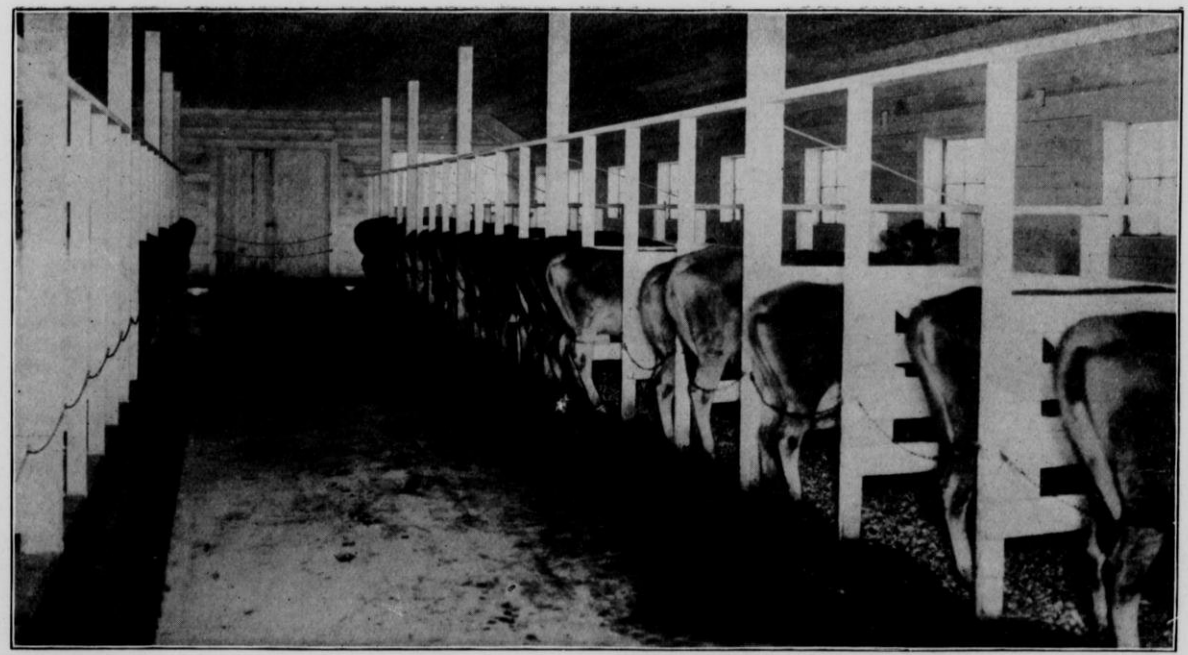


FIG. 6.—CLEAN COWS IN CLEAN BARN

which were placed about six feet deep in the ground and had no outlet were prevalent. So much time was required in cleaning them that it was seldom done by the regular factory help at the time of day when they were nearest empty. Often times maggots were found in the decaying organic matter which had accumulated therein and whey from these tanks was carried away in the same cans which conveyed the milk to the factories. Whey conductors that leaked under the buildings, and at various places on the way to the whey tank placed outside of cheese factory buildings, making putrid soil and a constant stench, were common. Other conductors consisted of tight pipes which entered the building, emitting foul odors from the decaying substances with which the inner walls of these pipes were coated. In many instances the milk patrons refused to take away all the whey and the surplus was allowed to overflow on the soil, causing a stench that was noticeable for a long distance.

The question of drainage had been largely ignored by many cheese makers, waste products being dumped on the soil. Some factories were connected with good sewers which, being unprovided with a trap, discharged the sewer gas into the building. The intake room, walls, presses, and jacket of milk vats were badly bespattered and greasy. The ceiling was blackened with fly specks, floor dirty and nearly all utensils unclean. Overalls and aprons of operators were not infrequently saturated and coated with dirt and filth. No efforts, in many instances, were made to keep flies out or to reduce the number inside, and some of them became tangled up in the milk and curd and were mixed up with the cheese. History records that at least one thrifty cheese maker kept a tame duck at his factory which, at the right time, he would pick up and put into the cheese vat filled with milk and allow it to swim around and gather the flies from the surface of the milk.

There were many and great losses caused by taints or changes in the milk, due to lack of proper knowledge or to neglect and carelessness on the part of milk producers supplying milk to cheese factories. Partial skimming and watering of the milk furnished the factories was all too common. It is reliably reported that the milk of a certain cheese factory patron, who had to cross a stream of water where it was his custom to stop, ostensibly to water his horses, was found more than once to contain a fish.

The average Wisconsin cheese factory of today, as a result of the campaign for cleanliness on the part of the dairy and food commission of this state, shows greatly improved conditions. The indifferent, negligent operator, who "couldn't afford it", "didn't have time", "thought it wasn't necessary", experienced a change of heart, became active, and fixing up and cleaning up was promptly begun. Many new whey tanks have been installed, good conductors and drains provided, and lime spread over putrid soil. Many cheese factory buildings have been repaired or remodeled and painted, windows and doors have been provided with screens, and things cleaned up in general until the aspect of the premises in hundreds of instances has been completely changed. In many cases an entirely new building has been constructed—the old building, an unsuitable and unsanitary affair, being entirely abandoned. The badly constructed and heedlessly managed cheese factories of former years are, in the main, things of the past, and the average Wisconsin cheese factory of today presents a more pleasing picture. Without, all is inviting. Most of the buildings are neatly painted, and in place of rubbish, flower beds frequently adorn the yard. Foul smells and bad drainage are inconspicuous. The whey tank, whether inside or outside the building, is scalded daily, and in many instances the whey is pasteurized and kept sweet for patron's use on the farm. Within,

there is neatness and cleanliness. The hot water and live steam connections in the modern factories insure cleanliness of utensils. The skimming and watering of milk has become exceedingly rare. In the main, the patrons' cans are clean and the milk itself delivered at the factory is clean. All this, together with the uncompromising war waged against all fraudulent products has effectively contributed to the present conditions where Wisconsin cheese has established and maintained for itself in the markets and in competitive contests a reputation unclaimed by any other state in this great country.

REALISTIC PEN PICTURES OF A CREAMERY BEFORE AND AFTER INSPECTION AND LAW ENFORCEMENT.

The creamery was poorly painted, a lot of weeds and rubbish around it, no adequate drainage and in consequence the sewage ran on the ground just outside of the building through which the patrons drove when delivering milk or cream to the creamery. Just outside, at one end of the creamery, were two large tanks, one for skim milk, and the other for buttermilk, both filthy. The pipes through which the milk was run to these tanks were also filthy, no attempt whatever being made to clean either the tanks or the pipes. At the place of loading the milk, a great deal of milk had been spilled on the ground, altogether making the surroundings filthy and the odor very bad. The creamery inside was in bad shape. The wood floor had rotted, and a part of the sewage soaked through and remained underneath to decay. The odor arising from that condition was very bad. The refrigerator, which was a part of the main creamery building, was in poor repair, moldy and damp. No screens were on the doors or windows, consequently there were plenty of flies in the creamery, also in the cream which was taken care of in an open vat. The butter maker, however, said he always strained the cream before churning, so that no flies got into the butter, not realizing the awfulness of the practice of soaking flies over night in a vat of cream from which a food for man was to be manufactured. The pump and pipes used for pumping the milk to the separators were rusty and unclean. Aside from that, the rest of the creamery apparatus used was passably clean though not in the best of repair. The steam connections to the engine and many unions and valves were leaking enough steam to run the entire plant. The milk and cream were tested twice a month. The samples for testing were cared for in tin-top sample jars, which permitted the evaporation of moisture. Part of the glassware was not correct, and the cream scales were not accurate.

All of these bad conditions were pointed out to the butter maker and to the owners and the law on the subject read to them. They promised to get busy at once and put the entire creamery and premises in good condition.

This creamery today is well painted; has adequate drainage; the surroundings are very materially cleaned up; an arrangement is made whereby little or no milk is spilled on the ground at the place of loading the same; the buttermilk tank is washed, and the pipes for conducting the milk to it are steamed out daily. The product received at the creamery now is in the form of hand separated cream, consequently there is no separating done and no use for a skim milk tank. A good new cement floor has been put in, but before this was done the owners said they had hauled away loads of filthy sewage and polluted earth from underneath the old wood floor. The refrigerator was repaired and is in first class condition; the doors and windows screened; new cream ripeners installed; all steam leaks

practically stopped; accurate glassware and cream scales provided, and the cream tested at each time of delivery. The entire creamery and apparatus are kept in a good and clean condition, and no bad odors are noticeable about the place.

Not all of such bad conditions were found at every creamery. In some cases the building was poor, and the apparatus and surroundings passably good and clean; at others, the building and apparatus were good and clean, but the surroundings were bad; and at still others, the buildings and surroundings were good and the apparatus very unclean. Wherever bad conditions were found, such bad conditions have been pointed out to the proper person, either the butter maker, manager or owner, and a request made to have conditions improved. If this failed, prosecutions followed, and as a result of such work there has been a marked improvement in the creameries throughout the state, so much so that the poorest creamery in the state today will compare favorably with the best creamery of five or six years ago.

It is by no means claimed that the millennium has been reached in the matter of sanitation in cheese factory, creamery and dairy conditions and products, for much yet remains to be accomplished. What is confidently asserted is that there have been revolutionary changes in all these matters.

SAVING TO PRODUCERS OF CHEESE AND BUTTER BY WORK OF THIS DEPARTMENT.

In answer to inquiries made of a representative number of leading wholesale dealers in cheese, who have for many years been familiar with Wisconsin conditions, they have stated that in their judgment it is very conservative to estimate that the improvement in the quality of Wisconsin cheese, due to the work of the Wisconsin dairy and food department in sanitary inspection and otherwise, has been such that the producers of Wisconsin cheese have realized upon an average at least 1 cent a pound more than they would have realized except for the work of this department.

The report of the dairy and food commissioner for the year 1909–10 shows that 145,171,231 pounds of cheese were produced by the Wisconsin cheese factories during the year 1909. Estimating that 1 cent a pound was saved to the producers of that cheese, it is shown that over $1,450,000 was saved for the year and is a conservative estimate of the annual amount saved to the producers during recent years.

In like manner, upon inquiry of a representative number of wholesale dealers in butter, who for many years have handled Wisconsin butter and have been familiar with Wisconsin conditions, it is found that the lowest estimate made by any of these dealers is that not less than one cent a pound has on an average been received by the producers of Wisconsin butter more than they would have received had it not been for the work of this department in improving the sanitary and other conditions in creameries and dairies. The answers given by a large number of these dealers place the saving much higher than one cent a pound.

In the report of the dairy and food commissioner for 1909–10 it is shown that 105,307,356 pounds of butter were produced for the year 1909. A saving of one cent a pound on this amounts to over $1,053,000. It thus appears as a conservative estimate that this department has caused an annual saving to the producers of cheese and butter in this state of more than $2,500,000. This represents an average annual saving to each patron of the Wisconsin cheese factories and creameries of a little more than $20.

Consumers have been benefited by being afforded an article of greatly improved quality. No state in the Union is now producing commercial cheese and butter of a higher quality than Wisconsin.

SAVING TO CONSUMERS OF LINSEED OIL.

Since 1899, there has been a law on the statute books, relating to the sale of adulterated linseed oil; but it was so defective in many particulars, that it was almost a dead letter until 1909, when the law was so amended and extended as to be enforcible and very effective in the suppression of adulteration and fraud in the sale of linseed oil, turpentine, white lead and zinc white. The dairy and food department is charged with the enforcement of that law.

According to reliable authority on the subject of the consumption of linseed oil in the United States, there is annually consumed, in recent years, in the country, 60,000,000 gallons. By the census of 1910, it is shown that the population of Wisconsin is approximately 3% of the population of the entire country. Upon the basis of population, therefore, Wisconsin should consume 3% of the total amount of linseed oil consumed in the entire country which amounts to 1,800,000 gallons. Based upon the results of our analyses of linseed oils in our laboratory and of our inspection of the linseed oil supply of the state, it is fair to say that 12½% of the total amount of linseed oil used in the state would be adulterated with mineral oil or with a mineral and rosin oil mixture, were it not for the law enforcement by this department.

The market value of these adulterants was for the years 1909 and 1910, fifty cents a gallon less than the market value of genuine linseed oil. In other words, the 12½% of the 1,800,000 gallons of reputed linseed oil, or 225,000 gallons of adulterations worth fifty cents a gallon less than linseed oil, would have been sold as linseed oil and at the price of linseed oil, except for the law enforcement by this department; 225,000 gallons at fifty cents a gallon amounts to $112,500, the estimated amount saved during the year 1910, to the ultimate consumers of linseed oil in this state, due to the law enforcement by this department. This estimate assumes that the painter makes an honest use of the product purchaseable on the Wisconsin market.

The immense loss of and damage to property caused by the use of adulterated linseed oil cannot be estimated and expressed in dollars and cents. That loss is immense and vastly exceeds the figures given above.

CONDITIONS SHOWING THE NEED OF FOOD LAWS.

I make the following quotation from the report of the dairy and food commissioner of Wisconsin for the years 1897–98, the Honorable H. C. Adams:

> "The first comprehensive general pure food law enacted in Wisconsin was passed by the legislature of 1897. The laws relating to the sale of adulterated dairy products were made reasonably stringent before that time. The only law under which the Dairy and Food Commission could prosecute dealers in adulterated food products, other than those of the dairy, was the law of 1879, which prohibited the false labeling of these products and provided for the prosecution of parties who *knowingly* violated the law. As it is practically impossible to prove the matter of intent, the law was a dead letter, and the work of adulteration went on without let or hindrance by the state. The present law as passed by the legislature of 1897 and made to take effect

January 1, 1898, embodies the main features of the pure food law now in force in Ohio, Massachusetts and other states, and which have been incorporated in the various pure food bills which have been presented to the attention of congress.

While the majority of the adulterations common in food products have not been injurious to the public health, all of them have taken money from the public pocket. Adulterations had become so common and widespread in many articles of food that it was deemed impossible by many sincere men in the grocery trade to eradicate them by any law that could be devised."

To make clear what has in part been accomplished by the dairy and food department of this state, it is necessary first to set forth the conditions existing at the time the pure food law was enacted. For this purpose I submit the following:

Soon after the late Hon. H. C. Adams, who had served as dairy and food commissioner of this state for seven and one-half years, had resigned that position and had been elected member of congress from the second district of Wisconsin, he made the following statement in a public and published address:

"Tea has been adulterated, coffee beans, made out of rye paste creased and colored to look like the real thing; flour, adulterated with white earth; candy, with the same material; common spirit vinegar, sold for cider vinegar; a riot of adulterations in all forms of spices; butter, adulterated with water, casein, lard and tallow; smoked hams, that smoke never touched and which obtained their color and flavor from a poisonous solution called "liquid smoke;" baking powders with labels written by the prince of liars; cream, colored artificially and preserved by rank poison; sausage made of stale meat unfit for human use, brightly colored by an injurious preservative; maple syrup made out of brown sugar and a beautiful label; New Orleans molasses, as nearly like the genuine as a decrepit negro would be like the Venus de Milo; milk, the special food of babies and invalids and the universal food of the people, diluted, skimmed, and poisoned; veal, from calves killed within forty-eight hours after birth; cheese robbed of butter fat and filled with hog fat; canned goods, full of water and injurious preservatives; adulterated beer, adulterated whiskey, adulterated wines, adulterated drugs; cottonseed oil sold for olive oil; honey mixed with glucose; lard, containing caustic, lime, starch, stearin and cottonseed oil; peas, colored with poisonous copper. Nearly everything which can be used for drink or food has been sold to the American people in recent years under the name of pure food products."

Referring to conditions that existed about the time our general food law was enacted, Dr. H. W. Wiley, Chief of the Bureau of Chemistry of the U. S. Department of Agriculture, made the following statements:

"What may a housewife expect who goes into a store where no food regulations, national, state or municipal exist? If she asks for butter, she may get oleomargarine or renovated butter; for honey, glucose or a mixture thereof; for pepper an article adulterated by the addition of starch and ground shells; for jelly, some fruit juice usually derived from apple cores and skins rejected in drying, mixed with glucose, preserved with salicylic acid and colored with some sort of aniline dye. The peas and beans may contain, especially if they are very green, considerable quantities of that poisonous substance, sulphate of copper; the prepared meat or sausage, boric acid and usually some color-

ing matter to intensify the real color of the meat; the codfish may be preserved with boric acid instead of old-fashioned common salt; the sardines purporting to be of French origin may have been caught off the coast of Maine, and instead of being packed in olive oil as one would expect, are often packed in cotton seed oil. She may get tub oysters highly dosed with borax; milk and cream containing formaldehyde; maple molasses made of glucose and melted brown sugar; olive oil that is wholly cotton seed oil or mixed with cotton seed, peanut or sesame oil; white wine almost saturated with sulphurous acid, red wine made partly of sugar and not wholly of the juice of the grape; Mocha and Java coffee from Brazil, yet bearing the false name; cream made of milk thickened with viscogen and artificially colored, and so on down the list."

Referring to conditions as they existed before the enactment and successful enforcement of food laws, Dr. E. F. Ladd, for a decade food commissioner of North Dakota, and one of the ablest and most vigorous food officials in the country, made the following statements:

"Jellies and jams were largely adulterated and misbranded, made from apple stock and waste fruit products, often containing starch paste and mucilage, colored with aniline dyes, preserved with salicylic acid, sweetened with glucose and saccharin and the whole falsely labeled. Our canned corn, almost without exception, was bleached with sulfites, preserved and sweetened with a coal tar product,—saccharin. Our peas and string beans frequently contained copper and alum salts and often contained chemical preservatives. Our meats were embalmed with chemicals, and some of the canned products contained little besides gristle, connective tissue and waste matters, seasoned and flavored, but sold as potted ham, chicken, etc. Our sorghum syrup came largely from glucose factories, while the maple syrup was almost wholly an imitation product, worth fifty cents a gallon and retailed for $1.50. Our strained honey was largely flavored syrups and glucose. Our candies were made from glucose, containing sulfites, to which further sulfites were added, colored with coal tar colors, many of which were known to be harmful, and flavored with chemicals or synthetic flavors. Our whiskies, brandies and wines, most generally sold even in the drug stores, the good Lord only knows what they did contain, but our chemists have shown that they seldom contained real whiskey. Our cider vinegars were unknown to the apple family. Our spices were but a semblance of the real thing, made as they were, from corn meal, cocoanut shells, olive stones and other waste products. Not a few of our drugs, drug preparations, extracts, etc., contained wood alcohol known to be a deadly poison. Cereals and chicory were the basis of much ground coffee. Lemon and vanilla extracts were largely imitation products and put up with wood alcohol. Many of the preparations dispensed at the drug stores varied from 25% to 150% of the U. S. P. strength; and fully 75% of the patent medicines were fakes, pure and simple."

The existence of extensive harmful adulterations of food products was early recognized by the New York Court of Appeals in the following language:

"It is notorious that the adulteration of food products has grown to proportions so enormous as to menace the health and safety of the people. Ingenuity keeps pace with greed and the careless and heedless consumers are exposed to increasing perils. To redress such evils is a plain duty but a difficult task.

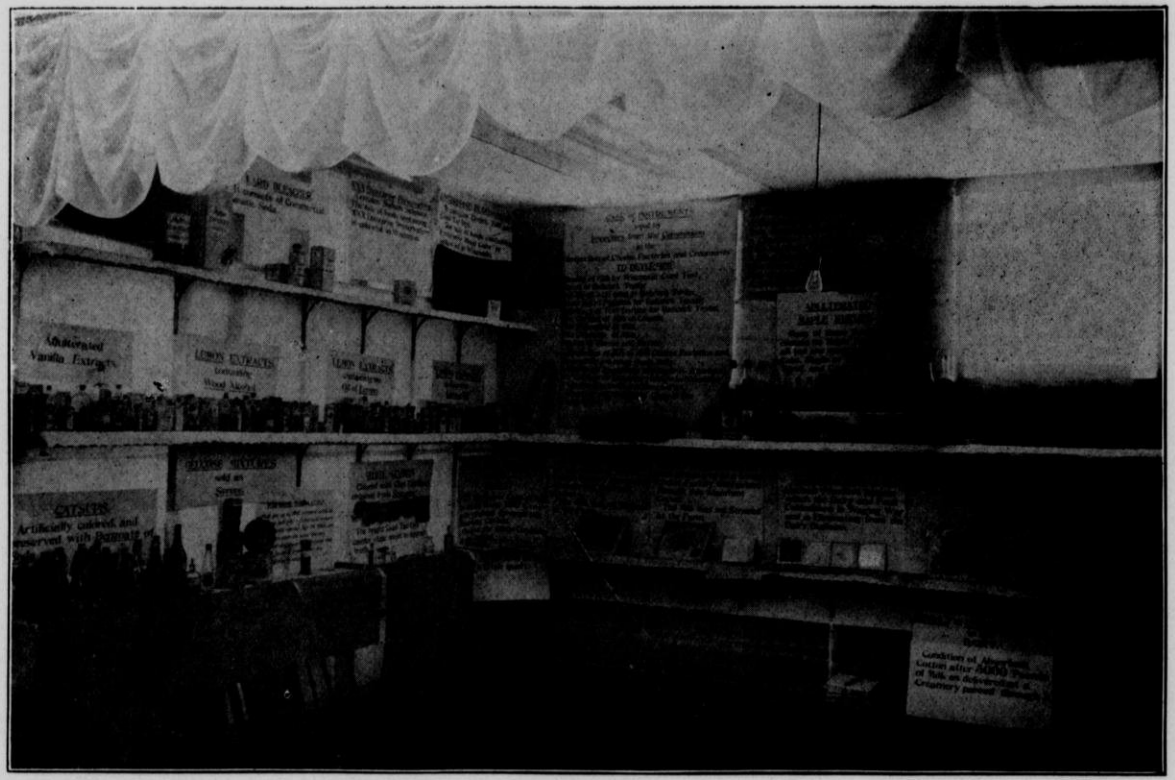


FIG. 7.—PART OF EXHIBIT OF ADULTERATED FOODS MADE BY DAIRY AND FOOD COMMISSION AT WISCONSIN STATE FAIR 1905.

Experience has taught the lesson that repressive measures which depend for their efficiency upon the proof of the dealer's knowledge and of his intent to deceive and defraud are of little use, and rarely accomplish their purpose. Such an emergency may justify legislation which throws upon the seller the entire responsibility for the purity and soundness of what he sells and compels him to know and be certain."

Following is a partial statement of adulterations found by the chemists in our laboratory.

BAKING MATERIALS:—
- Baking Powders:—Alum, with no statement of its presence on the label. Excessive amount of corn starch. Deficient in CO_2
- Flour:—Mixed with low grade flour and bleached with oxides of nitrogen.
- Buckwheat flour:—Low grade wheat and rye flour, corn starch, gypsum.
- Cream of Tartar:—Composed of calcium acid phosphate, calcium sulphate, alum, starch.

BEVERAGES:—
- Alcoholic Beverages:—
  - Wines:—Not the product of grapes, artificially colored solutions of glucose preserved with benzoic acid; white wine bleached with sulphur dioxide; cherry wine, a solution of sugar in water artificially colored and flavored, containing no alcohol. Sugar, water, tartaric acid, tannin, coal tar dye.
  - Blackberry Brandy:—Artificially colored and sweetened with saccharin.
- Non-Alcoholic Beverages:—
  - Apple Cider:—Diluted solutions of apple juice, sugar, water, tartaric acid, artificial flavors, coal tar dyes, preserved with chemical preservatives, salicylic acid and hydrofluoric acid, benzoate of soda, benzoic acid, saccharin.
  - Peach Cider:—Saccharin, benzoate of soda.
  - Raspberry and Orange Ciders:—Made from sugar, water, tartaric acid, saccharin, salicylic acid, coal tar dyes.
  - Cocoa:—Starch, oxide of iron.
  - Chocolate:—Starch, oxide of iron.
  - Grape Juice:—Sugar, water, tartaric acid, coal tar dye.
  - Pop:—Often contains saccharin, salicylic acid, coal tar dye.

CANDY:—Paraffin, clay, coatings of stearic acid, moldy and wormy nuts coated with shellac.

CONDIMENTS:—
- Catsup:—Canning factory refuse, tomato skins, seeds and trimmings, glucose. Highly colored with coal tar dyes and preserved with chemical preservatives and sweetened with saccharin.
- Meat Dressings:—Preserved with boric acid and borates.
- Vinegar:—
  - Cider Vinegar:—Not made from apples; artificially colored solutions of sugar in fermented apple solids or glucose with spirit vinegar.
  - Malt Vinegar:—Artificially colored solutions of spirit vinegar, sugar, glucose.
  - Wine Vinegar:—Not the product of grapes; spirit vinegar.
  - Spirit Vinegar:—Pyroligneous acid.
- Spices:—Starch, olive pits, cocoanut shells, pepper dust, pepper hulls, roasted cereals, oxide of iron, weed seeds, artificial coloring matter, mace.

DAIRY PRODUCTS:—
- Butter:—Water, foreign fats, deficient in butter fat, renovated butter, oleomargarine.
- Cheese:—Skimmed cheese sold for cream cheese or whole cheese, boric acid, borates, filled with foreign fats.
- Cream:—Boric acid, borax, formaldehyde, gelatin, artificial coloring matter, deficient in fat.
- Ice Cream:—Gums, gelatin, deficient in fat.
- Milk:—Added water, skimming, artificial color, formaldehyde, boric acid, borax, dirt.
- Evaporated and condensed milk:—Sold as evaporated or condensed cream.

DRUGS:
- Alcohol:—Diluted with water.
- Ammonia Water:—Deficient in the active principle.
- Elixir Simples:—Contained wood alcohol.
- Hammamelis Water:—Wood alcohol, formaldehyde, deficient in per cent of alcohol.
- Hydrogen Peroxide:—Deficient in the active principle.
- Jamaica Ginger:—Contained wood alcohol.
- Laudanum:—Deficient in morphine, one of the active principles.
- Lime Water:—Deficient in calcium hydroxide the active principle.
- Solution Liquor Potassium Arsenitus:—Deficient in the active principle.
- Spirit of Camphor:—Water, deficient in camphor, wood alcohol.
- Spirit of Nitrous Ether:—Deficient in the active principle, added water.
- Sulphur (Precipitated):—Calcium sulphate.
- Tincture of Cinnamon:—Contained wood alcohol.

Tincture of Digitalis, and tincture of Strophanthus:—Contained wood alcohol.
Tincture of Iodin:—Deficient in iodin, wood alcohol, prepared without potassium iodide.

FLAVORING EXTRACTS:—
Lemon Extract:—Wood alcohol, terpeneless lemon oil, robbed lemon oil, oil of lemon grass, artificial color, dilute alcohol.
Vanilla Extract:—Wood alcohol, tonka extract, vanillin, coumarin, prune juice, caramel, coal tar dyes.
Strawberry Extract:—Artificial preparations flavored with ethers and colored with coal tar dyes.
Raspberry Extract:—Artificial preparation flavored with ethers and colored with coal tar dyes.
Banana Extract:—Artificial preparation flavored with ethers and colored with coal tar dyes.

FISH:—
Fresh:—Boric acid, borax, partly decayed.
Dried:—Boric acid, borax, benzoate of soda.
Oysters:—Added water, boric acid, borax.

FRUITS:—
Canned:—Sulphur dioxide, benzoate of soda, saccharin, artificial color.
Dried:—Sulphur dioxide used to bleach in drying.
Fruit Products:—
Jams and preserves:—Made from unripe or decayed fruit, fruit refuse, apple trimmings, glucose, phosphoric acid, coal tar dyes, benzoate of soda.
Jellies:—Made from apple pomace, starch paste, gelatin, glucose, tartaric acid, artificial flavors, coal tar dyes.

FATS:—
Lard:—Cottonseed oil, cottonseed stearin, beef stearin, beef tallow.
Oleomargarine:—Made in semblance of yellow butter, by use of artificial color or selection of material.

MEATS:—
Fresh Meat:—Meat from diseased animals.
Chopped Meats:—Preserved with sulphites, boric acid, borax, colored with coal tar dyes.
Sausage:—Filled with starch and cereal fillers, added water, boric acid, borax, coal tar dyes, sulphites.

MOLASSES:—Glucose, poisonous salts introduced in the refining of sugar, sulphur dioxide.
NUTS:—Artificially colored to make them appear of greater value.
NOODLES:—Often sold as "Egg Noodles" but containing no egg, artificially colored.
OLIVE OIL:—Cottonseed oil, peanut oil, lard oil, copper salt.
PICKLES:—Alum, benzoic acid, saccharin, artificial color.
RICE:—Coated with glucose and talc to make it appear of greater value, artificial color.

SYRUPS:—
Cane Syrup:—Glucose.
Sorghum:—Glucose.
Maple Syrup:—Mixed with glucose, cane syrup or sorghum, or made entirely from sugar and a decoction of maple wood, hickory wood, or corn cobs, saccharin, benzoate of soda.

SUGAR:—
Cane Sugar:—Starch sugar.
Maple Sugar:—Made by the evaporation of mixtures such as stated above for maple syrup.

VEGETABLES:—Canned vegetables, sulphate of copper, tin oxide, saccharin, starch, soaked dried vegetables in cans sold as fresh canned vegetables.

COURSES OF PROCEDURE OPEN TO THE PUBLIC.

With these widespread adulterations of food products, for which the food manufacturers and purveyors were alone responsible, there were three courses of procedure open to the people of this country, as to the recovery of their rights:

1. They could quietly acquiesce in these conditions. They could, by silence and inaction, allow an army of food adulterators to rob them of their health and of their incomes. They could close their eyes, stultify their intellects and proclaim that the American food manufacturers and purveyors are the personification of honesty and integrity; that no wrongs were being perpetrated on consumers; that there was no embalmed beef; no adulterated food. General Miles was wrong. Dr. Wiley was wrong. Mr. Adams was wrong. The New York Court of Appeals was wrong. And they were "hurting business."

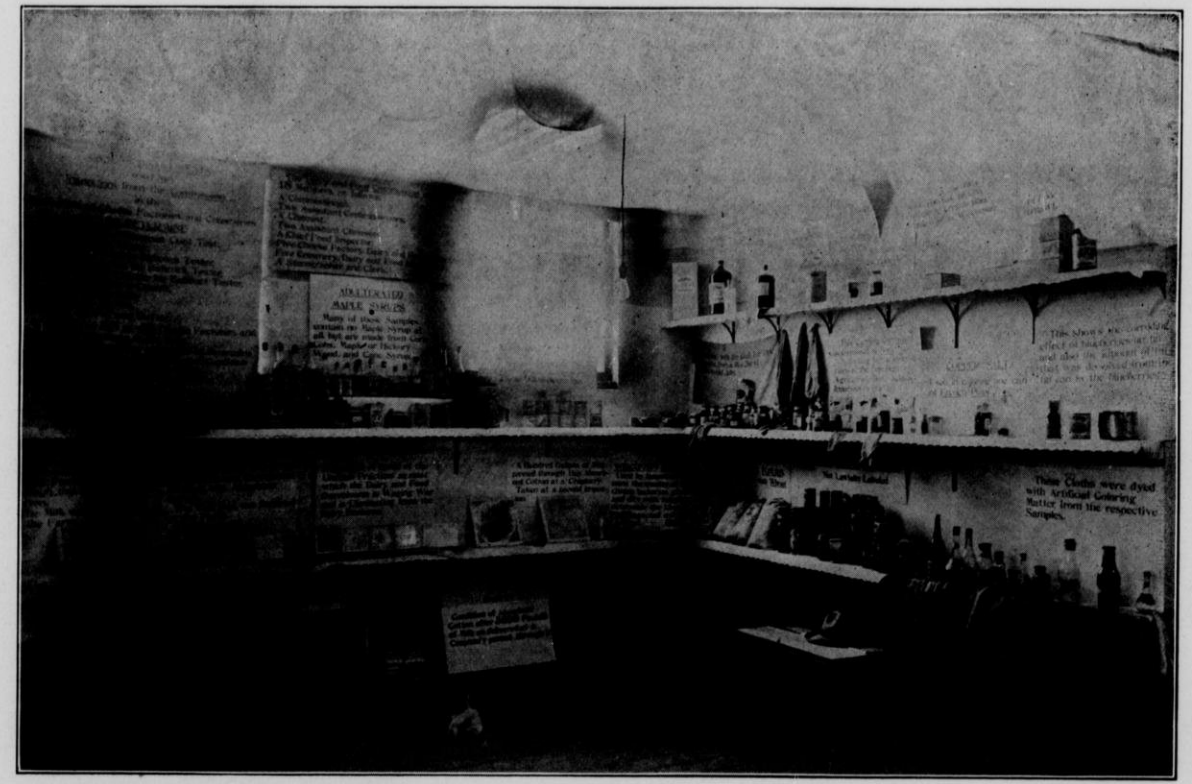


FIG. 8.—PART OF EXHIBIT OF ADULTERATED FOODS MADE BY DAIRY AND FOOD COMMISSION AT WISCONSIN STATE FAIR 1905.

2. Another method to be pursued was to let each consumer fight his own battle with these powerful food adulterating interests. Here is our laboring man with his family to support from his daily earnings. How much our political parties have concerned themselves that he should have a "full dinner pail." Full of what? Embalmed beef? Sausage loaded with potato flour and Lake Michigan water? Oleomargarine bought as butter, at the price of butter? Glucose bought as and for pure syrup, sorghum or molasses? Canners' waste preserved with benzoate of soda instead of genuine fruits? Bread made from a low grade of wheat flour, artificially bleached to deceive him into the belief that he is getting the best grade of wheat flour? Filled with never ending frauds and counterfeits? Or shall the dinner pail be filled with honest food?

By this second method of procedure, if this man considers himself wronged, defrauded, why, say the food adulterating fraternity, in their blandest manner and with their most complacent smiles, let him take his case into court; let him employ a lawyer; let him secure at his own expense the service of a chemist to prove that the food he purchased was adulterated, was a counterfeit; let him go into court and there establish that he has been damaged and how much and there recover the damage; let him do all this to win his case against the strong defense we will put up with our highly paid expert lawyers to conduct our case and equally expert and highly paid chemists to give the testimony we need. Or if food laws are to be enacted and enforced, let us dictate what the laws shall be and how they shall be enforced.

3. But there was another and a better method to deal with food adulterators and their frauds. It is the method which the people have chosen, and that is, to define food adulteration by legal enactment, provide by law and at public expense for food commissioners, food chemists, food inspectors, etc., for a vigorous and impartial enforcement of food laws made for the purpose of protecting the consuming public against the harmful consequences of food adulteration. And this method is the "square deal." This is the method of fair play; and that is what the people of Wisconsin love and are fully determined to have.

The end sought to be accomplished by the efforts of the dairy and food department of the state in the enforcement of the dairy and food laws, has been the protection of the consuming public by eliminating from the Wisconsin markets the adulterations and frauds in food and drug products hereinbefore set forth, with the results that today those conditions are greatly improved. Pure foods and pure drugs of proper strength and truthful labeling, now take the place upon our markets of former adulterated and fraudulent food products. Adulterated or fraudulent food products are now an exception and not the rule as a result of the enactment of the state food laws and their vigorous enforcement by this department. As the adulterations and frauds in food and drug products have been enormous in their extent, so the work of this department in their elimination has also been enormous.

AMOUNT OF FOOD ADULTERATION.

As before stated, the late Hon. H. C. Adams was for seven and one-half years dairy and food commissioner of this state and shortly after he resigned the position he was elected member of congress from the second district. He was a member of the committee on agriculture of the House of Representatives in the fifty-eighth and fifty-ninth congresses. Because of his ability and large experience in food matters as dairy and food commissioner of this state as well

as the experience gained as a member of the committee on agriculture of the House of Representatives, he was chosen to represent the committee with President Roosevelt at the critical time when the meat inspection bill was pending before Congress. His interview with the president in a representative capacity is conceded to have been the turning point which secured the passage of the meat inspection bill. His large acquaintance with food matters also made his influence potent in the passage of the national food and drug act of 1906. In a public address in the early part of 1904, speaking from his great experience, he made the following statement:

> "F. N. Barrett, editor of the American Grocer, stated to the Committee on Interstate Commerce of the 57th Congress that the 80,000,000, people of the United States consumed each year $8,000,000,000 worth of food and drink. This statement was based upon an average expenditure of $100 for each person.
>
> It has been estimated by officials of the department of agriculture that each year there is sold in the United States 2%, or $160,000,000 worth of foods adulterated in such a manner as to be injurious to the public health and that other forms of adulterations not injurious to health but dishonest because of being falsely labeled or deprived of their natural purity, would make the total extent of food adulteration for each year 15%, an estimate which would make food adulteration in this country cost the enormous amount of $1,200,000,000."

The American Grocer of April 3, 1904, in copying a letter to the Newark Daily News from United States Senator McCumber who was in charge of the pure food bill in the senate, quotes Senator McCumber as making the following statement:

> "The extent of the adulteration and misbranding of food products is appalling. * * * The report of the agricultural department estimates that the amount of fraudulent adulteration reaches 15% and injurious adulteration 2% of the products consumed. In other words $1,200,000,000 worth of adulterated food products are sold each year in the United States, and the cost of the injurious products reaches the sum of $160,000,000 yearly. These are conservative figures. It is probable that the truth would be more nearly reached if these sums were doubled."

SAVING TO CONSUMERS BY THE ENACTMENT AND ENFORCEMENT OF STATE FOOD LAWS.

With the statements of Congressman Adams, Mr. Barrett and Senator McCumber as a basis for estimates, we have the following: 15% (estimated per cent of adulterated foods) of $8,000,000,000 (the estimated amount expended in a year for food upon the basis of $100 to each person) amounts to $1,200,000,000 (as one year's cost of adulterated foods for the country). As the population of Wisconsin, 1900 census, was 2.7% of the entire population of the country, it is fair to estimate, upon the basis of population, that 2.7% of the $1,200,000,000 or $32,400,000 would have been paid by the people of Wisconsin for adulterated foods at the time the above estimates were made, 1904, unless protected by the food laws of this state and their enforcement.

It is a conservative estimate that 25% of the 15% of adulterated foods was absolutely worthless as food products, representing an absolute loss to the purchasers.

Twenty-five per cent of the $32,400,000 amounts to $8,100,000, which is the amount that would have been absolutely swindled out of the Wisconsin consuming public except for the food laws of this

state and their enforcement by the dairy and food department.

Estimating 75% as the yearly amount thus saved of the 25% of the worthless adulteration to the Wisconsin consuming public by the work of this department in the food law enforcement, which in view of the conditions of the food market today as compared with those when the food law was enacted is an extremely conservative estimate, it is shown that the work of this department has, during the recent years, been making an annual saving to the people of the state of over $6,000,000. This amount thus saved is more than 132 times the highest cost for any year for the maintenance of the dairy and food department and it is 370 times the average annual cost of the dairy and food department during the entire time of its existence.

In this report, I forbear to undertake to estimate what has been saved in life and health to the people of Wisconsin. Such a saving cannot be measured in dollars and cents. A study of the reports of the dairy and food department and of the statements quoted in this report of the extent and character of food adulteration, will disclose that in the early history of this struggle, milk, the common food of babes and invalids, was preserved with poisonous chemicals; that chopped meats and sausages, the chief reliance of the laboring class, were doped with borax, sodium sulphite and other substances deleterious to health; that extracts were made with poisonous wood alcohol; that numerous food products were artificially colored with harmful coal tar dyes; that salicylic acid was used as a preservative in many beverages; that saccharin, a coal tar product five hundred times as sweet as sugar, was a common adulterant, and that in general there was a riot of artificial coloring and harmful chemical preservatives in very general use in food products. These harmful chemical preservatives and deleterious artificial colors have been almost completely driven from the food products marketed in this state. It must follow that this result has caused an immense saving as to the lives and health of the people of Wisconsin.

INSPECTION OF SANITARY CONDITION.

In this connection, a statement should be made relative to the work of this department during the past two years in the sanitary inspection of groceries, general stores, meat markets, and other places where food is manufactured for sale or stored or offered or exposed for sale.

Until the year 1909, the work of sanitary inspection by this department was limited under the dairy and food laws of the state to cheese factories, creameries and dairies. While unsanitary conditions in a cheese factory or in a creamery or in a dairy barn might be corrected by officials of this department, we had no authority to correct like or even more unsanitary conditions in groceries, meat markets and other places where food for man was manufactured for sale or stored or offered or exposed for sale. But as a result of the public sentiment aroused by the work done by this department along various lines, the legislature of 1909 enacted a law requiring of this department the inspection of groceries, meat markets and other places where food is manufactured for sale and fixed penalties for manufacturing for sale or offering or exposing for sale food unless securely protected from filth, flies, dust or other contamination or other unclean, unheathful or unsanitary conditions.

The legislature of 1911 added to these provisions both by extension and by making more specific the penalties for violation of law. The results of the work of this department in the enforcement of

these statutes is a matter of common knowledge. There has been a general cleaning up in the places herein referred to. Instead of the unsanitary display of foods on the streets and in the places of business, suitable coverings of glass or metal or other material are being provided, and in the main food products are now reasonably well protected in striking contrast with the bad conditions of a few years ago. Still a great work along these lines yet remains to be done. Remembering the possible contamination by the many forms of disease germs which have been demonstrated by science, the importance of strict sanitary inspection and enforcement of sanitary laws can scarcely be over estimated.

SCOPE OF DAIRY AND FOOD WORK.

In scope the work under the dairy and food and drug and sanitary inspection laws now extends to the more than 3,000 cheese factories, creameries and skimming stations, and their nearly 123,000 patrons; 8,000 groceries and general stores; over 2,000 meat markets; upwards of 2,000 drug stores and an unknown number of other places where foods, including beverages, are manufactured, stored, offered or exposed for sale, estimated at 12,000, and totals 150,000 units of inspection. And like the compound eye of the fly, each of these units comprises a large number of smaller units.

During the past seven years, there have been 1,157 convictions for violations of the dairy and food and drug and sanitary laws. There have been 393 city and village milk supply inspections; 3,255 dairy inspections; 27,000 (estimated) inspections of the meat markets, groceries, etc.; 13,744 inspections of creameries, cheese factories, skimming stations and cream routes; 9,273 complete analyses of food products by the chemists and a total of 44,721 food products tested or analyzed.

I realize how inadequate must be the concept formed from the meager statement of this report as to the real character and scope of the work of the dairy and food department. I trust, however, that I have not failed to give a few clear glimpses of this great work of "safeguarding the public against fraud and adulteration in food products."

Glucose Mixtures, Interlocutory Injunction; The McDermott and Grady Cases.

The interlocutory injunction issued October 27, 1910, by A. L. Sanborn, Judge of the United States Circuit Court for the Western District of Wisconsin, on application of the Corn Products Refining Company, restraining the dairy and food commissioner of Wisconsin, his agents, assistants or attorneys, pending the determination of the cases of George McDermott, plaintiff in error, vs. The State of Wisconsin, defendant in error, from enforcing the provisions of chapter 557, laws of 1907, continues in force, those cases not having yet been determined by the U. S. Supreme Court.

SUSTAINED BY THE COURTS.

The aforesaid cases were instituted in the municipal court for Dane county on the 7th day of May, 1909, and in due

course the defendants were convicted of violation of the terms of chapter 557, laws of 1907, of the state of Wisconsin. An appeal to the circuit court of Dane county resulted in sustaining the verdict of the municipal court and the finding by the circuit court that the portion of chapter 557, laws of 1907, under consideration is a valid constitutional enactment and that under the undisputed evidence the defendants were guilty of the offenses charged against them. In his findings in this case, Judge Stevens said:

"The evidence convinces the court that the public generally understands a 'syrup' to be the concentrated sap of a sugar producing plant. The term 'corn syrup' naturally suggests that the product is a syrup produced from corn. Certainly the name carries no suggestion that it is produced by the action of acid on starch, which may be made from a score of different substances as well as from corn. But even if the product here in question were properly termed a syrup, that is not the controlling fact. As was said of oleomargarine, 'It may be butter, but it is not butter made from cream, and the difference in cost or market value, if no other, would make it a fraud to pass off one article for the other.

* * *

"The question is not whether the term 'corn syrup' is coming into general use, the question is whether this name deceives the public and leads it to buy that which it would not otherwise purchase. Whether the product be wholesome or unwholesome, whether the consumer had valid reasons or only unreasoning prejudices in regard to the matter, the public has a right to know, and the state the right to compel the disclosure of what is contained in all food products offered to the consumer.

* * *

When the defendants established the fact that the public generally would not purchase the product if it were put out under the name of glucose (which is shown to be a proper designation), they brought the case within the realm where the state, exercising the police power, has the right to determine that it shall no longer be sold under a name which misleads the public.

* * *

As we have seen, there is such danger that the public may be misled and defrauded into buying a product which it would not otherwise purchase, if the name 'corn syrup' is used, as to suggest some reasonable necessity for a remedy, affordable only by legislative enactment, as to efficiently invite public attention thereto."

On appeal to the Supreme Court of the State of Wisconsin, the judgment in each of the cases separately appealed from was affirmed, two of the seven Justices dissenting. It was from this decision of the Supreme Court of Wisconsin that an appeal was taken and has since been pending in the U. S. Supreme Court and pending the determination of which cases the dairy and food commissioner is restrained from enforcing the provisions of the statute in question. This accounts for the continuance of the sale in this state of glucose mixtures as

"corn syrup," in contravention of the terms of the law as interpreted and sustained by the Wisconsin Supreme Court.

In the opinion rendered by the Supreme Court it was stated:

"The characteristics and qualities of glucose in its pure state are admittedly not those of the articles known in the trade as table syrup; nor is it used as a table syrup in its unmixed state. The term 'corn syrup' as applied generally to an article for table use conveys a meaning and designates an article wholly different in character and quality from that of glucose. It does not appear that 'corn syrup' designates a mixture having a fixed proportion of glucose or syrup constituents; it seems that such constituents are of variant proportions in the article sold as 'corn syrup.' Nor can it be said that the great mass of persons understand that 'corn syrup' is a mixture of glucose and syrup. The natural result of such use of the term 'corn syrup' is to mislead the consumers into the belief that they are obtaining a table food of the variety and kind commonly known as syrup, the product of sugar producing plants, and the consequences of such practice are that the consumers are misled and deceived in the respects as to the actual nature, the constituents and the value of the article as a food product."

Evidently the purpose of the legislature of Wisconsin in enacting chapter 557 of the laws of 1907 was to "safeguard the public against fraud and deception in food products." The same purpose evidently led the legislatures of 1909 and 1911 to refuse so to amend that law as to legalize the sale of glucose under the name "corn syrup," although most urgently importuned so to do. It seems probable that the McDermott and Grady cases herein mentioned will be argued in December, 1912. If the United States Supreme Court should decide that the law is invalid, such decision of course would put an end to the law. But if on the other hand, the United States Supreme Court shall hold the law to be valid, then in the interests of the general public, the law should not be so amended as to legalize the sale of glucose under a name that the courts have decided to be deceptive and misleading.

Weights and Measures.

By the provisions of chapter 566 of the laws of 1911, relating to weights and measures, which became effective July 7, 1911, the state dairy and food commissioner was made ex officio state superintendent of weights and measures.

By the provisions of that statute the state superintendent of weights and measures was authorized to appoint, subject to the rules of the state civil service commission, a chief inspector of weights and measures with an annual salary of $1600 and nec-

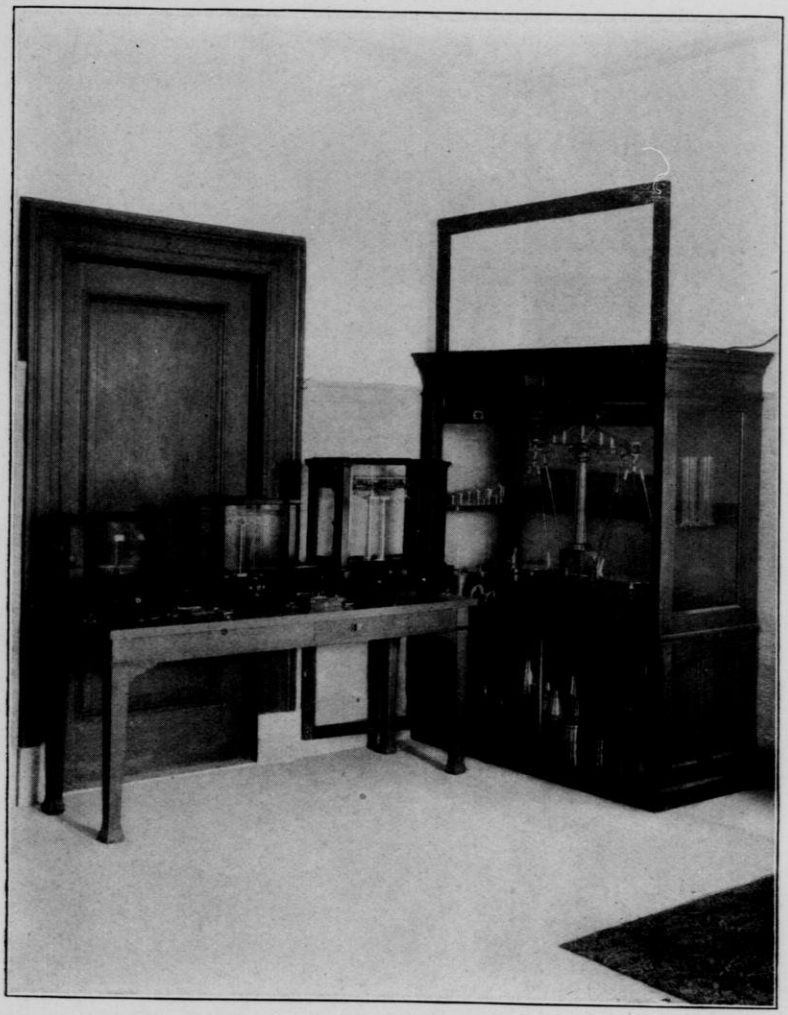


FIG. 9.—CORNER IN THE OFFICE OF WEIGHTS AND MEASURES, BALANCES AND STATE STANDARDS

essary traveling expenses, and one stenographer for the office of weights and measures, at a salary of $1200. The dairy and food commissioner was authorized to appoint not more than five additional dairy and food inspectors at a salary of not to exceed $1200 per year and necessary traveling expenses; he was authorized to designate any assistant dairy and food commissioner or any cheese factory, creamery, dairy and food inspector to act, ex officio, as state sealer of weights and measures, with like authority, powers, and duties as prescribed for city sealers of weights and measures.

The law prescribes that among the duties of the ex officio state superintendent of weights and measures, he shall have and keep a general supervision of the weights and measures and the weighing and measuring devices of the state and in use in the state; take charge of the state standards, cause them to be kept in a fireproof building belonging to the state, and to correct the standards of the several cities and as often as once in five years compare the same with those in his possession, and seal the same when tried and proved to be in conformity with the state standards. He is required annually to test all scales, weights and measures used in checking the receipt or disbursement of supplies in all institutions under the jurisdiction of the state board of control. He is required either himself or by his inspectors to visit the various cities at least once in each two years in order to inspect the work of the local sealers, and to issue from time to time regulations for the guidance of all sealers, said regulations to cover the procedure to be followed by the aforesaid officers in the discharge of their official duties. In those regulations he is required to prescribe the amount of tolerance to be allowed.

The old office of county sealer of weights and measures was abolished and in lieu thereof all the cities in the state of more than 5000 population by the last state or national census are required to have a city sealer of weights and measures to be appointed by the mayor from a list of eligible candidates furnished by the state civil service commission. In all territory within the state, except the aforesaid cities, the inspectors of weights and measures appointed by the state superintendent

of weights and measures, and such assistant dairy and food commissioners, cheese factory, dairy and food inspectors, and such creamery, dairy and food inspectors as may from time to time be designated by the state superintendent of weights and measures, shall act ex officio as sealers of weights and measures with like authority, powers and duties as prescribed for city sealers. No fees are allowed for sealing weights and measures.

It was nearly two months after the law became effective before a suitable room for the office of weights and measures as required by law became available, and the work of the office was to that extent retarded in conseqeuence.

Acting under authority of law, and with the approval of the civil service commission and in accordance with the state civil service law and regulations, on July 11, 1911, Mr. Fred P. Downing was promoted from the position of assistant chemist in the dairy and food department to the position of chief inspector of weights and measures. A state normal school graduate and a graduate of the University of Wisconsin, with four years of service as assistant chemist in the laboratory of the dairy and food department, he was well equipped for undertaking the duties of the office to which he was appointed. September 18, 1911, Miss Ethel D. Thomas, who had for nearly six years been employed as stenographer and confidential clerk in the office of the dairy and food commission, was transferred in accordance with the civil service law and regulations to the position of stenographer in the office of weights and measures. November 6, 1911, John E. Boettcher of Janesville, Henry L. Bornheimer of Jefferson, George Warner of Wausau, William Winder of Richland Center, and W. A. Voigt of Eau Claire, having been duly appointed dairy and food inspectors, were under authority of law designated to act ex officio as state sealers of weights and measures. Likewise, on January 25, 1912, Walter Kramer of Chilton, having been duly appointed dairy and food inspector, was designated to act ex officio as state sealer of weights and measures. Since these dates these appointees have devoted their entire time to the work of enforcement of the weights and measures law.

In July, 1911, a booklet containing the new weights and

measures law was published for distribution throughout the state to parties in interest, and in October of the same year a booklet of instructions for weights and measures officials was prepared and published in compliance with the requirements of law. "Specifications for city and state working standard weights and measures and apparatus for the sealers of the state of Wisconsin" were prepared and published in compliance with the requirements of law. Dealers in standards were provided with copies of this booklet.

Finding the terms of the law ambiguous as to the relation of the office of weights and measures to that of the office of the dairy and food commissioner, on July 20, 1911, a letter of inquiry was directed to the attorney general concerning this matter, and on August 7 an opinion was received from the attorney general's office as follows:

"Receipt of yours of July 20th is acknowledged. You have invited my attention to certain provisions of chapter 566 of the laws of 1911 and desire my opinion on the construction that should be placed upon it.

In paragraph 1 of section 1659, the Dairy and Food Commissioner is made ex officio State Superintendent of Weights and Measures and is authorized to appoint a chief inspector of weights and measures and one stenographer. He is also authorized to appoint not more than five additional dairy and food inspectors, at a salary not to exceed twelve hundred dollars per year and necessary traveling expenses.

You call my attention to the fact that no specific provision is made in said chapter 566 for compensation or for traveling expenses of the ex officio State Superintendent of Weights and Measures, or for traveling expenses of the ex officio sealer of weights and measures. You inquire whether the provisions of the statutes for traveling expenses of these officers and the assistant dairy and food commissioners, etc., extend to the services of these officials when acting in their ex officio capacity.

In answer I will say that in my opinion the traveling expenses provided for for the dairy and food commissioners and the dairy and food inspectors must be construed as applying to these officers when acting as sealers of weights and measures. You will notice that the Chief Inspector of Weights and Measures, under section 1659, is expressly given a salary and traveling expenses and that the stenographer provided for for the office of Superintendent of Weights and Measures is given a salary. It seems very evident that the Legislature did not provide additional salaries and additional traveling expenses for the Superintendent of Weights and Measures and the authorized ex officio sealers of weights and measures, as it was believed that these were already provided for in the statutes allowing traveling expenses for their services as appointees under the Dairy and Food Commissioner.

While courts have in certain cases held that, where an officer is ex officio the holder of another office, he may, under such provision, be held to hold two offices when there are special reasons apparent in the statute why such construction should be given, still, the other rule has often been followed: that the two offices are merged and the second office, which is held by virtue of the first, is simply an

extension of the duties of the other.

It seems to me that the intention of the legislature is so apparent that there can be no question regarding it. Any other construction would lead to the absurdity that it would be impossible to carry out the provisions of this law for lack of an appropriation for the necessary traveling expenses.

You also inquire whether the five additional dairy and food inspectors whom you are authorized to appoint as Dairy and Food Commissioner may be designated by you as ex officio sealers of weights and measures.

This question must, I believe, also be answered in the affirmative. Under the various statutes pertaining to your office you have been authorized to appoint cheese factory, dairy and food inspectors and creamery and dairy and food inspectors, and said chapter 566 authorizes you to appoint five additional dairy and food inspectors. Under section 1662 it is provided that such assistant dairy and food inspectors and such cheese factory, dairy and food inspectors and such creamery and dairy and food inspectors as may from time to time be designated by the Superintendent of Weights and Measures shall act ex officio as sealers of weights and measures, with like authority, powers and duties as are prescribed for city sealers.

It seems very apparent, and is clear to my mind, that the legislature, by the provisions of the statute quoted and other provisions of chapter 566, merely intended that you could designate any or all of the five dairy and food commissioners provided for by said section 1659, subdivision 1, and any or all of the cheese factory, dairy and food inspectors and creamery and dairy and food inspectors as inspectors of weights and measures.

You also inquire whether, as Superintendent of Weights and Measures, you are authorized and given the necessary printing to carry out the provisions of said section. You call my attention to the fact that you are given the necessary printing for the office of Dairy and Food Commissioner, but that chapter 566 does not mention printing.

"In view of the fact that under section 1670b there is appropriated out of any money in the state treasury not otherwise appropriated, a sum sufficient to carry out the provisions of sections 1658 to 1670a inclusive and, in view of the fact that you are ex officio Superintendent of Weights and Measures and that the printing is expressly granted to you as Dairy and Food Commissioner, I am of the opinion that you are entitled to the necessary printing for the office of Superintendent of Weights and Measures. It would be impossible, as I understand, to carry out the duties imposed upon you as Superintendent of Weights and Measures, if you were not permitted to have the necessary printing. This statute must receive a reasonable construction, so as to render it effective."

As a preparation for the work of inspecting and sealing of weights and measures and of an effective enforcement of the many provisions of the new weights and measures statute, a careful study was made of the systems existing in other states and in some of the larger cities having effective weights and measures departments. New York, Chicago, Milwaukee and other places were visited and their methods of inspection and sealing and law enforcement carefully and critically studied. In addition to this, a study was made of the methods of man-

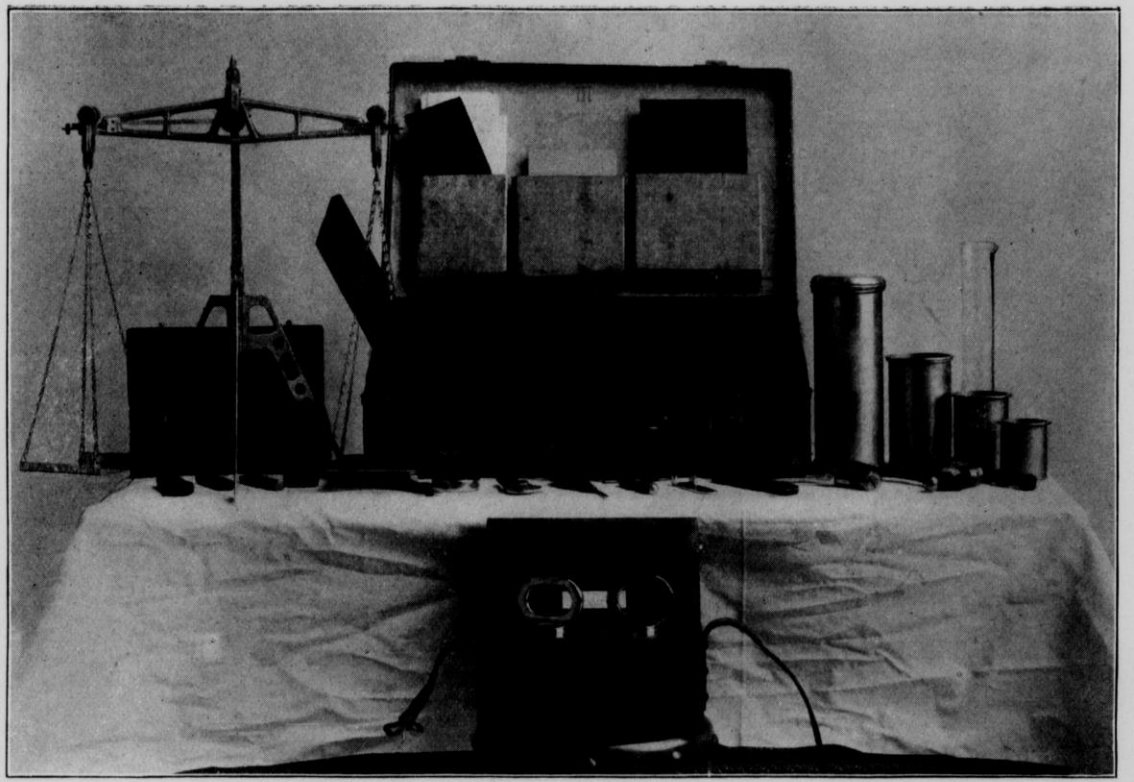


FIG. 10.—SEALER'S PORTABLE OUTFIT FOR LIGHT INSPECTION WORK, WEIGHT 60 LBS.

ufacture of scales in several of the larger establishments devoted to the manufacture of scales and measures. The laws and regulations effective in other states were carefully studied, and the suggestions of the officials entrusted with the enforcement of such laws were given very careful consideration.

As soon as a suitable room was made available for the office of weights and measures, the old state standards were transferred from the engineering building of the University of Wisconsin to the new quarters provided in the state capitol. These standards included balances, weights and measures furnished to the state of Wisconsin by the United States, pursuant to the several acts of congress. These standards also included a few purchases that had been made by the former state sealer of weights and measures, Professor Leonard Smith of the University of Wisconsin. As these standards were inadequate for the full performance of the duties of the state superintendent of weights and measures as prescribed by the new law, and as there were no working standards, it became necessary to make a careful selection and purchase of additional standards and other appliances, and adequate equipment has been provided.

The state sealers have been provided with portable sealing outfits carefully designed so that the greater portion of such outfits can be carried in one leather case, 20″x14″x5½″. These outfits are for what is designated as light work in sealing. For heavy work, that is for the testing and sealing of dormant platform and wagon scales, a much more difficult problem has presented itself. For the doing of this work not less than 1000 lbs. of weights are absolutely necessary. The transportation of these weights from place to place where the testing and sealing is required is a source of large expense. The problem thus presented calls for some more satisfactory solution than is possible by means now afforded the state superintendent of weights and measures under existing law.

It is the judgment of those who have been doing the work of heavy weight sealing,—and so great is this work that only a comparative beginning has been made,—that with the present available force in the office of weights and measures, approximately ten years would be required to complete the first inspection throughout the state.

The duties of the office of weights and measures as pre-

scribed by law embrace not only a general supervision of the work done by the city sealers of weights and measures in cities of more than 5000 inhabitants, but also the actual inspecting, sealing or condemning in all territory of the state outside of cities containing more than 5000 population. The work thus imposed upon this department is simply enormous and the provision made for the doing of that work is utterly inadequate.

The weights and measures law of 1911 was the result of an earnest effort on the part of the legislature in response to a public demand to secure just and effective regulation. The information as to the actual conditions was meager and fragmentary. It was anticipated at the time that one effect of the law which was enacted would be to secure more exact information as to conditions which would be the basis of such modifications of the law as might be required that the law might more effectively fulfill the purposes for which it was intended, to-wit: to protect the public and secure fair dealing in trade with the least hardship possible to producers and dealers. In the main, the administration of the law has proved that its provisions are wise and effective. Its administration has also proved that there are some serious defects calling for correction. Probably the most serious defect in the law is its lack of an adequate force for its prompt and effective enforcement.

Much time and effort have been spent by the chief inspector of weights and measures in directing the attention of the proper city authorities to the provisions of the new weights and measures law and clearing up misapprehension that seemed to exist relative to the matter of city sealers and their duties. Considerable time has also been given to these cities by other sealers belonging to the office of the state superintendent of weights and measures. In a number of cases city councils have fixed the salary of the city sealer so low that competent men have refused to accept the position. It is apparent that the purposes of the law may be thus defeated through the adoption by the councils of a niggardly policy. This suggests that if this work is to be successfully accomplished in the interests of the great mass of the people, a minimum graduated salary for city sealers should be fixed by the legislature.

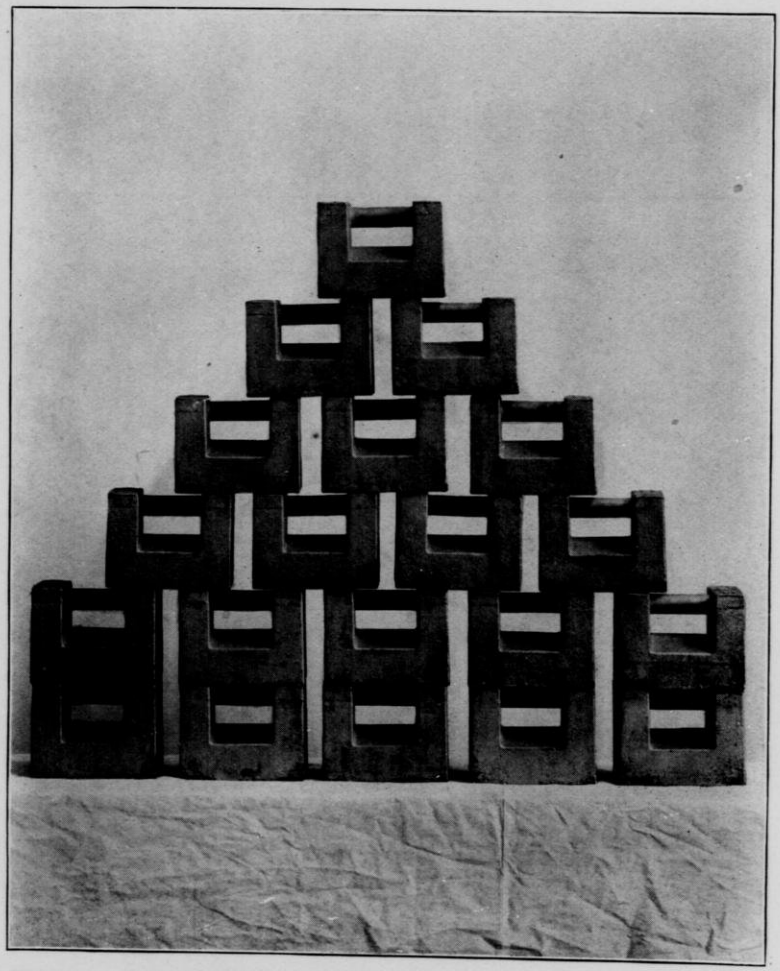


FIG. 11.—SEALER'S PORTABLE OUTFIT FOR TESTING WAGON AND PLATFORM SCALES, TWENTY 50-LB. WEIGHTS.

FIG 12.—CONFISCATED WEIGHTS AND MEASURES, OSHKOSH.

Of the thirty-six cities in Wisconsin having a population of more than 5000 inhabitants, according to the last official United States census, wherein section 1661 of the statutes requires that there shall be a city sealer of weights and measures appointed by the mayor from a list to be furnished by the state or local civil service board and under the rules of said board, such appointments have been made in twenty-eight of those cities up to June 30, 1912. It is expected that within the near future the terms of this statute will have been complied with by all of these cities.

Up to and including June 30, 1912, there have been made 34,591 first inspections and tests of different scales, weights and measures, with the result that 28.9% of that number was found inaccurate. The total number of second inspections or re-inspections is 3,824, of which number only 12.9% was found incorrect. It is thus shown that the per cent of inaccurate weighing and measuring appliances has been reduced from 28.9% to 12.9%. The number of office tests was 3,879, making a total number of 42,294 tests of all kinds.

The city of Milwaukee has for a number of years maintained an efficient city department of weights and measures. In his report for the year ending December 31, 1911, the city sealer of Milwaukee estimates that on twenty-four ordinary commodities of common use, his department made a saving to the consumers for that year of $319,500. As the population of the territory over which the state department of weights and measures has direct jurisdiction is 3.9 times the population of the city of Milwaukee, it is a fair inference that an equally effective enforcement of the weights and measures law throughout that territory will effect an annual saving to the consumers of that territory on the twenty-four commodities designated by the Milwaukee city sealer of weights and measures of 3.9 times the annual saving in Milwaukee or approximately one and a quarter million dollars, and on all the other commodities bought and sold a sum vastly more. Moreover the enforcement of the weights and measures law in the cities of the state is rendered much more effective by the supervision given by the office of the state superintendent of weights and measures.

Following is a list of cities and villages where weights and measures have been tested and either sealed or condemned as required by the terms of the law up to June 30, 1912:

Ableman	Elkhorn	Lynxville	Rolling Prairie
Albany	Elk Mound	Lyons	Rusk
Allenton	Elmhurst	Macfarland	St. Francis
Aniwa	Elroy	Madison	Salem
Arena	Embarrass	Marinette	Sauk City
Argyle	Endeavor	Marion	Schleisingerville
Avalon	Evansville	Markesan	Schofield
Avoca	Fairwater	Marshall	Sharon
Bagley	Fennimore	Mather	Sheboygan Falls
Baldwin	Ferryville	Mayville	Sherwood
Bangor	Fond du Lac	Mazomanie	Shullsburg
Barneveld	Fontana	Melvina	Silver Lake
Basco	Footville	Menomonee Falls	Soldiers Grove
Bassett	Fort Atkinson	Merrimac	Somers
Belgium	Fox Lake	Merton	So. Germantown
Belleville	Franksville	Middleton	Sparta
Benton	Gays Mills	Milton	Split Rock
Berlin	Genesee	Milton Junction	Springfield
Birnamwood	Genoa	Minnesota Junction	Spring Green
Black Earth	Genoa Junction	Monroe	Steuben
Blanchardville	Glendale	Montfort	Stevens Point
Bloomer	Glen Haven	Monticello	Stitzer
Blue Mounds	Gotham	Mosinee	Stoddard
Blue River	Grafton	Mount Horeb	Stoughton
Boaz	Granville	Mukwonago	Sugar Bush
Boscobel	Green Bay	Muscoda	Sullivan
Brandon	Hales Corners	Muskego	Sun Prairie
Bridgeport	Hanover	Nashotah	Sussex
Bristol	Hartford	Neenah	Templeton
Brodhead	Hartland	New Glarus	Tiffany
Brookfield	Hazel Green	New London	Tigerton
Brooklyn	Helenville	North Freedom	Trevor
Browntown	Hersey	North Lake	Troy Center
Burke	Highland	North Milwaukee	Twin Bluffs
Burlington	Hika	North Prairie	Twin Lakes
Byron	Hilbert	Norwalk	Two Rivers
Caledonia	Hillsboro	Oakwood	Union Center
Calhoun	Hollandale	Oconomowoc	Union Grove
Cambria	Honey Creek	Oconto	Valders
Cambridge	Horicon	Okauchee	Verona
Cashton	Iron Ridge	Omro	Viola
Cassville	Ixonia	Oostburg	Viroqua
Cedar Grove	Janesville	Oregon	Walworth
Chilton	Jefferson	Orfordville	Waterford
Cleveland	Johnson Creek	Otjen (Carrolville)	Waterloo
Clinton	Jonesdale	Palmyra	Watertown
Clintonville	Juda	Petersburg	Waunakee
Cobb	Junction City	Pewaukee	Waupun
Collins	Kansasville	Pickett	Wauwatosa
Corliss	Kendall	Platteville	Wauzeka
Cottage Grove	Kenosha	Pleasant Prairie	Welcome
Cross Plains	Klevenville	Port Washington	Westby
Cuba	Knapp	Potosi	West Salem
Cudahy	Koshkonong	Potter	Wheatland
Dane	La Farge	Prairie du Chien	Whitcomb
Darien	Lake Beulah	Prairie du Sac	Whitewater
Deerfield	Lake Geneva	Racine	Williams Bay
Delafield	Lake Mills	Randolph	Wilson
Delavan	Lancaster	Reedstown	Wilton
DeSoto	Lannon	Reedsburg	Winneconne
Dodgeville	La Valle	Rewey	Wittenberg
Dousman	Leon	Richfield	Wonewoc
Eagle	Lima Center	Richland Center	Woodford
East Troy	Linden	Ridgeway	Woodland
Eau Claire	Livingston	Riley	Woodman
Edgerton	Lodi	Ripon	Woodville
Edmund	London	Rochester	Woodworth
Eland	Lone Rock	Rockland	Zenda

More detailed information relating to the work of this department will be found in the report of the chief inspector of weights and measures, Mr. F. P. Downing, published elsewhere in this volume.

FIG. 13.—LIQUID MEASURES UNLAWFULLY USED FOR MEASURING DRY COMMODITIES, AND BOTTOMLESS MEASURES SEIZED BY STATE SEALERS.

CONVICTIONS.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1910.				
July 5	M. L. Drake, Poynette	Selling adulterated white lead	Frank Heidt, Portage	$25 and costs.
July 5	Keebaugh & Delaney, Poynette	Selling adulterated white lead	Frank Heidt, Portage	$25 and costs.
Aug. 6	A. R. Nitz, Milwaukee	Selling pop containing saccharin	N. B. Neelen, Milwaukee	$25 and costs.
Aug. 31	Ernest Bartling, Riley	**Selling adulterated milk**	A. Donovan, Madison	$25 and costs.
Sept. 12	Henry Dolski, Green Lake	**Selling adulterated milk**	Fred Engelbracht, Berlin	$25 and costs.
Sept. 13	Albert Eichhorst, Stevens Point	Selling adulterated milk	J. A. Murat, Stevens Point	$25 and costs.
Sept. 15	Edward Stuelke, Lake Mills	Selling adulterated milk	W. D. Stacy, Watertown	$25 and costs.
Sept. 22	Roy Potter, Coffervile, Kans	Serving oleomargarine for butter (State Fair Grounds)	M. Blenski, Milwaukee	$50 and costs.
Oct. 1	Fred Kratz, New Franken	Delivering adulterated milk to a cheese factory	N. J. Monahan, Green Bay	$25 and costs.
Oct. 4	Chas. Stobb, Menomonie	Offering for sale and selling unsanitary milk to a cheese factory	P. B. Clark, Menomonie	$25 and costs.
Oct. 11	Frank Aherns, Prairie du Chien	Selling adulterated milk	C. H. Speck, Prairie du Chien	$25 and costs.
Oct. 19	Fred J. Rasmussen, Oconto	Selling adulterated cream	J. A. Dunlevy, Oconto	$25 and costs.
Oct. 22	D. Sorensen, Oconto	Selling adulterated milk	J. A. Dunlevy, Oconto	$25 and costs.
Oct. 22	J. A. Dearth, Owen	Selling adulterated cream	W. A. Campman, Neillsville	$25 and costs.
Nov. 4	Aug. C. Brandt, Monroe	Selling adulterated milk	W. T. Saucerman, Monroe	$25 and costs.
Nov. 7	J. M. Jensen, Independence	Maintaining cheese factory and utensils in an unclean and unsanitary condition	Jacob Jackson, Independence	$25 and costs.
Nov. 11	John Burns, Livingston	Selling adulterated milk	S. Thanhauser, Lancaster	$25 and costs.
Nov. 17	Jas. Hanley, Hurley	Selling adulterated milk	Griffith Thomas, Hurley	$25 and costs.
Nov. 18	John Hart, Evansville	Selling adulterated milk	C. L. Fifield, Janesville	$25 and costs.
Nov. 18	Howard Edwards, Evansville	Selling adulterated milk	C. L. Fifield, Janesville	$25 and costs.
Nov. 19	Fred Shutz, Evansville	Delivering adulterated milk to a creamery	C. L. Fifield, Janesville	$25 and costs.
Nov. 19	Chas. Webb, Evansville	Delivering adulterated milk to a creamery	C. L. Fifield, Janesville	$25 and costs.
Nov. 19	Frank Haasl, Park Falls	Selling adulterated milk	F. W. Sackett, Phillips	*$25 and costs.
Nov. 23	Peter Mader, Oshkosh	Maintaining cream separator in unsanitary condition	S. D. Baird, Neenah	$25 and costs.

* Pleaded *nolo contendere.*

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge	Fine or forfeiture.
1910.				
Nov. 24	Peter DeBoer, Midway	Selling adulterated milk	John Brindley, La Crosse	$25 and costs.
Nov. 25	Mike Hahn, Sturgeon Bay	Delivering adulterated milk	H. H. Reynolds, Sturgeon Bay	$25 and costs.
Nov. 30	Henry Klackner, Manitowoc	Selling adulterated cream	John Chloupek, Manitowoc	$25 and costs.
Dec. 2	A. F. Schmidt, Superior	Selling adulterated cream	F. S. Parker, Superior	$25 and costs.
Dec. 2	Chas. H. Russell, Superior (Russell Creamery Co.)	Selling adulterated milk	F. S. Parker, Superior	$25 and costs.
Dec. 6	T. J. Paulson, Superior	Selling adulterated milk	John Brindley, La Crosse	$25 and costs.
Dec. 7	C. H. Baker, La Crosse	Selling adulterated cream	A. Weimann, Iola	$25 and costs.
Dec. 9	W. M. Ellis, Northport	Selling adulterated milk	F. S. Parker, Superior	$25 and costs.
Dec. 13	John Lund, Superior	Selling adulterated milk	Chas. Hahn, Marshfield	$25 and costs.
Dec. 13	Fred Mews, Auburndale	Delivering unsanitary cream to a creamery	John Brindley, La Crosse	$25 and costs.
Dec. 14	Wm. Newburg, La Crosse	Selling adulterated cream	John Brindley, La Crosse	$25 and costs.
Dec. 14	Fred Hass, La Crosse	Selling adulterated cream	A. Donovan, Madison	$25 and costs.
Dec. 14	E. M. Holton, Madison	Selling adulterated cream	C. S. Briggs, Wautoma	$25 and costs.
Dec. 14	E. M. Coville, Red Granite	Delivering unsanitary cream to a creamery	F. S. Parker, Superior	$25 and costs.
Dec. 14	C. C. Simon, Superior	Selling adulterated cream	F. S. Parker, Superior	$25 and costs.
Dec. 15	Chas. Carlson, Superior	Selling adulterated cream	W. D. Stacy, Watertown	$25 and costs.
Dec. 17	Henry F. Kleist, Watertown	Selling adulterated cream	C. S. Briggs, Wautoma	$25 and costs.
Dec. 21	J. C. Hanawalt, Wild Rose	Delivering unsanitary cream to a creamery	C. W. Burrows, Lancaster	$25 and costs.
Dec. 22	Al. Hunsaker, Lancaster	Selling adulterated cream	A. H. Goss, Oshkosh	$25 and costs.
Dec. 23	Albert Klug, Oshkosh	Exposing for sale meat not properly protected from filth, etc.	F. W. Jenkins, Chippewa Falls	$25 and costs.
Dec. 28	John Rice, Chippewa Falls	Selling a diseased fowl	C. W. Burrows, Lancaster	$25 and costs.
Dec. 31	J. H. Paul, Platteville	Selling adulterated cream	E. N. Pomainville, Grand Rapids	$25 and costs.
1911.			A. Donovan, Madison	$25 and costs.
Jan. 7	J. R. Merriam, Grand Rapids	Selling adulterated milk	Nicholas Hess, New Lisbon	$25 and costs.
Jan. 12	Matt. V. Schmitz, Waunakee	Selling adulterated linseed oil	W. H. Miller, Richland Center	$25 and costs.
Jan. 18	M. L. Shakman, New Lisbon	Selling a compound of lard and cotton seed oil for lard	Thos. Ryan, Appleton	$25 and costs.
Jan. 19	Gus. Gilbertson, Lone Rock	Selling adulterated white lead	Wisconsin Supreme Court. Appealed from Circuit Court of Portage Co.	$100 and costs.
Jan. 30	Henry Towsley, South Kaukauna	Selling adulterated milk		
Jan. 31	Wm. Welch, Stevens Point	Serving oleomargarine at lunch counter without notifying guest same was not butter		

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
Feb. 7	G. M. Rohrer, Cochrane	Selling adulterated buckwheat flour	J. S. McCabe, Alma	$25 and costs.
Mar. 11	John Fox, Avoca	Selling adulterated milk	Josiah Ward, Avoca	$25 and costs.
Mar. 11	Chris. Kraak, Avoca	Removing cream from milk at factory without consent of owner thereof	Josiah Ward, Avoca	$25 and costs.
Mar. 21	Frank Wreidt, Elkhart Lake	Furnishing unsanitary milk to a cheese factory	D. Mahlsted, Plymouth	$25 and costs.
Mar. 23	Garrett TenDollen, Oostburg	Operating a cheese factory in an unclean and unsanitary condition	D. Mahlsted, Plymouth	$25 and costs.
Mar. 29	John Wintermardt, (clerk for The Gonger-Grotophorst Co.) Prairie du Sac.	Selling adulterated linseed oil	L. H. Halsted, Baraboo	$25 and costs.
Mar. 29	Fred Meintz, Luxembourg	Selling milk from cows kept in filthy stables	J. H. DeWane, Kewaunee	$25 and costs.
April 8	H. L. Platte, Prescott	Selling maple syrup misbranded as to weight	R. L. Canfield, Ellsworth	$25 and costs.
April 12	Jos. Sook, Campbellsport	Having in possession with intent to selling unsanitary milk	J. M. Kohler, Campbellsport	$25 and costs.
April 14	Wm. Jaeger, Campbellsport	Having in possession with intent to sell unsanitary milk	J. M. Kohler, Campbellsport	$25 and costs.
April 24	Chas. Hundertmark, Oconto Falls	Having and exposing for sale meat and meat products not protected from filth, flies, etc.	J. A. Dunlevy, Oconto	$25 and costs.
April 28	Frank Townsend, Rush Lake	Maintaining cream separator premises in unsanitary condition	A. H. Goss, Oshkosh	$25 and costs.
April 28	Melchoir Kalscheur, Middleton	Operating a creamery in unsanitary condition	A. Donovan, Madison	$50 and costs.
April 29	John Dick, Middleton	Storing and selling meat not protected from filth, dust, etc., and in unsanitary condition	A. Donovan, Madison	$50 and costs.
May 1	W. G. Smith, Brandon	Manufacturing for sale butter from unsanitary cream.	H. M. Older, Ripon	$10 and costs.
May 2	Theo. Madenwaldt, Merrill	Preparing meat for sale under unclean and unsanitary conditions	M. C. Porter, Merrill	$25 and costs.
May 8	J. Saftie, Kenosha (Agent for Cudahy Bros.)	Selling sausage with cereal for sausage	C. E. Randall, Kenosha	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
May 8	Thos. English, Kenosha (Agent for Cudahy Bros.).	Selling sausage with cereal for sausage	C. E. Randall, Kenosha.....	$25 and costs.
May 9	Robt. Boldus, Racine (Agent for Cudahy Bros.)	Selling sausage with cereal for sausage	Geo. Schmieding, Racine	$25 and costs.
May 9	Emil Just, Port Washington (Agent for Cudahy Bros.)	Selling sausage with cereal for sausage..	N. Wilson, Port Washington.....	$25 and costs.
May 11	Jos. Raymond, Arnott.....	Offering for sale and delivering unsanitary milk to a creamery	G. L. Park, Stevens Point.....	$25 and costs.
May 12	Wm. Kobernik, Green Lake.....	Maintaining cream separator in unsanitary condition	H. E. Megow, Princeton.....	$25 and costs.
May 19	J. E. Corcoran, Fond du Lac	Offering for sale unsanitary milk.....	D. F. Blewett, Fond du Lac.....	$25 and costs.
May 20	J. A. Bryan, Portage.....	Preparing for sale sausage not protected from filth, flies, dust, etc.	E. S. Baker, Portage.....	$25 and costs.
May 22	R. F. Kohlman, Fond du Lac	Maintaining cheese factory premises and utensils in unsanitary condition	R. C. Fairbank, Fond du Lac.....	$75 and costs.
May 24	Fred Handt, Chippewa Falls.....	Exposing for sale meat under unclean, unhealthful and unsanitary conditions	F. W. Jenkins, Chippewa Falls....	$25 and costs.
May	N. Hetsinger, Sheboygan.....	Selling sausage containing cereal for sausage	J. M. Giblin, Sheboygan.....	Sentence suspended on payment of cost.
May 31	Chas. Luebcke, Middleton.....	Selling adulterated milk.....	A. Donovan, Madison.....	$25 and costs.
June 5	John Lloyd, Menasha.....	Preparing for sale meat and sausage not protected from filth, flies, dust, etc.	S. D. Baird, Neenah.....	$60 and costs.
June 6	Stanley Gavre, Nekoosa.....	Maintaining an unclean, and unsanitary meat market	Burton L. Brown, Grand Rapids..	$25 and costs.
June 12	Emil Draheim, Markesan.....	Offering for sale unsanitary cream.....	H. A. Price, Markesan.....	$25 and costs.
June 15	Arthur Jenks, Loyal.....	Maintaining and operating a creamery in unclean and unsanitary condition	Wm. Mills, Loyal.....	$25 and costs.
June 22	Frank and Anton Kemmer, Madison	Preparing for sale meat not protected from filth, dust, flies, etc.	A. Donovan, Madison.....	$25 and costs.
June 23	Chas. Densmore, Blair.....	Selling unsanitary cream.....	I. H. Ecker, White hall.....	$25 and costs.
June 28	Julius Splitgerber, Shawano.....	Selling adulterated milk.....	John Alft, Shawano	$25 and costs.
June 29	Edward Schultz, Welcome.....	Maintaining an unclean and unsanitary cheese factory	Daniel Coughlin, Marion.....	$25 and costs.
June 29	John Mattson, St. Croix Falls...	Maintaining creamery and apparatus in unclean and filthy condition.	J. A. Sleeper, Osceola.....	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
June 29	Morris Lawdahl, Dresser Junction	Maintaining creamery and apparatus in unclean and filthy condition	J. A. Sleeper, Osceola	$25 and costs.
July 1	Wm. Hosli, Clayton	Maintaining cheese factory premises and apparatus in unclean and filthy condition	J. A. Sleeper, Osceola	$25 and costs.
July 1	Oscar Eckwald, Clayton	Selling unsanitary milk in dirty cans	J. A. Sleeper, Osceola	$25 and costs.
July 1	Jos. Mertens, Kiel	Offering unsanitary milk to a cheese factory	Wm. Rothman, Chilton	$25 and costs.
July 3	Wolfgang Kolbeck, Marshfield	Delivering unsanitary milk to a creamery	B. L. Brown, Grand Rapids	$25 and costs.
July 3	M. E. O'Neil, Green Bay	Selling canned cherries containing sulphur dioxide and artificial coloring and not true to name	N. J. Monahan, Green Bay	Sentence suspended on payment of costs.
July 7	J. G. Funk, Racine	Selling adulterated cream	Wm. Smieding, Racine	$25 and costs.
July 7	Vincent Dvorack, Racine	Selling adulterated milk	Wm. Smieding, Racine	$25 and costs.
July 19	B. Hermann, Milwaukee (Prop. Blue Ribbon Bottling Works)	Selling pop containing saccharin	N. B. Neelen, Milwaukee	$25 and costs.
July 24	J. M. Wolfmeyer, Brillion	Maintaining cheese factory premises and utensils in unsanitary condition	Wm. Rothman, Chilton	$25 and costs.
July 24	Arthur Bastian, Brillion	Maintaining cheese factory premises in unsanitary condition	Wm. Rothman, Chilton	$25 and costs.
July 27	J. F. Kennedy, Fond du Lac	Maintaining cheese factory premises and utensils in unsanitary condition	D. F. Blewett, Fond du Lac	$25 and costs.
July 27	Simon Hoerl, Malone	Maintaining creamery premises in unsanitary condition	R. C. Fairbank, Fond du Lac	$25 and costs.
July 27	D. Bonshek, Milwaukee	Selling pop containing saccharin	N. B. Neelen, Milwaukee	Sentence suspended on payment of costs.
July 27	Jas. Kufka, Edgar	Manufacturing cheese in unsanitary factory and with unclean utensils	L. Marchetti, Wausau	$30 and costs.
July 29	Fred Zimmerli, Medford	Delivering unsanitary milk to a cheese factory	W. W. Case, Medford	$25 and costs.
Aug. 3	John Hoerig, Rubicon	Offering for sale and delivering milk in dirty cans	Arthur A. Hauser, Rubicon	$25 and costs.
Aug. 4	Jos. Peters, Rubicon	Offering for sale and delivering milk in dirty cans	Arthur A. Hauser, Rubicon	$25 and costs.
Aug. 4	Edward Freitag, Forest Junction	Offering for sale unsanitary milk	E. E. Curtis, New Holstein	$25 and costs.
Aug. 5	Patrick Feeley, Arnott	Delivering unsanitary milk to a creamery	G. L. Park, Stevens Point	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
Aug. 5	Martin Magor, Arnott.....	Delivering unsanitary milk to a creamery	G. L. Park, Stevens Point.....	$25 and costs.
Aug. 5	Timothy J. Leary, Arnott.....	Delivering unsanitary milk to a creamery in unsanitary cans	G. L. Park, Stevens Point.....	$25 and costs.
Aug. 7	Ernst Kendler, New Holstein....	Offering unsanitary milk to a cheese factory	D. F. Blewett, Fond du Lac.....	$25 and costs.
Aug. 7	John J. Steiner, New Holstein....	Offering unsanitary milk to a cheese factory	R. C. Fairbank, Fond du Lac....	$25 and costs.
Aug. 9	B. Shapiro, Madison.....	Conducting a meat market in unsanitary condition	A. Donovan, Madison.....	$25 and costs.
Aug. 10	Kenneth Peabody, Star Prairie..	Maintaining in unclean condition premises where cheese and butter are made	J. A. Sleeper, Osceola.....	$25 and costs.
Aug. 11	Elmer Tarmaat, Plymouth.....	Maintaining cheese factory premises and utensils in unsanitary condition	D. Mahlsted, Plymouth.....	$25 and costs.
Aug. 12	E. E. Smith, La Crosse.....	Maintaining utensils used for dairy products in unsanitary condition	John Brindley, La Crosse.....	$25 and costs.
Aug. 14	John Hardimon, Fond du Lac....	Offering for sale unsanitary milk.....	R. C. Fairbank, Fond du Lac.....	$25 and costs.
Aug. 15	Wm. DeSmidt, Sheboygan.....	Offering for sale unsanitary milk.....	J. M. Giblin, Sheboygan.....	$25 and costs.
Aug. 15	Wm. Klink, Rubicon.....	Delivering and offering for sale milk in unclean cans	Arthur A. Hauser, Rubicon.....	$25 and costs.
Aug. 15	Ben Hahn, Rubicon.....	Delivering and offering for sale milk in unclean cans	Arthur A. Hauser, Rubicon.....	$25 and costs.
Aug. 16	Fred Jens, Sr., Plymouth.....	Offering unsanitary milk to a cheese factory	Adam Trester, Sheboygan.....	$25 and costs.
Aug. 17	Herman Ebenreiter, Sheboygan..	Offering for sale unsanitary milk.....	J. M. Giblin, Sheboygan.....	$25 and costs.
Aug. 17	Herman Reich, Watertown.....	Maintaining an unsanitary cheese factory	W. D. Stacy, Watertown.....	$25 and costs.
Aug. 18	Jacob Lemahien, Oostburg.....	Maintaining cheese factory premises and utensils in unsanitary condition	Adam Trester, Sheboygan.....	$25 and costs.
Aug. 18	Gerhard Opgenorth	Offering for sale unsanitary milk.....	J. M. Giblin, Sheboygan.....	$25 and costs
Aug. 21	E. L. Schneider, Brillion.....	Offering and exposing for sale meat from a diseased animal	Wm. Koch, Brillion.....	$50 and costs
Aug. 24	Kurt Wiegert, Greenleaf.....	Maintaining unclean and unsanitary cheese factory	N. J. Monahan, Green Bay.....	$25 and costs.
Aug. 24	Edward Kopp, Maiden Rock.....	Maintaining cheese factory and utensils in unclean and filthy condition	C. Fenton, Ellsworth.....	$25 and costs.
Aug. 28	Jacob Bines, Sheboygan.....	Offering for sale unsanitary milk.....	J. M. Giblin, Sheboygan.....	$25 and costs.
Aug. 28	George S. Uebele, Tomah.....	Selling adulterated boiled linseed oil.....	O. J. Jackson, Sparta.....	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
Aug. 29	Theo. Stamatakus, Eau Claire....	Refusing to deliver to dairy and food inspector sample of food for analysis	Henry McBain, Eau Claire.....	$25 and costs.
Sept. 1	Edward Crye, Boscobel.....	Manufacturing an article of food under unsanitary conditions	C. C. Chase, Prairie du Chien....	$25 and costs.
Sept. 2	Jacob Muhlenbach, New Holstein	Offering for sale unsanitary milk.....	D. F. Blewett, Fond du Lac.....	$25 and costs.
Sept. 2	C. Mueller, Monroe.....	Selling adulterated milk.....	W. T. Saucerman, Monroe.....	$25 and costs.
Sept. 5	N. J. Moon, Sr., Oshkosh.....	Offering for sale unsanitary milk.....	A. H. Goss, Oshkosh.....	$25 and costs.
Sept. 6	Fred A. Zauk, Augusta.....	Offering for sale unsanitary milk.....	J. F. Ellis, Eau Claire.....	$25 and costs.
Sept. 7	Chas. Joslin, Sheboygan Falls..	Furnishing unsanitary milk to a cheese factory	Adam Trester, Sheboygan.....	$25 and costs.
Sept. 7	Arthur Leighton, Sheboygan Falls	Offering for sale unsanitary milk.....	D. Mahlsted, Plymouth.....	$25 and costs.
Sept. 9	Michael Harlow, Chilton.....	Offering for sale unsanitary milk.....	E. E. Curtis, New Holstein.....	$25 and costs.
Sept. 9	Barnard Block, Mellen.....	Offering and exposing for sale meat in unclean and unsanitary premises	John Garvin, Ashland.....	$25 and costs.
Sept. 11	Anton Sobieck, Pulaski.....	Selling adulterated milk.....	N. J. Monahan, Green Bay.....	$25 and costs.
Sept. 11	Jos. Snikas, Pulaski.....	Selling adulterated milk.....	N. J. Monahan, Green Bay.....	$25 and costs.
Sept. 11	Jac. Zilinski, Pulaski.....	Selling adulterated milk.....	N. J. Monahan, Green Bay.....	$25 and costs.
Sept. 16	John Esser, Madison.....	Selling unsanitary milk from dirty cans	A. Donovan, Madison.....	$25 and costs.
Sept. 19	Lary Ropella, Custer.....	Maintaining creamery premises and utensils in unclean and unsanitary condition	G. L. Park, Stevens Point.....	$25 and costs.
Sept. 22	Barney Rutten, Little Chute....	Selling adulterated milk.....	Thos. Ryan, Appleton.....	$25 and costs.
Sept. 25	Henry Schimming, Madison.....	Selling unsanitary milk from dirty cans	A. Donovan, Madison.....	$25 and costs.
Sept. 25	John Swontek, New Franken....	Delivering milk in dirty cans.....	N. J. Monahan, Green Bay.....	$25 and costs.
Sept. 29	Frank Frost, Plover.....	Maintaining utensils and premises where dairy products are produced in unclean and unsanitary condition	John A. Murat, Stevens Point....	$25 and costs.
Sept. 30	J. F. Marten, Allenville.....	Maintaining unclean and unsanitary cheese factory	Nels Jensen, Neenah.....	$25 and costs.
Oct. 2	John Dietsche, Spencer.....	Delivering adulterated milk to a cheese factory	R. F. Kountz, Neillsville.....	$25 and costs.
Oct. 2	Rudolph Freund, Malone.....	Maintaining creamery premises and utensils in unclean and unsanitary condition	R. C. Fairbank, Fond du Lac.....	$35 and costs
Oct. 2	Louis Luenberger, De Forest.....	Selling adulterated linseed oil.....	A. Donovan, Madison.....	$25 and costs.
Oct. 5	Edward Worachek, Kewaunee....	Maintaining unsanitary cheese factory....	J. N. Robillard, Kewaunee.....	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
Oct. 6	E. L. Viereck, Milwaukee	Selling canned cherries containing artificial color, sulphur dioxide, and not true to label	N. B. Neelen, Milwaukee	Sentence suspended on payment of costs.
Oct. 6	Jacob Best Co., Milwaukee	Selling canned cherries containing artificial color, and sulphur dioxide, misbranded	N. B. Neelen, Milwaukee	Sentence suspended on payment of costs.
Oct. 7	Peter Thill, Clayton	Maintaining cheese factory and untensils in unsanitary condition	F. B. Kinsley, Barron	$10 and costs.
Oct. 7	Arthur Jenks, Loyal	Manufacturing butter under unsanitary conditions	R. F. Kountz, Neillsville	$25 and costs.
Oct. 10	Alphonse Poels, Green Bay	Delivering milk in unclean cans	N. J. Monahan, Green Bay	$25 and costs.
Oct. 11	David Williquette, Green Bay	Delivering unsanitary milk in unclean cans	N. J. Monahan, Green Bay	$25 and costs.
Oct. 11	Wm. Zitron, Milwaukee	Selling canned cherries containing artificial color, sulphur dioxide: misbranded	N. B. Neelen, Milwaukee	$25 and costs.
Oct. 12	Miesi Kazinkewicy, Ashland	Maintaining an unsanitary meat market	John Garvin, Ashland	$25 and costs.
Oct. 13	Jack Farming, Greenwood	Maintaining premises and utensils used in the handling of cream in unclean, filthy and noxious condition	R. F. Kountz, Neillsville	$25 and costs.
Oct. 14	Edward Schultz, Welcome	Maintaining cheese factory premises and utensils in unsanitary condition	A. W. Millard, New London	$25 and costs.
Oct. 17	E. L. Meloy, Tomah, (Agent for Central Hardware Co.)	Selling adulterated boiled linseed oil	O. J. Jackson, Sparta	$25 and costs.
Oct. 17	F. O. Drowatzky, Tomah	Selling adulterated boiled linseed oil	O. J. Jackson, Sparta	$25 and costs.
Oct. 17	Edward Dietrich, Clarno	Using filthy utensils in manufacturing whey butter	W. T. Saucerman, Monroe	$25 and costs.
Oct. 18	Loui Naef, Monroe	Using filthy utensils in manufacturing whey butter	W. T. Saucerman, Monroe	$25 and costs.
Oct. 19	Henry Schmidt, Marshfield	Maintaining premises and utensils used in the production of milk and cream in an unsanitary condition	B. L. Brown, Grand Rapids	$25 and costs.
Oct. 19	A. C. VanHee, Hammond	Selling adulterated linseed oil	C. A. Disney, Hudson	$25 and costs.
Oct. 20	Jos. Czarnecki, Stevens Point	Delivering to a creamery unsanitary milk in unclean cans	J. A. Murat, Stevens Point	$25 and costs.
Oct. 24	F. E. Hunt, Palmyra	Returning ice cream cans over a railroad without same having first been washed	O. F. Stoppenbach, Jefferson	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1911.				
Oct. 24	George T. Young, Dallas.....	Maintaining an unclean and unsanitary meat market	F. B. Kinsley, Barron.....	$25 and costs.
Oct. 25	Even Erickson, Pigeon Falls.....	Selling unsanitary milk.....	J. H. Ecker, Whitehall.....	$25 and costs.
Oct. 30	Fred Stank, Pound.....	Maintaining cheese factory premises and utensils in unclean and unsanitary condition	Jas. A. Dunlevy, Oconto.....	$25 and costs.
Nov. 6	Leo Gross, Amery.....	Exposing and offering for sale foods in an unclean, unhealthful and unsanitary condition	J. A. Sleeper, Osceola.....	$25 and costs.
Nov. 7	A. Anderson (Manager of L. Anderson Grocery) Washburn.....	Maintaining an unclean and unsanitary grocery store	A. M. Warden, Washburn.....	$25 and costs.
Nov. 7	Ole Aune, (Mgr. Washburn Co-operative Store Co.,) Washburn	Maintaining an unclean and unsanitary grocery	A. M. Warden, Washburn.....	$25 and costs.
Nov. 7	John J. Walch, Kaukauna.....	Maintaining cheese factory and utensils in unclean and unsanitary condition	Thos. Ryan, Appleton.....	$25 and costs.
Nov. 22	Albert Anderson, Amherst Junction	Delivering unsanitary cream to a creamery	J. A. Murat, Stevens Point.....	$25 and costs.
Nov. 29	Chas. H. Carpenter, Janesville..	Serving oleomargarine at a hotel without notifying guest that the same was not butter	C. L. Fifield, Janesville.....	$50 and costs.
Dec. 1	Andrew Fredrickson, Neenah.....	Having in possession with intent to sell unsanitary milk	S. D. Baird, Neenah.....	$30 and costs.
Dec. 9	Rynard Draheim, Weyauwega...	Having in possession with intent to sell unsanitary cream	R. F. Taggart, Weyauwega.....	$25 and costs.
Dec. 15	Emil Makela, Hurley.....	Selling adulterated cider	Griffith Thomas, Hurley.....	$25 and costs.
Dec. 20	Geo. Schneider, Marshfield.....	Maintaining premises and utensils used in the handling of milk in unsanitary condition	B. L. Brown, Grand Rapids.....	$25 and costs.
Dec. 22	Skelly Grocery Co., Janesville....	Selling adulterated mustard.....	C. L. Fifield, Janesville.....	$25 and costs.
Dec. 26	F. A. Wopat, Hillsboro.....	Selling unsanitary cream.....	S. C. Pollard, Viroqua.....	$25 and costs.
1912				
Jan. 2	Geo. Holmes, Baraboo.....	Selling adulterated cream.....	H. L. Halsted, Baraboo.....	*$85 and costs.
Jan. 5	John E. Daly, Grand Rapids..	Selling adulterated spirit of nitre.....	Burton Brown, Grand Rapids.....	$25 and costs.
Jan. 6	Wm. Hoffman, Kewaunee.....	Delivering adulterated milk to a cheese factory	J. N. Robillard, Kewaunee.....	Fine suspended on payment of costs.

* Pleaded *nolo contendere.*

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1912.				
Jan. 8	J. L. Bonham, Baraboo	Selling adulterated cream	H. L. Halsted, Baraboo	*$25 and costs.
Jan. 11	Wm. Biegler, Hayward	Maintaining unclean and unsanitary meat-market	F. J. Riordan, Hayward	$25 and costs.
Jan. 12	Chas. Meyer, No. Fond du Lac	Selling unsanitary milk	R. C. Fairbank, Fond du Lac	$25 and costs.
Jan. 23	F. L. Steib, Grand Rapids	Selling adulterated spirit of camphor	Burton Brown, Grand Rapids	*$25 and costs.
Feb. 1	Samuel Church, Grand Rapids	Selling adulterated spirit of camphor	Burton Brown, Grand Rapids	$25 and costs.
Feb. 9	Samuel and Ben Schaefrin, Milwaukee (Blue Ribbon Bottling Works)	Selling pop containing saccharin	N. B. Neelen, Milwaukee	$100 and costs.
Feb. 9	J. B. Woodhead and Newton H. Woodhead, Ashland	Selling adulterated spirit of nitrous ether	John Garvin, Ashland	$25 and costs.
Feb 16	F. Bohn, Watertown	Selling adulterated milk	W. D. Stacy, Watertown	$25 and costs.
Feb. 17	W. L. Sexton, Marshfield (Sexton Bros.)	Selling adulterated spirit of nitrous ether	Hugo Wegner, Marshfield	$25 and costs.
Feb. 17	R. J. Strauss, Marshfield	Selling adulterated spirit of camphor	Hugo Wegner, Marshfield	$25 and costs.
Feb. 17	Otto Lamke, and Emil Lamke, Fort Atkinson	Having in possession with intent to sell unsanitary cream	O. F. Stoffenbach, Jefferson	$25 and costs.
Feb. 21	Abe. Wiley, Fifield	Serving oleomargarine at hotel without notifying guest same was not butter	F. W. Sackett, Phillips	$50 and costs.
Feb. 23	Geo. Bicken, Kenosha	Serving oleomargarine at a restaurant without notifying guest same was not butter	C. E. Randall, Kenosha	$50 and costs.
Feb. 26	Noyes Matteson, Clintonville	Selling unsanitary cream	E. Dooley, Marion	$25 and costs.
Mar. 2	Fred Melius, Rubicon	Selling adulterated milk	A. A. Hauser, Rubicon	$25 and costs.
Mar. 8	Robert Junchen, Stevens Point.	Preparing meats for sale under unsanitary conditions	J. A. Murat, Stevens Point	$25 and costs.
Mar. 9	Andrew Anderson, Amherst	Maintaining premises and utensils used in production of milk in unclean and unsanitary condition	G. L. Park, Stevens Point	$25 and costs.
Mar. 13	August Bonnin, New London	Selling unsanitary milk	A. W. Miller, New London	$25 and costs.
Mar. 16	Geo. S. Beardsley, Grand Rapids	Selling canned "maraschino" cherries containing artificial coloring and sulphurous acid	Burton Brown, Grand Rapids	$25 and costs.
Mar. 27	Chas. Nachtigall, Marinette	Maintaining an unclean and unsanitary meat market	L. M. Evert, Marinette	$25 and costs.
Mar. 29	Ernest Venness, New Franken	Delivering unsanitary milk in unclean cans	N. J. Monahan, Green Bay	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1912.				
April 5	Jacob Jacobsen, Neenah.....	Furnishing unsanitary milk to a cheese factory	S. D. Baird, Neenah.....	$25 and costs.
April 6	Edward Flynn, Neenah.....	Furnishing unsanitary milk to a cheese factory	Nels Jenssen, Neenah.....	$25 and costs.
April 6	John Brockman, Neenah.....	Furnishing unsanitary milk to a cheese factory	S. D. Baird, Neenah.....	$25 and costs.
April 10	C. H. Neisen, Saukville.....	Furnishing unsanitary milk to a cheese factory	N. E. Wilson, Port Washington.....	$25 and costs.
April 10	Michael Dickman, Saukville.....	Offering unsanitary milk to a cheese factory	N. E. Wilson, Port Washington.....	$25 and costs.
April 25	Frank Gevidek, West Bend.....	Offering unsanitary milk to a cheese factory	Henry Rolfs, West Bend.....	$25 and costs.
April 25	W. A. Gillmore, Durand.....	Selling canned peas containing a copper salt	W. H. Huntington, Durand.....	$25 and costs.
April 25	Jacob Skibba, Junction City....	Selling boiled linseed oil adulterated with mineral oil	J. A. Murat, Stevens Point.....	$25 and costs.
April 25	H. Garbisch, Kewaskum.....	Selling unclean and unsanitary milk....	W. P. Rix, West Bend.....	$25 and costs.
April 25	Chas. Garbisch, Kewaskum.....	Offering for sale unclean and unsanitary milk	W. P. Rix, West Bend.....	$25 and costs.
April 25	John Korneli, Newberg.....	Selling unclean and unsanitary milk.....	Henry Rolfs, West Bend.....	$25 and costs.
April 27	Henry Krueger, Jackson.....	Offering unsanitary milk to a creamery	W. P. Rix, West Bend.....	$25 and costs.
April 27	Joseph Jerzak, Stevens Point....	Preparing meat for sale under unsanitary conditions	J. A. Murat, Stevens Point.....	$25 and costs.
April 27	H. B. Woldt, Jackson.....	Maintaining an unclean and unsanitary creamery	Henry Rolfs, West Bend.....	$25 and costs.
April 29	L. O. Reidler, Token.....	Selling boiled linseed oil adulterated with mineral oil	J. C. Fehlandt, Madison.....	$25 and costs.
April 30	B. Scheunlman, Jackson.....	Selling unclean and unsanitary milk....	W. P. Rix, West Bend.....	$25 and costs.
April 30	B. D. Doperalski, Kewaunee.....	Delivering unsanitary milk to a factory..	J. H. Ray, Kewaunee.....	$25 and costs.
May 1	John Kobeldt, West Bend.....	Offering for sale milk in filthy utensils..	Henry Rolfs, West Bend	$25 and costs.
May 2	Jacob Vogelsang, Barton.....	Furnishing unsanitary milk to a cheese factory	Henry Rolfs, West Bend	$25 and costs.
May 2	Joseph Schemenauer, West Bend	Offering unsanitary milk to a cheese factory	W. P. Rix, West Bend.....	$25 and costs.
May 9	Peter Wolf, Richfield.....	Maintaining an unclean and unsanitary cheese factory	W. P. Rix, West Bend.....	$25 and costs.
May 9	Fred Becker Richfield.....	Offering unsanitary milk to a creamery..	Henry Rolfs, West Bend.....	$25 and costs.

CONVICTIONS—Continued.

Date.	Defendant.	Cause of Action.	Trial Judge.	Fine or forfeiture.
1912.				
May 14	Ben B. Kraus, Elkhorn.....	Selling boiled linseed oil adulterated with mineral oil	J. T. Lyon, Elkhorn.....	*$25 and costs.
May 17	Peter Bies, Schleisingerville.....	Offering unsanitary milk to a cheese factory	Timothy Foley, Hartford.....	$25 and costs.
May 17	Barney Katzfey, Schleisingerville	Offering unsanitary milk to a cheese factory	Timothy Foley, Hartford.....	$25 and costs.
May 21	Charles C. Hotchkiss, Elkhorn....	Selling boiled linseed oil adulterated with mineral oil	J. T. Lyon, Elkhorn.....	$25 and costs.
May 28	J. G. Uecke, Oshkosh.....	Selling adulterated milk.....	A. H. Goss, Oshkosh.....	$25 and costs.
June 7	H. O. Hemmingson, Cumberland (Cumberland Supply Co.)	Selling linseed oil adulterated with mineral oil	J. W. Soderberg, Barron.....	$25 and costs.
June 12	J. M. Pitts, Kenosha.....	Selling linseed oil adulterated with mineral oil.	C. E. Randall, Kenosha.....	$25 and costs.
June 15	Peter Thill, Fredonia.....	Offering unsanitary milk to a cheese factory	John Fintzen, Fredonia.....	$25 and costs.
June 16	Nicholas Roth, Plum City.....	False reading of Babcock test.....	C. Fenton, Ellsworth.....	$25 and costs.
June 18	R. H. Brennecke, Watertown....	Selling adulterated lemon extract.....	W. D. Stacy, Watertown.....	$25 and costs.
June 25	Jos. Reeves, Beloit.....	Selling canned cherries containing artificial color and a chemical preservative	J. B. Clark, Beloit.....	$25 and costs.
June 28	Geo. Tarnish, Shullsburg.....	Serving oleomargarine at a hotel without notifying guest same was not butter	J. B. Simpson, Darlington.....	$50 and costs.

* Pleaded *nolo contendere.*

DISBURSEMENTS FOR THE YEAR ENDING JUNE 30, 1911.

J. Q. Emery, Commissioner, salary and expenses	$2,620.28
U. S. Baer, Assistant, salary and expenses	2,501.19
H. C. Larson, Second Assistant, salary and expenses	2,089.72
A. E. Kundert, Chemist, salary and expenses	1,808.74
Richard Fischer, Assistant Chemist (Associate Director of Chemical Laboratory, salary)	600.00
F. P. Downing, Assistant Chemist, salary and expenses	1,238.94
W. A. Brannon, Assistant Chemist, salary and expenses	1,231.92
Harry Klueter, Assistant Chemist, salary and expenses	1,559.71
F. M. Buzzell, Chief Food Inspector, salary and expenses	1,704.81
E. L. Aderhold, Cheese Factory, Dairy and Food Inspector, salary and expenses	2,013.13
F. E. Carswell, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,961.12
J. D. Cannon, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,951.16
Fred Marty, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,916.40
P. A. Larson, Creamery, Dairy and Food Inspector, salary and expenses	1,776.88
James VanDuser, Creamery, Dairy and Food Inspector, salary and expenses	2,015.17
S. J. Dufner, Creamery, Dairy and Food Inspector, salary and expenses	1,968.28
W. A. Voigt, Creamery, Dairy and Food Inspector, salary and expenses	1,897.96
R. B. Southard, Cheese Factory, Dairy and Food Inspector, salary and expenses	2,067.67
J. B. Linzmeyer, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,461.18
W. F. Scott, Food Inspector, salary and expenses	1,359.66
P. W. Guse, Creamery, Dairy and Food Inspector, per diem, and expenses	1,459.80
Florence Q. Norton, Secretary, salary	1,200.00
Ethel D. Thomas, Stenographer and Confidential Clerk, salary	900.00
Menges Pharmacies, supplies	43.75
S. D. Myers, supplies	24.50
Madison Post Office, postage	797.79
Wisconsin Telephone Co., messages	73.95
Western Union Telegraph Co., messages	5.60
Postal Telegraph Cable Co., messages	.54
Democrat Printing Co., printing	1,670.52
American Express Co., express	34.13
Wells Fargo Express Co., express	9.99
Eimer & Amend, supplies	389.55
Chicago & Northwestern Ry. Co., freight	1.43
C. N. Casper Co., supplies	1.25
George Burroughs & Son, supplies	20.00
Cornish, Curtis & Greene, supplies	10.36
P. W. Guse, Creamery, Dairy and Food Inspector, salary and expenses	274.88
Mautz Bros., supplies	1.00
Parsons Printing & Stationery Co., supplies	1.85
Mautz Bros., supplies	3.96

Krey-Scheerer Co., supplies	217.00
Streissguth-Petran Engraving Co., cuts	33.57
Chicago & Northwestern Railway Co., freight	1.10
Chicago, Milwaukee & St. Paul Ry. Co., freight,	17.53
Andrew Mayers, supplies	1.25
C. M. Thomas, photos	1.50
John M. Olin, Special Counsel,	135.55
L. E. Gettle, Special Counsel,	21.50
Hinrichs Dry Goods Co., supplies	3.00
J. E. Moseley, supplies	34.60
C. W. Jarvis, draying	3.75
E. H. Sargent & Co., supplies	6.02
Total	$43,145.14

DISBURSEMENTS FOR THE YEAR ENDING JUNE 30, 1912.

J. Q. Emery, Commissioner, salary and expenses	$2,677.10
U. S. Baer, Assistant Commissioner, salary and expenses	2,300.69
H. C. Larson, Second Assistant, salary and expenses	2,292.18
W. A. Brannon, Assistant Chemist, salary and expenses	375.00
A. E. Kundert, Chemist, salary and expenses	158.03
A. E. Kundert, Assistant Chemist, salary and expenses	961.51
Richard Fischer, Assistant Chemist (Associate Director of Chemical Laboratory) salary	600.00
Harry Klueter, Assistant Chemist, salary and expenses	131.48
Harry Klueter, Chemist, salary and expenses	1,709.15
F. P. Downing, Assistant Chemist, salary and expenses	91.87
I. R. Howlett, Assistant Chemist, salary	939.27
F. M. Buzzell, Chief Food Inspector, salary and expenses	1,628.93
F. E. Carswell, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,898.47
E. L. Aderhold, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,981.88
J. D. Cannon, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,821.47
Fred Marty, Cheese Factory, Dairy and Food Inspector, salary and expenses	1,823.07
R. B. Southard, Cheese Factory, Dairy and Food Inspector, salary and expenses	2,043.99
P. W. Guse, Creamery, Dairy and Food Inspector, salary and expenses	2,063.26
S. J. Dufner, Creamery, Dairy and Food Inspector, salary and expenses	1,951.05
W. A. Voigt, Creamery, Dairy and Food Inspector, and ex officio Sealer of Weights and Measures, salary and expenses	2,031.39
James VanDuser, Creamery, Dairy and Food Inspector, salary and expenses	1,990.62
W. F. Scott, Food Inspector, salary and expenses	1,760.87
S. B. Cook, Creamery, Dairy and Food Inspector, salary and expenses	1,234.68
J. B. Linzmeyer, Cheese Factory, Dairy and Food Inspector salary and expenses	1,493.78
F. P. Downing, Chief Inspector of Weights and Measures, salary and expenses	2,053.79

J. E. Boettcher, Sealer of Weights and Measures, salary and expenses	1,004.68
William Winder, Sealer of Weights and Measures, salary and expenses	1,203.60
George Warner, Sealer of Weights and Measures, per diem and expenses	963.69
H. L. Bornheimer, Sealer of Weights and measures, per diem and expenses	822.22
W. J. Kramer, Sealer of Weights and Measures, per diem and expenses	563.33
Florence Q. Norton, Secretary, salary	1,200.00
Ethel D. Thomas, Confidential Clerk and Stenographer, salary	187.49
Ethel D. Thomas, Stenographer,	949.98
M. L. Walter, Stenographer and Confidential Clerk, salary	675.00
J. E. Moseley, books	10.50
E. H. Sargent & Co., supplies	5.93
Schwaab Stamp & Seal Co., seal	1.05
Lorenz Model Co., supplies	132.00
J. Bishop & Co., supplies	295.57
Torsion Balance Co., supplies	4.75
C. W. Jarvis, drayage	6.75
Streissguth-Petran Engraving Co., cuts	4.00
American Express Co., express	64.93
Wells Fargo Express Co., express	14.87
Madison Post Office, postage and box rent	392.41
Democrat Printing Co., printing	1,243.97
Western Union Telegraph Co., messages	20.10
Postal Telegraph Cable Co., message	.60
Wisconsin Telephone Co., messages	113.85
Chicago, Milwaukee & St. Paul Ry. Co., freight	12.16
Chicago & Northwestern Ry. Co., freight	7.62
Eimer & Amend, supplies	539.26
Menges Pharmacies, supplies	45.45
Hinrichs Dry Goods Co., supplies	7.44
Hollister Drug Co., supplies	1.70
Creamery Package Manufacturing Co., supplies	21.50
Milwaukee Lithographing Co., letterheads	59.39
	$48,649.32

By the foregoing it is shown that for the year ending June 30, 1912, there were disbursements amounting to $48,649.32. This amount includes the additional expense incurred by the administration of the new weights and measures law committed to this department, not inclusive, however, of (approximately) $3,000 expended for permanent equipment for the office of weights and measures by the superintendent of public property and which amount was not paid during the fiscal year ending June 30, 1912. It exceeds the amount of disbursements of any former year as is shown by the following tabulation of annual disbursements and membership:

For the year ending Sept. 30	Disbursements:	Membership	
1889	$3,490.81	3	Chapter 452 laws of 1889
1890	7,424.95		
1891	7,857.50		
1892	8,630 69		
1893	7,742.92		
1894	7,971.99		
1895	9,261.94		
1896	8,347.61		
1897	9,787.21	5	Chapter 328, laws 1897.
1898	10,100.70		
1899	12,984.80		
1900	12,120.25		
1901	13,074.96		
For the year ending June 30			
1902	$7,966.95		
1903	9,712.82	8	Chapter 144, laws 1903.
1904	16,853.57		
1905	16,117.18	18	Chapter 390, laws 1905.
1906	36,206.88		
1907	36,752.27	22	Chapter 386, laws 1907.
1908	44,283.75		
1909	42,244.77	23	Chapter 532, laws 1909.
1910	45,907.26		
1911	43,152.70	30	Chapter 556, laws 1911.
1912	48,649.32		

In this connection it will be of public interest to compare the disbursements for the year 1911 of the dairy and food department of Wisconsin with those of the states bordering on Wisconsin. The annual cost of the Illinois dairy and food commission was $73,000; of the Iowa dairy and food commission, $48,000; of the Michigan dairy and food commission, $40,600; of the Minnesota dairy and food commission, $52,728. The average annual cost, therefore, of the dairy and food commissions of the four states bordering on Wisconsin for the year 1911 was $56,075, while the cost of the dairy and food commission of Wisconsin for the same year was $48,649.32, and as above stated is the largest annual expenditure in the history of the commission. These figures show that the average cost of the dairy and food commissions of the states bordering on Wisconsin was $7,425 more than the highest cost for any year of the dairy and food commission of the state of Wisconsin. But Wisconsin has a total of 3,048 cheese factories, creameries and condenseries, whereas Illinois has only 306; Iowa only 503; Michigan only 531; and Minnesota 927. This shows that the inspection work of the Wisconsin dairy and food commission covers 781 more cheese factories, creameries and condenseries than is covered by all of the dairy and food commissions of the four neighboring states of Illinois, Iowa, Michigan and Minnesota combined.

FIG. 14.—CONFISCATED WEIGHTS AND MEASURES, MILWAUKEE.

Legislation.

1. During the past year a vacancy has existed in the position of assistant chemist authorized by chapter 390, laws of 1905, the salary of which is $1200 with reimbursement for necessary traveling expenses. It would greatly strengthen the dairy and food department to provide by law for a bacteriologist in lieu of the assistant chemist here referred to. The time has come in the experience of the department when the services of a bacteriologist are greatly needed and when the demand upon the department cannot be met without the services of a competent bacteriologist. It is believed that with the splendid appliances now in the laboratory, no additional funds would be required for the necessary equipment for the bacteriologist. The legislation herein indicated is urgently recommended.

2. As changes in conditions designed to circumvent the effectiveness of food laws are taking place and as previously undiscovered fraudulent, deceptive and harmful conditions are being brought to light, there must be amendments to the food laws from time to time to meet such changed and changing conditions. This statement is applicable to present Wisconsin food laws.

3. In recent years Wisconsin has been priding herself upon her progressive spirit in the provisions made for safeguarding the rights of various classes of employes in industrial occupations. It is here submitted that consistency requires that the employes of the state should receive at the hands of the legislature the consideration which their merits justly entitle them to, and that what these just dues of the employes of the state are should be determined not by political pull but by scientific expert investigation of the importance, quality and amount of service rendered. These remarks are offered as preparatory to the statement that in my judgment employes in the Wisconsin dairy and food department are not all receiving at the hands of the state the consideration for their service which the importance, quality and the quantity of their work entitle them to. A study was made of the organization and efficiency of the dairy and food commission by an expert employed by the state board of public affairs who, as I am informed, has reported his findings to the said board with certain recom-

mendations as to the importance, amount and quality of the work done by the respective members of the department, and has made certain recommendations in connection with other departments in behalf of a more just and discriminating recognition of such services. I desire here to emphasize my conviction that the employes of this department who have rendered faithful and efficient service to the state during a series of years, and thereby have become more valuable to the state, are entitled to a just recognition of such service.

4. As is made manifest elsewhere in this report under the topic Weights and Measures, and in the special report of the chief inspector of weights and measures, the force provided for the administration of the new weights and measures law is very inadequate. If that law is to be justly and effectively enforced throughout the state, it is inevitable that a greater force for doing that work must be provided.

J. L. Emery.

Dairy and Food Commissioner,

Ex officio State Superintendent of Weights and Measures.

FIG. 14½.—BURNING OF CONFISCATED MEASURES AT THE HAYMARKET, MILWAUKEE, DECEMBER 6, 1911.

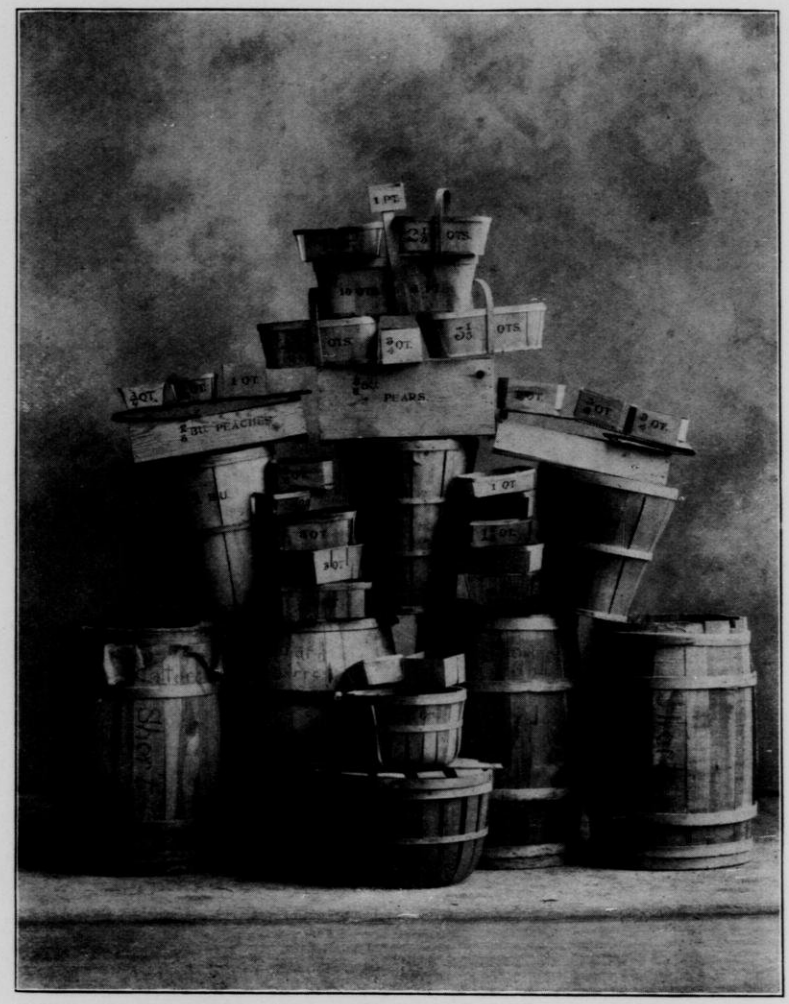


FIG. 15.—SHOWING THE VARIABLE SIZES OF "BASKETS", "BARRELS", "HAMPERS". ETC. THE LAW SEEKS TO STANDARDIZE SUCH NONDESCRIPT CONTAINERS.

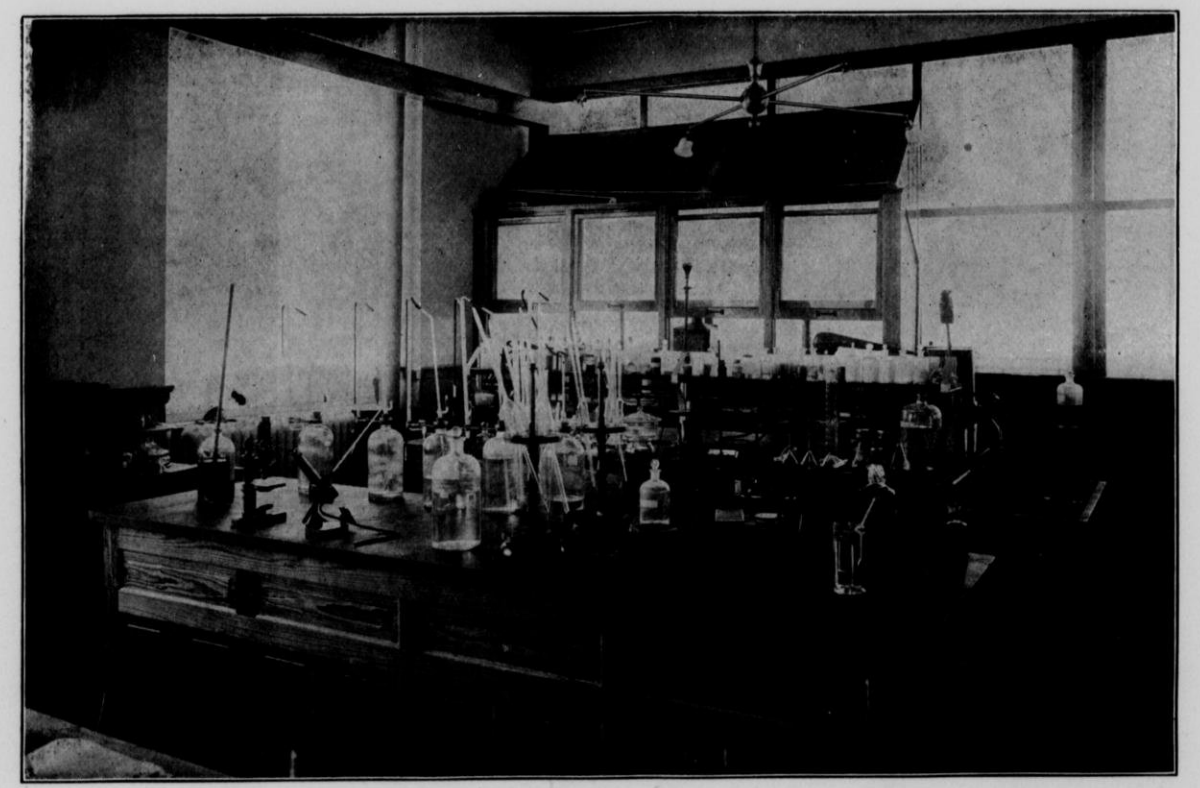


FIG. 16.—VIEW IN LABORATORY OF WISCONSIN DAIRY AND FOOD COMMISSION.

REPORT OF CHEMIST.

HARRY KLUETER PH. G.

General Summary of Analyses.

1614 Samples.

	No. of samples	
Beverages		61
Adulterated or misbranded. Tested for saccharin and preservatives	34	
Free from saccharin, and salicylic and benzoic acids	27	
Buckwheat Flour		49
Not standard. Found to contain foreign flour	7	
Standard	17	
Submitted	25	
Butter		73
Not standard	7	
Served as butter. Found to be oleomargarine	6	
Tested for foreign fats. None found	10	
Standard	13	
Submitted		
Found to contain foreign fats	2	
Tested for foreign fats. None found	33	
Tested for per cent of butter fat	2	
Butter Fats		13
Candy		21
Canned Goods		17
Not standard	12	
Standard	5	
Catsup		19
Cheese		35
Not standard	6	
Standard	24	
Submitted	5	
Coffee		7
Standard	7	
Cream		150
From city supplies. Not standard	55	
From city supplies. Standard	9	
Submitted	54	
Samples taken to determine overreading or underreading of Babcock test	32	

Drugs		178
Ammonia water—		
Not standard	7	
Standard	3	
Hamamelis water—		
Not standard	3	
Standard	14	
Lime water—		
Not standard	2	
Standard	31	
Spirit of camphor—		
Not standard	32	
Standard	28	
Spirit of nitrous ether—		
Not standard	20	
Standard	6	
Tincture of iodine—		
Not standard	12	
Standard	11	
Miscellaneous	9	
Evaporated Milk		21
Not standard	8	
Standard	13	
Flavors and Flavoring Extracts		46
Lemon extracts—		
Not standard	10	
Standard	11	
Terpeneless lemon extracts—		
Below standard	3	
Vanilla extracts—		
Vanilla extracts not standard, and substitutes	16	
Standard	3	
Miscellaneous	3	
Flour		10
Honey		8
Ice Cream		53
Below standard in fat	11	
Standard	18	
Experimental work on ice cream and ice cream mixtures	24	
Ice Cream Cones		24
Free from saccharin, and salicylic, boric and benzoic acids	20	
Sweetened with saccharin	4	
Jellies, Preserves and Mixtures		18
Lard		5
Linseed Oils		156
Found to contain mineral oil	36	
Found to contain mineral oil and rosin oil	3	
Found to contain a volatile petroleum product	3	
Found to contain more than 2.5 per cent unsaponifiable material	16	
Standard	48	
Submitted	50	

Meats and Meat Products		73
Chopped meats free from boric acid and sulphites	10	
Sausage—		
Bought for sausage. Found to be sausage with cereal. Tested for boric acid and borates. None found	20	
Bought for sausage. Found to contain potato flour	1	
Bought for sausage. Found to contain more than 4 per cent of cereal. Tested for boric acid and borates. None found	17	
Bought for sausage. Free from cereal, potato flour, boric acid or borates	13	
Sausage with cereal—		
Bought for sausage with cereal	5	
Miscellaneous meats and chopped meats	7	
Milk		370
City milk—		
Below standard	42	
Standard	40	
Milk delivered to creameries or cheese factories—		
Below standard	82	
Standard	12	
Herd samples milked in presence of inspectors	107	
Submitted samples	87	
Miscellaneous		49
Samples collected by inspectors	29	
Submitted samples	20	
Oleomargarine		20
Held to be in resemblance of yellow butter	10	
Tested for butter fat. Little or none found	4	
Tested for per cent of fat	6	
Olive Oil		36
Not standard	1	
Standard	35	
Soda Fountain Crushed Fruits and Syrups		17
Tested for benzoic acid, salicylic acid, saccharin, and artificial color	17	
Spices		12
Syrups, Molasses, and Syrup Mixtures		40
Maple syrup—		
Not standard	5	
Standard	14	
Miscellaneous syrups and molasses	9	
Syrup mixtures	12	
Turpentine		7
Vinegar		14
White Lead and Zinc White		12
White lead—		
Not standard	1	
Standard	10	
Zinc white—		
Not standard	1	

BEVERAGES.

Adulterated or misbranded. Tested for saccharin and preservatives.

Date.	Bought for.	Labeled.	Bought of.	Manufacturer or Jobber.	Remarks.
1910.					
Aug. 2	Pop	.....	A. R. Nitz Co., Milwaukee.....	A. R. Nitz Co., Milwaukee.....	Contains saccharin.
Aug. 2	Pop	.....	C. W. Herro, Milwaukee.....	A. R. Nitz Co., Milwaukee.....	Contains saccharin.
Aug. 2	Pop	.....	Santo Maglio, Milwaukee.....	A. R. Nitz Co., Milwaukee.....	Contains saccharin.
Aug. 29	Ginger ale.....	Ginger ale.....	Piper Bros. Madison.....	Cantrell & Cochrane, Dublin and Belfast.	Contains .002% sulphur dioxide.
Aug. 30	Lemon sour.....	Lemon sour.....	L. L. Rowe, Madison.....	Manhattan Bottling Works, Milwaukee.	Not a fruit juice product. Misbranded.
Dec. 12	Ginger ale.....	Pepsin ginger ale.....	Emery & Dewey, Madison.....	Chicago Consolidated Bottling Co., Chicago.	No active pepsin found. Misbranded.
1911.					
April 14	**Ginger ale.....**	Ginger ale.....	Findlay & Co., Madison.....	.....	Colored with caramel.
May 31	Orange cider ...	**Artificial orange cider.**	St. John Mineral Spring Co., Green Bay.	St. John Mineral Spring Co., Green Bay.	Not an orange juice product.
May 24	Orange cider....	Orange cider.....	The Salvator Mineral Springs Co., Green Bay.	The Salvator Mineral Springs Co., Green Bay.	Not an orange juice product. Misbranded. Contains benzoic acid. Colored with a coal-tar dye.
May 24	**Orange cider....**	Orange cider, artificial	J. J. Handlen, Green Bay.....	J. J. Handlen, Green Bay.....	Not an orange juice product.
May 24	Orange cider....	Orange cider.....	De Pere Bottling Works, De Pere...	Allouez Mineral Springs Co., Green Bay.	Not an orange juice product. Misbranded. Contains benzoic acid.
May 25	Orange cider....	Artificial orange cider. Colored and flavored.	Allouez Mineral Springs Co., Green Bay.	De Pere Bottling Works, De Pere...	Not an orange juice product. Artificially colored with a coal-tar dye.
May 25	**White pop.....**	.....	Erickson Hotel, Kewaunee.....	Kewaunee Bottling Works, Kewaunee.	Contains saccharin.
May 31	Grape punch....	.....	*Earl Gyles, Madison.....	.....	Contains added benzoic acid and colored with a coal-tar dye.
June 8	White pop.....	.....	Kewaunee Pop Co., Kewaunee.....	Kewaunee Pop Co., Kewaunee.....	Contains saccharin.
June 19	**Pepsin ginger ale.**	Pepsin ginger ale.....	B. F. Staack, Madison.....	Manhattan Bottling Works, Milwaukee.	Does not contain pepsin. Misbranded.
July 12	White pop.....	.....	Blue Ribbon Bottling Works, Milwaukee.	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.

*Submitted by.

July 12	White pop.....	.....	D. Bonchek, Milwaukee.....	D. Bonchek, Milwaukee.....	Contains saccharin.
Aug. 1	White pop.....	.....	Bitker's Department Store, Milwaukee.	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Nov. 8	Apple cider.....	Apple cider.....	Emil Makela, Hurley.....	Hurley Bottling Works, Hurley.....	Not apple cider. Misbranded. Diluted with water and sweetened with sugar.
Nov. 22	Cider	Cider preserved with 1-1000 part of benzoate of soda.	Mrs. John M. Fox, Footeville.....	S. D. Deyo Co., Kingston, N. Y.....	Preserved with benzoate of soda.
Nov. 22	Lemon sour.....	Lemon sour.....	Mrs. John M. Fox, Footeville.....	C. Gray, Janesville.....	Not a fruit juice product. Artificially colored and flavored.
Dec. 14	Solon Springs . punch.	Solon Springs punch. Four in one. Concentrated.	W. H. Kneeland, Eau Claire.....	T. F. Solon, Solon Springs.....	Artificially colored. Contains benzoic acid.
1912.					
Feb. 2	Pop	.....	L. Doliver, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	Jos. Shapiro, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	L. Margalus, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	I. Koppel, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	Otto Fiedler, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	Jos. Primakow, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
Feb. 2	Pop	.....	A. Jacswitch, Milwaukee.....	Blue Ribbon Bottling Works, Milwaukee.	Contains saccharin.
April 24	Pop	.....	J. E. Jelling, Withee.....	Chris. Volkman, Eau Claire.....	Contains saccharin.
May 24	Pop	.....	Jos. Evans, Eau Claire.....	Jos. Evans Bottling Works, Eau Claire.	Contains saccharin.
May 24	Pop	.....	Jos. Evans, Eau Claire.....	Jos. Evans Bottling Works, Eau Claire.	Contains saccharin.
May 24	Pop	.....	Jos. Evans, Eau Claire.....	Jos. Evans Bottling Works, Eau Claire.	Contains saccharin.

BEVERAGES FREE FROM SACCHARIN, AND SALICYLIC AND BENZOIC ACIDS.

Date.	Bought for.	Bought of.	Manufacturer or Jobber.
1910.			
Aug. 28	Ginger ale	M. L. Nelson, Madison	Clicquot Club Co., Millis, Mass.
Aug. 29	Ginger ale	Wm. Brady Co., Madison	Sprague, Warner & Co. Chicago.
Aug. 29	Ginger ale	John Hyland, Madison	Franklin MacVeagh & Co., Chicago.
Aug. 30	Root beer	Simons Bros., Madison	Chicago Consolidated Bottling Co., Chicago.
Sept. 13	Pop	Jos. Stainer, State Fair Park, Milwaukee	Manhattan Bottling Co., Milwaukee.
Sept. 13	Pop	J. Foxhoven, State Fair Park, Milwaukee	A. R. Nitz Co., Milwaukee.
Sept. 13	Pop	H. Hoff, State Fair Park, Milwaukee	John Grab, Milwaukee.
Sept. 13	Pop	J. E. Okray, State Fair Park, Milwaukee	Manhattan Bottling Co., Milwaukee.
Sept. 13	Pop	John Brill, Milwaukee	E. L. Husting Co., Milwaukee.
Sept. 13	Pop	C. A. Mosher, State Fair Park, Milwaukee	Manhattan Bottling Co., Milwaukee.
Sept. 13	Pop	J. Foxhoven, State Fair Park, Milwaukee	
Sept. 13	Pop	Jos. Stainer, State Fair Park, Milwaukee	
Sept. 20	Pop	Herman Smith, Chippewa Falls, Northern Fair Park	C. Kleis, Chippewa Falls.
Sept. 20	Pop	Jos. E. Kempton, Chippewa Falls, Northern Fair Park	Chippewa Spring Co. Chippewa Falls.
1911.			
June 8	White pop	J. Oakes, Luxembourg	Luxembourg Pop Co., Luxembourg.
July 12	White pop	Star Bottling Works, Milwaukee	Star Bottling Works, Milwaukee.
Aug. 15	White pop	Wenzler Bros. & Metzker, Milwaukee	Wenzler Bros. & Metzker, Milwaukee.
Aug. 15	White pop	Walberg Bottle House, Milwaukee	Wenzler Bros. & Metzker, Milwaukee.
Aug. 15	Cream soda	Westside Bottle House, Milwaukee	Wenzler Bros. & Metzker, Milwaukee.
1912.			
Feb. 19	Pineapple juice	L. L. Rowe, Madison	Hawaiian Pineapple Products Co., Honolulu.
May 9	Red pop	Rice Lake Bottling Works, Rice Lake	Rice Lake Bottling Works, Rice Lake.
May 9	Pop	Rice Lake Bottling Works, Rice Lake	Rice Lake Bottling Works, Rice Lake.
May 24	Pop	Chris. Volkman, Eau Claire	Chris. Volkman Bottling Works, Eau Claire.
May 24	Pop	Chris. Volkman, Eau Claire	Chris. Volkman Bottling Works, Eau Claire.
June 17	Pop	Chris. Volkman, Eau Claire	Chris. Volkman Bottling Works, Eau Claire.
June 17	Pop	Chris. Volkman, Eau Claire	Chris. Volkman Bottling Works, Eau Claire.
June 17	Pop	Chris. Volkman, Eau Claire	Chris. Volkman Bottling Works, Eau Claire.

BUCKWHEAT FLOUR.

Not standard. Found to contain foreign flour.

Date.	Bought of.	Manufacturer or Jobber.
1910.		
Dec. 29	C. H. Kaste, Alma	A. G. Ochsner, Cochrane, Wis.
Dec. 29	Albert Kirchner, Fountain City	Alert Roller Mills, Fountain City, Wis.
1911.		
Jan. 20	G. N. Rohrer, Cochrane	A. G. Ochsner Cochrane, Wis.
Feb. 8	Chas. Wesserberger, Neillsville	Neillsville Milling Co., Neillsville, Wis.
Feb. 9	George W. Hart, Granton	J. W. Huyck & Son, Hingham, Wis.
Mar. 18	W. L. Hemphill, Neillsville Milling Co., Neillsville	Neillsville Milling Co., Neillsville, Wis.
April 21	W. L. Hemphill, Neillsville Milling Co., Neillsville	Neillsville Milling Co., Neillsville, Wis.

Standard.

1910		
Dec. 3	J. McNamara, Madison	E. R. Pahl & Co., Milwaukee.
Dec. 16	Gilbert Bros., Eau Claire	The Berkett Mills, Penn Yan, New York.
Dec. 16	A. Nelson & Co., Eau Claire	Northwestern Flour & Grain Co., Eau Claire.
Dec. 28	H. L. Platte, Prescott	Griggs, Cooper & Co., St. Paul, Minn.
Dec. 28	F. M. White & Son, Maiden Rock	S. M. Meyers & Son, Winona, Minn.
Dec. 29	C. F. Prussing & Co., Fountain City	Bay State Milling Co., Winona, Minn.
1911.		
Jan. 9	P. A. Moe, Chetek	Northwestern Flour and Grain Co., Chetek, Wis.
Jan. 10	The Fair Store Co., Rice Lake	J. W. Taylor, Barron, Wis.
Jan. 19	W. Grams, La Crosse	A. Grams & Son, La Crosse, Wis.
Jan. 19	J. G. Jakel, La Crosse	The Blodgett Milling Co., Janesville, Wis.
Feb. 8	Ketchen & Albright, Neillsville	Olson & Johnson, Humbird, Wis.
Feb. 24	Wise & Mish, Independence	Independence Milling Co., Independence, Wis.
Feb. 24	M. I. Gilbert, Blair	A. Jacobson, Coral City Mills, Whitehall, Wis.
Mar. 21	Wise & Mish, Independence	Independence Milling Co., Independence, Wis.
Mar. 21	Whitehall Milling Co., Whitehall	A. Jacobson, Coral City Mills, Whitehall, Wis.
Nov. 2	Sprecker Grocery Store, Baraboo	Timme Bros, Delton.
Dec. 28	Neillsville Milling Co., Neillsville	Neillsville Milling Co., Neillsville, Wis.

Buckwheat Flour, Submitted.

Date.	Submitted by.	Remarks.
1910.		
Nov. 18	R. P. Koenig & Co., Watertown	No foreign flour found.
1911.		
Jan. 30	O. Leonard, West Salem	No foreign flour found.
Feb. 5	Edward Ramsden, Kansasville	No foreign flour found.
Feb. 22	W. R. Roberts, Wild Rose	No foreign flour found.
Mar. 13	W. A. Fuller, Merton	No foreign flour found.
Nov. 18	Frank Tirrill, Lodi	No foreign flour found.
Nov. 29	Harley Best, Belleville	No foreign flour found.
Nov. 29	Mrs. H. L. Terry, 137 Langdon St., Madison	No foreign flour found.
Dec. 8	John R. Place, Belleville	No foreign flour found.
Dec. 8	John. R. Place, Belleville	No foreign flour found.
Dec. 8	J. Moher, Rolling Prairie	No foreign flour found.
Dec. 27	Frank Guttenberg Jr., Jefferson, R. D. 1	No foreign flour found.
Dec. 27	Mrs. Addie Babcock, Evansville	No foreign flour found.
1912.		
Jan. 10	W. E. Chatterton, 1112 W. Washington Ave., Madison	No foreign flour found.
Jan. 15	The Jacob Frank Co., Hartford	No foreign flour found.
Jan. 15	Kleist Bros., Brillion	Contains foreign starch.
Jan. 18	O. D. Hutchins, Loyal	No foreign flour found.
Jan. 23	Wm. Sherman, La Valle	Contains foreign flour.
Jan. 27	H. C. Larson, Madison	No foreign flour found.
Jan.	Chas. Ritter, Appleton	No foreign flour found.
Feb. 16	C. E. Smith, Gordon	Contains a small amount of wheat starch.
Feb. 17	Wm. Waddell, Hub City	No foreign flour found.
Mar. 6	F. Stover, 744 Van Buren St., Milwaukee	No foreign flour found.
Mar. 16	A. H. Craig, Mukwonago	No foreign flour found.
June 19	J. H. Tichenor, Lynxville	No foreign flour found.

BUTTER.

Butter, Not Standard.

Date.	Bought of.	Manufacturer or Jobber.	Per cent butter fat.
1910. Oct. 20	Poynette Creamery, Poynette	August Westphal, Neosho, Wis	77.8
1911. Sept. 21	Rhinelander Creamery & Produce Co., Rhinelander	F. W. Meen, Rhinelander, Wis	80.2
1912. Jan. 2	Badger Creamery Co., Madison	Madison Dairy Produce Co., Madison, Wis	80.14
Jan. 2	Badger Creamery Co., Madison	Madison Dairy Produce Co., Madison, Wis	80.21
Jan. 2	Badger Creamery Co., Madison	Madison Dairy Produce Co., Madison, Wis	80.11
Jan. 27	Herrmann Bros, Appleton	Hermann Bros., Appleton, Wis	82.0
Mar. 29	W. E. Kingsbury, Stevens Point	Custer Creamery Co., Custer, Wis	80.1

Served as butter. Found to be oleomargarine.

Date.	Bought of
1910. Sept. 13	Roy Potter, State Fair Park, Milwaukee.
1911. Nov. 21	Chas. D. Carpenter, Railroad Hotel, Janesville.
1912. Jan. 2	Abe Wiley, Fifield.
Jan. 4	Geo. Bicken, Kenosha.
Jan. 30	Abe Wiley, Fifield.
Mar. 11	George Tarnish, Shullsburg.

Butter, Tested for Foreign Fats. None Found.

Date.	Bought of.	Manufacturer or Jobber.	Remarks.
1911.			
Feb. 8	Minix & Campbell, Barneveld	Gordon Williams	
Feb. 28	Klatt & Stuber, Clyman	Harmony Creamery Co., Pittsburg, Pa.	
Mar. 7	Richard C. Henning, Stetsonville		Served with meal.
Dec. 8	Hotel Campbell, Merrillan		Served with meal.
Dec 13	Chapin Hall House, Hudson		Served with meal.
1912.			
Jan. 29	Tremont Hotel, Oshkosh		Served with meal.
Jan. 29	Tremont Hotel, Oshkosh		Served with meal.
Feb. 27	E. T. Borgen, Westby		
Mar. 12	Frank Gordon, Darlington		
Mar. 12	Frank Gordon, Darlington		

Butter, Standard.

Date.	Bought of.	Manufacturer or Jobber.
1910.		
Oct. 22	Peter Nottleman, Oshkosh	Nottleman Bros., Oshkosh, Wis.
Oct. 22	John Hackbarth, Oshkosh	
1911.		
Mar. 1	E. Seaman, Clinton Junction	H. C. Raven, Clinton Junction, Wis.
Apr. 5	Ralph Meracle, Palmyra	Oak Hill Creamery, Palmyra, Wis., R. D.
Oct. 17	Edward M. Pond, Eau Claire	Eau Claire Creamery Co., Eau Claire, Wis.
Oct. 17	Lind & Co., Eau Claire	Eau Claire Creamery Co., Eau Claire, Wis.
Oct. 17	F. F. Conley, Eau Claire	E. C. Jacobs, Elk Mound, Wis.
Nov. 15	W. Welsher, Madison	Madison Dairy Produce Co., Madison, Wis.

Butter, Standard—Continued.

Date.	Bought of.	Manufacturer or Jobber.
1912.		
Jan. 15	Jules J. Marten Co., South Kewaunee	Fox River Valley Creamery Co., West De Pere, Wis.
Jan. 27	Potts, Woods & Co., Appleton	
Mar. 6	M. Moersch & Son, Peebles	M. Moersch & Son, Peebles, Wis.
Mar. 29	H. C. Moen, Stevens Point	Custer Creamery Co., Custer, Wis.
Mar. 29	W. B. Pett, Stevens Point	Custer Creamery Co., Custer, Wis.

Butter, Submitted.

FOUND TO CONTAIN FOREIGN FATS.

Date.	Submitted by.
1911.	
Apr. 1	B. E. Nelson, Woodruff.
1912.	
Jan. 22	F. A. Ochtenberg, Oshkosh.

Butter, Submitted.

TESTED FOR PER CENT OF BUTTER FAT.

Date.	Submitted by.	
1910.		
Oct. 14	Miss Mildred Kenzel, Oshkosh	Contains 73.0% butter fat.
1911.		
Mar. 6	Hon. John Thomas, Jim Falls	Contains 80.56% of butter fat.

Butter, Submitted —Continued.
Tested for foreign fats. None found.

Date.	Submitted by.
1910.	
Oct. 28	L. R. Davies, Marinette.
Dec. 16	Fred M. Trogstad, Sparta.
Dec. 24	Prof. F. O. Reed, Madison.
Dec. 29	Kestel Bros., Marshfield.
1911.	
Jan. 14	W. E. Winters, Delavan.
Jan. 31	Ragatz & Gasser, Prairie du Sac.
Feb. 7	M. L. Ensign, Madison.
Feb. 13	J. B. McCoy, Milwaukee.
Feb. 24	A. C. Stone, Tomah.
Mar. 17	J. F. Kadonsky, Wausau.
Mar. 29	Mrs. Geo. R. Kenzel, Oshkosh.
Apr. 8	Arnold J. Brandt, Boyd.
Sept. 22	W. E. Knuth, Green Bay.
Oct. 14	J. S. Jenson, Racine.
Dec. 8	N. A. Steel, Tomah.
Dec. 8	D. F. Truax, Eau Claire.
Dec. 12	Frank Newcomb, Lake Mills.
Dec. 18	P. J. Savage, Iron River.
1912.	
Jan. 15	W. E. Carle, Janesville.
Jan. 22	H. P. Friday, Markesan.
Jan. 27	Mrs. Louis R. Head, Madison.
Feb. 1	Frank Dillman, New London.
Feb. 5	Laun Bros., Wausaukee.
Feb. 5	U. S. Baer, Madison.
Feb. 5	R. T. Jenney, De Pere.
Feb. 13	S. B. Friday, Markesan.
Feb. 23	H. C. Larson, Madison.
Feb. 28	Chas. Kinrill, Green Bay.
Mar. 15	George Jones, Oconto.
Mar. 20	Evelyn M. Irish, Beloit.
Mar. 23	A. C. Siekman, Appleton.
Apr. 4	Miss M. S. Hohlfeldt, Janesville.
Apr. 8	S. B. Friday, Markesan.

BUTTER FATS.

Date.	From sample of.	Bought of or Submitted by.	Foam.	Melts.	Zeiss Butyro Refracto-meter at 40° C.	Reichert-Meissl Number.	Remarks.
1911.							
Jan. 14	Butter	*Board of Health, Barneveld.....	Good	Clear	43.5	21.1	Marked "1. F. Urban."
Jan. 19	Butter	*Board of Health, Barneveld.....	Good	Clear	43.0	20.8	Marked "2. From consignment rejected by Swift & Co."
Jan. 26	Butter	*Minix & Campbell, Barneveld.....	Good	Clear	42.8	22.8	Taken by inspector.
Jan. 26	Butter	*Minix & Campbell, Barneveld.....	Good	Clear in ½ hr.	42.7	21.1	Taken by inspector from tub returned by Swift & Co.
Feb. 8	Butter	Minix & Campbell, Barneveld.....	Good	Clear	43.0	20.8	Taken by inspector from a tub returned by Swift & Co.
Feb. 8	Butter	Minix & Campbell, Barneveld.....	Good	Clear in 1½ hrs.	44.0	16.9	Marked "Moody Price."
Feb. 8	Butter	Hughes & Harris, Barneveld.....	Good	Clear in 1½ hrs.	43.4	21.9	Marked "F. Pallan, farmer."
Feb. 8	Butter	Hughes & Harris, Barneveld.....	Good	Clear	43.0	22.5	Marked "W. Zipplin, farmer."
Feb. 8	Butter	Minix & Campbell, Barneveld.....	Good	Clear in ½ hr.	43.0	20.7	Marked "J. Hanley."
Feb. 23	Cream	F. Urban, Barneveld.....	.....	.....	43.5	25.8	
Feb. 24	Cream	J. Hanley, Barneveld.....	.....	.....	42.2	24.5	
Feb. 24	Cream	Gordon Williams, Barneveld.....	.....	.....	42.4	26.5	
Feb. 25	Cream	C. J. Zipplin, Barneveld.....	.....	.....	43.0	26.7	

* Submitted sample.

CANDY.

Date.	Bought for.	Bought of.	Remarks.
1910.			
Aug. 31	Candy	N. F. Schmitt, Kenosha.....	No adulteration found.
Aug. 31	Candy	N. F. Schmitt, Kenosha.....	No adulteration found.
1911.			
Jan. 6	Burnt peanuts	Jos. Puccinelli, 473 3rd St., Milwaukee.....	No adulteration found.
Jan. 6	Burnt peanuts	G. A. Taddey, Center St., Milwaukee.....	Manufactured from wormy and moldy peanuts. No shellac found.
Jan. 6	Marshmallows	G. A. Taddey, Center St., Milwaukee.....	Contain gelatin.
Jan. 6	Marshmallows	Chas. Stuger, Center St. and Louis Ave., Milwaukee.....	Contain gelatin.
Jan. 6	Burnt peanuts	F. Schwind, 12th and Chestnut Sts., Milwaukee.....	Coated with shellac.
Jan. 6	Burnt peanuts	Chas. Stuger, Center St. and Louis Ave., Milwaukee.....	Coated with shellac.
Jan. 6	Burnt peanuts	Fruit Stand, 12th and Walnut Sts., Milwaukee.....	Coated with shellac.
Jan. 6	Burnt peanuts	M. Weisberg, 904 Walnut St., Milwaukee.....	Peanuts raw.
Jan. 6	Candy wine bottles.	F. Slinglbauer, 1225 Center St., Milwaukee.....	Syrup in candy bottles contains no alcohol.
Feb. 10	Burnt peanuts	Princess Candy Co., Milwaukee.....	Coated with shellac.
Feb. 10	Burnt peanuts	S. S. Kressge, 313 Grand Ave., Milwaukee.....	No adulteration found.
Feb. 10	Burnt peanuts	Knox Five and Ten Cent Store, 218 Grand Ave., Milwaukee..	No adulteration found.
Feb. 16	Burnt peanuts	The Princess, Grand Ave., Milwaukee.....	Coated with shellac.
Feb. 17	Burnt peanuts	Metry & Barrock, Grand Ave., Milwaukee.....	Coated with shellac.
Feb. 17	Burnt peanuts	Chas. Stuger, 1223 Center St., Milwaukee.....	Coated with shellac.
Feb. 17	Burnt peanuts	F. Schwind, 12th and Chestnut Sts., Milwaukee.....	Coated with shellac.
Feb. 17	Burnt peanuts	Scherer's Confectionery, Grand Ave., Milwaukee.....	Coated with shellac.
Feb. 17	Burnt peanuts	Chacona's, Grand Ave., Milwaukee.....	Coated with shellac.
1912.			
Feb. 14	Candy	*Mrs. Alex. Johnson, Marshfield.....	No adulteration found.

* Submitted sample.

CANNED GOODS.

Canned Goods, Not Standard.

Date.	Bought for.	Labeled.	Brand.	Bought of.	Manufacturer or Jobber.	Remarks.
1911. May 24	Maraschino cherries	Maraschino cherries ...	Lovedale	M. E. O'Neill, Green Bay.	Liebenthal Bros. & Co., Cleveland, Ohio.	Contains a bleaching compound (sulphurous acid), artificial color (coal-tar dye), and added benzoic acid. Not Maraschino cherries. Misbranded.
June 9	Early June peas...	Early June Peas.....	Gold Bond	Boston Store, Milwaukee	Dundas Canning Co., Dundas, Wis.	Mixed with Canada thistle bulbs. Misbranded.
July 12	Maraschino cherries	Maraschino Cherries ...	C. S. K.....	Fiegl & Kopps Saloon, Milwaukee.	Chas. Krause, Milwaukee	Contains a bleaching compound (sulphurous acid), artificial color. Not Maraschino cherries. Misbranded.
July 31	Canned cherries ...	Maraschino Cherries ...	.....	Espenhain's Department Store, Milwaukee.	.....	Contains a bleaching compound (sulphurous acid) and artificial color (coal-tar dye). Not Maraschino cherries. Misbranded.
Aug. 1	Canned cherries ...	Maraschino Cherries ...	.....	Bitker's Department Store, Milwaukee.	Bonheim-Rexinger Co., Cincinnati.	Contains a bleaching compound (sulphurous acid) and artificial color (coal-tar dye). Not Maraschino cherries. Misbranded.
Dec. 9	Maraschino cherries	Maraschino Cherries ...	Victor	G. S. Beardsley, Grand Rapids.	Rheinstrom Bros., Cincinnati.	Contains a bleaching compound (sulphurous acid) and artificial color (cochineal). Not Maraschino cherries. Misbranded.
Dec. 19	French peas	.....	Couteaux	W. A. Gilmore, Durand	Wespelaer, Belgium	Colored with a deleterious substance (a copper compound).

Canned Goods, Not Standard—Continued.

Date.	Bought for.	Labeled.	Brand.	Bought of.	Manufacturer or Jobber.	Remarks.
1911.						
Dec. 19	Canned cherries ...	Canned Cherries	Silver Thistle ...	Joseph Reeves, Beloit...	Hannan & Hogg, Chicago.	Contains a bleaching compound (sulphurous acid) and artificial color (coal-tar dye).
1912.						
Feb. 23	Canned peas	Canned Peas	Couteaux	C. S. Stacy, Waterloo..	Reid, Murdock & Co., Chicago.	Colored with a deleterious substance (a copper compound).
Mar. 4	Canned cherries ...	Maraschino Cherries ...	White Rose.....	Dion Condos, Janesville	Wm. J. Benckos & Co., Chicago.	Contains a bleaching compound (sulphurous acid) and artificial color (a coal-tar dye). Not Maraschino cherries. Misbranded.
May 2	Canned cherries ...	Canned Cherries	Silver Thistle ...	Joseph Reeves, Beloit...	Hannan & Hogg, Chicago.	Contains a bleaching compound (sulphurous acid) and artificial color.
May 2	Canned cherries ...	Fancy Cherries	.....	Burr Bros., Beloit.....	Cincinnati Extract Wks., Cincinnati.	Contains a bleaching compound (sulphurous acid). Artificially flavored.

Canned Goods, Standard.

Date.	Bought for.	Brand.	Bought of.	Manufacturer or Jobber.
1911.				
Mar. 14	Canned tomatoes.	Bright Spot	*J. Q. Emery, Madison.....	V. R. Pieper, Milwaukee.
Aug. 22	Sauerkraut	Hanover	H. G. Vogel, Prairie du Sac.....	Libby, McNeill & Libby, Chicago.
Aug. 22	Sauerkraut	Union	John Kaiserman, Richland Center.....	Steele-Wedeles Co., Chicago.
Aug. 22	Sauerkraut	Genesee	Louis Traeger, Richland Center.....	Sprague, Warner & Co., Chicago.
Dec. 19	Peas	Carvel	Perkins Bros., Kenosha.....	The Columbus Canning Co., Columbus, Wis.

*Submitted by.

CATSUP.

Date.	Bought of.	Manufacturer or Jobber.	Brand.	Bacteria No. per cc., millions.	Per cent of fields showing moulds.	No. spores and yeasts per 1-60 cc.	Remarks.
1911.							
Feb. 8	Adams & Taylor, Whitehall.....	Frazier Packing Co., Elwood, Indiana.....	Champion..	96	60	15	.....
Feb. 24	M. I. Gilbert, Blair.....	Frazier Packing Co., Elwood, Indiana.....	Champion ..	84	50	10	.....
April 17	Monat-Duenow Co., Chippewa Falls.	Franklin MacVeagh & Co., Chicago.....	Lyndon.	12	17	.....	.....
April 18	A. A. Peterson, Amery.....	Green & DeLaittre Co., Minneapolis, Minn.	Golden West..	19	40	.....	.....
April 18	Goethel Bros., Chippewa Falls...	Columbia Conserve Co., Indianapolis, Indiana.	Columbia....	1 to 2	43	.....	.....
April 21	Harry Olson, Eau Claire.....	H. T. Lang Co., Eau Claire.....	Wisconsin....	96	80	40	.....
April 27	Wm. Rabenowich & Sons, Park Falls.	Frazier Packing Co., Elwood, Indiana.....	Burro...	108	94	70	.....
June 19	Behrend & Oelmiller, Madison....	H. J. Heinz Co., Pittsburg.....	Heinz...	12	100	20	.....
June 19	Haak & Son, Madison.....	T. A. Snider Preserving Co., Cincinnati...	Snider's.	84	60	25	.....
June 23	M. H. Halperin, Madison.....	Huss-Edler Preserve Co., Chicago.....	Kinzie..	35	50	30	.....
June 23	S. Kasdin, So. Madison.....	Van Camp Packing Co., Indianapolis, Indiana.	Van Camp's	14	52	15	.....
June 23	I. Kalen, Madison.....	Libby, McNeill & Libby, Chicago.....	Libby's.	8	64	.....	.....
June 23	Mrs. Gerke, Madison.....	The Jersey Packing Co., Cincinnati.....	Newport	120	64	66	.....
July 6	Fred Allen, Ridgeway.....	Reid, Murdock & Co., Chicago.....	Farm House.	16	100	22	.....
July 6	Geo. Swenson, Klevenville.....	Corbin & Sons Co., Chicago.....	Hartland..	1 to 2	60	.....	.....
July 6	Jas. Kelly, Ridgeway.....	Durand & Kasper Co., Chicago.....	Rival...	132	100	30	.....
Dec. 19	H. C. Marquardt, Durand.....	Frazier Packing Co., Elwood, Indiana.....	Royal Red...	24	85	17	.....
1912.							
Mar. 29	Robert Vincent, Baraboo.....	.....	.....	.....	.....	.....	Color natural. Ether-soluble preservative none. Saccharin none.
May 23	George B. Purvis, Knapp.....	The Williams Bros. Co., Detroit, Mich....	Williams	.....	.....	.....	Color natural. Preservative none.

CHEESE.

Cheese, Not Standard.

Date.	Bought for.	Labeled.	Bought of.	Manufacturer or Jobber.	Fat per cent.	Water free substance. per cent.	Ratio.	Remarks.
1911.								
Apr. 19	D'Isigny cheese.	D'Isigny cheese..... American type. Partly skimmed.	Wm. Steinmeyer, Milwaukee.	Phoenix Cheese Co., Zeeland, Mich.	24.0	50.69	47.3	Partly skimmed.
May 16	Pimento cheese.	MacLaren's Pimento cheese.	Adolph Dernehl, Milwaukee.	MacLaren Imperial Cheese Co., Detroit and Toronto	19.1	43.6	43.8	.....
Dec. 28	Cheese	.....	A. Grosenbach Co., Milwaukee.	.....	15.70	54.82	28.6	.....
1912.								
April 16	Cheese	Sorge's Pimento cheese..	The City Grocery Co., La Crosse.	Central Wisconsin Creamery Co., La Crosse.	21.00	42.81	49.0	.....
April 16	Cheese	Elkhorn Brand Potted cheese.	The City Grocery Co., La Crosse.	Kraft & Bros. Co., Chicago.	31.00	64.9	47.8	.....
April 17	Cheddar ..... cheese.	Cheddar cheese.....	Adolph Dernehl, Milwaukee.	Harry Peck, Snow Hill, London.	43.7	.....	.....	Contains boric acid or a salt thereof.

Cheese, Standard.

Date.	Bought for.	Labeled.	Bought of.	Manufacturer or Jobber.
1910.				
Dec. 1	Limburger cheese..	.....	Rudolph Urben, Blue Mounds.....	.....
Dec. 1	Limburger cheese..	.....	Rudolph Urben, Blue Mounds.....	.....
Dec. 1	Limburger cheese..	.....	Rudolph Urben, Blue Mounds.....	.....

Dec. 1	Limburger cheese..	.....	Rudolph Urben, Blue Mounds.....	.....
1911.				
Jan. 27	Cheese	Pearce's Special.....	Monsos Bros., Black River Falls.....	Pearce & Co. Indianapolis.
Feb. 24	Cheese	Wis. Danish Style Pimento cheese.....	E. W. Schultze, La Crosse.....	Wis. Dairy Products Co., La Crosse.
April 26	Camembert cheese.	Veritable Fromage de Camembert, extra fine.	Hale's Grocery, Kenosha.....	C. Percival, New York.
April 26	Camembert cheese.	Imported Camembert	Scholer & Funck, Kenosha.....	Beech-Nut Pack. Co., Canajoharie, N. Y.
April 27	Roquefort and American cheese.	MacLaren's Roquefort and American cheese.	Adolph Dernehl, Milwaukee.....	MacLaren Imperial Cheese Co., Detroit and Toronto.
May 16	Lunch Brie cheese.	Miniature Lunch Brie fancy cheese.....	Adolph Dernehl, Milwaukee.....	.....
May 22	Roquefort cheese...	Roquefort cheese	Findlay & Co., Madison.....	.....
May 26	Brie cheese	Miniature Brie (made in Wisconsin)....	Galloway-West Co., Fond du Lac.....	Galloway-West Co., Fond du Lac.
Aug. 25	Edam cheese	.....	Chas. A. Johnson, Allouez.....	John Beemster, Appleton.
Nov. 6	Cheese	.....	J. L. Kilkenny, Whitewater.....	J. L. Kilkenny, Whitewater.
Nov. 10	Cheese	.....	J. C. Coxe Co., Whitewater.....	J. L. Kilkenny, Whitewater.
Nov. 10	Cheese	.....	A. E. Scholl, Whitewater.....	J. L. Kilkenny, Whitewater.
Nov. 10	Cheese	.....	H. A. Dierfield & Son, Whitewater.....	J. L. Kilkenny, Whitewater.
Nov. 10	Cheese	.....	H. A. Dierfield & Son, Whitewater.....	J. L. Kilkenny, Whitewater.
Dec. 19	Brick cheese	.....	Berard & Kubisiak, Grand Rapids.....	F. B. Ives Co., Fond du Lac.
1912.				
Jan. 5	Cheese	.....	John Jenkins, Athens.....	Marathon County Farmers' Creamery Co., Athens.
Feb. 14	Cheese	.....	Evansville, Merc. Ass'n, Evansville.....	MacLaren Imperial Cheese Co., Detroit.
April 10	Cheese	MacLarens' Canada style cheese.....	E. W. Moran, Portage.....	MacLaren Imperial Cheese Co., Detroit.
April 16	Cheese	Elkhorn Brand Cream cheese.....	The City Grocery Co., La Crosse.....	Kraft & Bros. Co., Chicago.
Apr. 17	Cheese	Elkhorn Brand Club cheese.....	The City Grocery Co., La Crosse.....	Kraft & Bros. Co., Chicago.

Cheese, Submitted.

Date.	Submitted by.	Fat per cent.	Water-free substance per cent.	Ratio.	Remarks.
1910.					
July 13	Butz Bros, Mazomanie.....	32.0	.....	.....	Tested for foreign fats. None found.
1911.					
Aug. 14	J. Kirkpatrick, Richland Center.....	31.5	65.54	48.06	Not standard.

Cheese Submitted—Continued.

Date.	Submitted by.	Fat per cent.	Water-free substance. per cent.	Ratio.	Remarks.
1911.					
Aug. 14	J. Kirkpatrick, Richland Center	33.50	65.06	51.48	Standard.
Dec. 19	H. B. Stanz Co., Milwaukee	19.0	51.16	37.13	Below standard.
1912.					
Jan. 20	F. F. Chesak, Athens	37.9	70.45	53.8	Standard.

COFFEE.

Standard.

Date.	Bought of or Submitted by.	Manufacturer or Jobber.
1911.		
Jan. 3	*Philip Giloy, Humbird	
Oct. 11	*Mrs. Rohr, 368 Quine St., Kenosha	
Nov. 8	*W. F. Scott, Madison	
Nov. 13	Mrs. Minnie Ratigan, 260 Ashland Ave., Kenosha	
Nov. 13	Mrs. Jos. Sweeney, 266 Ashland Ave., Kenosha	Eureka Tea Co., Chicago.
Nov. 13	Mrs. H. J. Davis, 260 Ashland Ave., Kenosha	India Tea Co., Chicago.
Nov. 13	Mrs. Patrick Ward, 322 Wisconsin St., Kenosha	India Tea Co., Chicago and Sullivan Tea & Coffee Co., Kenosha.
		W. W. Barlow, Kenosha.

* Submitted samples.

CREAM.

Cream From City Supplies, Not Standard.

Date.	Bought of.	City.	Per cent fat.
1910.		Menasha	13.6
Aug. 18	S. J. Resch	Wausau	14.4
Aug. 23	H. Menret	Merrill	15.0
Aug. 25	William Haeger	Merrill	13.0
Aug. 25	F. J. Massart	Superior	14.0
Aug. 30	Chas. Carlson	Superior	17.0
Aug. 30	C. C. Simon	Superior	17.0
Aug. 30	Ed. Kamler	Superior	13.6
Aug. 30	A. F. Schmidt	Superior	13.2
Sept. 1	Henry Schroeder	Oshkosh	15.1
Sept. 1	J. G. Uecke	Oshkosh	16.1
Sept. 9	Henry Loehschmidt	Appleton	15.7
Sept. 9	William Ohlroges	Appleton	16.6
Sept. 9	A. T. Krickeberg	Appleton	13.0
Sept. 21	J. A. Dearth	Owen	15.6
Sept. 22	Fred C. Rasmussen	Oconto	17.3
Sept. 27	Henry Duellman	Marshfield	13.0
Sept. 29	H. Klackner	Manitowoc	16.25
Sept. 29	S. O. Gunderson	Manitowoc	15.5
Sept. 29	Bernard Gerl	Manitowoc	13.6
Sept. 29	Ernest Dill	Manitowoc	14.3
Oct. 18	Henry Klackner	Manitowoc	14.4
Nov. 4	H. J. Yule	Columbus	16.0
Nov. 7	Al. Hunsaker	Lancaster	16.2
Nov. 10	E. Norlund	Superior	12.1
Nov. 10	Russell Creamery Co.	Superior	17.0
Nov. 10	F. Berg	Superior	13.8
Nov. 10	Chas. Carlson	Superior	15.1
Nov. 10	C. C. Simon	Superior	12.3
Nov. 10	A. F. Schmidt	Superior	15.7
Nov. 11	Bernard Gerl	Manitowoc	16.7
Nov. 11	E. W. Dill	Manitowoc	14.2
Nov. 11	S. O. Gunderson	Manitowoc	

Cream From City Supplies, Not Standard—Continued.

Date.	Bought of.	City.	Per cent fat.
1910.			
Nov. 16	A. Kleist, agent for Jahnke Bros.	Watertown	16.4
Nov. 16	Misses Virtue	Hudson	14.6
Nov. 16	C. H. Baker	La Crosse	15.0
Nov. 16	Fred Hass	La Crosse	16.3
Nov. 16	Wm. Newberg	La Crosse	16.3
Nov. 25	E. M. Holton	Madison	*13.8
Nov. 29	Russell Creamery Co.	Superior	14.0
Nov. 29	Adam F. Schmidt Cry. Co.	Superior	17.5
Nov. 29	Charles Carlson	Superior	12.8
Nov. 29	Mrs. Mary Albeck	Superior	16.0
Nov. 29	Ed Kamler	Superior	15.0
Nov. 29	Russell Creamery Co.	Superior	14.0
Nov. 29	A. Christensen	Superior	16.0
Nov. 29	L. Kahle	Superior	17.5
Dec. 6	J. H. Paul	Platteville	16.7
Dec. 9	E. M. Holton	Madison	13.0
Dec. 30	Crystal Spring Dairy	Madison	16.1
1911.			
June 24	J. G. Funk	Racine	15.1
July 18	Peter Christopher	Stoughton	15.0
Dec. 16	George Holmes	Baraboo	14.4
Dec. 16	J. L. Bonham	Baraboo	16.0
1912.			
Apr. 16	F. G. Reckner & Son	Beaver Dam	16.5
May 21	J. G. Uecke	Oshkosh	16.0

* Contains dirty sediment.

Date.	Bought of	City.
1910.		
Nov. 29	Charles C. Simon	Superior.
Nov. 29	G. Peterson	Superior.
Nov. 29	H. Koffoed	Superior.
Nov. 29	B. Knutsen	Superior.
Nov. 29	T. J. Paulson	Superior.
Nov. 29	Pitts & Son	Superior.
Nov. 29	E. J. Mills	Superior.
Nov. 29	F. Berg	Superior.
Nov. 29	J. H. Carlsgaard	Superior.

Submitted Cream.

Date.	Submitted by	Per cent fat.	Remarks.
1910.			
July 18	Square Deal Creamery, Stoughton	21.0	
July 20	E. V. Harpold, Camp Douglas	27.75	
Aug. 6	John Lebeis, Bloomer	29.6	
Aug. 24	P. Bauer, Kilbourn	25.0	
Aug. 31	A. A. Schroeder, Stetsonville	33.2	
Sept. 6	Ole B. Peterson, Marathon	28.0	
Sept. 14	State Fair Association, Milwaukee	21.0	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	20.2	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	41.0	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	24.0	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	35.0	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	26.0	Tested for preservatives. None found.
Sept. 14	State Fair Association, Milwaukee	27.5	Tested for preservatives. None found.
Sept. 19	V. E. Scott, Madison	.....	Tested for foreign fats. None found.
Oct. 3	John Belcher, Camp Douglas	28.0	

Submitted Cream—Continued.

Date.	Submitted by	Per cent fat.	Remarks.
1910.			
Nov. 2	J. T. Lundeberg, Stoughton	21.0	Marked "No. 8".
Nov. 2	J. T. Lundeberg, Stoughton	21.0	Marked "No. 9".
Nov. 2	J. T. Lundeberg, Stoughton	25.0	Marked "No. 12".
Nov. 10	N. R. Toogood, Lake Mills	24.35	
Dec. 9	A. H. Koch, Rudolph	20.5	
Dec.	E. G. Schwingle, Avoca	28.0	
1911.			
Jan. 22	N. E. Warren, Grand Rapids, R. D. 2	32.0	
Feb. 7	J. W. Hamilton, Portage, R. D. 2	35.0	
Mar. 7	Hon. Christian Pickart, Malone	20.5	
Mar. 24	Fred Imert, Fall River	29.0	
Mar. 27	F. Laurick, Seymour, R. D. 39	18.75	
Apr. 5	F. W. Parks, Sherry	29.50	
Apr. 5	Roach & Seeber Co., Waterloo	19.50	
Apr. 18	J. A. Marion, Fall River	28.0	
Apr. 26	Henry Meyer, Darlington	23.0	
May 8	Howard D. Kuter, Grand Rapids, R. D. 56	21.6	
July 8	F. W. Huth, Seymour	31.0	
July 27	M. B. Lincoln, Doylestown	22.5	
Aug. 9	R. C. Sawales, Ogema, R. 1	37.0	
Aug. 19	Klondike Creamery, Salem	22.5	
Nov. 27	Hoard's Creameries, Fort Atkinson	37.0	
Dec. 27	J. L. Bonham, Baraboo	17.0	Marked "No. 1".
Dec. 27	J. L. Bonham, Baraboo	15.0	Marked "No. 2".
Dec. 27	J. L. Bonham, Baraboo	21.5	Marked "No. 3".
1912.			
Jan. 2	M. B. Lincoln, Doylestown	26.75	
Feb. 3	C. J. Benson, Reeve	32.0	
Feb. 13	F. A. Philbrick, Baraboo	19.5	
Feb. 14	Hoard's Creameries, Fort Atkinson	32.5	Marked "No. 3".
Feb. 14	Hoard's Creameries, Fort Atkinson	32.0	Marked "No. 17".
Feb. 20	W. G. Roepke, Sussex	22.0	
Mar. 7	W. G. Roepke, Sussex	34.0	
Mar. 14	Marcus Perfection Creamery, Muscoda	.....	Tested for foreign fats. None found.

Mar. 27	Karl Kohn, Dousman	23.5
Apr. 1	Hoard's Creameries, Fort Atkinson	19.0
Apr. 23	Wm. C. Hirschfeld, Jefferson	20.0
Apr. 26	F. G. Reckner, Beaver Dam	22.0
May 1	Hoard's Creameries, Fort Atkinson	24.0
May 15	F. J. Grab, Junction	38.0
June 13	Frank Ritter, Doylestown, R. D. (Weuthrich Bros.)	23.5
June 13	F. Zink, Doylestown (Weuthrich Bros.)	28.75
June 24	E. G. Schwingle, Avoca	36.5

Creams Tested for Per Cent of Butter Fat to Determine Overreading or Underreading of Babcock Test.

During this biennial period, thirty-two samples of cream were collected by members of the commission with the view of determining whether or not overreading or underreading of the Babcock test was being practiced by the purchasers of cream who were paying for the same on the basis of the butter fat contained therein as determined by the Babcock test. The percentage of fat in these samples was determined in the laboratory. In some instances prosecutions followed.

DRUGS.

Ammonia Water, Not Standard.

Date.	Bought of	Per cent ammonia gas (by weight).	Remarks.
1911.			
Dec. 9	John E. Daly, Grand Rapids	7.4	
Dec. 13	Chas. J. Norton, Mellen	8.3	
Dec. 14	A. C. Whitman Co., Hurley	12.6	Contains more than the required percentage of ammonia gas.
Dec. 15	Woodhead's Drug Store, Ashland	3.56	
Dec. 19	Durand Drug Co., Durand	2.66	
Dec. 27	Olaf Noer, Menomonie	7.7	
1912.			
Jan. 24	Weichmann's Pharmacy, Wausau	7.9	

Ammonia Water, Standard.

Date.	Bought of
1911.	
Dec. 9	Samuel Church, Grand Rapids.
Dec. 27	Louis Ehrhard, Menomonie.
1912.	
Jan. 24	Wausau Drug Store, Wausau.

Hamamelis Water (Witch Hazel), Not Standard.

Date.	Bought of	Per cent alcohol (by vol.).
1911.		
Dec. 9	F. L. Steib, Grand Rapids	12.85
Dec. 13	Mellen Drug Store, Mellen	12.0
Dec. 15	Harrison's Drug Store, Ashland	34.0

Hamamelis Water (Witch Hazel), Standard.

Date.	Bought of
1911.	
Dec. 5	Lemmer Drug Co., Spooner.
Dec. 5	Cumberland Drug Co., Cumberland.
Dec. 8	The Potter Pharmacy, Marshfield.
Dec. 9	Johnson, Hill & Co., Grand Rapids.
Dec. 15	Weed's Drug Store, Ashland.
Dec. 14	J. F. Sullivan, Hurley.

Dec. 15	Warner Bros., Ashland.
Dec. 19	D. H. Pollock & Co., Beloit.
Dec. 19	C. A. Hougen, Durand.
Dec. 27	C. C. Sniteman Co., Neillsville.
Dec. 27	Tonnar's Drug Store, Menomonie.
1912.	
Jan. 4	H. D. Culloch Co., Stevens Point.
Jan. 20	E. C. Dettloff, Bloomer.
Jan. 24	Ramsey's Pharmacy, Wausau.

Lime Water, Not Standard.

Date.	Bought of	Per cent calcium hydroxide
1911.		
Dec. 8	The Potter Pharmacy, Marshfield	0.047
1912.		
Jan. 20	E. C. Dettloff, Bloomer	0.078

Lime Water, Standard.

Date.	Bought of
1911.	
Dec. 4	Jewett Drug Co., Rice Lake.
Dec. 5	Lemmer Drug Co., Spooner.
Dec. 5	O. F. Baker & Co., Shell Lake.
Dec. 5	Cumberland Drug Co., Cumberland.
Dec. 5	Red Cross Pharmacy, Spooner.
Dec. 8	Sexton Bros., Marshfield.
Dec. 9	F. L. Steib, Grand Rapids.
Dec. 9	Johnson, Hill & Co., Grand Rapids.
Dec. 9	Samuel Church, Grand Rapids.

Lime Water, Standard—Continued.

Date.	Bought of
1911.	
Dec. 13	Mellen Drug Store, Mellen.
Dec. 13	J. F. Sullivan, Hurley.
Dec. 15	Weed's Drug Store, Ashland.
Dec. 15	Harrison Drug Co., Ashland.
Dec. 15	Warner Bros., Ashland.
Dec. 19	C. A. Hougen, Durand.
Dec. 27	Boston Drug Store, Menomonie.
Dec. 27	Tonnar's Drug Store, Menomonie.
1912.	
Jan. 24	Geo. W. Pardee, Wausau.
Jan. 24	W. W. Albers, Wausau (Branch Store).
Jan. 24	W. W. Albers, Wausau.
Jan. 24	Bert. Schwanberg, Wausau.
Jan. 24	Pardee Pharmacy, Wausau.
Jan. 24	Weichmann's Pharmacy, Wausau.
Jan. 24	Ramsey's Pharmacy, Wausau.
Feb. 9	Crabb & Giese, Ashland.
Feb. 9	H. G. Gielle, Ashland.
Feb. 9	Edw. Hoppenyan, Ashland.
Feb. 28	Wm. Haarlow, Spring Valley.
Mar. 7	Mooney's Pharmacy, Ladysmith.
Mar. 7	Speidel & Speidel, Ladysmith.
	H. A. Dimock, Ladysmith.

Spirit of Camphor, Not Standard.

Date.	Bought of	Gms. of camphor in 100 ccs.	Solvent per cent alcohol, by w't.	Remarks.
1911.				
Nov. 21	John Graham, Portage	12.8	92.6	
Nov. 21	Rhyme's Drug Store, Portage	12.6	92.0	
Dec. 5	O. F. Baker & Co., Shell Lake	9.0	91.5	
Dec. 5	Cumberland Drug Co., Cumberland	9.1	90.3	
Dec. 8	The Potter Pharmacy, Marshfield	9.0	91.5	
Dec. 8	R. J. Strauss, Marshfield	6.2	93.15	
Dec. 9	F. L. Steib, Grand Rapids	4.9	72.4	Below standard both in camphor and alcohol.
Dec. 9	Samuel Church, Grand Rapids	6.17	92.0	
Dec. 13	Mellen Drug Store, Mellen	9.1	91.4	
Dec. 15	Harrison Drug Co., Ashland	9.7	76.6	Contains added water.
Dec. 15	Weed's Drug Store, Ashland	9.0	91.5	
Dec. 19	C. A. Hougen, Durand	8.5	72.0	Below standard both in camphor and alcohol.
Dec. 27	Boston Drug Store, Menomonie	8.5	91.6	
1912.				
Jan. 4	H. D. McCulloch, Stevens Point	10.4	84.3	Contains added water.
Jan. 24	Weichmann's Pharmacy, Wausau	11.0	81.0	Contains added water.
Jan. 24	Wausau Drug Co., Wausau	10.0	80.0	Contains added water.
Jan. 24	Bert Schwanberg, Wausau	3.2	79.2	Below standard both in camphor and alcohol.
Jan. 24	George W. Pardee, Wausau	4.0	64.25	Below standard both in camphor and alcohol.
Jan. 24	W. W. Albers, Wausau	9.3	90.7	
Jan. 24	Weichmann's Pharmacy, Wausau	9.2	91.5	
Jan. 24	Fred A. Schmidt, Wausau	8.5	91.2	
Feb. 9	H. G. Gielle, Ashland	7.4	73.3	Below standard both in camphor and alcohol.
Feb. 9	Harrison Drug Co., Ashland	8.4	83.8	Below standard both in camphor and alcohol.
Feb. 9	Crabb & Giese, Ashland	9.1	91.7	
Mar. 7	Mooney's Pharmacy, Ladysmith	5.34	72.3	Below standard both in camphor and alcohol.
Mar. 7	H. A. Dimock, Ladysmith	11.8	92.4	
Mar. 7	Speidel & Speidel, Ladysmith	12.9	92.26	
Mar. 8	E. C. Molstad, Rio	8.1	90.0	
Mar. 21	Ivey's Pharmacy, Mineral Point	8.1	92.2	
Apr. 2	Wm. Nussbaum, Elk Mound	8.1	91.8	
Apr. 4	Geo. W. Prandel, Wausau	8.0	80.29	Below standard both in camphor and alcohol.
Apr. 10	Alex. Krembs, Jr., Stevens Point	13.2	91.8	

Spirit of Camphor, Standard.

Date.	Bought of
1911.	
Dec. 4	Elmer E. Larson, Rice Lake.
Dec. 4	N. W. Heintz, Rice Lake.
Dec. 5	Lemmer Drug Co., Spooner.
Dec. 5	Red Cross Pharmacy, Spooner.
Dec. 8	Sexton Bros., Marshfield.
Dec. 9	Johnson, Hill & Co., Grand Rapids.
Dec. 14	J. F. Sullivan, Hurley.
Dec. 15	Warner Bros., Ashland.
Dec. 19	W. T. Sherer, Janesville.
Dec. 27	Louis Ehrhard, Menomonie.
Dec. 28	C. C. Sniteman, Neillsville.
Dec. 30	Collette Drug Co., Chippewa Falls.
1912.	
Jan. 4	Alex. Krembs, Jr., Stevens Point.
Jan. 20	E. C. Dettloff, Bloomer.
Jan. 24	W. W. Albers, Wausau.
Jan. 24	Pardee Pharmacy, Wausau.
Feb. 9	E. Hoppenyan, Ashland.
Feb. 28	Wm. Haarlow, Spring Valley.
Mar. 21	Prideaux & Bliss, Mineral Point.
Mar. 21	Metz Pharmacy, Mineral Point.
Mar. 22	H. A. Robinson, Platteville.
Mar. 22	Youman's Pharmacy, Platteville.
Mar. 23	Brown's Drug Store, Highland.
Apr. 3	B. Buchholz & Co., Fond du Lac.
Apr. 4	W. W. Albers, Wausau.
Apr. 4	W. W. Albers, Wausau.
Apr. 5	Williams & Johnson Drug Co., Merrillan.
Apr. 11	H. J. O'Connor, Whitewater.

Spirit of Nitrous Ether, Not Standard.

Date.	Bought of	Ethyl nitrate per cent by w't.	Remarks.
1911.			
Dec. 4	Elmer E. Larson, Rice Lake	2.7	
Dec. 5	O. F. Baker & Co., Shell Lake	82.32	A concentrated solution of ethyl nitrate sold for spirit of nitrous ether.
Dec. 8	Sexton Bros., Marshfield	1.1	
Dec. 9	R J. Strauss, Marshfield	0.06	
Dec. 9	John E. Daly, Grand Rapids	0.41	Contains added water.
Dec. 15	Woodhead's Drug Store, Ashland	1.03	
Dec. 19	King's Pharmacy, Janesville	3.0	
Dec. 30	Riester & Dettloff, Chippewa Falls	2.25	
1912.			
Jan. 4	Alex. Krembs, Jr., Stevens Point	1.7	
Jan. 24	Wausau Drug Co., Wausau	0.0	Contains added water.
Jan. 24	Weichmann's Pharmacy, Wausau	0.58	Contains added water.
Jan. 24	Ramsey's Pharmacy, Wausau	0.15	Contains added water.
Jan. 24	Fred A. Schmidt, Wausau	3.5	Contains added water.
Jan. 24	W. W. Albers, Wausau	2.6	
Jan. 24	Bert Schwanberg, Wausau	2.8	
Jan. 24	Pardee Pharmacy, Wausau	2.6	
Jan. 24	Weichmann's Pharmacy, Wausau	2.4	
Feb. 9	Crabb & Giese, Ashland	1.43	
Apr. 4	Wausau Drug Co., Wausau	2.39	Contains added water.
Apr. 4	Weichmann's Pharmacy, Wausau	1.61	

Spirit of Nitrous Ether, Standard.

Bought of	
Chas. J. Norton, Mellen. A. C. Whitman Co., Hurley. Durand Drug Co., Durand. Olaf Noer, Menomonie Victor C. Woelffer, Menomonie. E. C. Dettloff, Bloomer.	

Tincture of Iodine, Not Standard.

Date.	Bought of	Gms. of iodine in 100 ccs.	Gms. of potassium iodide 100 ccs.	Remarks.
1911.				
Nov. 21	Rhymes Drug Store, Portage	5.6	5.47	
Dec. 5	Red Cross Pharmacy, Spooner	8.34	3.27	Above standard in iodine.
Dec. 8	R. J. Strauss, Marshfield	6.4	3.27	
Dec. 9	John E. Daly, Grand Rapids	6.0	4.52	
Dec. 13	Chas. J. Norton, Mellen	5.04	4.8	
Dec. 14	A. C. Whitman Co., Hurley	7.5	3.62	
Dec. 19	Durand Drug Co., Durand	6.6	3.76	
Dec. 28	C. C. Sniteman, Neillsville	7.00	3.95	
1912.				
Jan. 4	H. D. McCulloch, Stevens Point	5.8	1.5	
Mar. 8	E. C. Molstad, Rio	5.46	2.66	
Mar. 21	Ivey's Pharmacy, Mineral Point	8.17	7.29	Above standard in iodine and potassium iodide.
Mar. 22	H. A. Robinson, Platteville	6.65	3.85	

Tincture of Iodine, Standard.

Date.	Bought of
1911.	
Dec. 4	Jewett Drug Co., Rice Lake.
Dec. 4	N. W. Heintz, Rice Lake.
Dec. 15	Woodhead's Drug Store, Ashland.
Dec. 28	Tonnar's Drug Store, Menomonie.
Dec. 30	Collette Drug Co., Chippewa Falls.
Dec. 30	Riester & Dettloff, Chippewa Falls.
1912.	
Jan. 4	Alex. Krembs, Jr., Stevens Point.
Mar. 21	Prideaux & Bliss, Mineral Point.
Mar. 21	The Metz Pharmacy, Mineral Point.
Mar. 22	Youman's Pharmacy, Platteville.
Mar. 23	Brown's Drug Store, Highland.

Miscellaneous Drugs.

Date.	Sample of	Bought of or Submitted by	Remarks.
1910.			
July 28	Wood alcohol	*Prof. Chas. S. Slichter, Madison	Contains methyl alcohol, by weight, 65%.
Aug. 4	Castor oil	*Dr. F. S. Wade, New Richmond	No adulteration found.
Oct. 26	Alcohol	*T. R. Whalen, Madison	Contains alcohol, by weight, 76.5%. Not standard. Diluted with water.
Oct. 31	Alcohol	A. A. Pardee, Madison	Alcohol, by weight, 91%. Not standard.
1911.			
May 17	Sulphur	*Hon. Clinton B. Ballard, Appleton	Standard.
Dec. 30	Precipitated sulphur	Collette Drug Co., Chippewa Falls	Ash 0.33%. Not standard.
1912.			
Jan. 30	Alcohol	W. E. Barringer, Baraboo	Alcohol, by weight, 91.4%. Not standard.
Feb. 27	Alcohol	C. A. Hougen, Durand	Alcohol, by weight, 78.44%. Not standard. Diluted with water.
Apr. 8	Alcohol	C. A. Hougen, Durand	Alcohol, by weight, 90.5%. Not standard.

*Submitted samples.

EVAPORATED MILK.

Evaporated Milk, Not Standard.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Labeled.	Brand.	Per cent fat	Per cent total solids
1911.						
Feb. 17	O. K. Himley, Soldiers Grove.	John T. Hancock Co., Dubuque, Iowa.	Evaporated unsweetened milk.....	Faultless	6.9	22.77
Mar. 8	*F. E. Carswell, Richland Center.	Reid, Murdock & Co., Chicago....	Condensed milk	Monarch	6.9	21.75
		National Condensed Milk Co., Chicago.	Evaporated milk	Globe	8.14	25.60
1912.						
April 10	J. H. Bryan, Portage....	.....	Condensed milk	Carnation	7.35	24.75
Apr. 16	H. E. Schlicht, La Crosse.	.....	Condensed milk	Globe	7.38	24.87
Apr. 16	H. E. Schlicht, La Crosse.	Libby, McNeill & Libby, Chicago..	Unsweetened sterilized evaporated milk.	Libby's	7.75	25.17
Apr. 17	B. M. Benson, Madison...	Helvetia Milk Condensing Co., Highland, Ill.	Evaporated milk	Pet	7.50	25.86
Apr. 17	B. M. Benson, Madison...					
May 7	E. A. Glover, New Richmond	National Condensed Milk Co., Chicago.	Evaporated milk unsweetened.....	Globe	7.50	24.39

*Submitted sample. Bought for condensed milk.

Evaporated Milk, Standard.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Labeled.	Brand.
1911.				
Sept. 28	*J. Q. Emery, Madison.....	.....	.....	.....
1912.				
April 10	Steinke Bros., Arlington.....	The Sheboygan Evaporated Milk Co., Sheboygan.	Evaporated milk	Sunset.
April 10	W. R. Deakin, Portage.....	The Sheboygan Evaporated Milk Co., Sheboygan.	Evaporated milk	Sunset.
April 10	W. R. Deakin, Portage.....	Van Camp Packing Co., Indianapolis, Indiana..	Evaporated milk	Van Camp's.
April 10	J. H. Bryan, Portage.....	Van Camp Packing Co., Indianapolis, Indiana..	Evaporated milk	Van Camp's.
April 10	T. W. Drew, Portage.....	Pacific Coast Cond. Co., Seattle, Wash.....	Evaporated milk	Carnation.

April 10	T. W. Drew, Portage	Libby, McNeill & Libby, Chicago	Evaporated milk	Libby's.
April 16	H. E. Schlicht, La Crosse	Van Camp Packing Co., Indianapolis, Indiana	Condensed milk	Van Camp's.
April 17	B. M. Benson, Madison	National Condensed Milk Co., Chicago	Evaporated milk	Globe.
April 17	B. M. Benson, Madison	Van Camp Packing Co., Indianapolis, Indiana	Evaporated milk	Van Camp's.
April 24	D. W. McKenzie, Cadott	The Ortman Condensed Milk Co., Dundee, Ill.		Dundee.
May 2	A. Heiting, Stanley	Eau Claire Grocery Co., Eau Claire		Colon.
May 2	A. Heiting, Stanley	The H. T. Lange Co., Eau Claire		Yours truly.

* Submitted sample.

FLAVORS AND FLAVORING EXTRACTS.

Lemon Extract, Not Standard.

Date.	Bought of	Manufacturer or Jobber.	Labeled.	Brand.	Oil per cent.	Alcohol per c't. (by vol.)	Remarks.
1910. Dec. 28	F. M. White & Son, Maiden Rock.	Rolander Remedy Co., St. Paul, Minn.	Triple strength lemon flavor.	Rolander's	0.0	46.3	Not triple strength. Not standard. Misbranded.
Dec. 28	H. L. Platte, Prescott	Geo. R. Newell & Co., Minneapolis, Minn.	Concentrated lemon flavor.	Mrs. Bakers'	0.0	26.0	Below standard. Not concentrated. Misbranded.
Dec. 29	Albert Kirchner, Fountain City.	Fountain City Bottling Works, Fountain City.	Extract lemon	Fromm's Fountain.	4.3	89.0	Below standard in oil of lemon.
1911. Mar. 14	Mower & Bush, Black River Falls.	McNeill & Higgins Co., Chicago.	Pure flavoring extract of terpeneless lemon.	Mt. Baker	0.0	48.4	One quarter standard strength of terpeneless lemon extract. Sold for flavoring extract of lemon.

Lemon Extract—Continued.

NOT STANDARD—Continued.

Date.	Bought of	Manufacturer or Jobber.	Labeled.	Brand.	Oil per cent.	Alcohol per c't. (by vol.)	Remarks.
1912. April 5	Pelletier & Paquette, Chippewa Falls.	Meissner-Bergwall Co., Milwaukee.	Terpeneless lemon extract.	Full Value	0.0	48.21	One-half standard strength terpeneless extract of lemon. Sold for extract of lemon.
April 25	S. H. Jewett, Milton Junction.	S. H. Jewett, Milton Junction.	Extract of lemon.....	Excelsior	4.6	81.68	Below standard in lemon oil. Artificially colored.
May 22	R. H. Brennecke, Watertown.	R. H. Brennecke, Watertown.	Extract of lemon.....	.....	2.85	79.69	Below standard in lemon oil. Artificially colored.
June 27	Henry Machlman, Burke...	Badger Medicine Co., Waterloo.	Pure concentrated extract of lemon.	Badger	0.0	42.62	Not a pure concentrated extract of lemon. Not a lemon extract. Misbranded.
June 27	C. M Gulickson, Kaiser....	.....	.....	.....	0.0	44.5	Bought for lemon extract. Not lemon extract. One half standard strength terpeneless extract of lemon.
June 28	Badger Medicine Co., Waterloo.	Badger Medicine Co., Waterloo.	Pure concentrated extract of lemon.	Badger	0.0	44.18	Not a pure concentrated extract oi of lemon. Artificially colored with a coal tar dye. Misbranded.

Lemon Extract—Continued.

STANDARD.

Date.	Bought of	Manufacturer or Jobber.	Brand.
1910.			
Dec. 16	Gilbert Bros., Eau Claire	McFadden Coffee & Spice Co., Dubuque, Ia	Crystal.
Dec. 21	Fred Broadburt Lone Rock	A. J. Kasper Co., Chicago	A. J. K.
Dec. 21	F. T. Nourse & Son, Lone Rock	Federal Extract Co., Chicago	Federal.
Dec. 21	Brainard & Son, Lone Rock	John T. Hancock Co., Dubuque, Ia	Climax.
Dec. 21	J. A. Logan. Muscoda	McNeill & Higgins Co., Chicago	Blossom.
Dec. 25	H. L. Platte, Prescott	George R. Newell & Co., Minneapolis	Newell's Extra.
1911.			
June 8	Frank Strykowski, Junction City	Wilson Mercantile Co., Wausau	Good Buy.
June 8	Frank Strykowski, Junction City	McNeill & Higgins Co., Chicago	Blossom.
Dec. 7	H. N. Burrington, Tomahawk	Royal Remedy & Extract Co., Dayton, Ohio	Souder's.
Dec. 19	Fries & Kaiser, 222 Main St., Racine	Chapman & Smith Co., Chicago	Rolling Pin.
1912.			
May 17	Dorchester Coöperative Co., Dorchester	Chapman & Smith Co., Chicago	Chapman's.

Terpeneless Lemon Extract.

BELOW STANDARD.

Date.	Bought of	Manufacturer or Jobber.	Labeled.	Brand.	Per cent citral (by Hiltner method).	Remarks.
1911.						
Dec. 15	George J. Neher, Eau Claire.	Eau Claire Grocery Co., Eau Claire.	Terpeneless lemon flavor, one-quarter standard strength.	Valley Belle	.04	One-quarter standard strength. Sold for terpeneless lemon flavor.
Dec. 19	R. H. Goodwin, Beloit	McNeill & Higgins Co., Chicago.	Pure extract terpeneless lemon.	Mt. Baker	0.1	Below standard in citral.
1912.						
Mar. 28	Chas. Hoenn, Fall Creek	Steinwender-Stoffregen Coffee Co., St. Louis, Mo.	One-half standard strength, terpeneless of lemon flavor.	Jumbo	0.1	One-half standard strength. Sold for terpeneless lemon flavor.

Vanilla Extracts.

NOT STANDARD, AND SUBSTITUTES.

Date.	Bought of	Bought for	Manufacturer or Jobber.	Labeled.	Brand.	Remarks.
1909.						
Dec. 16	Sever Olson, Ashland.....	Vanilla flavoring	Sandham Medicine Co., Duluth, Minn.	Vanillin, coumarin and vanilla flavor.	Interstate	Not a vanilla flavoring.
1910.						
Dec. 29	B. G. Schultz & Son, Fountain City.	Vanilla extract..	Frimmes Chemical Co., La Crosse.	Artificial vanilla extract made from chemically pure vanillin and coumarin.	Fountain	Not a vanilla extract. Contains little or no vanilla.
Dec. 29	Albert Kirchner, Fountain City.	Vanilla flavor ...	Fountain City Bottling Works, La Crosse.	Compound essence vanillin and coumarin. Superior to ordinary vanilla flavor.	Fountain	Not a vanilla flavor. Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
1911.						
June 22	Cumberland Supply Co., Cumberland.	Compound vanilla flavor.	Steinwender & Stoffregen Coffee Co., St. Louis, Mo.	Compound flavor of vanillin, 8 ounces full measure.	Jumbo	Misbranded as to measure. Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Dec. 7	D. C. Jones, Tomahawk..	Vanilla extract..	A. Kickbusch Grocery Co., Wausau.	Imitation extract of vanillin, vanilla, tonka and coumarin.	.....	Contains little or no vanilla. In imitation of genuine vanilla extract.
Dec. 19	Fries & Kaiser, Racine...	Vanilla extract..	Chapman & Smith Co., Chicago.	Colonial vanilla extract.	Rolling Pin	Not a standard extract Contains coumarin.
1912.						
Mar. 28	Chas. Hoenn, Fall Creek..	Compound vanillin flavor.	Steinwender & Stoffregen Coffee Co., St. Louis, Mo.	Compound flavor of vanillin, coumarin, vanilla, with caramel coloring, 8 ounces full measure.	Jumbo	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract. Misbranded as to measure.
Apr. 23	T. W. Janzen, Milwaukee..	Compound vanillin and coumarin.	Janzen Co., Milwaukee.	Compound vanillin, coumarin, sugar color.	Daisy	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.

Apr. 23	R. W. Bruckner, 760 27th St., Milwaukee.	Vanillin	Janzen Co., Milwaukee.	Flavoring extract vanillan.	Daisy	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Apr. 23	A. J. Hilbert Co., Milwaukee.	Imitation vanilla and tonka.	A. J. Hilbert Co., Milwaukee.	Imitation vanilla and tonka with caramel color.	Wright's	Artificially colored and flavored in imitation of the flavor and color of genuine vanilla extract.
Apr. 23	Economy Grocery and Coffee Store, Milwaukee.	Imitation vanilla and tonka.	.....	Imitation vanilla and tonka with caramel color.	Economy	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Apr. 23	Arthur Gale, 2615 Elm St. Milwaukee.	Compound vanillin and coumarin.	Hart Extract Co., Wauwatosa.	Compound vanillin and coumarin with caramel color.	Eclipse	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Apr. 23	Hart Extract Co., Wauwatosa.	Compound vanillin and coumarin.	Hart Extract Co., Wauwatosa.	Compound of vanillin and coumarin with caramel color.	Eclipse	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Apr. 23	F. E. Warren, Milwaukee..	Imitation vanilla and tonka.	.....	Imitation vanilla and tonka with caramel color.	Warren's	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
Apr. 25	S. H. Jewett, Milton Junction.	Extract of tonka and vanillin.	S. H. Jewett, Milton Junction.	Compound extract of tonka and vanillin.	Jewett's	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.
June 4	A. J. Hilbert, Milwaukee..	Imitation vanilla and tonka.	A. J. Hilbert Co., Milwaukee.	Imitation vanilla and tonka with caramel color.	.....	Artificially colored and flavored in imitation of the color and flavor of genuine vanilla extract.

Vanilla Extracts.

STANDARD.

Date.	Bought of	Manufacturer or Jobber.	Brand.
1912.			
Mar. 28	Charles Hoenn, Fall Creek.....	Steinwender-Stoffregen Coffee Co., St. Louis, Mo.....	Yale.
April 5	Pelletier & Paquette, Chippewa Falls.....	Meissner-Bergwall Co., Milwaukee.....	Ice Cream Makers' Special.
April 10	Chas. Frieders, Antigo.....	B. Heller & Co., Chicago.....	

Miscellaneous Flavors and Extracts.

Date.	Bought for	Labeled.	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1911.						
Dec. 7	Imitation lemon flavor....	Imitation Lemon Flavor.	D. C. Jones, Tomahawk.	Franklin MacVeagh & Co., Chicago.	Priscilla	In imitation of the flavor of a genuine extract of lemon.
1912.						
May 7	Extract of almond.....	Extract of Almond..	Ole Bergsug, New Richmond.	Hunt's Perfect Baking Powder Co., Minneapolis.	Hunt's Perfect...	An alcoholic solution of benzaldehyde. Not an extract of almond.
May 7	Extract of orange.....	Extract of Orange. Triple. 2 ounce full measure.	Ole Bergsug, New Richmond.	Minnesota Mercantile Co., Stillwater, Minn.	Dells	Below standard in oil of orange. Misbranded, in that it is not a triple extract, and as to measure, being 14.5% short of amount stated on label.

FLOUR.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Brand	Remarks.
1911.				
Jan. 26	A. C. Dixon & Son, Kilbourn.....	Updike Milling Co., Omaha, Neb...	Updike's Seal of Nebraska	Tested for chemical bleaching. Not chemically bleached.
Feb. 6	*H. C. Larson, Madison.....	Wells-Abbott-Nieman Co., Schuyler, Neb.	Puritan	Tested for chemical bleaching. Not chemically bleached.
Aug. 28	*Duluth-Superior Milling Co., Duluth, Minn.	.....	....	Tested for chemical bleaching. Not chemically bleached.
1912.				
Jan. 18	*C. Monson, Richland Center.....	.....	....	No adulteration found. Not chemically bleached.
Feb. 28	J. A. Meller Drug Co., Boscobel.....	.....	Puritan	Tested for chemical bleaching. Not chemically bleached.

Feb. 28	Williams & Scott, Boscobel.....	Davis Milling Co., St. Joseph, Mo..	Cream of Lakota...	Tested for chemical bleaching. Not chemically bleached.
Feb. 28	The Parker-Hildebrand Co., Boscobel	.....	White Lily	Tested for chemical bleaching. Not chemically bleached.
Feb. 29	Robert Buerki, Sauk City.....	Southwestern Milling Co., Kansas City.	Anstos	Tested for chemical bleaching. Not chemically bleached.
Feb. 29	Schneller & Felix Co., Prairie du Sac	Crete Mills, Crete, Neb.....	White Lily	Tested for chemical bleaching. Not chemically bleached.
Feb. 29	Murrish & Sons, Mazomanie.....	.....	Kirk's Cyclone.....	Tested for chemical bleaching. Not chemically bleached.
Mar. 14	*George H. Smith, Janesville.....	.....	....	Graham flour. Tested for adulterants. None found.

*Submitted sample.

HONEY.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Remarks.
1910. Sept. 27	Milt. Brown, Shell Lake.....	Milt. Brown, Shell Lake.....	Contains sucrose 10.4%. Not standard.
1911. Feb. 23	*Peterson Grocery Co., Waupaca.....	.....	Standard.
Feb. 23	*Peterson Grocery Co., Waupaca.....	.....	Standard.
Mar. 2	*J. Q. Emery, Madison.....	.....	Standard.
Nov.	*J. L. Haakeson, Stoughton.....	.....	Standard.
Nov. 29	Harty Bros., 185 Michigan St., Milwaukee.....	E. R. Pahl & Co., Milwaukee.....	Standard.
1912. Feb. 14	Evansville Mercantile Ass'n, Evansville.....	McNeil & Higgins Co., Chicago.....	Standard.
Feb. 15	H. C. Koenig, Marshfield.....	.....	Standard.

* Submitted samples.

ICE CREAM.

Ice Cream, Below Standard in Fat.

Date.	Bought of	Manufacturer.	Fat per cent.	Remarks.
1910.				
July 19	S. H. Knox & Co., Madison		13.0	Contains a gum and coal tar dye.
July 21	Bellows & Co., Chippewa Falls	Bellows & Co., Chippewa Falls	12.6	Contains gums.
Aug. 15	C. A. Whipple, Beloit	Sturtevant, Wright & Wagner Dairy Co., Beloit.	8.5	Contains no gums or gelatin.
1911.				
May 9	American Ice Cream Co., Madison	American Ice Cream Co., Madison	11.5	Contains gum. No gelatin found.
July 17	Paul A. Ruf, Monroe	Paul A. Ruf, Monroe	10.1	Contains no gums or gelatin.
July 17	Gustave Voss, Monroe	Union Dairy Co., Rockford, Ill.	8.1	Contains no gums or gelatin.
July 17	Geo. Pfeiffer, Monroe	Geo. Pfeiffer, Monroe	11.1	Contains gum. No gelatin found.
July 17	Krise's Emporium, Monroe	Allen, Rockford, Ill.	9.8	Contains gelatin. No gums found.
July 17	Zilmer's Bakery, Monroe	Shurtliff & Co., Janesville	13.3	Contains gelatin. No gums found.
Nov. 10	H. B. Quackenbush, Antigo		12.6	Contains gelatin. No gums found.
Dec. 5	H. B. Quackenbush, Antigo		12.0	

Ice Cream, Standard in Fat.

Date.	Bought of	Manufacturer or Jobber.	Remarks.
1910.			
July 18	R. P. Schults, La Crosse		Contains a gum.
July 18	Royal Confectionery, La Crosse	Hadreas & Pappas, La Crosse	
Sept. 21	Moriarity & Hayes, Chippewa Falls	Eau Claire Creamery Co., Eau Claire	Contains gelatin.
Sept. 21	J. Melson, Chippewa Falls	John A. Mitchell, Chippewa Falls	Contains gelatin.
1911.			
May 9	Thos. Olson, Madison	Thomas Olson, Madison	Tested for gelatin and gums. None found.
May 9	T. Hagan, Madison		Contains gelatin. No gums found.
May 9	Ben & Frank's Lunch Room, Madison	Mansfield-Caughey Co., Madison	Contains gelatin. No gums found.

May 9	J. Y. Keeley, Palace of Sweets Co., Madison.	Palace of Sweets Co., Madison	Contains gum. No gelatin found.
May 9	C. F. Waltzinger, Madison	C. F. Waltzinger, Madison	Contains gelatin. No gums found.
July 11	Robinson's Drug Store, Platteville		Contains gelatin. No gums found.
July 11	Hatcher's Restaurant, Platteville		Contains gums. No gelatin found.
July 11	Metropolitan Cafe, Platteville	Metropolitan Cafe, Platteville	No gums or gelatin found.
July 17	Edw. Neuenschwander, Monroe	Mineral Point Creamery Co., Mineral Point	Contains gums. No gelatin found.
Oct. 18	Peter Zappas, Merrill	Peter Zappas, Merrill	Tested for foreign fats. None found.
Nov. 10	Rowlinson & Dickenson, Antigo		Contains gum. No gelatin found.
Nov. 10	N. Papadakis, Antigo		Tested for gums and gelatin. None found.
Dec. 8	*C. Dorter, Mayville		Fat 16.10%.
1912.			
May 6	*C. Wertz & Son, Richland Center		Fat 14.25%.

* Submitted samples.

EXPERIMENTAL WORK ON ICE CREAM AND ICE CREAM MIXTURES

While gathering samples of ice cream from various dealers throughout the state, the statement was made to a member of the commission by certain ice cream dealers that a representative sample of ice cream could not be obtained where a large quantity of the ice cream mixture was prepared and then frozen. To either prove or disprove this statement, Mr. H. C. Larson, second assistant commissioner, was instructed to obtain samples of such unfrozen mixtures and of the product at various stages in the process of freezing, for the purpose of making tests of the butter fat content. The results of the analyses of these samples collected by Mr. Larson and submitted to the laboratory are given in the following tables:

Table No. I.

Date.	Bought of	Bought for	Per cent fat.	Remarks.
1911				
June 7..	Rendtorff & Zilisch Co., Madison.	Ice cream mixture with gelatin.	14.6	Taken from a 70 gallon mixture ready for freezing.
June 7...	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	14.2	Taken from the first 20 gallons frozen.
June 7...	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	14.4	Taken from the next 17 gallons frozen.
June 7...	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	14.4	Taken from the next 5 gallons frozen.

Table No. II.

Date.	Bought of	Bought for	Per cent fat.	Remarks.
1911				
June 7...	Mansfield-Caughey Co., Madison.	Ice cream mixture with gelatin.	14.3	Taken from a 220 gallon mixture ready for freezing.
June 7...	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	14.0	Taken from first ten gallons frozen.
June 7...	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (A)	14.0	Taken from next 80 gallons frozen.
June 7...	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (B)	14.2	Taken from next 5 gallons frozen.
June 10..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (C)	14.1	Taken from bottom portion of a container packed with sample A after being kept in a frozen condition for three days
June 10..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	14.4	Taken from top portion of above container at the same time sample C was collected.
June 10..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (D)	14.4	Taken from bottom portion of a container packed with sample B after being kept in a frozen condition for three days.
June 10..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	14.7	Taken from top portion of the above container at the same time sample D was taken.

Table No. III.

Date.	Bought of	Bought for	Per cent fat.	Remarks.
1911				
June 19..	Rendtorff & Zilisch Co., Madison.	Ice cream mixture with gelatin.	13.2	Taken from a mixture ready for freezing.
June 19..	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	12.9	Taken from first 10 gallons frozen.
June 19..	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	13.0	Taken from next 15 gallons frozen.
June 19..	Rendtorff & Zilisch Co., Madison.	Ice cream with gelatin.	13.0	Taken from next 15 gallons frozen.

Table No. 4.

Date.	Bought of	Bought for	Per cent fat.	Remarks.
1911.				
June 20..	Mansfield-Caughey Co., Madison.	Ice cream mixture with gelatin.	13.4	Taken from a mixture ready for freezing.
June 20..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	13.0	Taken from first 10 gallons frozen.
June 20..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	12.8	Taken from next 30 gallons frozen.
June 20..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (A).	13.0	Taken from next 65 gallons frozen.
June 20..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin (B).	12.8	Taken from next 2 gallons frozen.
June 23..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	12.8	Taken from the bottom portion of a container packed with sample A, after being kept in a frozen condition for 3 days.
June 23..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	12.8	Taken from the bottom portion of a container packed with sample B, after being kept in a frozen condition for 3 days.
June 23..	Mansfield-Caughey Co., Madison.	Ice cream with gelatin.	13.0	Taken from the middle portion of a container packed with samples A and B.

ICE CREAM CONES.

Ice Cream Cones Sweetened with Saccharin.

Date.	Bought of	Manufacturer or Jobber.	Remarks.
1910.			
July 18	C. H. Enderline Chippewa Falls	.....	
July 19	A. Steady Co., Eau Claire	.....	
Aug. 4	W. H. Tonne, Medford	Consolidated Wafer Co., Brooklyn.	Contains boric acid or a salt thereof.
Aug. 10	R. L. Meader Co., Eau Claire	Consolidated Wafer Co., Brooklyn.	

Ice Cream Cones Free from Saccharin, and Salicylic, Boric, and Benzoic Acids.

Date.	Bought of	Manufacturer or Jobber.	Remarks.
1910.			
July 18	Hunt Bros., Chippewa Falls	Hunt Bros., Chippewa Falls	
July 18	John A. Mitchell, Chippewa Falls		
July 19	Stamatkos Bros., Eau Claire	Richart & Richter, Minneapolis, Minn.	
July 19	Smith-Dor. Co., Eau Claire		
July 19	S. H. Knox Co., Madison		
July 20	Bellows & Woodruff, Chippewa Falls	Bellows & Woodruff, Chippewa Falls	
July 20	Isaac Kailen, Madison	Consolidated Wafer Co., Brooklyn, N. Y.	
July 20	Madison Candy Co., Madison	Globe Biscuit and Specialty Co., Baltimore, Md.	
July 21	Model Creamery Co., Madison	Boston Biscuit Co., Chicago	Contains artificial color.
July 26	G. O. Gustafson, Rice Lake	Brooklyn Manufacturing Co., Brooklyn, N. Y.	Contains artificial color.
July 26	B. Drocek, Rice Lake		
July 26	John Poulis, Ashland Candy Kitchen, Ashland	Begstedt Bros., St. Paul	
July 27	B. Anderson, Ashland	Begstedt Bros., St. Paul	
July 27	B. F. Judd, Ashland	Anger Baking Co., New York	Contains artificial color.
July 27	Hoppenyan Drug Store, Ashland	Hawkins, Minneapolis, Minn.	
July 27	Quincy W. Frost, Washburn		
July 27	George Mertz, Washburn	Coleman Cone & Candy Co., Duluth	
July 28	R. E. Johnson, Bayfield		
July 28	Anderson Bros., Bayfield		
July 28	Jos. Brendt, Bayfield		

JELLIES, PRESERVES AND MIXTURES.

Date.	Bought for	Labeled.	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1911. Mar. 22	Imitation fruit jelly.	Imitation fruit jelly 35% apple juice, 60% corn syrup 5% sugar. Preserved with phosphoric acid.	Nendeck Bros., Neenah.	D. B. Scully Syrup Co., Chicago.		Misbranded as to percentage of glucose. A glucose jelly in imitation of a genuine apple jelly.

Mar. 29	Preserves	Preserves. Apple juice from trimmings, red raspberry, sugar and 1-10 of 1% citric acid.	O. Kopplin, Portage.	Roundy, Peckham & Dexter Co., Milwaukee	Challenge	Not a preserve. Misbranded.
Mar. 29	Pure fruit plum jelly flavor.	Pure fruit plum jelly flavor 8% plum juice, 37% apple juice, 55% cane sugar.	O. H. Meyer, Portage.	Emery Food Co., Chicago.	.....	Misbranded. Fruit juices used not stated on label in order of their preponderence.
Mar. 29	Pure fruit jelly raspberry flavor.	Pure fruit jelly, raspberry flavor.	E. W. Moran, Portage.	Geo. I. Robinson & Co., Milwaukee.	Narragansett ...	Tested for preservatives, none found. Not labeled as required by law.
Mar. 29	Pure apple jelly...	Pure apple jelly.	E. W. Moran, Portage.	Geo. I. Robinson & Co., Milwaukee.	Narragansett ...	Tested for preservatives. None found.
Mar. 29	Strawberry preserves.	Preserves. Strawberries ...	O. H. Meyer, Portage.	St. Louis Syrup & Preserving Co., St. Louis.	Tiger	Contains benzoic acid or a salt thereof.
Mar. 29	Peach preserves ...	Preserves. Peaches	O. H. Meyer, Portage.	St. Louis Syrup & Preserving Co., St. Louis.	Tiger	Tested for preservatives and saccharin. None found.
July 24	Imitation fruit jelly.	Imitation fruit jelly. Compound: Glucose, apple trimmings juice. 1-10 of 1% phosphoric acid. Colored with harmless amaranth color.	Meyer & Shakman, New Lisbon.	Oelrich & Berry Co., Chicago.	Premium	Artificially colored to make it appear better or of greater value than it really is.
Oct. 2	Imitation fruit jelly.	Imitation fruit jelly.....	Jake Kromefski, Madison.	Oelrich & Berry Co., Chicago.	Lily	Not labeled as required by law.
Oct. 2	Imitation fruit jelly.	Imitation fruit jelly.....	Globe Bakery, Madison.	Oelrich & Berry Co., Chicago.	Premium	Not labeled as required by law.
Oct. 2	Glucose, sugar, fig and apple jelly.	Glucose, sugar, fig and apple jelly.	Globe Bakery, Madison.	Chapman & Smith Co., Chicago.	Rolling Pin	Tested for preservatives and coal tar dye. None found. Not labeled as required by law.
Oct. 2	Apple, glucose jelly	Apple, glucose jelly, apple trimmings juice, corn syrup (glucose) colored with fruit juices. Contains 1-10 of 1% phosphoric acid.	Nic. Webber, Madison.	Hulker & Bletsch Co., Chicago and Cincinnati.	Crescent	Not labeled as required by law. Made from apple trimmings and contains added phosphoric acid.
Oct. 2	Apple, glucose jelly	Apple, glucose jelly, apple trimmings juice, corn syrup (glucose), colored with fruit juices. Contains 1-10 of 1% phosphoric acid.	Tip Top Bakery, Madison.	Hulker & Bletsch Co., Chicago and Cincinnati.	Crescent	Not labeled as required by law. Made from apple trimmings and contains added phosphoric acid.

Jellies, Preserves and Mixtures.—Continued.

Date.	Bought for	Labeled.	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1911.						
Oct. 24	Jelly	.....	City Bakery, Stoughton.	.....	.....	Not jelly. Contains glucose.
Oct. 24	Jelly	.....	Home Bakery, Stoughton.	.....	.....	Not jelly. Contains glucose.
Oct. 24	Jelly	.....	City Hall Bakery, Stoughton.	.....	.....	Not jelly. Contains glucose.
Dec. 7	Jelly	Jelly. Apple jelly from trimmings. Grape flavor.	D. C. Jones, Tomahawk.	Franklin MacVeagh, Chicago.	Charm	Misbranded. Made from apple trimmings.
1912.						
Feb. 14	Pure fruit jelly....	Pure fruit jelly.....	Evansville Mercantile Co., Evansville.	McNeill & Higgins Co., Chicago.	Blossom	No adulteration found.

LARD.

Date.	Bought of or Submitted by	Remarks.
1910.		
Oct. 25	*Dr. H. C. Reich, Sheboygan.....	No adulteration found.
Nov. 28	*F. Traubman, Shell Lake.....	No adulteration found.
1911.		
Jan. 5	M. L. Shakman, New Lisbon.....	Contains little or no lard. The product is composed mainly of cottonseed stearin.
Mar. 22	G. Ulrich & Co., Neenah.....	No adulteration found.
Oct. 23	*Edward Hoffman, Monroe	No adulteration found.

* Submitted sample.

LINSEED OILS.

Linseed Oils, Not Standard.

FOUND TO CONTAIN MINERAL OIL.

Date.	Bought for	Bought of or Submitted by	Manufacturer or Jobber.	Remarks.
1910.				
Oct. 8	Boiled linseed oil	M. P. Hollrith, Grafton	Midland Linseed Co., Minneapolis.	
Dec. 27	Boiled linseed oil	Matt. Schmitz, Waunakee		Heavily adulterated.
1911.				
Feb. 3	Boiled linseed oil	Schneller, Felix & Co., Prairie du Sac.	Archer Daniels Co., Minneapolis	
Apr. 13	Boiled linseed oil	*Mautz Bros. Co., Madison	Midland Linseed Co., Minneapolis.	
Apr. 13	Boiled linseed oil	*Mautz Bros. Co., Madison	Midland Linseed Co., Minneapolis.	
Apr. 28	Boiled linseed oil	B. Fleckenstein, Dorchester	Red Wing Linseed Oil Co., Red Wing, Minn.	
Apr. 28	Boiled linseed oil	Mrs. Anna Crackenberger, Dorchester.	Douglas Linseed Oil Co., Minneapolis.	
June 11	Boiled linseed oil	Geo. S. Uebele, Tomah		
June 13	Boiled linseed oil	Central Hardware Co., Tomah		
June 13	Boiled linseed oil	F. O. Drowatzky, Tomah		
July 25	Boiled linseed oil	Dan Smith, Mauston	The Alston-Lucas Paint Co., Chicago.	
July 25	Boiled linseed oil	Van Hey Drug Store, Hammond		Heavily adulterated.
July 25	Boiled linseed oil	Becker & Johnson, Turtle Lake		
July 26	Boiled linseed oil	Rudolph Andres, Tomah	Red Wing Linseed Oil Co., Red Wing, Minn.	
July 26	Boiled linseed oil	E. Nelson Hardware Store, Barron		
July 26	Boiled linseed oil	Ed. Post, Cameron		Heavily adulterated.
Aug. 2	Boiled linseed oil	Luenberger & Wurst, De Forest		Heavily adulterated.
Aug. 2	Boiled linseed oil	Luenberger & Wurst, De Forest		Heavily adulterated.
Aug. 2	Boiled linseed oil	Luenberger & Wurst, De Forest		
Nov. 29	Boiled linseed oil	Ira Parker & Sons Co., Oshkosh		
Dec. 5	Boiled linseed oil	Geo. S. Uebele, Tomah	Red Wing Linseed Oil Co., Red Wing, Minn.	

* Submitted samples.

Linseed Oils, Not Standard —Continued.

FOUND TO CONTAIN MINERAL OIL.

	Bought for	Bought of or Submitted by	Manufacturer or Jobber	Remarks.
1911.				
Dec. 5	Boiled linseed oil.....	Rudolph Andres, Tomah	Red Wing Linseed Oil Co., Red Wing, Minn.	
Dec. 8	Boiled linseed oil.....	A. F. Radke, Neillsville.....	Red Wing Linseed Oil Co., Red Wing, Minn.	
Dec. 13	Boiled linseed oil.....	The Kraft Mercantile Co., Menomonie.	Red Wing Linseed Oil Co., Red Wing, Minn.	
Dec. 16	Boiled linseed oil.....	Remington Drug Co., Fond du Lac	Central Oil Co.	Heavily adulterated.
Dec. 28	Boiled linseed oil.....	A. F. Radke, Neillsville.....	Red Wing Linseed Oil Co., Red Wing, Minn.	
1912.				
Jan. 1	Boiled linseed oil.....	Joseph Skibba, Junction City.....	.....	Heavily adulterated.
Apr. 12	Raw linseed oil.....	Chas. C. Hotchkiss, Elkhorn.....	.....	Heavily adulterated.
Apr. 12	Boiled linseed oil	Ben. B. Kraus	.....	Heavily adulterated.
Apr. 12	Boiled linseed oil.....	Chas. C. Hotchkiss, Elkhorn.....	.....	Heavily adulterated.
Apr. 16	Boiled linseed oil.....	John Scantleton, Cataract.....	.....	Heavily adulterated.
Apr. 16	Boiled linseed oil.....	L. O. Reidler, Token Creek.....	American Linseed Oil Co., Omaha, Neb.	Heavily adulterated.
May 8	Raw linseed oil.....	Cumberland Supply Co., Cumberland.	A. M. Hurlbut Co., Omaha, Neb.	Heavily adulterated.
May 16	Raw linseed oil	J. J. Pitts, Kenosha.....	American Linseed Oil Co., Omaha, Neb.	Heavily adulterated.
May 17	Boiled linseed oil	Abbotsford Coöperative Co., Abbotsford.	The F. Dohman Co., Milwaukee..	
June 11	Boiled linseed oil	Remington Drug Co., Fond du Lac.	.....	

FOUND TO CONTAIN MINERAL OIL AND ROSIN OIL.

Date.	Bought for	Bought of	Manufacturer or Jobber.	Remarks.
1911.				
Jan. 3	Boiled linseed oil.....	Conger-Grotophorst Co., Prairie du Sac.	Holland Linseed Oil Co., Chicago	Heavily adulterated.
Feb. 3	Raw linseed oil	Jacob Hatz, Prairie du Sac.....	Holland Linseed Oil Co., Chicago	Heavily adulterated.
June 8	Boiled linseed oil.....	Joseph Skibba, Junction City.....	.....	Heavily adulterated.

FOUND TO CONTAIN A VOLATILE PETROLEUM PRODUCT

1910. July 11	Boiled linseed oil.....	Fred Klein Co., Madison.....	.....	
Oct. 26	Boiled linseed oil.....	Enno Dorestan & Son Co., Milwaukee.	Enno Dorestan & Son Co., Milwaukee.	
1912. June 19	Boiled linseed oil.....	J. A. Mack, St. Croix Falls.....	.....	Heavily adulterated.

FOUND TO CONTAIN MORE THAN 2.5 PER CENT UNSAPONIFIABLE MATERIAL.

Date.	Bought for	Bought of	Manufacturer or Jobber.
1910. June 14	Boiled linseed oil	Herman J. Stecker, Sauk City.....	
Oct. 26	Boiled linseed oil	O'Neil Oil & Paint Co., Milwaukee.....	O'Neil Oil & Paint Co., Milwaukee.
1911. Apr. 21	Boiled linseed oil	A. F. Radke, Neillsville	Red Wing Linseed Oil Co., Red Wing, Minn.
Apr. 25	Boiled linseed oil	Wilkinson & Schwartz, Spring Green.....	
June 1	Boiled linseed oil	Nickel Hardware Co., Wausau.....	Red Wing Linseed Oil Co., Red Wing, Minn.
June 6	Boiled linseed oil	Victor S. Prais, Stevens Point.....	Ira Parker, Oshkosh.
June 7	Boiled linseed oil	E. D. Howland, Merrill.....	Foreman & Ford, St. Paul, Minn.
June 7	Boiled linseed oil	H. & W. F. Steffenhaugen, Merrill.....	Midland Linseed Co., Minneapolis, Minn.
June 7	Boiled linseed oil	Gust. Wenzel, Merrill	Red Wing Linseed Oil Co., Red Wing, Minn.
June 7	Boiled linseed oil	R. H. Tranton, Merrill.....	Douglas Linseed Co., Minneapolis, Minn.
June 9	Boiled linseed oil	Wm. C. Raue & Sons, Watertown.....	
June 13	Boiled linseed oil	J. Ballentine, Mauston	
June 13	Boiled linseed oil	Behnke Bros., Mauston	
July 25	Boiled linseed oil	A. E. Stronks, Baldwin.....	
July 25	Boiled linseed oil	Christensen's Pharmacy, Baldwin	
Aug. 2	Boiled linseed oil	Luenberger & Wurst, DeForest.....	

Linseed Oils, Standard.

Date.	Bought for	Bought of or Submitted by	Manufacturer or Jobber.
1910.			
June 14	Raw linseed oil	Hahn, Rischmueller & Meyer, Sauk City	
Oct. 26	Boiled linseed oil	W. F. Zummach Co., Milwaukee	W. F. Zummach Co., Milwaukee.
Oct. 26	Boiled linseed oil	Jas. E. Patton Co., Milwaukee	Jas. E. Patton, Milwaukee.
Oct. 26	Boiled linseed oil	Patek Bros., Milwaukee	Patek Bros., Milwaukee.
Nov. 2	Boiled linseed oil	Frank Dan, 261 3rd St., Milwaukee	
1911.			
Feb. 3	Raw linseed oil	Ragatz & Gasser, Prairie du Sac	Holland Linseed Oil Co., Chicago.
Apr. 21	Boiled linseed oil	Dennis Touringy, Neillsville	Minnesota Linseed Oil Co., Minneapolis.
Apr. 25	Boiled linseed oil	Sherwood Bros., Spring Green	
Apr. 25	Boiled linseed oil	W. Correll, Spring Green	
Apr. 27	Boiled linseed oil	J. O. Nelson, Park Falls	
Apr. 27	Boiled linseed oil	Vincent & Vincent, Park Falls	
June 2	Boiled linseed oil	Edward Everson, Tomahawk	O'Neill Oil & Paint Co., Milwaukee.
June 9	Boiled linseed oil	Schmutzler & Heissman, Watertown	
June 9	Boiled linseed oil	Chas. David, Watertown	
July 12	Boiled linseed oil	J. B. Murphy Co., Watertown	
July 19	Boiled linseed oil	Wm. C. Raue & Sons Co., Watertown	J. B. Murphy Co., Watertown.
July 19	Raw linseed oil	Wm. C. Raue & Sons Co., Watertown	J. B. Murphy Co., Watertown.
July 25	Boiled linseed oil	Baldwin Coöperative Co., Baldwin	
July 26	Boiled linseed oil	Dahl Hardware Co., Barron	
July 27	Boiled linesed oil	Edw. Leibly, Rice Lake	
Oct. 26	Boiled linseed oil	The Coöperative Mercantile Co., Black Earth	
Oct. 26	Raw linseed oil	The Coöperative Mercantile Co., Black Earth	
Nov. 29	Raw linseed oil	Ira Parker & Sons Co., Oshkosh	
Dec. 6	Boiled linseed oil	C. G. Pier, Wausau	Midland Linseed Oil Co., Minneapolis.
Dec. 6	Boiled linseed oil	O. C. Callies, Wausau	Minnesota Linseed Oil Co., Minneapolis.
1912.			
Jan. 1	Raw linseed oil	Victor Prais, Stevens Point	The Red Wing Linseed Co., Red Wing, Minn.
Mar. 27	Boiled linseed oil	I. L. Grosse, Eagle	O'Neil Oil & Paint Co., Milwaukee.
Mar. 27	Raw linseed oil	I. L. Grosse, Eagle	O'Neil Oil & Paint Co., Milwaukee.
Mar. 27	Boiled linseed oil	Smart Bros., Eagle	Douglas & Co., Minneapolis, Minn.
Mar. 27	Boiled linseed oil	Smart Bros., Eagle	Douglas & Co., Minneapolis, Minn.
Apr. 12	Raw linseed oil	Ben. B. Kraus, Elkhorn	
Apr. 25	Boiled linseed oil	L. N. Pomeroy & Co., Edgerton	

Apr. 25	Raw linseed oil	L. N. Pomeroy & Co., Edgerton	Spencer-Kellogg & Sons, Buffalo and Minneapolis.
Apr. 29	Boiled linseed oil	R. S. Young, Darien	
Apr. 29	Boiled linseed oil	R. S. Young, Darien	
Apr. 29	Boiled linseed oil	M. A. Thorpe, Darien	Chicago White Lead & Oil Co., Chicago.
May 2	Boiled linseed oil	K. N. Hollister, Delavan	
May 2	Boiled linseed oil	Flack's Pharmacy, Elkhorn	
May 2	Boiled linseed oil	Lyon Drug Co., Elkhorn	
May 7	Raw linseed oil	Kaufman Bros., Edgerton	
May 7	Boiled linseed oil	J. D. Hain Estate, Edgerton	Minnesota Linseed Oil Co., Minneapolis.
May 9	Boiled linseed oil	The Fair Store, Rice Lake	Spencer-Kellogg & Sons, Buffalo and Minneapolis.
May 15	Boiled linseed oil	Schulz & Ungrodt, Medford	Minnesota Paint & Oil Co., Minneapolis.
May 15	Boiled linseed oil	O. Greisser & Son, Medford	Midland Linseed Oil Co., Minneapolis.
May 16	Boiled linseed oil	J. A. Pitts, Kenosha	Spencer-Kellogg & Sons, Minneapolis.
May 17	Boiled linseed oil	Phillips Hardware Co., Phillips	Wadhams Oil Co., Milwaukee.
May 17	Boiled linseed oil	Prentice Mercantile Co., Prentice	
June 6	Boiled linseed oil	August Schwedes, Plum City	

Linseed Oils, Submitted.

Date.	Sample of	Submitted by	Remarks.
1910.			
July 18	Boiled linseed oil	G. O. Gordon, Lodi	No adulteration found.
July 18	Raw linseed oil	G. O. Gordon, Lodi	No adulteration found.
Aug. 24	Raw linseed oil	Jerome Fitzgerald, Kilbourn	Not standard.
Aug. 25	Boiled linseed oil	W. C. Raue & Sons Co., Watertown	Not standard.
Sept. 17	Boiled linseed oil	Edward L. Tracy, 815 Pabst Bldg., Milwaukee	No adulteration found.
Sept. 23	Boiled linseed oil	F. A. Wilde, Jr., Milwaukee	Contains mineral oil.
Sept. 30	Boiled linseed oil	F. E. Joannes, Green Bay	Contains mineral oil.
1911.			
Feb. 23	Boiled linseed oil	A. L. Goddard, Madison	Contains rosin.
Mar. 5	Boiled linseed oil	Victor L. Prais, Stevens Point	Contains mineral oil.
Mar. 17	Raw linseed oil	W. A. Kalk, Columbus	Contains mineral oil.
Mar. 24	Raw linseed oil	J. V. D. Wymelenberg & Son, Wrightstown	Contains mineral oil.
Mar. 24	Boiled linseed oil	J. V. D. Wymelenberg & Son, Wrightstown	Contains mineral oil.
Mar. 24	Boiled linseed oil	J. V. D. Wymelenberg & Son, Wrightstown	Contains mineral oil.
Apr. 13	Raw linseed oil	Mautz Bros. Co., Madison	No adulteration found.

Linseed Oils, Submitted—Continued.

Date.	Sample of	Submitted by	Remarks.
1911.			
Apr. 14	Raw linseed oil	Moers, Pritchard, Brandon, Racine	Contains mineral oil.
May 1	Boiled linseed oil	James Nevins Madison	Contains mineral oil.
July 3	Boiled linseed oil	Thos. Thoen, Hammond	Contains mineral oil.
July 11	Linseed oil	Little Falls Co., Amery, R. D. 2	Contains mineral oil.
July 31	Linseed oil	A. O. Hamre, De Forest	Contains mineral oil.
Sept. 22	Boiled linseed oil	R. S. Cowie, Whitehall	Contains mineral oil.
Oct. 27	Linseed oil	Edward Lawler, Mazomanie	No adulteration found.
Nov. 7	Boiled linseed oil	H. Lappley, Mazomanie	No adulteration found.
Nov. 7	Raw linseed oil	H. Lappley, Mazomanie	No adulteration found.
Nov. 10	Raw linseed oil	F. E. Waite, Oshkosh	Contains benzine.
Dec. 8	Boiled linseed oil	J. R. Pike, Fond du Lac	Contains mineral oil.
Dec. 16	Raw linseed oil	John A. Pahl, Sister Bay	Contains mineral oil.
Dec. 21	Boiled linseed oil	E. W. Stewart, Madison	Contains excessive amount of foots.
1912.			
Mar. 1	Boiled linseed oil	Kier & Jaeger, Oconomowoc	Contains mineral oil.
Mar. 8	Raw linseed oil	Henry Grube, Auburndale	No adulteration found.
Mar. 8	Raw linseed oil	J. P. Mullenbach, Stanley	No adulteration found.
Mar. 27	Boiled linseed oil	J. H. Arent, West De Pere	Contains mineral oil.
Mar. 27	Raw linseed oil	J. H. Arent, West De Pere	Contains mineral oil.
Apr. 1	Raw linseed oil	McKichan & Miller, Patch Grove	Contains a large amount of nondrying seed oil.
Apr. 2	Raw linseed oil	R. Connor Co., Auburndale	No adulteration found.
Apr. 15	Boiled linseed oil	Dr. B. G. Stockman, Woodville	Contains mineral oil.
Apr. 16	Raw linseed oil	Wm. Rhodes & Co., Marshfield	No adulteration found.
Apr. 29	Boiled linseed oil	Schweer's Hardware Co., Shawano	Contains mineral oil.
May 1	Raw linseed oil	Herman Eulloff & Sons, St. Nazianz	No adulteration found.
May 5	Boiled linseed oil	Chas. Hoehn, Fall Creek	Contains mineral oil.
May 5	Raw linseed oil	Chas. Hoehn, Fall Creek	Contains mineral oil.
May 7	Raw linseed oil	S. P. Sanders, Amos	No adulteration found.
May 13	Boiled linseed oil	Grinder & Iverson, Perry	No adulteration found.
May 23	Boiled linseed oil	S. O. Sveum, Stoughton, R. D. 5	Contains excessive amount of foots.
May 27	Boiled linseed oil	R. S. Scheibel, Madison	No adulteration found.
June 4	Linseed oil	Matt. Powell, Avoca	Contains mineral oil.
June 17	Raw linseed oil	Quinn & Cunningham, Rice Lake	No adulteration found.
June 17	Raw linseed oil	H. G. Oaks, Tunnel City	Contains mineral oil.
June 19	Raw linseed oil	Jacobson & Swenson, Nelsonville	No adulteration found.
June 25	Boiled linseed oil	N. J. Berge, Leerfield	No adulteration found.
June 25	Raw linseed oil	N. J. Berge, Deerfield	No adulteration found.

MEATS AND MEAT PRODUCTS.

Chopped meats free from boric acid and sulphites.

Date.	Bought for	Bought of
1910.		
Sept. 13	Hamburger steak	J. Doolittle, State Fair Park, Milwaukee.
Sept. 13	Hamburger steak	Baker & Little, State Fair Park, Milwaukee.
Sept. 13	Hamburger steak	A. Johnson, State Fair Park, Milwaukee.
Sept. 13	Hamburger steak	Baker & Little, State Fair Park, Milwaukee.
Sept. 13	Hamburger steak	F. Coplen, State Fair Park, Milwaukee.
Sept. 13	Hamburger steak	Frank Wagner, State Fair Park, Milwaukee.
1911.		
Mar. 22	Beef and pork sausage	John Koepsel, Neenah.
Mar. 22	Beef sausage	John Koepsel, Neenah.
April 4	Hamburger steak	J. T. Holstein, Menomonie.
April 4	Hamburger steak	J. G. Inenfeldt & Son, Menomonie.

Sausage.

BOUGHT FOR SAUSAGE. FOUND TO BE SAUSAGE WITH CEREAL. TESTED FOR BORIC ACID AND BORATES. NONE FOUND.

Date.	Bought of
1910.	
Oct. 19	J. S. Bongay, Deerfield.
Oct. 19	J. S. Bongay, Deerfield.
Oct. 19	J. S. Bongay, Deerfield.
1911.	
Feb. 1	Wm. Weisemann, Watertown.
Feb. 1	Wm. Bittner, Watertown.
Feb. 1	R. F. Block, Watertown.

Sausage—Continued.

BOUGHT FOR SAUSAGE. FOUND TO BE SAUSAGE WITH CEREAL. TESTED FOR BORIC ACID OR BORATES; NONE FOUND.

Date.	Bought of
1912.	
Feb. 1	Julius Bayers, Watertown.
Mar. 31	People's Market, Sheboygan.
Mar. 31	People's Market, Sheboygan.
April 28	John Dick, Middleton.
July 28	T. Davenport, Soldiers Grove.
July 29	T. Davenport, Soldiers Grove.
Aug. 1	Stelzman & Davidson, Soldiers Grove.
Sept. 1	Chicago Market, Racine.
1912.	
May 23	Millers' Sixth Ward Market, Oshkosh.
May 23	Friedrich Market, Oshkosh.
May 23	Frank Miller, Oshkosh.
May 23	Ernest Siewert, Oshkosh.
May 23	F. W. Witte, Oshkosh.
May 23	George A. Alert, Oshkosh.

BOUGHT FOR SAUSAGE. FOUND TO CONTAIN POTATO FLOUR.

1912.	
May 23	People's Cash Market, Oshkosh.

BOUGHT FOR SAUSAGE. FOUND TO CONTAIN MORE THAN 4 PER CENT OF CEREAL. TESTED FOR BORIC ACID AND BORATES; NONE FOUND.

Date.	Bought of or Submitted by
1911.	
Jan. 27	*J. D. Cannon, New London.
Feb. 1	J. O'Brien, Watertown.

* Submitted sample.

Feb. 1	Otto Schultz, Watertown.
Mar. 17	People's Meat Market, Watertown.
Mar. 30	People's Meat Market, Kenosha.
Mar. 30	Cudahy Meat Market, Kenosha.
Mar. 30	Cudahy Market, Racine.
Mar. 30	Cudahy Market, Racine.
Mar. 31	Cudahy Market, Port Washington.
1912.	
May 23	Oscar Ernest, Oshkosh.
May 23	J. Wichert, Oshkosh.
May 23	Chas. Taube, Oshkosh.
May 23	Nic. Pfell, Oshkosh.
May 23	J. F. Borsack, Oshkosh.
May 23	B. J. Muller, Oshkosh.
May 23	G. Ulrich, Oshkosh.
May 23	The Utz Market, Oshkosh.

BOUGHT FOR SAUSAGE. FREE FROM CEREAL, POTATO FLOUR, BORIC ACID OR BORATES.

1911.	
Jan. 12	J. C. Inenfeldt, Menomonie.
Jan. 12	C. G. Tilleson, Menomonie.
Jan. 12	C. Krause, Menomonie.
Jan. 12	C. Krause, Menomonie.
Jan. 12	J. C. Inenfeldt, Menomonie.
Jan. 12	S. Schneider, Menomonie.
Jan. 12	J. T. Holstein, Menomonie.
Jan. 18	P. F. Becher, 1704 Vliet St., Milwaukee.
Feb. 1	M. Nowack, Watertown.
Mar. 30	Cudahy Market, 925 Salem Ave., Kenosha.
Mar. 30	Cudahy Market, 907 Market St., Kenosha.
1912.	
Mar. 8	Halle & Berg, Rio.
May 23	Bartells Market, Oshkosh.

Sausage with Cereal

BOUGHT FOR SAUSAGE WITH CEREAL.

Date.	Bought of	Remarks.
1910.		
Oct. 19	G. W. Gilbert & Son, Deerfield	
Oct. 19	G. W. Gilbert & Son, Deerfield	
Oct. 19	G. W. Gilbert & Son, Deerfield	
Oct. 19	G. W. Gilbert & Son, Deerfield	
Oct. 22	Jacob Wichert, Oshkosh	Found to contain no cereal.

Miscellaneous Meats and Chopped Meats.

Date.	Bought for	Bought of or Submitted by	Remarks.
1910.			
July 18	Corned beef	*Mrs. John Lamp, Deerfield	Tested for boric acid and sulphites. None found.
Oct. 4	Boiled meat	*Otto R. Rucks, Oakfield	Tested for boric acid and sulphites. None found.
Oct. 19	Pickled pork	G. W. Gilbert & Son, Deerfield	Tested for boric acid and sulphites. None found.
Nov. 25	Hamburger steak	*Carl Klofanda, Prairie du Chien	Tested for potato flour and cereals. None found.
Dec. 28	Bacon	*C. J. Wells, Tomah	Tested for boric acid and sulphites. None found.
1912.			
Mar. 7	Meat	*Harry G. Smith, Madison	Tested for boric acid and sulphites. None found.
Mar. 16	Bacon	*W. B. Davisson, Spring Green	Tested for preservatives. None found.

*Submitted sample.

MILK.

City Milk.

BELOW STANDARD.

Date.	Bought of	City	Sp. G.	Per cent fat.	Per cent total solids	Per cent solids not fat.	I. R. of whey (20° C.)	Remarks.
1910.								
Aug. 5	E. W. Dill	Manitowoc	1.0315	2.4	10.87	8.47	41.5	
Aug. 5	H. Klackner	Manitowoc	1.0325	2.45	11.26	8.81	42.5	
Aug. 19	Eichhorst Bros.	Stevens Point	1.0247	3.55	10.68	7.13	37.5	Watered. See herd sample.
Aug. 23	Donohu & Sons	Wausau	1.0335	2.6	11.57	8.97	.....	See herd sample.
Aug. 26	Henry Doulski	Green Lake	1.0321	1.9	10.48	8.58	40.4	
Aug. 27	C. H. Christenson	Chippewa Falls	1.0332	2.9	11.73	8.83	41.2	
Aug. 30	Chas. Carlson	Superior	1.0310	3.30	11.75	8.45	39.8	
Aug. 30	H. Koffoed	Superior	1.0310	3.0	11.28	8.28	40.7	
Aug. 30	C. C. Simon	Superior	1.0331	2.5	11.34	8.84	41.3	
Aug. 30	Lars Kramstrom	Superior	1.0294	3.0	11.09	8.09	38.7	
Sept. 1	Chas. Thiex	Oshkosh	1.0315	2.6	11.07	8.47	40.3	
Sept. 1	Chas. A. Kuhl	Lake Mills	1.0285	3.95	11.78	7.83	38.5	
Sept. 22	D. Sorensen	Oconto	1.0333	2.65	11.55	8.90	41.7	Skimmed. See herd sample.
Sept. 28	Balzer Wirtz	Sheboygan	1.0325	2.75	11.25	8.50	40.4	Skimmed. See herd sample.
Sept. 29	Aherns Bros.	Prairie du Chien	1.0349	2.1	11.17	9.07	41.6	
Oct. 24	Peter De Boer (Pure Food Co.)	La Crosse	1.0290	3.2	11.10	7.9	38.2	Watered. See herd sample.
Oct. 31	Peter De Boer (Pure Food Co.)	La Crosse	1.0318	3.4	11.83	8.43	39.4	See herd sample.
Nov. 2	R. Griffin	Sturgeon Bay	1.0273	3.9	11.67	7.77	37.7	
Nov. 2	Frank Haasl	Park Falls	1.0252	3.6	10.72	7.12	37.1	Watered. See herd sample.
Nov. 3	Theo. Gloeckler	Portage	1.0273	4.2	11.68	7.48	37.6	Watered. See herd sample.
Nov. 3	Jas. Hanley	Hurley	1.0257	3.25	10.33	7.08	35.5	Watered. See herd sample.
Nov. 7	Al. Hunsaker	Lancaster	1.0237	4.1	11.18	7.08	35.8	Watered.
Nov. 7	Al. Hunsaker	Lancaster	1.0259	4.15	11.66	7.51	36.6	Watered.
Nov. 10	Russell Cry. Co.	Superior	1.0275	3.1	10.46	7.36	37.3	Watered.
Nov. 10	Chas. Carlson	Superior	1.0290	3.2	11.34	8.14	39.0	
Nov. 10	John Lund	Superior	1.0294	2.9	10.93	8.03	38.6	Watered. See herd sample.
Nov. 16	Mike Hahn	Sturgeon Bay	1.0262	3.8	11.05	7.25	36.35	Watered. See herd sample.

City Milk—Continued.

BELOW STANDARD—Continued.

Date.	Bought of	City	Sp. G.	Per cent fat.	Per cent total solids	Per cent solids not fat.	I. R. of whey (20° C.)	Remarks.
1910.								
Nov. 16	Mike Hahn	Sturgeon Bay	1.0280	4.0	11.73	7.73	38.3	Watered. See herd sample.
Nov. 29	T. J. Paulson	Superior	1.0321	2.65	11.50	8.85	.....	
Nov. 29	A. F. Schmidt Cry. Co.	Superior	1.0320	2.9	11.49	8.59	40.5	
Dec. 27	C. C. Simon	Superior	1.0336	2.75	11.84	9.09	.....	
Dec. 30	J. R. Merriam	Grand Rapids	1.0330	2.75	11.73	8.98	.....	Skimmed. See herd sample.
	H. A. Towsley	Kaukauna	1.0210	2.7	8.37	5.67	32.0	Watered. See herd sample.
1911.								
June 24	Vincent Dvorack	Racine	1.0290	2.6	10.40	7.80	40.0	
Dec. 16	J. L. Bonham	Baraboo	1.0293	3.0	10.9	7.9	40.25	
1912.								
Mar. 16	S. F. Hewitt	Neillsville	1.0250	3.6	10.44	6.84	36.3	
Apr. 3	B. Miller	Madison	1.0301	3.9	11.78	7.88	40.0	Watered. See herd sample.
May 14	Mrs. F. Pech	Manitowoc	1.0322	2.40	10.98	8.58	39.8	
May 14	Wm. Hills	Manitowoc	1.0328	2.4	10.82	8.42	40.7	
May 21	J. G. Uecke	Oshkosh	1.0328	2.75	11.35	8.60	.....	
May 21	J. G. Uecke	Oshkosh	1.0340	2.7	11.77	9.07	.....	
May 21	J. G. Uecke	Oshkosh	1.0339	2.7	11.61	8.91	.....	

City Milk.

STANDARD.

Date.	Bought of	City.	Sp. G.	Per cent fat.	Per cent total solids.	Per cent solids not fat.	I. R. of whey (20° C.)
1910.							
Aug. 5	C. Schroeder	Manitowoc	1.0310	3.65	12.2	8.55	41.55
Aug. 5	S. A. Morris	Manitowoc	1.0304	3.4	11.90	8.5	41.9
Aug. 25	A. B. Chamberlain	Menomonie	1.0336	3.0	11.86	8.86	42.2
Aug. 30	T. J. Paulson	Superior	1.0324	3.10	12.19	9.09	41.9
Sept. 9	Appleton Pure Milk Co	Appleton	1.0334	3.0	11.83	8.88	41.2
Nov. 10	E. Naslund	Superior	1.0335	3.65	12.88	9.23	.....
Nov. 25	A. W. Clayton	Madison	1.0321	3.9	12.84	8.94	.....
Nov. 29	E. J. Mills	Superior	1.0333	3.9	13.12	9.22	.....
Nov. 29	E. J. Mills	Superior	1.0326	4.4	13.57	9.17	.....
Nov. 29	F. Berg	Superior	1.0320	4.7	13.78	9.08	.....
Nov. 29	J. H. Carlsgaard	Superior	1.0316	5.1	14.16	9.06	.....
Nov. 29	F. Johnson	Superior	1.0316	4.5	13.44	8.94	.....
Nov. 29	A. Christensen	Superior	1.0341	3.1	12.36	9.26	.....
Nov. 29	Ed. Kamler	Superior	1.0320	4.4	13.42	9.02	.....
Nov. 29	Pitts & Son	Superior	1.0321	4.1	13.06	8.96	.....
Nov. 29	Aug. Simon	Superior	1.0319	4.2	13.18	8.98	.....
Nov. 29	Russell Cry. Co	Superior	1.0325	3.3	12.2	8.9	.....
Nov. 29	Russell Cry. Co	Superior	1.0302	4.1	12.6	8.5	.....
Nov. 29	L. Kahle	Superior	1.0331	4.2	13.48	9.28	.....
Nov. 29	Nels Sorensen	Superior	1.0308	4.5	13.24	8.74	.....
Nov. 29	C. C. Simon	Superior	1.0325	3.05	12.20	9.15	41.5
Nov. 29	Mrs. Mary Albeck	Superior	1.0315	4.5	13.44	8.94	.....
Nov. 29	H. Koffoed	Superior	1.0322	4.0	13.04	9.04	.....
Nov. 29	B. Knutson	Superior	1.0320	4.2	13.16	8.96	.....
Nov. 29	Aug. Simon	Superior	1.0310	4.1	12.81	8.71	.....
Nov. 29	Chas. Carlson	Superior	1.0315	3.6	12.36	8.76	.....
Nov. 29	G. Peterson	Superior	1.0321	4.1	13.06	8.96	.....
Nov. 29	E. Naslund	Superior	1.0330	4.2	13.43	9.23	.....
1911.							
Feb. 7	J. Godersky	Port Washington	1.0337	3.4	12.66	9.26	42.1
April 18	J. G. Smith	Sparta	1.0325	4.8	13.89	9.09	.....

City Milk—Continued.

STANDARD—Continued.

Date.	Bought of	City.	Sp. G.	Per cent fat.	Per cent total solids.	Per cent solids not fat.	I. R. of whey (20° C.)
1911.							
April 18	J. G. Smith	Sparta	.....	3.6	12.38	8.78	.....
April 18	J. G. Smith	Sparta	.....	4.2	13.30	9.10	.....
June 22	F. Pederson	Kenosha	1.0324	3.2	12.26	9.06	42.3
July 1	Bowman & Owee	Madison	.....	3.0	.....	.....	.....
July 7	Geo. New	Kenosha	1.0310	3.75	12.07	8.32	40.5
July 7	Frank Smith	Kenosha	1.0313	4.0	12.53	8.53	42.0
July 7	J. Maurer	Kenosha	1.0300	4.55	12.76	8.21	40.0
July 18	Peter Christopher	Stoughton	1.0310	4.2	12.93	8.73	.....
1912.							
Mar. 16	S. F. Hewitt	Neillsville	1.0329	3.3	11.8	8.5	42.0
May 2	C. H. Shaver News Co	Janesville	1.0312	3.8	12.24	8.44	41.5

Milk Delivered to Creameries or Cheese Factories.

BELOW STANDARD.

Date.	Sold or delivered by	Delivered to	Sp. G.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	I. R. reading of whey.	Remarks.
1910.								
Aug. 11	F. Maternowski, Green Bay.	Maternowski Cheese Fac.	1.0280	3.15	11.03	7.88	40.6	See herd sample.
Aug. 11	Andrew Mancheski, Green Bay.	Maternowski Cheese Fac.	1.0246	3.0	10.14	7.14	36.6	Watered. See herd sample.
Aug. 19	Ernest Bartling, R'ley.....	Gausman's Cheese Fac.	1.0246	3.45	10.52	7.07	36.3	Watered. See herd sample.
Aug. 24	Fred Krats, New Franken	F. Appleham Cheese Fac	1.0175	3.0	8.21	5.21	31.4	Watered. See herd sample.

Aug. 31	John Burnes, Livingston..	Dennis Cheese Fac...	1.0283	3.30	11.22	7.92	38.2	Watered.
Sept. 6	Fred Kratz, New Franken	Appleham Cheese Fac.	1.0194	2.55	7.76	5.21	30.6	Watered. See herd sample.
Sept. 9	Edward Stuelke, Lake Mills.	Chas. Kuhl, Jefferson	1.0252	3.98	11.22	7.24	37.0	Watered. See herd sample.
Sept. 26	Aug. Brandt, Monroe.....	Pengra Cheese Fac..	1.0277	3.2	10.8	7.6	37.8	Watered. See herd sample.
Oct. 31	Howard Edwards, Evansville.	Meyers Cheese Fac...	1.0218	3.2	9.36	6.16	32.9	Watered. See herd sample.
Oct. 31	John Hart, Evansville.....	Meyers Cheese Fac...	1.0280	3.1	10.9	7.5	37.8	Watered. See herd samples.
Nov. 1	Fred Shutz, Evansville.....	D. E. Wood Cry. Co.	1.0231	3.1	9.82	6.72	34.1	Watered. See herd sample.
Nov. 1	Chas. Webb, Evansville...	D. E. Wood Cry. Co.	1.0256	3.45	10.79	7.34	37.0	Watered. See herd sample.
Nov. 1	R. Anderson, Evansville...	D. E. Wood Cry. Co.	1.0230	3.2	9.99	6.79	34.1	Watered. See herd sample.
Nov. 19	N. M. Ellis, Northport....	Nat. Condensed Milk Co., New London.	1.0223	3.5	9.92	6.42	33.5	Watered. See herd sample.
Dec. 15	Wm. DeGroot, Union Grove.	Bowman Dairy Co...	1.0240	3.0	9.47	6.47	35.0	Watered. See herd sample.
1911.								
Feb. 28	Ed Westby, Clinton.....	Clinton City	1.0315	2.95	11.31	8.36	40.4	See herd samples.
Mar. 1	Mrs. H. Paulson, Clinton.	Clinton Cry.	1.0304	2.9	10.88	7.98	41.0	
Mar. 1	G. Fossman, Clinton.....	Clinton Cry.	1.0319	2.85	11.60	8.75	40.6	
Mar. 14	Mrs. G. Peterson, Stoughton.	Gordon & Parish Milk Depot.	1.030	3.0	11.10	8.10	39.8	See herd samples.
Mar. 14	Peter Nygard, Stoughton.	Gordon & Parish Milk Depot.	1.030	2.5	10.63	8.13	39.8	See herd samples.
Mar. 14	Andrew Nettem, Stoughton	Gordon & Parish Milk Depot.	1.031	2.55	10.92	8.37	40.3	See herd samples.
Mar. 14	Andrew Nettem, Stoughton	Gordon & Parish Milk Depot.	1.0315	3.6	11.99	8.39	41.6	See herd samples.
Mar. 21	H. G. Emerson, Capron, Ill.	Sharon Cry., Sharon	1.0272	2.9	10.33	7.43	37.0	Watered. See herd sample.
April 11	Peter Blinkenheim, Johnson Creek.	Mansfield Cry.	1.0290	3.1	10.88	7.78	38.7	Watered.
April 11	Jul. Haubenschild, Johnson Creek.	Mansfield Cry.	1.0290	3.0	10.75	7.75	41.4	See herd sample.
April 11	Herman Stande, Johnson Creek.	Mansfield Cry.	1.0285	3.4	11.42	8.02	40.0	See herd sample.
April 11	H. Mueller, Johnson Creek	Mansfield Cry.	1.0286	3.1	11.00	7.90	39.3	See herd sample.
April 11	H. Emmert, Johnson Creek.	Mansfield Cry.	1.0200	3.2	11.60	8.40	41.4	See herd sample.
April 11	Aug. Nadler, Johnson Creek.	Mansfield Cry.	1.0300	3.05	11.17	8.12	40.0	See herd sample.
April 11	A. Voelker, Johnson Creek	Mansfield Cry.	1.027	3.1	11.03	7.97	40.4	See herd samples.
April 11	E. Schaefer, Johnson Creek.	Mansfield Cry.	1.0286	2.8	10.60	7.80	40.0	See herd sample.

Milk Delivered to Creameries or Cheese Factories—Continued.

BELOW STANDARD—Continued.

Date.	Sold or delivered by	Delivered to	Sp. G.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	I. R. reading of whey.	Remarks.
1911.								
April 11	Geo. Broom, Johnson Creek.	Mansfield Cry.	1.0280	2.8	10.52	7.72	38.8	See herd sample.
April 11	Lee Boutelle, Johnson Creek.	Mansfield Cry.	1.0295	3.1	11.28	8.18	42.0	See herd sample.
May 2	Robt. Anderson, Greenwood.	Woodside Cheese Fac.	1.0320	2.8	11.48	8.68	41.5	See herd sample.
May 24	Chas. Luebcke, Madison..	Zilisch Cry.	1.0320	2.0	10.35	8.35	40.0	See herd samples.
May 24	Chas. Luebcke, Madison..	Zilisch Cry.	1.0315	2.0	10.33	8.33	40.0	See herd samples.
May 24	Chas. Luebcke, Madison..	Zilisch Cry.	1.0312	2.1	10.40	8.30	39.8	See herd samples.
June 10	Jule. Splitgerber, Embarrass.	Wolf River Cheese Fac.	1.0250	2.6	9.40	6.80	35.7	Watered. See herd sample.
June 13	A. Zimbrich, Waterloo....	Fountain Cry.	1.0320	2.7	11.04	8.34	.....	See herd sample.
June 13	J. Fridel, Waterloo.....	Fountain Cry.	1.0310	2.6	10.93	8.33	.....	See herd sample.
June 13	W. Krause, Waterloo.....	Fountain Cry.	1.0270	2.95	10.52	7.57	37.0	Watered. See herd samples.
June 13	Wm. Hohnke, Waterloo...	Maple Grove Skim.	1.0288	3.90	11.81	7.91	39.1	See herd samples.
July 18	Albert Wolf, Rubicon.....	Fremont Cheese Fac.	1.0285	3.2	11.20	8.00	39.8	
July 18	Geo. Loos, Rubicon.....	Fremont Cheese Fac.	1.0280	3.25	10.88	7.63	39.3	
July 19	Wm. Hoff, Hartford.....	Oak Cheese Fac.	1.0281	3.3	10.91	7.61	39.0	
July 19	Fred Melius, Hartford....	Oak Cheese Fac.	1.0260	3.25	10.34	7.09	38.0	Watered.
July 28	Fred Roder, Belleville.....	Holstein Cheese Co.. Fac.	1.0280	3.8	11.57	7.77	39.5	Watered. See herd sample.
Aug. 2	Nic. Wagner, Rubicon....	Pleasant Hill Cheese Sta.	1.0297	3.4	11.37	7.97	40.2	
Aug. 9	Jos. Skinkas, Pulaski.....	Elm Dairy Cry.	1.0235	2.5	9.12	6.62	34.7	Watered. See herd sample.
Aug. 9	Anton Gobick, Pulaski....	Elm Dairy Cry.	1.0240	3.0	10.07	7.07	34.3	Watered. See herd sample.
Aug. 9	Jacob Zielinski, Pulaski...	Elm Dairy Cry.	1.0260	3.25	10.31	7.06	35.4	Watered. See herd sample.
Aug. 25	John Dietsche, Spencer....	Sherman Cheese Fac.	1.0270	3.45	10.96	7.51	38.2	Watered. See herd sample.
Aug. 25	John Dietsche, Spencer....	Sherman Cheese Fac.	1.0275	3.45	11.03	7.58	38.6	Watered. See herd sample.
Aug. 29	Barney Rutter, Little Chute.	Pleasant View Fac.	1.0278	2.85	10.42	7.57	37.0	Watered. See herd sample.

Sept. 23	Wm. Tilly, Green Bay, R. D. 9.	Howard Coöperative Cry. Co.	1.0155	2.6	7.11	4.51	28.0	Watered. See herd sample.
Oct. 11	Arthur Draught, Lloyd...	Loyd Cheese Fac...	1.0280	4.0	11.93	7.93	38.75	Watered.
Oct. 20	J. P. Byrns, Livingston...	Dennis Cheese Fac..	1.0290	4.05	12.20	8.15	39.0	
Nov. 27	Earl A. Paddock, Elkhorn	Elkhorn Milk Plant.	1.0262	2.6	9.61	7.01	35.7	Watered. See herd sample.
Dec. 23	Wm. Hoffman, Kewaunee..	Pleasant View Cheese Fac.	1.0225	3.3	9.48	6.18	33.7	Watered. See herd sample.
1912.								
Jan. 26	Wm. Gugel, Madison.....	Rendtorff & Zillisch Co.....	1.0286	3.4	11.54	8.14	39.3	
Jan. 26	Otto F. Toepfer, Madison	Rendtorff & Zillisch Co.....	1.0300	3.15	11.29	8.14	40.3	
Jan. 26	F. Bohn, Watertown.....	Moldenhauer Cheese Fac.	1.0260	3.0	10.09	7.09	37.0	Watered. See herd sample.
Feb. 14	W. Kulker, Jr., Watertown	Poplar Grove Cheese Fac.	1.0295	2.9	10.85	7.95	39.9	
Feb. 20	Fred Melius, Rubicon.....	Oak Cheese Fac. ...	1.0267	2.7	9.88	7.18	37.3	Watered. See herd sample.
Feb. 20	Wm. Hoff, Hartford.....	Oak Cheese Fac. ..	1.0260	3.6	10.87	7.27	36.5	Watered. See herd sample.
Mar. 6	Chas. Benedum, Allenton..	Wayne & Addison Cheese Fac.	1.0320	2.7	11.24	8.54	.....	See herd sample.
Mar. 6	Robt. Repe, Allenton.....	Wayne & Addison Cheese Fac.	1.0320	2.1	10.52	8.42	.....	Skimmed. See herd sample.
Mar. 15	Jos. Ray, Kewaunee.....	Alaska Cheese Fac..	1.0310	3.4	11.79	8.39	.....	See herd sample.
Mar. 15	Chas. Geier, Kewaunee....	Alaska Cheese Fac..	1.0305	3.2	11.23	8.03	.....	See herd sample.
Mar. 15	Jos. Blahnek, Kewaunee..,	Alaska Cheese Fac..	1.0295	3.0	10.82	7.82	.....	See herd sample
Mar. 18	Fred Fach, Marshfield.....	North Hewitt Cry...	1.0259	2.2	9.27	7.07	37.3	Watered. See herd sample.
Mar. 20	Lewis Schmidt, Woodland	Maple Shade Cheese Fac.	1.0290	2.90	10.38	7.48	.....	
Mar. 28	Louis Clark, New Franken, R. 2.	A. Sindzincki Cheese Fac.	1.0262	2.9	9.93	7.03	36.5	Watered. See herd sample.
Apr. 3	Gottliv Piescher, Granton, R. 1.	Granton Cheese Fac.	1.0320	2.50	11.27	8.77	41.5	
Apr. 3	Adolph Schlinsog, Granton	Granton Cheese Fac.	1.0299	3.05	10.92	7.87	41.3	See herd sample.
Apr. 22	Otto Toepfer, Madison...	Rendtorff & Zilisch Co.	1.0300	3.05	11.02	7.97	39.1	See herd sample.
Apr. 22	Otto Toepfer, Madison...	Rendtorff & Zilisch Co.	1.0293	3.10	11.03	7.93	39.1	Watered. See herd sample.
Apr. 30	Gottliv Piescher, Granton R. 1.	Granton Cheese Fac.	1.0309	2.09	11.32	8.42	40.6	
June 18	James Kraunick, Denmark	Buckman Cheese Fac.	1.0301	2.35	10.34	7.99	39.0	Partly skimmed. See herd sample.

Milk Delivered to Creameries or Cheese Factories—Continued.

BELOW STANDARD—Continued.

Date.	Sold or delivered by	Delivered to	Sp. G.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	I. R. reading of whey.	Remarks.
1912.								
June 18	Thomas Gaffney, Denmark	Buckman Cheese Fac.	1.0335	2.6	11.51	8.91	40.4	Partly skimmed. See herd sample.
June 18	Jas. Buresch, Denmark...	Buckman Cheese Fac.	1.0324	2.9	11.68	8.78	40.6	Slightly skimmed. See herd sample.
June 25	Chas. Crabb, West De Pere.	Fox River Valley Cry.	1.0309	2.9	10.99	8.09	39.5	

Miik Delivered to Creameries or Cheese Factories.

STANDARD.

Date.	Delivered by	Delivered to	Sp. G.	Per cent fat.	Per cent total solids.	Per cent solids not fat.	I. R. reading of whey (20° C)
1911.							
Jan. 18	H. Stichart, Granton, R. D. 1.....	Banner Creamery	1.0345	3.05	12.27	9.22	42.1
Jan. 18	H. Stichart, Granton, R. D. 1.....	Banner Creamery	1.0335	3.55	12.60	9.05	41.8
June 13	J. Wellhoefer, Waterloo.....	Fountain Creamery	1.0338	3.05	12.29	9.24	.....
July 15	H. Schumacher, Cazenovia.....	Swenink Cheese Fac.	1.0306	4.75	13.38	8.63	41.4
July 15	H. Schumacher, Cazenovia.....	Swenink Cheese Fac.	1.0326	3.15	12.05	8.90	41.4
Aug. 9	Fred Roder, Belleville	Holstein Cheese Co.	1.0310	4.0	12.55	8.55	... .
1912.							
Jan. 26	Aug. Toepfer, Madison.....	Rendtorff & Zilisch Co.	1.0310	3.65	12.40	8.75	41.1
Jan. 26	Chas. Dreger, Madison.....	Rendtorff & Zilisch Co.	1.0312	3.35	11.99	8.64	41.0
Mar. 6	Nick Hohner, Allenton	Wayne & Addison Cheese Fac.	1.0320	3.0	11.60	8.60	.....
Mar. 15	Louis Zuzanek, Kewaunee.....	Alaska Cheese Fac.	1.0330	3.5	12.49	8.99	.....
Apr. 22	E. D. Mayne, Fitchburg.....	Rendtorff & Zilisch Co.	1.0322	3.0	11.61	8.61	41.0
June 18	Martin Cherney, Denmark.....	F. N. Buckman Cheese Fac.	1.0321	3.15	11.88	8.73	40.7

Herd Samples Collected in Presence of Inspectors.

Date.	From herd of	Sp. Gr.	Per cent milk fat.	Per cent total solids	Per cent solids not fat.	I. R. of whey (20° C.)	Remarks.
1910.							
Aug. 11	Frank Maternowski, Green Bay	1.0306	3.3	11.98	8.68	41.7	
Aug. 11	Andrew Marcheski, Green Bay	1.0280	3.2	11.33	8.13	39.1	
Aug. 25	Ernest Bartling, Riley	1.0305	4.0	12.70	8.70	41.3	Morning's milk.
Aug. 25	Ernest Bartling, Riley	1.0310	4.0	12.76	8.76	42.0	Night's milk.
Aug. 29	Eichhorst Bros., Stevens Point	1.0321	4.2	12.97	8.77	41.1	Night's milk.
Sept. 2	Donohu & Son, Wausau	1.0334	3.25	12.35	9.10	.....	Night's milk.
Sept. 6	Fred Kratz, New Franken, R. D. 2	1.0312	4.0	12.84	8.84	42.0	
Sept. 10	Edward Stuelke, Lake Mills	1.0315	4.6	13.33	8.73	40.9	
Sept. 22	D. Sorensen, Oconto	1.0320	4.2	13.09	8.89	42.1	Night's milk.
Sept. 27	A. C. Brandt, Monroe	1.0320	4.15	13.16	9.01	41.2	Morning's milk.
Sept. 28	Balzer Wirtz, Sheboygan	1.0313	4.15	12.83	8.73	41.3	
Oct. 31	Peter DeBoer, Midway	1.0331	4.1	13.12	9.02	42.4	
Nov. 1	Howard Edwards, Evansville	1.0315	4.25	13.09	8.84	40.8	Night's milk.
Nov. 2	John Hart, Evansville	1.0328	4.0	12.88	8.88	42.3	Morning's milk.
Nov. 3	James Hanley, Hurley	1.0316	4.85	13.88	9.03	41.7	
Nov. 4	Frank Haasl, Park Falls	1.0298	5.70	14.20	8.50	41.3	Night's milk.
Nov. 7	Fred Shutz, Evansville	1.0311	4.25	13.36	9.11	41.0	Night's milk.
Nov. 7	Chas Webb, Evansville	1.0312	4.3	13.1	8.8	41.5	Night's milk.
Nov. 7	Rasmus Anderson, Evansville	1.0317	4.7	13.86	9.26	42.5	Night's milk.
Nov. 10	Theo. Gloeckler, Portage	1.0320	4.8	13.45	8.65	41.3	
Nov. 10	Theo. Gloeckler, Portage	1.0320	4.9	13.56	8.66	.....	
Nov. 11	E. Naslund, Superior	1.0335	4.15	13.49	9.34	.....	
Nov. 11	John Lund, Superior	1.0301	4.9	13.74	8.84	42.0	
Nov. 22	W. M. Ellis, Northport	1.0337	5.0	14.77	9.77	43.1	Morning's milk.
Nov.	M. Hahn, Sturgeon Bay	1.0331	5.4	14.71	9.31	43.9	Night's milk.
Dec. 15	Wm. DeGroot, Union Grove	1.0320	4.2	13.08	8.88	42.6	
Dec. 28	J. R. Merriam, Grand Rapids	1.0320	4.4	13.27	8.87	.....	
1911.							
Jan. 17	Henry Townley, So. Kaukauna	1.0330	5.4	14.78	9.38	44.0	
Mar. 6	Edward Westby, Clinton	1.0310	3.5	11.95	8.45	.....	Night's milk.
Mar. 7	Edward Westby, Clinton	1.0309	2.95	11.30	8.35	.....	Morning's milk.
Mar. 15	Mrs. G. Peterson, Stoughton	1.0301	3.65	11.99	8.34	.....	Night's milk.
Mar. 15	Andrew Nettun, Stoughton	1.0299	3.35	11.62	8.27	.....	Morning's milk.
Mar. 15	Andrew Nettun, Stoughton	1.0307	4.0	12.13	8.13	.....	Night's milk.
Mar. 16	Peter Nygard, Stoughton	1.0312	3.8	12.51	8.71	43.7	Morning's milk.

Herd Samples Collected in Presence of Inspectors—Continued.

Date.	From herd of	Sp. Gr.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	I. R. of whey (20° C.)	Remarks
1911.							
Mar. 16	Peter Nygard, Stoughton	1.0288	3.35	11.0	7.65	40.4	Night's milk.
Mar. 16	Mrs. G. Peterson, Stoughton	1.0297	3.8	12.07	8.27	.....	Morning's milk.
Mar. 21	H. G. Emerson, Capron, Ill., R. 1	1.0310	3.2	11.49	8.29	40.6	Night's milk.
Mar. 22	Peter Nygard, Stoughton	1.0310	2.75	11.05	8.30	40.35	Night's milk.
Apr. 14	H. Mueller, Johnson Creek	1.0290	3.0	10.85	7.85	.....	Night's milk.
Apr. 14	Leon Boutelle, Johnson Creek	1.0300	3.0	11.10	8.10	.....	Night's milk.
Apr. 14	H. Emmert, Johnson Creek	1.0310	3.3	11.71	8.41	.....	Night's milk.
Apr. 14	Geo. Broom, Johnson Creek	1.0290	2.9	10.73	7.83	39.8	Night's milk.
Apr. 14	Emil Schaefer, Johnson Creek	1.0290	3.4	11.33	7.93	.....	Night's milk.
Apr. 14	A. Voelker, Johnson Creek	1.0295	3.35	11.39	8.04	.....	Night's milk.
Apr. 14	A. Voelker, Johnson Creek	1.0300	3.5	11.70	8.20	.....	Night's milk.
Apr. 14	Aug. Nadler, Johnson Creek	1.0290	3.1	10.97	7.87	40.2	Night's milk.
Apr. 15	Jul. Haubenschild, Johnson Creek	1.0300	3.4	11.54	8.18	41.3	Morning's milk.
Apr. 15	Herman Stande, Johnson Creek	1.0285	3.3	11.08	7.78	.....	Morning's milk.
May 2	Robert Anderson, Greenwood	1.0313	3.4	12.03	8.63	40.7	Night's milk.
May 24	Chas. Luebcke, Middleton	1.0315	2.6	10.78	8.18	.....	Night's milk.
May 24	Chas. Luebcke, Middleton	1.0316	2.8	11.66	8.56	.....	Night's milk.
June 14	Jul. Splitgerber, Shawano, R. D.	1.0323	3.6	12.44	8.84	41.4	
June 19	Wm. Hohnke, Marshall	1.0291	3.9	11.65	7.75	.....	Night's milk.
June 20	Wm. Hohnke, Marshall	1.0296	4.35	12.18	7.83	.....	Morning's milk.
June 20	John Wellhoefer, Waterloo	1.0320	3.5	12.57	9.07	.....	Night's milk.
June 21	John Wellhoefer, Waterloo	1.0320	3.8	12.95	9.15	.....	Morning's milk.
June 21	A. Zimbrick, Waterloo	1.0304	2.8	10.96	8.16	.....	Night's milk.
June 22	A. Zimbrick, Waterloo	1.0310	3.05	11.59	8.54	.....	Morning's milk.
June 22	Wm. Krause, Waterloo	1.0310	3.0	11.34	8.34	41.0	Night's milk.
June 23	Wm. Krause, Waterloo	1.0310	3.3	11.88	8.58	41.7	Morning's milk.
June 23	John Friedel, Waterloo	1.0299	2.6	10.76	8.16	.....	Night's milk.
June 24	John Friedel, Waterloo	1.0307	2.65	10.95	8.30	.....	Morning's milk.
July 17	H. Schumacher, Cazenovia	1.0320	3.6	12.4	8.8	41.0	
July 17	H. Schumacher, Cazenovia	1.0316	3.4	12.12	8.72	.....	
Aug. 1	Fred Roder, Belleville	1.0310	4.0	12.50	8.55	40.6	Morning's milk.
Aug. 17	Anton Sobek, Pulaski	1.0310	3.8	12.52	8.72	41.0	
Aug. 17	Jos. Shinkas, Pulaski	1.0290	3.6	11.62	8.02	40.1	
Aug. 18	Jac. Zilinski, Pulaski	1.0316	4.0	12.62	8.62	40.6	

Aug. 25	John Dietsche, Spencer	1.0327	3.95	12.87	8.92	42.3	
Aug. 25	C. Mueller, Monroe	1.0300	3.7	11.96	8.26	40.4	Morning's milk.
Sept. 6	Barney Rutten, Little Chute	1.0313	4.05	12.69	8.64	40.5	
Sept. 25	Wm. Tilly, Green Bay, R. D. 8	1.0300	6.35	15.04	8.69	41.0	
Dec. 6	E. A. Paddock, Elkhorn, R. D.	1.0308	2.40	10.66	8.26	39.5	Morning's milk.
Dec. 6	E. A. Paddock, Elkhorn, R. D.	1.0294	2.80	10.82	8.02	38.5	Night's milk.
Dec. 27	Wm. Hoffman, Kewaunee, R. D. 6	1.0305	5.5	14.30	8.80	41.5	
1912.							
Jan. 26	F. Bohn, Watertown	1.0295	4.0	12.37	8.37	41.0	Night's milk.
Jan. 27	F. Bohn, Watertown	1.0293	3.6	11.83	8.23	41.0	Morning's milk.
Feb. 14	W. Kulkee, Jr., Watertown	1.0295	3.4	11.45	8.05	40.2	Night's milk.
Feb. 15	Wm. Kulkee, Jr., Watertown	1.0295	3.3	11.33	8.03	40.0	Morning's milk.
Feb. 20	Fred Melius, Rubicon	1.0310	3.4	11.92	8.52	42.0	Night's milk.
Feb. 21	Fred Melius, Rubicon	1.0328	3.5	12.58	9.08	42.8	Morning's milk.
Feb. 21	Wm. Hoff, Hartford	1.0315	3.5	12.19	8.69	41.7	Night's milk.
Mar. 6	Robt. Repe, Allenton	1.0299	3.6	11.79	8.19	.....	Night's milk.
Mar. 7	Nic. Hohner, Allenton	1.0324	3.3	12.06	8.76	.....	Morning's milk.
Mar. 7	Robt. Repe, Allenton	1.0306	2.7	11.99	8.29	.....	Morning's milk.
Mar. 7	Nic. Hohner, Allenton	1.0316	4.0	12.70	8.70	.....	Night's milk.
Mar. 8	Chas. Benedum Allenton	1.0329	2.65	11.40	8.75	.....	Morning's milk.
Mar. 15	Jos. Ray, Kewaunee	1.0310	4.8	13.01	8.21	.....	
Mar. 15	Louis Stoller, Kewaunee	1.0301	2.80	10.68	7.88	.....	Night's milk.
Mar. 18	Fred Fach, Marshfield	1.0296	3.2	10.98	7.78	40.0	
Mar. 19	Jos. Blahnek, Kewaunee	1.0295	3.05	10.99	7.94	.....	
Mar. 19	Chas. Geier, Kewaunee	1.0295	3.3	11.25	7.95	.....	
Mar. 20	S. F. Hewitt, Neillsville	1.0321	4.0	12.77	8.77	42.4	
Apr. 1	Louis Clark, New Franken, R. 2	1.0310	4.1	12.57	8.47	40.5	Night's milk.
Apr. 3	G. Piescher, Granton, R. D. 1	1.0314	3.4	11.92	8.52	41.3	Night's milk.
Apr. 4	Adolph Schlinsog, Granton	1.0313	2.8	10.72	7.92	40.4	Night's milk.
Apr. 4	G. Piescher, Granton, R. D. 1	1.0335	3.5	12.58	9.08	43.7	Morning's milk.
Apr. 5	Adolph Schlinsog, Granton	1.0308	2.5	10.70	8.20	41.3	Morning's milk.
Apr. 26	Otto Toepfer, Madison	1.0305	3.3	11.18	7.88	40.0	Night's milk.
June 4	Mrs. F. Pech, Manitowoc	1.0334	4.3	13.51	9.21	.....	
June 26	James Kraynik, Denmark	1.0310	3.65	12.36	8.71	41.0	
June 26	Thos. Gaffney, Denmark	1.0328	3.15	12.04	8.89	41.6	
June 27	Jos. Buresch, Denmark	1.0331	3.6	12.51	8.91	41.2	
June 27	Martin Cherney, Denmark	1.0337	3.6	12.65	9.05	42.0	

Submitted Milks.

Date.	Submitted by	Sp. G.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	Remarks.
1910.						
July 11	American Milk Products Co.					Tested for formaldehyde. None found.
July 14	John Streit, Riley	1.0275	3.0	10.475	7.475	
July 15	Martin Leichtman, Abbottsford		3.4			
July 20	E. V. Harpold, Camp Douglas		.08			Skimmed milk.
Aug. 16	Robt. E. Peat, Riley	1.029	3.5			
Aug. 16	Robt. E. Beat, Riley	1.024	3.3			
Aug. 18	M. B. Aldrich, Shawano		4.40			
Aug. 18	M. B. Aldrich, Shawano		3.80			
Aug. 20	Mrs. Breitenbach, Madison	1.031	3.20	10.95	8.39	
Aug. 20	M. B. Aldrich, Shawano		3.80			
Aug.	Frank C. Willie, Fond du Lac		.9			
Sept. 10	D. M. Spicer, Tiffany		3.85			Sample "No. 17."
Sept. 10	D. M. Spicer, Tiffany		3.8			Sample "No. 32."
Sept. 10	D. M. Spicer, Tiffany		3.8			Sample "No. 40."
Sept. 14	State Fair Association		3.6			Tested for preservatives. None found.
Sept. 14	State Fair Association		5.8			Tested for preservatives. None found.
Sept. 14	State Fair Association		3.4			Tested for preservatives. None found.
Sept. 14	State Fair Association		3.6			Tested for preservatives. None found.
Sept. 14	State Fair Association		4.6			Tested for preservatives. None found.
Sept. 14	State Fair Association		4.8			Tested for preservatives. None found.
Sept. 14	State Fair Association		4.8			Tested for preservatives. None found.
Nov. 2	J. T. Lundeberg, Stoughton		3.7			Sample "No. 13."
1911.						
Jan. 3	D. Irvine, Greenwood, R. D. 3		3.6			
Jan. 10	Otto Naffine, Minn. Junction	1.032	3.7			
Jan. 19	Kenosha Creamery, Kenosha		3.4			
Jan. 19	Kenosha Creamery, Kenosha		3.0			
Jan. 23	Robt. Polzin, Minn. Junction		3.6			Sample "No. 1."
Jan. 23	Robt. Polzin, Minn. Junction		3.5			Sample "No. 2."
Feb. 13	Dr. J. Stevens, Janesville	1.0340	1.0	9.84	8.84	Skimmed. No preservative found.
Mar. 2	A. F. Boles, Osceola		2.8			
Mar. 5	J. A. Richards, Sparta					Tested for preservatives. None found.
Mar. 10	Jossi Cheese Co., Watertown	1.0265	2.05	9.08	7.03	Marked "Taylor."
Mar. 10	Jossi Cheese Co., Watertown	1.0232	2.75	9.10	6.35	Marked "Hardie No. 1."
Mar. 10	Jossi Cheese Co., Watertown	1.0258	2.9	9.93	7.03	Marked "Hardie No. 2."

Mar. 24	C. A. Zilisch, Madison	1.0304	3.3	11.56	8.26	Marked "No. 19½."
Mar. 24	C. A. Zilisch, Madison	1.0319	3.2	11.81	8.61	Marked "G."
Mar. 24	C. A. Zilisch, Madison	1.0313	3.0	11.35	8.35	Marked "No. 22."
Mar. 29	Frank Schultz, Fond du Lac		2.4			
April 1	B. E. Nelson, Woodruff	1.0317	3.9	12.75	8.85	
April 3	Theo. H. Richter, Burlington		4.4			
April 5	J. A. Richards, Sparta					Tested for preservatives. None found.
April 6	Chas. F. Perren, Waukesha		2.6			
April 14	Olaf Nelson, Madison	1.0320	3.0	11.74	8.74	
April 19	Theo. Richter, Burlington		4.8			
April 26	Henry Schempf Co., Fort Atkinson		0.07			Skimmed milk.
May 1	Theo. H. Richter, Burlington		4.9			
May 9	S. W. Trindle, Sharon		3.3			
May 18	Baltz Hoesly, New Glarus		3.1			Marked "No. 1."
May 18	Baltz Hoesly, New Glarus		2.8			Marked "No. 2."
May 18	Baltz Hoesly, New Glarus		2.9			Marked "No. 3."
May 18	Baltz Hoesly, New Glarus		3.6			Marked "No. 4."
May 18	Baltz Hoesly, New Glarus		3.4			Marked "No. 5."
May 18	Baltz Hoesly, New Glarus		3.2			Marked "No. 6."
May 18	Baltz Hoesly, New Glarus		3.2			Marked "No. 7."
May 19	Jos. Sneberk, Greenwood, R. 3		3.4			
May 24	C. A. Zilisch, Madison	1.0360	1.6	10.91	9.31	Sample marked "X."
May 24	C. A. Zilisch, Madison	1.0354	1.6	10.84	9.24	Sample marked "XX."
July 17	Prof. A. N. Winchell, Madison					Tested for preservatives. None found.
July 24	Clay Tyler, West De Pere, R. D. 1		3.0			
July 25	O. L. Kowalke, Madison					Tested for preservatives. None found.
Sept. 19	Jos. Severson, Dodgeville, R. D. 2		3.5			
Sept. 20	Wm. Brandenburg, Beloit, R. D. 29		3.55			
Oct. 11	Mr. Borden, Madison		5.95			
Nov. 29	J. F. Mirlach, Beaver Dam		5.0			
Dec. 4	Wuethrich Bros., Doylestown	1.0340	1.6			
Dec. 18	Peter O. Schineder, Darien		3.8			
1912.						
Jan. 26	Wisconsin Butter & Cheese Co., Elkhorn		3.0			Marked "No. 1."
Jan. 26	Wisconsin Butter & Cheese Co., Elkhorn		3.3			Marked "No. 2."
Feb. 3	Chas. Wiswell, Elkhorn		3.3			Marked "No. 1."
Feb. 3	Chas. Wiswell, Elkhorn		3.35			Marked "No. 2."
Feb. 3	Chas. Wiswell, Elkhorn		3.7			Marked "No. 3."
Mar. 5	E. G. Erickson, Frederick, R. D. 2		4.15			
Mar. 7	A. G. Palmer, Lake Geneva		3.4			Marked "No. 4."
Mar. 7	A. G. Palmer, Lake Geneva		3.35			Marked "No. 5."
Mar. 7	A. G. Palmer, Lake Geneva		3.5			Marked "No. 6."
Mar. 20	A. G. Palmer, Lake Geneva		3.4			Marked "No. 1."
Mar. 20	A. G. Palmer, Lake Geneva		3.4			Marked "No. 2."
Mar. 20	A. G. Palmer, Lake Geneva		3.2			Marked "No. 3."

Submitted Milks—Continued.

Date.	Submitted by	Sp. G.	Per cent milk fat.	Per cent total solids.	Per cent solids not fat.	Remarks.
1912.						
Mar. 26	Clarence Ward, Madison, R. D. 3.....	1.0363	2.0	11.47	9.47	
Mar. 26	Clarence Ward, Madison, R. D. 3.....	1.0352	3.2	12.64	9.44	
April 24	B. Boemke, Fall Creek.....	.....	4.15	.....	.....	
May 1	Hoard's Creameries, Fort Atkinson.....	.....	3.55	.....	.....	
May 10	G. M. Spier, Tiffany.....	.....	3.9	.....	.....	Marked "No. 15."
May 10	G. M. Spier, Tiffany.....	.....	3.8	.....	.....	Marked "No. 19."
May 17	F. J. Zell, Mosinee.....	.....	1.8	.....	.....	
June 14	J. T. Henderson, Birnamwood.....	.....	3.75	.....	.....	
June 17	Julius Krug, Madison.....	.....	3.2	.....	.....	

MISCELLANEOUS.

Samples Collected by Inspectors.

Date.	Bought for	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1910.					
July 26	Ice cream powder.....	John Poulis, Ashland.....	B. Heller & Co., Chicago...	Snow	Contains a gum.
Oct. 31	Nabisco	M. L. Nelson, Madison.....	National Biscuit Co., New York.	.....	Tested for saccharin. None found.
1911.					
Jan. 20	Red fruit color.....	P. M. Rohrer, Cochrane....	Spense, McCord Drug Co., La Crosse.	.....	A coal tar dye.
Jan. 26	Currants	A. C. Dixon & Son, Kilbourn.	W. M. Hoyt Co., Chicago..	Mallard	Labeled "Cleaned currants." Not cleaned currants. Misbranded. Mixed with sand, stems and small stones.
Feb. 9	Pickles	A. Puerer & Son, Jefferson..	Wm. Hemming Co., Chicago	.....	Contain benzoic acid and alum.
Feb. 23	Gelatin	John A. Krumholz, Arcadia.	Wixon Spice Co., Chicago...	Wixon	Composed of 86% sucrose (cane sugar) and 9.4% gelatin.
Feb. 28	Bleached raisins	Findlay & Co., Madison....	.....	.....	Bleached with sulphur dioxide, 0.18%.

Mar. 21	Sugar	T. E. George, Madison			Contains 0.00099% sulphur dioxide.
Mar. 21	Sugar	O. R. Jacobson, Madison			Contains 0.00019% sulphur dioxide.
Mar. 21	Sugar	Miss Walker, Madison			Contains 0.0014% sulphur dioxide.
Mar. 22	Lard purifier	G. Ulrich & Co., Neenah	B. Heller & Co., Chicago		Commercial sodium bicarbonate.
Mar. 23	Maple sugar	Frank Henzlik, Chippewa Falls.	The Towle Maple Products Co., St. Paul, Minn.	Towle's	No adulteration found.
Mar. 29	Currants	O. H. Meyer, Portage	The Hills Bros. Co., New York.		Labeled "Perfectly cleaned currants." Misbranded. Not perfectly cleaned currants. Sample contains sand, stems and other dirt.
Mar. 29	Dates	O. Kopplin, Portage	The Hills Bros. Co., New York.	Royal Excelsior selected	Misbranded. Not a selected product. Contains some mouldy and unripe dates.
April 27	Prepared mustard	E. Simonson, Waunakee	W. M. Hoyt Co., Chicago	Mallard	No adulteration found.
Aug. 11	Powder used in ice cream	R. Else & Son, Milton			Composed of corn starch and a gum sweetened with sugar.
Sept. 27	Cocoa	Wm. Steinmeyer Co., Milwaukee.	Wm. Steinmeyer Co., Milwaukee.		No adulteration found.
Oct. 2	Lemon pie filling	J. Morshauser, Madison	Logan-Johnson Co., Boston		Contains Glucose, corn starch, benzoic acid and a coal tar dye.
Nov. 1	Frou Frou	Kelly Grocery Co., Janesville			Contains boric acid or a salt thereof.
Nov. 7	Bourbon whiskey	The Cardinal Hotel, Madison	W. A. Gaines & Co., Frankfort, Ky.	Old Crow	No adulteration found.
Nov. 8	Bourbon whiskey	Brader & Ripp, Madison	W. A. Gaines & Co., Frankfort, Ky.	Old Crow	No adulteration found.
Nov. 9	Lard and tallow purifier	Geo. Ashbacher, Prairie du Chien.	B. Heller & Co., Chicago		Commercial sodium bicarbonate.
Dec. 5	Confectionery sugar	C. S. Nelson, Spooner			Colored with cochineal.
1912.					
Feb. 9	Glaze	Puritan Candy Co., Milwaukee.			Arsenic calculated as the trioxide of arsenic, 25 parts per million.
Feb. 9	Glaze	Badger Candy Co., Milwaukee.			Arsenic calculated as the trioxide of arsenic, 2½ parts per million.
Feb. 9	Glaze	Royal Candy Co., Milwaukee.			Arsenic calculated as the trioxide of arsenic, 5 parts per million.
May 7	Powdered sugar	Ole Bergsug, New Richmond.			No adulteration found.
May 29	Baking powder	Jenzen Co., Milwaukee	Jenzen Co., Milwaukee		Labeled: "This baking powder is composed of the following ingredients and none other—calcium acid phosphate, bicarbonate of soda, corn starch and egg albumen and sodic aluminic sulphate." Contains alum. Not labeled in compliance with law.
May 29	Baking soda	Jenzen Co., Milwaukee	Jenzen Co., Milwaukee		No adulteration found.

Miscellaneous—Submitted Samples.

Date. 1910.	Sample of	Submitted by	Remarks.
July 25	Water	Jacob Jackson, Village Clerk, Independence	Parts per million. Total solids (105° C.) 133.00 Loss on ignition 50.00 Ammonia as free 0.30 as albuminoid 0.082 Nitrogen as nitrates none as nitrates traces Chlorine 2.40 Oxygen absorbed (24 hrs.) 2.00
July 30	Coating from a "McKay's" cream sampler.	H. C. Larson, Madison	Contains a copper compound.
Dec. 12	Oysters	Dr. G. E. Crosley, Milton	Tested for preservatives. None found.
1911.			
Jan. 11	Powdered sugar	Joseph W. Pizer, 851 Sobieski, St., Milwaukee.	No adulteration found.
Jan. 23	Ham sandwich	H. G. Bennett, Milwaukee	No adulteration found.
Mar. 10	Konserverungs salz	E. H. Schwartz & Co., Marinette	Contains sulphite.
Mar. 29	Zero pickle	Fred Dix, Colby	A mixture of sodium chloride (salt) and potassium nitrate (saltpeter).
Apr. 4	"Fresh" eggs	G. A. Lukwitz, La Crosse	Not fresh eggs.
May 13	Drier		
May 13	Drier	Midland Linseed Co., Minneapolis, Minn..	Marked "Atlantic Crusher Drier." Contains 71.6% mineral oil.
May 13	Drier	Midland Linseed Co., Minneapolis, Minn..	Marked "Tower Crusher Drier." Contains 78.3% mineral oil.
May 13	Chinese paint oil	Midland Linseed Co., Minneapolis, Minn..	Marked "Linseed oil drier." Contains 1.7% unsaponifiable material.
May 24	Asbestos pipe covering	A. M. Ophany, Windsor	Contains a low boiling mineral oil product.
Oct. 19	Granulated sugar	State Board of Control, Madison The J. F. Bruss & Sons Co., Cedarburg	Magnesium calculated as calcium magnesium silicate 87%. No adulteration found.
1912.			
Feb. 15	Table salt	Geo. C. Shutts, Whitewater	Standard.

May 23	Soap chips	State Board of Control, Madison	Moisture, 4.90%. Ash, 18.9%. Unsaponifiable material, 0.2%.
May 23	Soap	State Board of Control, Madison	"White Cloud Laundry." Moisture, 19.3%. Ash, 15.9%. Unsaponifiable material, 0.17%.
May 23	Soap	State Board of Control, Madison	"Borax Laundry." Moisture, 25.1%. Ash, 14.5%. Unsaponifiable material, 0.78%.
June 28	Soap chips	State Board of Control, Madison	Moisture, 13.1%. Ash, 19.2%. Unsaponifiable material, 0.9%.
June 28	Soap	State Board of Control, Madison	"Borax Laundry." Moisture, 28.2%. Ash, 15.2%. Unsaponifiable material, 1.14%.

OLEOMARGARINE.

Oleomargarine Held to be in Semblance of Yellow Butter.

Date.	Bought of	Manufacturer or Jobber.	Brand.
1911.			
Jan. 19	L. M. Shakman, New Lisbon	Swift & Co., Chicago	Jersey.
Nov. 16	Jacob Huber, Wausau	Schwarzschild & Sulzberger, Chicago	Myrtle Leaf.
Nov. 15	D. C. Jones, Tomahawk	Swift & Co., Chicago	Lincoln.
Nov. 16	Jacob Huber, Wausau	Schwarzschild & Sulzberger, Chicago	Majestic.
1912.			
Jan. 18	D. E. Lussier, Merrill	Swift & Co., Chicago	Lincoln.
Jan. 18	Peterman Bros., Merrill	Swift & Co., Chicago	Lincoln.
Jan. 28	Geo. Rothlisberg, Merrill	Swift & Co., Chicago	Lincoln.
Jan. 30	J. J. Stumreiter, Fifield	Armour & Co., Chicago	.....
Feb. 12	Jacobs Bros., De Pere	Swift & Co., Chicago	Lily.
Mar. 18	Fred Will, St. Croix Falls	Armour & Co., Chicago	Silver Churn.

Oleomargarine Tested for Butter fat, Little or None Found.

1911.			
Nov. 24	Allen Hanson, Eau Claire	John F. Jelke Co., Chicago	Imperial.
Nov. 24	T. F. Connley, Eau Claire	John F. Jelke Co., Chicago	Good Luck.
Nov. 24	L. H. Starkey, Eau Claire	John F. Jelke Co., Chicago	Good Luck.
Mar. 16	Mrs. M. C. Boylan, Cumberland	.....	

Oleomargarine Tested for Per Cent of Fat.

Date.	Bought of	Manufacturer or Jobber.	Brand.	Per cent fat.
1911.				
Dec. 20	Chas. Hess, 802 3rd St., Milwaukee.....	Grossenbach & Co., 299 Broadway, Milwaukee....	.....	88.3
1912.				
Jan. 9	Wm. Hintzen, Madison.....	Friedman & Co., Chicago.....	.....	83.8
Jan. 9	Welcher Market Co., Madison.....	Wm. J. Moxley, Chicago.....	Dairy	87.5
Jan. 9	W. P. Lynch, Madison.....	John F. Jelke Co., Chicago.....	Good Luck	86.4
Jan. 9	Olwell Bros., Madison.....	Armour & Co., Chicago.....	Buttercup	87.8
Jan. 9	A. G. Ruter, Madison.....	Swift & Co., Chicago.....	Lily	81.7

OLIVE OIL.

Olive Oil, Not Standard.

Date.	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1912.				
Mar. 28	Hess Pharmacy, Milwaukee.....	.....	.....	Contains sesame oil.

Olive Oil, Standard.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Brand.
1910.			
Oct. 19	Wm. A. Oppel, Madison	Wm. A. Oppel, Madison	
Oct. 19	Findlay & Co., Madison		
Oct. 19	Piper Bros., Madison	Anouil Courbin Co., Bordeaux, France	
Oct. 19	M. L. Nelson, Madison	Nicelle Olive Oil Co., New York	White Label.
Oct. 19	Ott's Pharmacy, Madison	Meyer Drug Co., St. Louis	Maltese Cross.
Oct. 19	Hollister Drug Co., Madison	Lautie Fils, Grasse, France	L. F.
1911.			
Jan. 19	Stephen S. Cycmanick, La Crosse	Chas. P. Grogan, Los Angeles, California	Purity.
1912.			
Jan. 29	C. P. Schubring, Madison	Glaser & Kohn Co., Chicago	Rugini.
Jan. 29	Wm. Beglinger, Madison	H. J. Heinz Co., Pittsburgh	Heinz.
Jan. 29	John G. Hyland, Madison		Les Trois Croix.
Jan. 29	Wm. Brady Co., Madison	Atwood & Steele Co., Chicago	A S C.
Jan. 30	W. Nehs & Son, Baraboo	Reid, Murdock & Co., Chicago	Couteaux
Jan. 30	F. C. Peck, Baraboo	S. Rea & Co., Leghorn, Italy	
Mar. 7	Love Bros., Waukesha	Sprague, Warner & Co., Chicago	Ferndell.
Mar. 7	Putney Bros. Co., Waukesha	Nicelle Olive Oil Co., New York	Nicelle.
Mar. 7	Hugo Hoeveler, Waukesha	Squibbs & Co., New York	
Mar. 8	The Department Store, Oconomowoc	Rodier Fils et Cie., Nice, France	
Mar. 8	The Coöperative Store, Oconomowoc	Reid, Murdock & Co., Chicago	Dumouron.
Mar. 18	C. Oliva, Madison	Marca Dante, Genoa, Italy	
Mar. 21	Prideaux & Bliss, Mineral Point		
Mar. 21	The Metz Pharmacy, Mineral Point		
Mar. 21	Ivey's Pharmacy, Mineral Point		
Mar. 22	H. A. Robinson, Platteville		
Mar. 22	Youman's Pharmacy, Platteville		
Mar. 23	Brown Drug Store, Highand		
Mar. 28	A. Spiegel Co., Wisconsin St., Milwaukee		
Mar. 28	The A. Schrader Co., Milwaukee		
Apr. 2	H. Ausman & Sons, Elk Mound	Atwood & Steele, Chicago	
Apr. 2	Wm. Seidenberg, Elk Mound	Strohmeyer & Arpe Co., New York	Re Umberto.
Apr. 3	Dana & Worm Drug Co., Fond du Lac		
Apr. 3	Sallade & Ruh, Fond du Lac		
Apr. 3	B. Buchholz & Co., Fond du Lac		
Apr. 4	*W. O. McKenna, Madison		
Apr. 8	C. A. Hogan, Durand	Spence-McCord Drug Co., La Crosse	
May 14	F. Dohman Co., Miwaukee	F. Dohman Co., Milwaukee	

*Submitted sample.

SODA FOUNTAIN CRUSHED FRUITS AND SYRUPS.

Tested for Benzoic Acid, Salicylic Acid, Saccharin, and Artificial Color.

Date	Bought for	Bought of	Manufacturer or Jobber.	Color.	Benzoic acid.	Salicylic acid.	Saccharin
1912.							
May 8	Pineapple fruit juice.	L. Hess, Madison.....	Liquid Carbonic Co., Chicago.	Natural	None	None	None .....
May 8	Cocoa syrup...	L. Hess, Madison.....	Liquid Carbonic Co., Chicago.	Natural	None	None	None .....
May 8	Strawberry crushed fruit.	L. Hess, Madison.....	Liquid Carbonic Co., Chicago.	Cudbear	None	None	None .....
May 8	Lemon syrup...	L. Hess, Madison.....	Liquid Carbonic Co., Chicago.	Natural	None	None	None .....
May 8	Orange syrup...	L. Hess, Madison.....	Liquid Carbonic Co., Chicago.	Natural	None	None	None .....
May 8	Strawberry crushed fruit.	J. L. McCarthy, Madison	Hungerford Smith Co., Rochester.	Cochineal	None	None	None .....
May 8	Wild cherry fruit juice.	J. L. McCarthy, Madison	Hungerford Smith Co., Rochester.	Cudbear	None	None	None .....
May 8	Pineapple fruit juice.	J. L. McCarthy, Madison	Hungerford Smith Co., Rochester.	Natural	None	None	None .....
May 10	Cherries	A. J. Schwoegler, Madison.	Hungerford Smith Co., Rochester.	Cochineal	None	None	None .....
May 10	Cherries	L. Russos, Madison.....	Hungerford Smith Co., Rochester.	Ponceau 2R or 3R red, a coal tar dye.	Present	None	None .....
May 10	Grape stock	Chas. Waltzinger, Madison.	Habicht & Brain, Chicago.	Natural	None	None	None .....
May 10	Strawberry stock.	Chas. Waltzinger, Madison.	Habicht & Brain, Chicago.	Natural	None	None	None .....
May 10	Cherry stock..	Chas. Waltzinger, Madison.	Habicht & Brain, Chicago.	Natural	None	None	None .....
May 10	Cherry crushed stock.	L. Russos, Madison.....	L. Russos, Madison.....	Natural	None	None	None .....
May 10	Raspberry crushed fruit.	L. Russos, Madison.....	L. Russos, Madison.....	Natural	None	None	None .....
May 10	Raspberry crushed fruit.	Palace of Sweets, Madison.	Armour & Co., Chicago	Natural	None	None	None ... .
May 10	Cherries	Palace of Sweets, Madison.	Armour & Co., Chicago	Coal tar dye, either Ponceau 2R or 3R red.	None	None	None .....

SPICES.

Date.	Bought for	Bought of	Manufacturer or Jobber.	Remarks.
1911.				
Apr. 10	Ground black pepper.....	Farmers' Produce Co., Chippewa Falls.	Wixon & Co., Chicago....	No adulteration found.
Apr. 27	Black pepper	Wm. Rabenowich & Sons, Park Falls.	.....	No adulteration found.
Apr. 27	Cinnamon	E. Simonson, Waunakee.	Wm. Hoyt Co., Chicago....	No adulteration found.
Apr. 27	Jamaica ginger	E. Simonson, Waunakee.	W. M. Hoyt Co., Chicago..	No adulteration found.
Apr. 27	Black pepper	E. Simonson, Waunakee.	W. M. Hoyt Co., Chicago..	No adulteration found.
Nov. 1	Ground pepper	Taylor Bros., Janesville....	.....	Not standard. Contains excessive amount of crude fiber.
Nov. 1	Mustard	Taylor Bros., Janesville....	.....	Not standard. Contains charlock or Dakota mustard.
Nov. 1	Mustard	Kelly Grocery Co., Janesville.	.....	Not standard. Contains charlock or Dakota mustard.
Nov. 1	Ground pepper	Norton & Maloney, Janesville.	Sherer-Gillett Co., Chicago.	Standard.
Nov. 1	Mustard	Norton & Maloney, Janesville.	Chesbrough & Moss Co., Beloit.	Standard.
Dec. 7	Black pepper	H. M. Burrington, Tomahawk.	Henry Wichert, Chicago.	Standard.
1912.				
Mar. 4	Ground mustard	Taylor Bros., Janesville....	.....	No adulteration found.

SYRUPS, MOLASSES, AND SYRUP MIXTURES.

Maple Syrup.

NOT STANDARD OR MISBRANDED.

Date.	Bought of	Manufacturer or Jobber.	Labeled.	Brand.	Remarks.
1910.					
Dec. 28	H. L. Platte, Prescott....	St. Paul Syrup Refining Co., St. Paul, Minn.	Sap Maple Syrup, ¼ Gallon Full Measure.	Virgin pure.....	Short measure. Misbranded.
1911.					
Jan. 26	H. L. Platte, Prescott....	St. Paul Syrup Refining Co., St. Paul, Minn.	Sap Maple Syrup, ¼ Gallon Full Measure.	Virgin	Short measure. Misbranded.
Jan. 26	H. L. Platte, Prescott....	St. Paul Syrup Refining Co., St. Paul, Minn.	Sap Maple Syrup, ¼ Gallon Full Measure.	Virgin	Short measure. Misbranded.
May 6	John H. Murphy, System Hotel, Portage.	.....	.....	.....	Served with meal as maple syrup. Not maple syrup.
1912.					
Mar. 7	The Palmer Hotel, Fond du Lac.	.....	.....	.....	Served with meal as maple syrup. Not maple syrup.

Maple Syrup.

STANDARD.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Brand.
1910.			
July 13	*O. J. Burnham, Richland Center.....	.....	.....
Dec. 15	Ward Grocery Co., Chippewa Falls.....	Griggs, Cooper & Co., St. Paul.....	Home.
Dec. 16	Felix Dorwin, Eau Claire.....	Franklin MacVeagh & Co., Chicago.....	Club House.
1911.			
April 26	C. F. Lohr & Son, Hartford.....	Reid, Murdock & Co., Chicago.....	Bismarck.
April 27	*Hon. A. H. Reid, Wausau.....	.....	.....
May 17	*Clinton B. Ballard, Appelton.....	.....	.....
Sept. 29	*F. M. Buzzell, Chippewa Falls.....	.....	.....

1912.			
Jan. 29	*F. M. Marty, Monroe		
April 25	*Theo. Jensen, River Falls		
April 27	*W. Darling, Mattoon		
April 30	*Dr. Mauermann, Monroe		
May 5	*G. W. Paulus, Grand Rapids		
May 8	*Hon. J. H. Dennhardt, Neenah		
May 9	*C. A. Russell, Winneconne		

Submitted samples.

Miscellaneous Syrups and Molasses.

Date.	Bought for	Labeled.	Bought of or Submitted by.	Manufacturer or Jobber.	Brand.	Remarks.
1910.						
Dec. 16	Cane sugar syrup..	Cane sugar syrup.....	Borgen & Aune, Eau Claire.	Eau Claire Grocery Co., Eau Claire.	Colon	No adulteration found.
1911.						
Jan. 24	"Sorghum molasses."	.....	*P. H. Frowley, Gotham	.....	.....	No adulteration found.
Jan. 25	Pure sugar cane syrup.	Pure sugar cane syrup...	Olwell Bros., Madison...	Gould, Wells & Blackburn Co., Madison	White Hall..... White Hall.....	No adulteration found. Tested for sulphur dioxide. None found.
Mar. 20	Cane syrup	Pure sugar cane syrup...	Olwell Bros., Madison...	Gould, Wells & Blackburn Co., Madison	Red Hen.....	Contains 0.0027% sulphur dioxide.
Mar. 21	Molasses	Louisiana molasses.....	T. E. George, Madison..	Oelrich & Laux, Chicago		
Mar. 21	"Karo corn syrup"	Karo	Thos. Olson, Madison...	Corn Products Refining Co., New York.	Karo	Contains 0.00034% sulphur dioxide.
Mar. 21	Molasses	Molasses	Miss Walker, Madison...	Oelrich & Berry, New Orleans, La.	Uncle Ben.....	Contains 0.0038% sulphur dioxide.
Dec. 14	Sorghum syrup.....	.....	*Charles N. Strong, Chetek.	.....	.....	No adulteration found.
1912.						
Feb. 27	Sorghum syrup.....	.....	*Ewald Green, Spring Green.	.....	.....	No adulteration found.

*Submitted sample.

Syrup Mixtures.

Date.	Bought for	Labeled.	Bought of	Manufacturer or Jobber.	Brand.	Remarks.
1910.						
Dec. 12	Sugar and maple syrup.	Sugar syrup and maple syrup.	Emery & Dewey, Madison.	Sprague, Warner & Co., Chicago.	Monsoon	Labeled as required by law.
Dec. 12	Sugar and maple syrup.	Sugar syrup and maple syrup.	Fred Bartels, Jr., Madison.	Sprague, Warner & Co., Chicago.	St. Croix.....	Labeled as required by law.
Dec. 12	Sugar cane syrup flavored with maple syrup.	Sugar cane syrup flavored with maple syrup.	M. Diederich, Madison..	St. Louis Syrup & Preserving Co., St. Louis, Mo.	Ohio	Not a sugar cane syrup mixture. Not labeled as required by law.
Dec. 15	Sugar and maple syrup.	Sugar syrup and maple syrup.	Ward Grocery Co., Chippewa Falls.	Sprague, Warner & Co., Chicago.	St. Croix.....	Labeled as required by law.
Dec. 15	Maple and cane sugar syrup.	Maple and cane sugar syrup, 50% maple, 50% cane sugar syrup.	Success Store, Chippewa Falls.	Corn Products Co., Chicago.	Kanuck	Labeled as required by law.
Dec. 15	Cane and maple syrup.	Syrup, 15% maple and 85% cane syrup.	Pelletier & Paquette, Chippewa Falls.	Manierre-Yoe Syrup Co.,	Silver Kettle.....	Not a cane syrup mixture. Not labeled as required by law.
Dec. 16	Maple and cane syrup.	Canadian maple and cane syrup.	A. Nelson & Co., Eau Claire.	Wm. R. Manierre, Chicago.	Old Manse.....	Not a maple and cane syrup mixture. Not labeled as required by law.
Dec. 21	Cane syrup and maple syrup.	Cane syrup and maple syrup, a blend of 15% maple and 85% cane syrup.	Huppler & Postel, Muscoda.	Manierre-Yoe Co., Chicago.	Silver Kettle.....	Not a cane syrup mixture. Not labeled as required by law.
Dec. 28	Cane and maple syrup.	Cane and maple syrup..	Mrs. A. F. Carson, Maiden Rock.	St. Paul Syrup & Refining Co., St. Paul, Minn.	Canada Sap.....	Not a cane and maple syrup mixture. Not labeled as required by law.
Dec. 29	Sugar cane and maple syrup.	Sugar cane syrup flavored with maple syrup. Cane syrup 80%, maple syrup 20%.	C. H. Kaste, Alma.....	St. Louis Syrup & Preserving Co., St. Louis, Mo.	Ohio	Not a sugar cane syrup. Flavored with maple syrup. Not labeled as required by law.
1911.						
Jan. 19	Cane and maple syrup.	Cane and maple syrup. Cane 80%, maple 20%.	M. J. Bezpaletz, La Crosse.	Clarence A. Crane Co., Warren, Ohio.	Beaver	Not a cane syrup mixture. Not labeled as required by law.
Dec. 19	Cane and maple sugar syrup.	Fancy sugar syrup, a compound ⅞ cane, ⅛ maple sugar syrup.	E. N. Fredendall, Janesville.	Bay State Maple Syrup Co., Boston, Mass.	Mt. Mansfield.....	Labeled as required by law.

TURPENTINE.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Remarks.
1910.			
July 11	Fred Klein Co., Madison		Tested for mineral oil. None found.
Dec. 21	J. M. Brophy, Lone Rock	W. M. Hoyt Co., Chicago	Tested for mineral oil. None found.
1911.			
Jan. 29	*Geo. La Breche, Manitowoc		Contains approximately 30% of a mineral oil product.
May 13	*A. M. Ophany, Windsor		Contains little or no turpentine.
May 20	Polk & Nelson, Madison	Standard Oil Co	Contains a small amount of a mineral oil product.
1912.			
May 20	*Wm. Tesch, Appleton		Tested for mineral oil. None found.

VINEGAR.

Date.	Bought for or Submitted as	Bought for or Submitted by	Remarks.
1910.			
Sept. 27	*Vinegar	J. Kimball, Briggsville	Below standard in acetic acid.
1911.			
Sept. 29	Cider vinegar	Emery & Dewey, Madison	No adulteration found.
Sept. 29	Cider vinegar	Purcell Bros., Madison	Not a standard cider vinegar. Below standard in apple solids.
Sept. 29	Cider vinegar	Findlay & Co., Madison	No adulteration found.
Sept. 29	Cider vinegar	J. Novick, Madison	Below standard in acetic acid.
Sept. 29	Cider vinegar	H. Lynch, Madison	No adulteration found.
Oct. 12	*Vinegar	C. Snoyenbos, Jr., Hersey	Below standard in acetic acid.
Nov. 22	Vinegar	Trevorrsh & Fish, Footville	No adulteration found.
Nov. 22	Vinegar	E. H. Mattice & Son, Footville	Not a standard cider vinegar. Below standard in apple solids.
Dec. 6	*Cider vinegar	C. E. Thorkelson, Racine	No adulteration found.
Dec. 6	*Vinegar	C. E. Thorkelson, Racine	Tested for acetic acid. Found to contain 5.5 grams per 100 ccs.
1912.			
Feb. 23	Cider vinegar	T. F. Greves, Waterloo	No adulteration found.
Feb. 23	Cider vinegar	C. S. Stacy, Waterloo	No adulteration found.
June 18	*Cider vinegar	G. E. Bible, Cazenovia	Below standard in acetic acid.

*Submitted samples.

WHITE LEAD AND ZINC WHITE.

White Lead.

NOT STANDARD.

Date.	Bought for	Labeled.	Bought of	Manufacturer or Jobber.	Remarks.
1910.					
Dec. 21	White lead.....	Perma White.....	Gus. Gilbertson, Lone Rock	Patek Bros., Milwaukee.....	Contains 22.50% of zinc white and 25.7% of barium sulphate.

White Lead.

STANDARD.

Date.	Bought of or Submitted by	Manufacturer or Jobber.	Brand.
1910.			
July 11	Fred Klein Co., Madison.....	.....	.....
Dec. 12	Polk & Nelson, Madison.....	Eagle White Lead Co., Cincinnati.....	.....
1911.			
May 1	*James Nevins, Madison.....	.....	.....
May 5	Fred Klein, Madison	Sherwin-Williams Co., Chicago.....	.....
May 5	Oldenburg & Doerschlag, Madison.....	National White Lead Co., Chicago.....	Dutch Boy.
May 5	Dresen & Rhodes, Madison.....	Eagle White Lead Co., Cincinnati.....	Eagle.
May 5	Mautz Bros. Co., Madison.....	Carter White Lead Co., Chicago.....	Carter.
May 5	Mautz Bros. Co., Madison.....	National White Lead Co., Chicago.....	Dutch Boy.
1912.			
Feb. 19	A. Pearson, Madison.....	De Voe & Reynolds, New York and Chicago.....	Devoe.
June 26	*State Board of Control, Madison.....	.....	.....

*Submitted samples.

Zinc White.

NOT STANDARD.

Date.	Bought of	Remarks.
1910. July 11	Fred Klein Co., Madison.....	Contains barium sulphate and calcium sulphate.

REPORTS OF ASSISTANT COMMISSIONERS

REPORT OF U. S. BAER, ASSISTANT COMMISSIONER

During this biennial period, I have been engaged in making inspections of cheese factories, creameries, city milk suppiles, skimming stations, condensing factories, dairy farms and herds, oleomargarine, grocery stores, restaurants and lunch counters, hotels, drug stores, flouring mills, ice houses and ice delivery wagons, meat packing houses, butcher shops, delicatessen stores, slaughterhouses, sausage manufactories, paint and oil stores, pop factories, bottling plants and ice cream plants, as follows:

Oleomargarine stores	384
Cheese factories	88
Creameries	14
City milk supplies	9
Skimming stations	3
Milk-condensing factories	16
Dairy herds and barns	23
Grocery stores	238
Butcher shops	54
Hotels	11
Restaurants and lunch counters	38
Drug stores	9
Flouring mills	2
Fair concessionaries	81
Ice wagons	34
Dairy herd milk samples	7
Second dairy	9
Combined butter and cheese factories	9
Cheese cold storage warehouses	19
Milk, cream, ice cream and whey cream shipping cans	2050
Ice cream manufacturing plants	44
Paint and oil stores and shops	16
Bottling plants and soft drink factories	9

While engaged in the work of inspecting, I have collected and have delivered into the hands of the state chemist 31 samples of food products for analysis.

In connection with the work of farm, factory, and city dairy inspection, I have tested several hundred samples of milk and cream by means of the Babcock test, the lactometer test, the curd test, the acidity test, the formaldehyde test, the borax test, the moisture test and the sediment test.

I have tested a large number of samples of milk, cream, cheese and butter, submitted to the commission from various sources and reported same to you on cards especially prepared for such work.

I have scored approximately five thousand samples of cheese and butter by the official numerical and descriptive score cards for the U. S. Dept. of Agriculture, Wisconsin Experiment Station, Monthly Cheese Scoring Exhibitions, State Fair, and various interstate, intercounty, and county fairs.

A portion of my time has been taken up in work at the office and laboratory, attending to correspondence, compiling statistics, drawing dairy maps, preparing photos and posters for the cheese factories of the state, the preparation of talks or lectures, the answering of inquiries relating to dairying on various topics coming from many quarters, especially from cheese manufacturers, in the mailing of biennial reports, bulletins, posters, pamphlet copies of dairy laws, circular letters and in proof reading.

I have made a number of second inspections of creameries, cheese factories and city dairies with other members of the commisson. As a result, in several cases, prosecutions and convictions followed work of this character. In this connection, I beg to report that some of the prosecutions reported by other members of the commission were the result in part of such work performed by me in accordance with your instructions.

During the period covered by this report, I have made addresses at several creamery and cheese factory picnics, morning and evening creamery and cheese factory patrons' meetings, farmers' gatherings and dairy conventions.

Merchants are generally becoming more and more guarded in making purchases, and jobbers more particular and careful as to shipping goods which do not comply with our food laws. The purchaser of to-day almost universally gets that which he buys and gets it free from poisonous substances, while for years before the law became operative and was vigorously enforced, a great many articles of food were largely adulterated and injurious to health. Food products in this state have been so gradually changed for the better that the consumer does not always fully appreciate to the full extent the work that the commission has done for his health and also for his pocket book.

CHEESE FACTORY CONDITIONS

A marked change has taken place in cheese factory management. Buildings and utensils are kept cleaner, and cheese makers are more generally becoming students of their business rather than imitators of their predecessors.

In general, the cheese factories inspected, so far as cleanliness and methods of management are concerned, with some exceptions, were in good and satisfactory condition, and fully equipped with up-to-date appliances. The live steam and hot water wash sink connections in the cheese factory of to-day insure cleanliness of utensils.

Most cheese factories in the state are now in good repair. Test bottles and milk-testing glassware have been calibrated and are kept clean and bright. Waste matter is not allowed on the soil of the factory premises and the whey tank is as a rule cleaned daily. Wooden floors have been done away with and cement floors have taken their place. Windows and doors have been quite generally provided with screens, thus reducing the number of flies in the building to the minimum. Many new factory buildings have been erected in all the cheese-making districts of the state.

The unclean and rusty condition of cans has been the source of a large amount of the tainted milk supplied to the factories. The inspectors, with the assistance of the cheese makers, have been able

to improve these to a great extent, but they are a source of trouble that will require the constant vigilance of the inspector.

CITY DAIRY AND MILK INSPECTION

The inspection of city dairies included the milk delivery wagons and utensils of the same used in the distribution of the product to the consumer, special attention being given to the sanitary conditions of the cattle, feed and farm or dairy barns. The insanitary bulk or can milk distribution system on dirty, dusty streets is fast being replaced by the more sanitary bottle system. The quality of the milk supply of our cities is certainly improving. Dairymen are as a rule taking pride in furnishing their customers with pure unadulterated milk and cream, and their wagons are generally neat, clean and nicely arranged. It is gratifying to report that a large percentage of the city dairies inspected were provided with stables having improved systems of ventilation, light and drainage, thus insuring the health and comfort of the herds. This particular branch of the inspection work of the commission is fast claiming additional attention and has come to be universally regarded by the people of the state as a most valuable work. The continued vigilance of the department's inspectors during the past two years, coupled with vigorous prosecutions of offenders against the law, has materially reduced the unclean practices of milk producers. However, we still have with us a class of dairymen who are careless with their stables, cows and milk at the time of milking. Dust and dirt are allowed to accumulate in the stables. No particular attention is given to light or ventilation. The cows are covered with dust and dung. A slap or two is given the udder and milking begins. The cans, into which the milk is strained, are allowed to stand in the stable until the milking is completed. No particular attention is given the milk before sending it to the milk depot or retailer. It is a matter of common knowledge among our people that the latter conditions are no longer the rule but rather exceptions to the rule.

DAIRY SHIPPING VESSELS

The rigid inspection of milk cans and milk bottles in cases, creamery and farm dairy cream cans, ice cream cans, whey cream cans and other dairy containers or vessels at various shipping, receiving and distributing stations in different localities of the state goes to show that a great improvement has taken place. The shipping vessels of to-day in the main are free from open seams and rust. They are as a rule in good repair and clean. The former practice of many shippers in disfiguring the outside of tin milk and cream cans with paint has become almost a thing of the past. The majority of retail ice cream dealers do not make their own product, but buy from some large manufacturer. Only recently have the retailers made any attempt whatever to clean the empty cans returned for refilling to the manufacturer. At the present time, with but an occasional exception, inspection discloses the fact that empty ice cream cans are washed and scalded before going into return transit. The present sanitary condition of vessels used for shipping dairy products in this state has been brought about primarily by means of tagging unfit shipping containers at depot platforms, etc., with tags especially prepared for the purpose, supplied by the commission to its inspectors. On the one side of these tags printed instructions are given as to how to properly clean the cans. On the reverse side of the tags is printed the specific law on the subject, together with the

penalty for the violation of same. In the enforcement of the regulations provided in the statute a number of the most flagrant, gross and deliberate offenders of the law were brought into courts of justice.

BABCOCK MILK TEST

Inspection and instruction with vigorous prosecutions of offenders against the law, has materially reduced the number of milk producers who deliver milk below the legal standard to consumers, cheese factories and creameries. Many cheese factories of the state which had formerly received the milk by the quantity, are now using the Babcock milk test. Although not all are buying by butter fat test, yet they are quite generally equipped so that they may know the quality of each patron's milk and are steadfastly refusing to accept milk that does not come up to the standard as prescribed by law.

OLEOMARGARINE

During the period covered by this report I have personally inspected three hundred and eighty four (384) retail oleomargarine markets in several of the larger cities located in both the eastern and western federal districts of the state. These inspections were for the purpose of ascertaining whether the dealers were complying with the state law in regard to the sale of oleomargarine. In most cases the dealers were conspicuously displaying the proper signs. I found five dealers who were selling oleomargarine colored in resemblance of yellow butter. The law was read and explained to each of these dealers. Three of them nailed up the packages or boxes containing the unlawful goods, tagging same for Chicago in my presence. Subsequent inspections showed the other two dealers to be handling lawful goods.

THE CHEESE FACTORY WHEY TANK

Marked improvements in the care and handling of the whey and whey tanks are being made by factory men in every cheese making section of the state. Many of our cheese factories have recently installed the elevated whey tank inside the factory building. A power pump or still better a steam jet is used to elevate the whey from the cheese vat to the whey tank. This is the ideal method of whey disposal. These tanks are more easily kept clean and do not receive the wash water and floor drainage as do some of the whey barrels, tanks and cisterns still in use at some of our cheese factories. Many factorymen have done away with the old filthy wooden tub sunk in the ground equipped with filthy wood pumps and have placed the tank outside the factory building, elevated above ground with sewer connections, so that it may be drained and washed daily. The outside elevated tank permits the air and sunshine to get all around it. To do away with a breeding place for flies, and to prevent rain, dirt and dust from entering the whey, a good tight cover should be provided.

SANITARY CONDITION

In the past two years marked improvement has been made in the sanitary condition of the grocery stores, meat markets, fruit and confectionery stores and other places where food products are sold or served to the consuming public.

REPORT OF H. C. LARSON, SECOND ASSISTANT DAIRY AND FOOD COMMISSIONER

During the biennial period ending June 30, 1912, I have been engaged in work along almost every line over which the Dairy and Food Commission has jurisdiction.

I have personally and in company with Inspectors Dufner, Voigt, VanDuser, Southard, Cannon, Aderhold, Marty, Carswell, Guse, and Scott inspected 157 creameries, cheese factories, dairies and dairy barns; 524 grocery stores, meat markets, slaughterhouses, ice cream factories, canning factories, restaurants and hotels; the cans, milk and cream at twelve creameries; cheese factories and city milk supplies, testing the milk and cream at six of the same, besides a great many samples which have been sent to the office; witnessed the milking and obtained samples of milk from five herds where adulteration was suspected; examined a great many milk, cream and ice cream cans which were found at depots all over the state, the same having been returned from the dealer to the shipper; have attended the State Cheese Makers' and Butter Makers' Association meetings and have scored the butter exhibited in connection with the latter, also at the State Fair and at a number of county butter makers' association meetings; have attended and addressed a number of creamery and butter makers' meetings; have acted as one of three judges who have scored and criticized the butter exhibited in connection with the state butter and cheese scoring exhibtions; have also scored considerable experimental butter at the University Wisconsin dairy school.

Considerable time has been spent investigating complaints charging various kinds of violation of the dairy and food laws which have come to the office from different parts of the state. While engaged in investigation and inspection work, a great many copies of the dairy and food laws, and weights and measures law enacted by the 1911 legislature have been distributed and explained to dealers who were amenable to the same, also a great many copies of the Attorney General's opinion, in which he states that the jurisdiction of the Dairy and Food Commission extends to the enforcement of section 4600 and to 4601 relating to hotels, restaurants, lunch counters, boarding houses, etc., have been handed to the proprietors of hotels, restaurants, etc.

Two hundred and ninety-nine samples of food products suspected of being adulterated have been purchased and delivered to the state chemist for analysis.

Dairymen, milk, cream and ice cream dealers have been prosecuted for the sale of milk below legal standard, of cream from dirty cans and below legal standard in milk fat, and of cream produced by the use of a cream separator not thoroughly washed after previous use in the separation of cream from milk, and for not washing ice cream cans before return shipment; butchers for the sale of meat not protected from filth and flies; dealers in oil for the sale of adulterated linseed oil as and for pure linseed oil; a cheese maker for the manufacture of cheese in an unclean cheese factory; restaurant and hotel proprietors for furnishing oleomargarine without notifiying the guests that the substance so furnished was not butter.

As a result of such prosecutions more than 90% of the defendants have been convicted and have paid fines ranging from $25 to $50 besides the cost of prosecution. A great many second inspections of

places over which this department has jurisdiction have been made with the inspectors before mentioned and have resulted in prosecution and conviction of a number of violators of the dairy and food laws, which are not included in this report but are reported by the inspector bringing the prosecution.

CREAMERIES AND CHEESE FACTORIES

There has been great improvement in the equipment and sanitary condition of the creameries and cheese factories of the state, although not so pronounced as in former years, for the reason that to start with they were in the main equipped with modern machinery and in a fairly sanitary condition. There are, however, conditions and practices at many creameries and cheese factories that should be improved.

PUMPS, PIPES, AND TANKS FOR SKIM MILK, BUTTERMILK AND WHEY

In the great majority of cases the pumps and pipes used for pumping and the tanks for holding the skim milk, buttermilk and whey are found to be not sanitary, being rusty and many constructed so as to make it impossible for the operator to clean the same. Many tanks, although cleaned daily, are rusty and many others are placed in the ground and no attempt whatever made to clean them.

CANS

There is no doubt that large sums of money have been lost in the past on both butter and cheese manufactured from cream and milk contaminated by being cared for in cans which have been used to carry the by-products from the factory to the farm, the patrons not having thoroughly washed the cans after emptying the skim milk or whey and before putting the whole milk or cream into them. When talking this matter over with the factorymen and operators, they have said to me that it was the duty of the patrons to thoroughly wash their cans before putting the milk or cream into them, which is true, but I have pointed out to them that it was no less their duty to handle the skim milk, buttermilk and whey in such a cleanly manner that that the patrons' cans would not become contaminated by having the same put into them. It is my judgment, and I have asserted it whereever opportunity afforded, that these products should be handled under absolutely sanitary conditions and be so clean that the owner or operator of a creamery or a cheese factory would just as soon take a drink of skim milk, buttermilk, or whey at the faucet or pump from which the patron drew the same into his cans as he would from the separator, churn or cheese vat.

SCREENS

Not all the factories are provided with suitable screens to exclude flies. When talking with owners or operators, I have tried to impress upon them the necessity of proper screening by giving a word picture of a day in the life of a fly, such as its visits to all kinds of foul places, becoming contaminated and, if permitted to do so, entering the creamery or cheese factory, the milk or cream, carrying with it contamination of filth and disease, which if unheeded would no doubt continue to result in not only great loss of money but of life.

TESTING

There is still a great deal of carelessness practiced on the part of creamery and cheese factory operators in the taking of samples of milk and cream and in the care and testing of the same. The milk or cream to be sampled is often not properly mixed. Many composite samples are cared for in top jars which permit of evaporation, and in the making of many tests the factors necessary to correctness are more or less ignored. Many cream scales have been found in a more or less rusty condition, also the 9 and 18 gram weights have been found coated with grease and dirt, making it impossible to do accurate work. I have always pointed out to the operators that the law required that all apparatus used be accurate and that correct fat determinations be made, and have shown that such determinations could only be made where the apparatus was clean, the scales sensitive and the greatest possible care taken in all of the work of making the test.

For the purpose of protecting the cream scales from dust and dampness when not in use, I have recommended that a tight stationary box be provided and arranged so that a steam pipe in daily use pass through, or, if that is not possible, a small cup of sulphuric acid be placed in the box to take up the moisture.

SCORING EXHIBITIONS

The work of the state butter and cheese scoring exhibitions to which I have given two or three days each month has resulted in great good to the butter and cheese makers taking part in them, who in turn have been helpful to their patrons in assisting them in the production of better milk and cream, which has resulted in the manufacture of better butter and cheese. The following are typical of letters which I have received from a great number of butter makers taking part in the scoring exhibitions:

"In reply to your letter asking about what good I have received from the scoring held at the University of Wisconsin Dairy School, will say: Will soon have my second year finished and my score will average over one point higher this year than for the one previous. Have been able to control both moisture and salt and I give the scoring contest credit for my improvement. I think it helps the patrons to take better care of their milk and cream. I do not understand why every butter maker in Wisconsin does not send; am sure they could get a great deal of good."

"The benefits I have received from the scoring contests are very great, and I know to continue with the same will mean success and continued interest in my career as a butter maker."

"In reply to yours of the 20th I am glad to state that I have derived great benefits from the judges' remarks on each tub and the letter of information always received. I have 340 patrons and we make 236 tubs in the flush against 118 last year."

"Replying to your inquiry relative to the benefits that I have received from taking part in the state butter scoring exhibitions, I will say, I have been better able to control the composition of the butter with reference to salt and moisture. The letters received with the score sheets from the judges on which they criticised the butter have enabled me to make great improvement. I have often received suggestions as to why my butter did not score higher which in every case has been looked into with good results. From such experience I have been able to talk to the patrons and help them produce better cream and as a result the quality of my butter has been greatly im-

proved. I think every butter maker in the state ought to take part in this work."

Sediment Tests

The sediment tests of the city milks by the use of a little instrument designed for the purpose have been the means of causing the production of very much cleaner milk. From the milk of each producer a pint is taken after all the milk has been well mixed, which is the amount used for every test. The entire pint of milk is forced through a cotton disc which catches all the solid sediment contained in the milk. The amount of sediment thus found is a safe indication of the clean or unclean conditions under which the milk is produced.

Dairy Inspection

Great improvement in the dairy herds and barns of the state has been made. A good dairy sire of one breed or other is found at the head of a great many herds. Many dairymen, by weighing the milk from each cow and testing the same are learning which are good and which are poor. They are weeding out the poor cows, raising the heifer calves from the good ones and are thus building up herds of good and profitable producers. Many barns are being provided with cement floors, better light and a good system of ventilation.

A great many milk houses have been built and cream separators by the thousands have been removed from barns and placed in milk houses or other suitable places. Notwithstanding this great improvement, very, very much yet remains to be made. Therefore, it is my ɹuəɯƃnɟ that the dairy inspection work should be given all the time possible, for the reason that the inspector can see just what the conditions are, can make the dairymen acquainted with the dairy laws and can make suggestions as to dairy buildings and as to how to best care for the milk and cream, also how the barns can be improved by whitewashing and putting in cement floors, good gutters, plenty of light and ventilation, which, if followed, will mean less filth, cleaner cows, better milk and more money for it, no matter for what purpose it is used.

Milk, Cream and Ice Cream Cans

The inspection of hundreds of empty milk and cream cans at railway stations goes to show that they are good and clean, having been thoroughly washed before being delivered to the railway station for return shipment. While improvement has been made in the case of ice cream cans, yet many of the retail dealers who purchase ice cream from the wholesalers do not thoroughly wash the cans before returning the same.

Grocery Stores and Meat Markets

There has been a marked improvement in the sanitary condition of grocery stores and meat markets. Food products, including fruits, etc., in the main will be found protected from dust and flies. The front rooms of meat markets are generally kept clean and neat and I am glad to report that many of the back workrooms have been greatly improved and cleaned up; also the instruments used are kept much cleaner.

OLEOMARGARINE

I am glad to report that the oleomargarine law of this state is being complied with practically to the letter. Dealers have the proper signs displayed and the oleomargarine sold is not in imitation of yellow butter.

SLAUGHTERHOUSES

Some of the slaughterhouses have been greatly improved, but many are maintained in a very unclean condition. They are poorly constructed, and in a condition which makes it impossible to keep them clean. When the slaughtering is done, the offal is thrown just outside of the building on the ground where hogs are kept for the purpose of eating the same. Some of these premises that have been in use for years have become so foul that it would seem hardly possible for the men doing the slaughtering to stand the stench. After slaughtering, notwithstanding the foul condition in and around many of these places, and with no protection whatever from flies, the meat is permitted in many cases to remain there over night.

PRICE DISCRIMINATION

Investigation shows that there is need in this state of an effective price discrimination law. The lack of such a law affords buyers of cream an opportunity to pay different prices at different places. For example, one of the large centralizers buying cream in this state paid on a certain day 23 cents a pound for fat at one place and on the same day at another place farther away from the central plant where there was a good local creamery in operation they paid 26 cents a pound for fat, presumably for no other purpose than to cripple the local creamery.

REPORT OF FRED P. DOWNING, CHIEF INSPECTOR OF WEIGHTS AND MEASURES

During the past year great strides have been made toward securing correct weight and measure. The laws relating to weights and measures prior to the enactment of chapter 566, 1911, had no adequate machinery for their proper enforcement. It was practically an impossibility to secure convictions in court owing to the necessity of proving "intent" to defraud. A few cities, notably Milwaukee, had effective ordinances; but aside from this, there was no general system of inspection. As a result of this lack of proper legislaton many frauds were perpetrated upon an unsuspecting and unprotected public.

Certain manufacturers in this state had offered for sale measures that were short, weights that had never been sealed, scales that were inaccurate or designed to short-weight the consumer; grocers were selling commodities in a manner contrary to law; berry growers were offering berries for sale in containers of widely varying sizes; commisson men and wholesalers were importing commodities into the state in barrels and bushel baskets that were usually short: in fact, the evils of short weight and measure had come to a point where the public demanded legislation that would afford relief.

This awakening was brought about to a large extent through the publicity attached to the work that had been done in several other

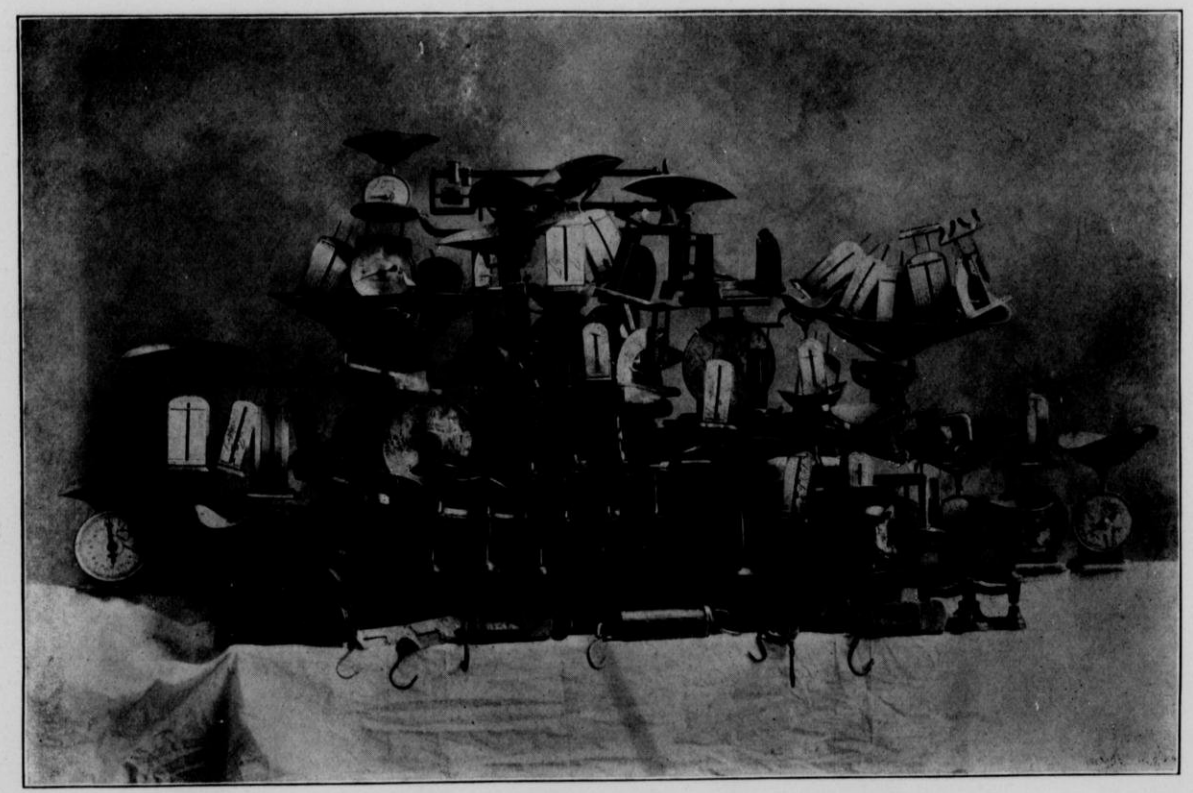


FIG. 17.—SAMPLES OF CONFISCATED SPRING AND COUNTER SCALES.

states and in a number of the larger cities of the country. Through the efforts of the former state sealer, Professor L. S. Smith, and others, a revised weights and measures bill was prepared and finally enacted into law.

The enforcement of this law was put into the hands of the dairy and food commissioner who was made ex officio state superintendent of weights and measures. It provides for an annual inspection of all weights, scales and measures in the state, the work to be done in the cities of over 5000 inhabitants by city sealers, and in the smaller towns and villages by state inspectors. Provision was made for a chief inspector of weights and measures to assist the state superintendent of weights and measures in the administration of the law. State standards were established and provided for as well as were the proper working outfits for the state sealers. The law provided for state supervision of all sealers of weights and measures and issuing of regulations for their guidance; it prescribed the manner of sale of certain specified commodities and provided penalties for the violation of many of its numerous provisions.

In the enforcement of this law the Wisconsin dairy and food commission has had the support of the general public and of honest business men. Not only does the law protect the consuming public, but it has been an important factor in the uplifting of the ethics of business transactions. The dealer, who in the past has resorted to cutting prices and then short-weighting his customers, has been forced to change his methods or undergo the publicity of a trial in court.

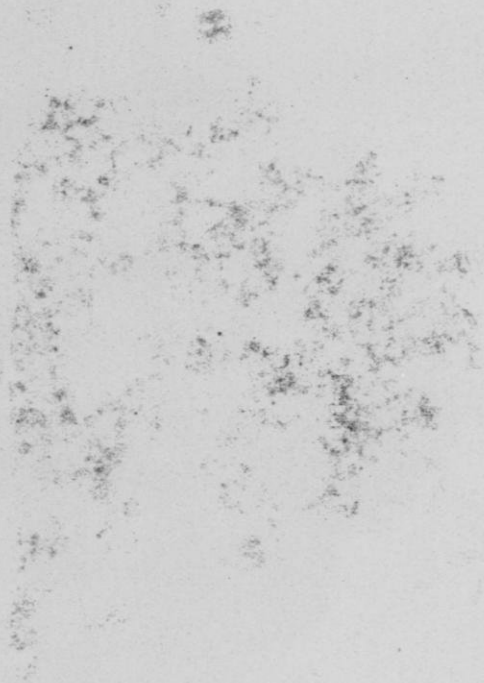
Prior to the organization of the department, a careful, exhaustive study was carried on of the work done in other states possessing effective laws on weights and measures. This investigation covered such subjects as equipment, keeping of records, regulations, and methods of inspection. The equipment now in the office of the state superintendent of weights and measures and the working outfits carried by our state sealers are the best and most serviceable that can be obtained in this country. (See illus., pp. 32, 37, 38.) One of the problems of inspection is to get a working outfit as light and compact as possible and at the same time complete in every detail. Under the Wisconsin weights and measures law the sealer must go to the store, the office or the factory to do his inspecting and testing. One of the chief reasons why the old law on weights and measures proved a dead letter was that under it the merchant was obliged to carry scales or measures to the courthouse of his county to be tested. This of course was rarely if ever done.

A system of keeping records has been carefully worked out. Our files show what cities and villages have been inspected, the number of measuring devices that have been tested and sealed, the number adjusted, and the number either condemned and confiscated or condemned for repairs. A follow-up system of inspection has been instituted. Merchants with defective scales have been given a certain time to make repairs. To avoid unnecessary reinspection trips, cards have been issued to dealers which are filled out and sent to the office of weights and measures as soon as defective scales have been repaired. For the guidance of both city and state sealers a booklet of instructions has been issued. This booklet contains a list of faulty weights and measures likely to be encountered, directions for the proper method of testing weighing and measuring appliances, and the specifications with which all scales, weights and measures used in Wisconsin must comply. The uniform and systematic system of inspection by sealers in all parts of the state can be to a large degree attributed to the issuing and placing of this booklet in the hands of all sealers.

Shortly after the organization of the state department of weights and measures, a circular letter was issued to the mayors of cities having a population of over 5000 inhabitants, calling their attention to sections 1660 and 1661 of the statutes, and requesting them to invite the attention of the city councils to the provisions therein contained. A goodly number of councils responded and made adequate provision for the appointment and equipment of a city sealer. In other places the letter if not the spirit of the law was complied with. To obtain competent men for a responsible office, the salary must be made adequate. That this has not always been done is made manifest in a number of cases shown in Table I. In some instances this apathy and lack of interest on the part of the council was due to misunderstanding. In other cases it became necessary for the chief inspector to make an inspection of the business places of the city, give a report of the same to the local press, and awaken the public sentiment of the city in favor of the office. Frankness compels the admission that the attitude of some of the common councils in the matter of the protection of consumers has been found lacking in both enthusiasm and aggressiveness.

The average annual salary paid to the city sealers of weights and measures in Wisconsin is $658.37. If we exclude the city of Milwaukee, the average is reduced still further and falls to $546.90. These figures reveal the necessity of a minimum salary being incorporated in the state statutes. In six cities of Wisconsin there are as yet no sealers of weights and measures at work. The cities of South Milwaukee and Menasha have made no provision for either salary or equipment of a city sealer; the city of Neenah has made no provision for office or equipment, but has created the office of sealer of weights and measures and determined what the salary shall be. The city of Marshfield has purchased the equipment for the sealer, but the salary is placed so low that no applicants have appeared for the place. Sheboygan is the only one of the larger cities in which the terms of the law have not been complied with. This city had a sealer of weights and measures prior to the enactment of the state law relating to weights and measures. Up to the present time, no appointment has been made by the mayor from the list of those who qualified in a competitive examination.

Table I likewise reveals that inadequate provision has been made for the testing of heavy dormant and wagon scales. It is absolutely necessary that sealers be provided with a conveyance for this line of work. Notwithstanding the discouraging facts mentioned above, many of our city sealers are rendering excellent service and it is to be hoped that the importance of the service rendered will be made so apparent as speedily to bring about a readjustment of matters. The city sealer's work under state supervision is by no means a "joke." He is vastly more than a "sealer" of weights and measures; he is the local officer entrusted with both the enforcement of the city ordinance and the state law. His strict attention to the duties of the office will go a long way toward helping to reduce the present high cost of living.



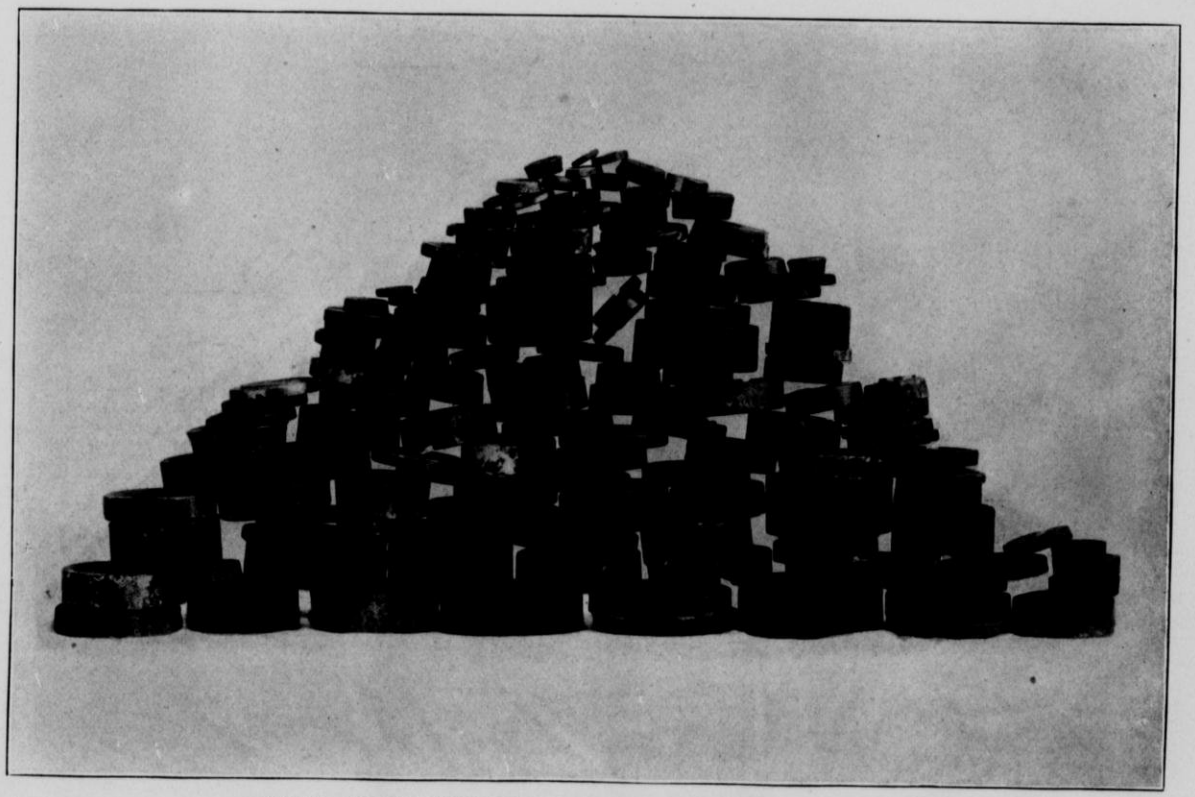


FIG. 18.—CONFISCATED WORN, PLUGGED AND DRILLED WEIGHTS.

TABLE I.

City.	Population.	Sealer.	Salary per annum.	Office.	Conveyance.
Antigo	7,196	C. S. Leykom	$524	With mayor	Use city team.
Appleton	16,773	E. Schueller	300	City Hall	Hired by city.
Ashland	11,594	A. J. Kull	780		
Baraboo	6,324	F. A. Philbrick	360	None	Hired by city.
Beaver Dam	6,758	Homer B. Hubbell	300	Police station	None.
Beloit	15,125	W. M. VanLone	720	Council room	Hired by city.
Chippewa Falls.	8,893	F. R. Hughes	500	City Hall	None.
Eau Claire	18,310	Jos. F. Weizenegger	300	City Hall	Under consideration.
Fond du Lac	18,797	Jos. L. Weber	600	Council room	Hires.
Grand Rapids	6,521	B. Metzger	420		
Green Bay	25,236	John M. Kelliher	720	None	Hired by city.
Janesville	13,894	F. Kennedy (resigned)	200	None	Furnished by city.
Kenosha	21,371	Felix A. Mayer	900	City Hall	None.
La Crosse	30,417	E. H. Derr	1,000	City Att'y.	$200
Madison	25,531	H. L. Thompson	1,200	City Clerk	Maintenance for auto.
Manitowoc	13,027	Henry Mulholland	3 0	None	None.
Marinette	14,610	W. H. Nichol	300	City Engineer.	City team.
Marshfield	5,783				
Menasha	6,081				
Menomonie	5,036	George Shafer	300	City Hall	City
Merrill	8,689	R. W. Barrett	800	City Hall	None.
Milwaukee	373,857	Fred C. Janssen	1,800	City Hall	Automobile, horse and wagon, horse and buggy.
		Wm. F. Steinel	1,200		
		Wm. A. Phillips	1,000		
		E. A. Morgan	1,000		
		Wm. M. Cropper	1,000		
		Fred Nielson	1,000		
		Albert Levick	1,000		
		E. W. Herbst	720		
Neenah	5,734				
Oconto	5,629	John E. Youngs	120	None	City team.
Oshkosh	33,062	Walter R. Meyer	660	City Hall	Hired.
Portage	5,440	Wm. Netzo	600	City Hall	Own.
Racine	38,002	D. E. Fitzgerald	1,000	City Hall	None.
Rhinelander	5,637	H. J. Danfield	300	City Hall	Hired by city.
Sheboygan	26,396		420		
So. Milwaukee	6,092				
Stevens Point	8,692	E. H. Flentie	600		
Superior	40,384	N. G. Penfound	960	Temporary	Hired by city.
Waukesha	8,740	John J. Staub	300	None	$75 appropriation.
Wausau	16,560	J. H. Pomeroy	900	City Hall	Hired by city.
Watertown	8,829	Edw. Gnatzig	720	City Hall	Hired by city.
West Allis	6,645	Wm. R. Baumann	300	City Hall	

Appointees to the position of city or state sealer of weights and measures of necessity were men who had but little previous experience or knowledge of scale testing. State sealers according to law were obliged to qualify as expert butter and cheese makers. After thus qualifying, they were turned into an entirely new and previously unknown field of work. It became necessary therefore to hold a school of instruction before such appointees could be set at work. Assistance of a similar nature has been rendered to the cities, trained and experienced state men being sent to confer with local sealers, assisting them in the proper interpretation of the laws and regulations and giving instruction of a technical nature. The state law relating to weights and measures prescribes that all weights, scales and measures used in trade shall be tested and sealed at least once each year. The combined population of the thirty-five cities required by law to do their own inspection and sealing is 875,667, or approximately one-

third of the total population of the state. With the exception of the above mentioned cities, all the vast and varied weights and measures work in all sections of the state is required to be performed by the state department of weights and measures. For this enormous increase of work, fully doubling the work of the dairy and food department, only seven additional appointees were provided. The absolute impossibility of adequately accomplishing this gigantic task with this limited force should be manifest to all. For the state to make an annual inspection of all weighing and measuring devices and do all that is required by law at least twenty additional men will have to be employed.

The work of the state department has been compiled up to June 30, 1912 and is given below. Table II gives the total number of first inspections from January 1, 1912 to June 30, 1912. Table III gives the percentage of first inspections that have been found correct and sealed, the percentage that have been adjusted by the sealer and the percentage that have been condemned and confiscated or condemned for repairs for the period of time shown in Table II.

TABLE II—*Total number of first inspections from January 1, 1912, to June 30, 1912, inclusive.*

Instrument.	Sealed.	*Adjusted.	Condemned for repairs.	Condemned.	Total.
Scales	3,325	689	470	326	4,121
Dry measures	260	....	37	517	814
Liquid measures	6,589	23	114	2,047	8,750
Weights	7,847	921	346	209	8,402
Linear measures	956	80	1,911	1,151	4,018
Milk bottles	28	.....	.....	.....	28
Measure pumps	714	317	70	32	816
Miscellaneous	18	2	.....	.....	18
Total	19,737	*2,032	2,948	4,282	26,967

* The appliances adjusted have been sealed and in computing totals are included in Sealed column.

The extremely high percentage of incorrect dry and linear measures is due in part to noncompliance with the new regulations issued by the state superintendent of weights and measures. Dry measures falling short of the proper diameter and counter tacks with large heads in dry goods stores have been condemned even though the same were accurate as to cubical contents or linear dimensions. It will be observed that nearly 25% of the liquid measures have been condemned. These measures have in many instances been made short by the manufacturer. Others have been manfactured of such flimsy material that they have become dented the moment they were put into service, and still others, through carelessness on the part of the dealer, have become caked with oil. Many of the measuring pumps for kerosene and gasoline have been found to be inaccurately adjusted. This trouble is now being overcome by requiring manufacturers of such pumps to provide caps for each stop so the same can be properly sealed.

Table III shows that out of a total of 26,967 tests, 9,262 or 34.9% have been found incorrect. This is an appalling percentage and is a startling revelation of the necessity of the work this department is performing. Without laws regulating the testing and sealing of weigh

TABLE III.

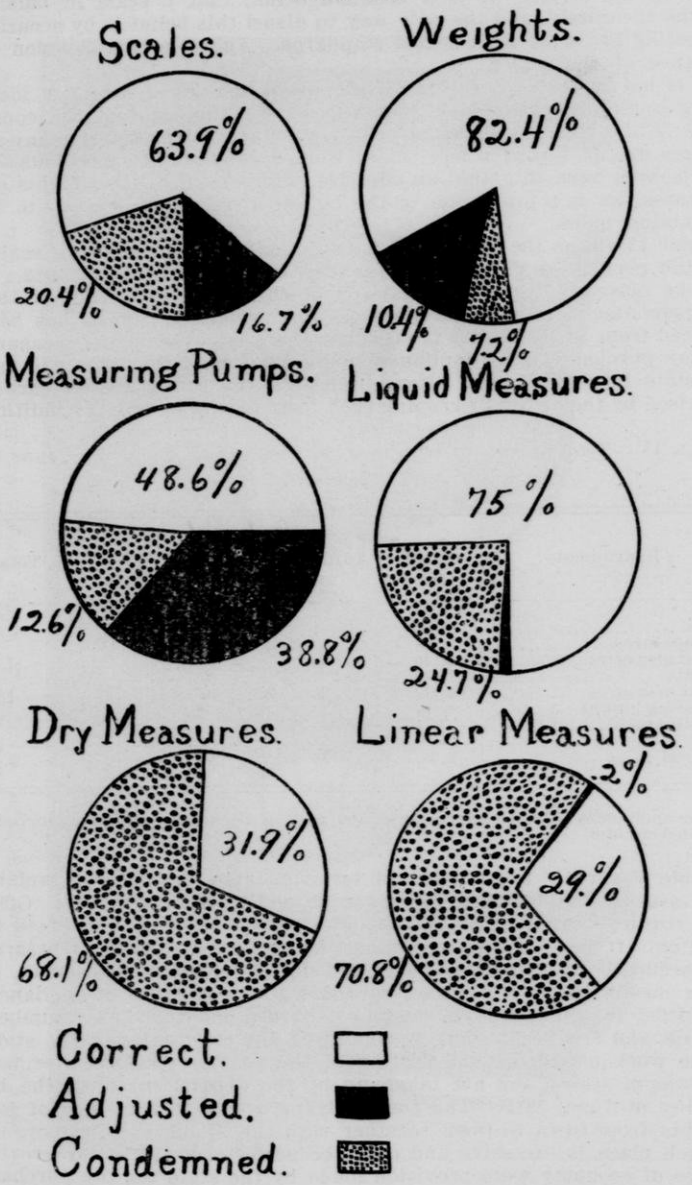


FIG. 19.—DIAGRAM ILLUSTRATING WORK IN TESTING, FIRST SIX MONTHS, 1912, BY WISCONSIN STATE DEPARTMENT OF WEIGHTS AND MEASURES.

ing and measuring appliances, the dealer is often unaware of any defects in his scales. It is a common belief, that a scale in balance weighs accurately, and the only way to dispel this belief is by accurately testing the scale with sealed standards. And this is a common experience of the sealer.

It is not to be implied that all the above mentioned incorrect measuring appliances have been found to be working against the consumer. While this is true in a large percentage of cases, yet many instances are on record where scales were deceiving the merchants. It will be seen from this, that an effective enforcement of the weights and measures law is a protection to the honest merchant as well as to the consuming public.

Table IV shows the number of reinspections made by the state sealers for the period extending from January 1, 1912 to June 30, 1912. It will be observed from a comparison of this table with Table I that the percentage of incorrect measures and weighing devices has been reduced from 34.9% to 11.9%. Owners of scales, weights and measures are now purchasing such appliances under a guaranty that they will pass the state inspection; and after purchasing the same, greater care is exercised by the owner in keeping such instruments in proper condition.

TABLE IV—*Total number of reinspections from Jan. 1, 1912 to June 30, 1912, inclusive.*

Instrument.	Sealed.	*Adjusted.	Condemned for repairs.	Condemned.	Total.
Scales	333	17	97	6	436
Dry measures	68	.....	1	10	79
Liquid measures	1,045	3	43	92	1,180
Weights	448	25	23	.....	471
Linear measures	1,377	23	160	8	1,545
Measuring pumps	94	10	12	1	107
Miscellaneous	4	.....	2	.....	6
Total	3,369	*78	338	117	3,824

* The appliances adjusted have been sealed and in computing totals are included in Sealed column.

Table V reveals the number of tests made in the office of weights and measures at Madison for the year ending June 30, 1912. Office tests require work of a much higher degree of accuracy than field inspection. It has been necessary during the present year to pass on the accuracy of standards purchased by 27 cities of Wisconsin, to make careful tests for manfacturers and others of types of appliances submitted for our approval, and to calibrate and seal large numbers of milk and cream test bottles sent in by the creameries of the state.

The work of testing and sealing of the heavier platform, dormant and wagon scales was not taken up by the department until the beginning of June, 1912. The cost of transporting 1000 pounds of test weights from town to town together with the hiring of a conveyance at each place is excessive and could be performed with a far greater degree of economy were provision made by the state for the purchase of automobile trucks or other vehicles.

FIG. 20.—KEROSENE MEASURE, SHORTAGE SHOWN BY GRADUATE. MILK MEASURE WITH BOTTOM HAMMERED UPWARD. VINEGAR MEASURE MADE SHORT BY SAWING OFF TOP.

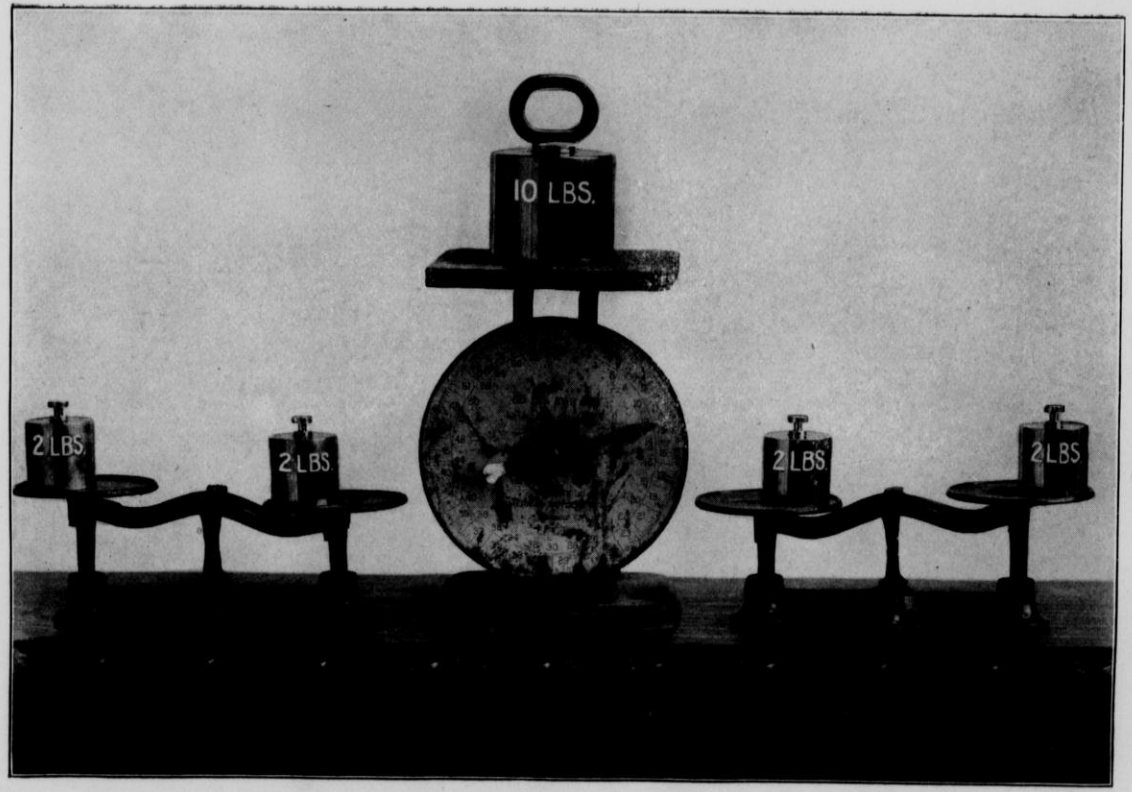


FIG. 21.—MEAT SCALES WHEREON 10 LBS. WERE MADE TO WEIGH 12½ LBS. ALSO TWO EVEN ARM BALANCES SHOWING VARIATION OF 4 OZ. BY SIMPLY SHIFTING PLACE OF WEIGHTS.

TABLE V.—*Office Tests for year ending June 30, 1912.*

Instrument.	Correct.	Incorrect.	Total.
City standards	1,460	51	1,511
Babcock cream test bottles	950	414	1,364
Babcock milk test bottles	603	20	623
Pipettes	28	8	36
Cream test scales	13	3	16
Weights	5	.....	5
Commercial scales	3	.....	3
Liquid measures	3	1	4
Dry measures	15	14	29
Linear measures	5	.....	5
State working standards	253	.....	253
Miscellaneous	30	.....	30
Total	3,368	511	3,879

In addition to the above work which consists of elimination of incorrect types of weighing and measuring appliances, considerable time has been devoted toward the securing of proper use of such appliances. By instituting a system of try-outs in which purchases have been made by the inspectors and in which packages put up for delivery with bills attached have been reweighed, it has been possible to eliminate a large percentage of the inaccuracies due either to carelessness or intent. The force of men to accomplish this work is entirely inadequate. Much of this work has been performed incidentally by the creamery and cheese factory inspectors in connection with their numerous other duties. Of necessity a great deal of this work has been instructional in nature. Below is a statement of the number of inspections made, together with the results of the same:

INSTRUCTIONAL WORK DEALING CHIEFLY WITH SALE OF BERRIES, FRUITS AND VEGETABLES.

Inspections	1,503
Weight or measure given found correct	85
Weight or measure given short of that called for	144
Weight or measure given in excess of that called for	30
Total number of try-outs	1,762

The passage of the new law has had a wholesome effect in regulating the method of sale of many commodities and in correcting certain abuses that have arisen and that were sanctioned by custom. It has been customary for years for grocers to purchase beans and other commodities by weight and then retail them to their customers in liquid quart measures, thus taking from their customers from 10% to 15% of what was their due. A dry quart contains 9.45 cubic inches or nearly 15% more than the liquid quart. Thousands of such illegal measures have been seized and destroyed by officers entrusted with the enforcement of the law and hundreds of others have been destroyed by merchants having them in their possession. It is the exception now for sealers to discover such measures in use anywhere in the state. (See illustration, p. 40.)

The so-called bottomless measure was another device that enabled the retailer to get five pecks out of one bushel. This measure while it contained the proper number of cubic inches was long and narrow, thus preventing any heap as required by law. As a filler for paper

sacks it is admittedly convenient, but as a device for enabling dealers to defraud their customers it has few equals. This form of measure has also been practically driven from use during the past year.

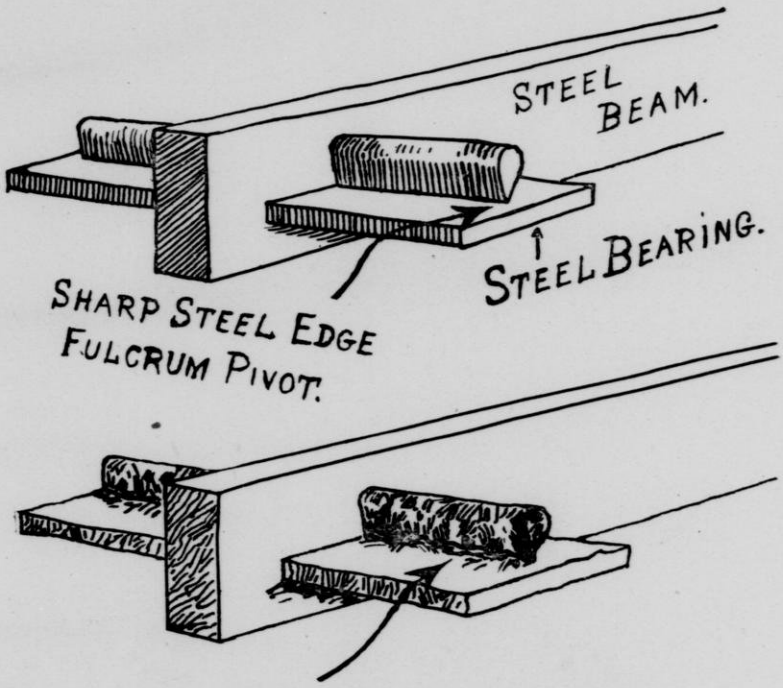
Short bushel and half-bushel baskets so long prevalent everywhere are also gradually disappearing. Our law specifies that in the commodities named the measure of the bushel dry measure is not 2150.4 cubic inches as many suppose, but the number of pounds stated in the law. The enforcement of this provision has practically revolutionized the method of sale of all of our dry commodities such as apples, potatoes, cranberries, etc., Many of our grocers have discarded their measures and now sell all dry commodities by weight or count. Much misunderstanding has arisen as a result of the weight and the volume bushel, and it would undoubtedly be advisable to eliminate dry measures entirely and provide for the sale of all fruits, nuts and vegetables by weight or count. With the two standards it is possible to buy by weight and sell by measure when vegetables are heavy and reverse the method when such vegetables have become light through shrinkage.

Another of the so-called "trade customs" has been the practice of including the weight of heavy paper sacks, wrapping paper and wooden trays in the weight of the commodity purchased. Trays used for butter and lard weigh from one-half ounce to one ounce according to size; heavy sacks for sugar weigh from one to three ounces. When the dealer receives the price of sugar, butter and lard for such wood and paper he is indeed making a large and excessive profit. Effort has been directed towards the elimination of such practices. Anyone selling less than the quantity he represents is liable to prosecution. This provision should entitle the buyer to receive net weight on all purchases put up by the retailer.

Many of the creameries of the state were turning out butter prints short of 16 ounces when the new law was enacted. Some butter prints were found running less than 14 ounces to the pound. Most of the creameries of the state are now furnishing full weight prints for the Wisconsin market and in a number of instances the butter has been found to be over-weight. A few manufacturers still evade the law by putting out short prints and selling them as such instead of by weight. In some instances they receive the regular market quotations for butter and in other cases the price is slightly below the market value per pound. In either instance the practice is unfair both to honest manufacturers and to the public, and legislation is needed forbidding the sale of butter in any other manner than by weight.

It has been customary to sell strawberries, currants, raspberries and other small fruits by the box. A very common size box in this state was the so-called "wine quart" holding 5/6 of a standard dry quart. Other growers used boxes slightly larger holding 60 cubic inches or 9/10 of a dry quart. Many boxes coming into the state from the south were 25% short of a standard dry quart. Probably not a single box in years past held a full quart. This year a large percentage of the berries were sold in standard quart boxes and dealers selling short boxes were obliged to stamp the same to show their true interior capacity. That the public will be the gainer when only full quart boxes are legally sold in the state is made evident by the facts revealed this year, berries in numerous instances being offered for sale in full quart and in ¾ quart boxes at exactly the same price. The illustration on p. 58 shows different sizes of so-called quart boxes found on the Wisconsin market the past year.

What has been said regarding the sale of berries is likewise applicable to the sale of all our common fruits and vegetables. The placing of such commodities upon the market in containers that are of no definite capacity and then offering the same for sale by the



BEARINGS ON WAGON SCALES.

FIG. 22.—WORN BEARING AND PIVOT OF WAGON SCALE.

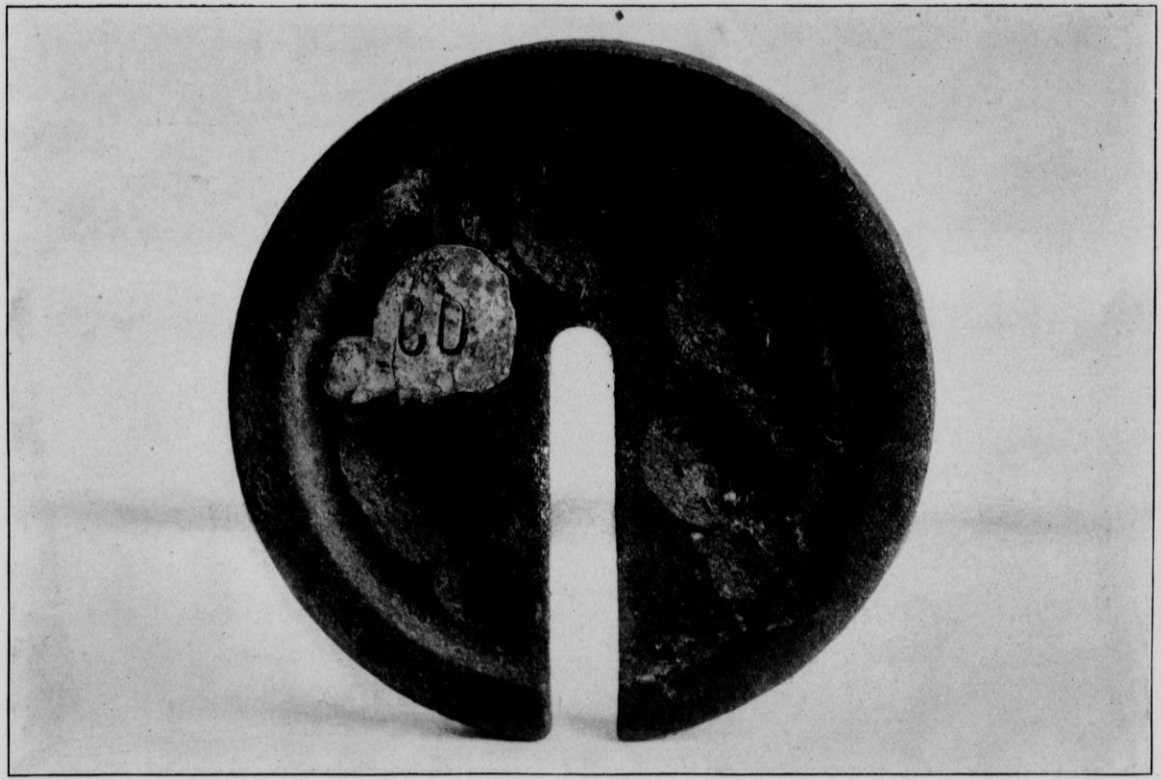


FIG. 23.—PLUGGED WEIGHT USED BY POTATO BUYER. BY WHICH HE GAINED 26 LBS. ON A THOUSAND LBS.

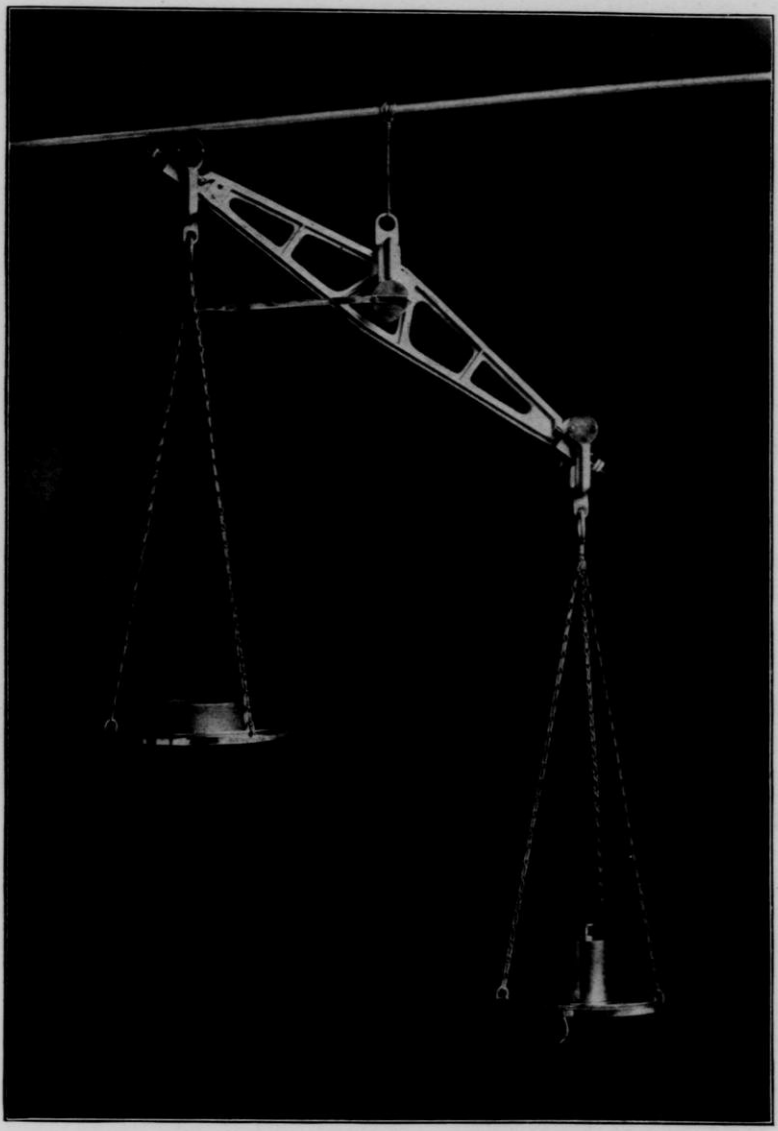


FIG. 24.—CONFISCATED WEIGHT USED IN A GROCERY STORE, SHORT ONE OUNCE ON POUND.

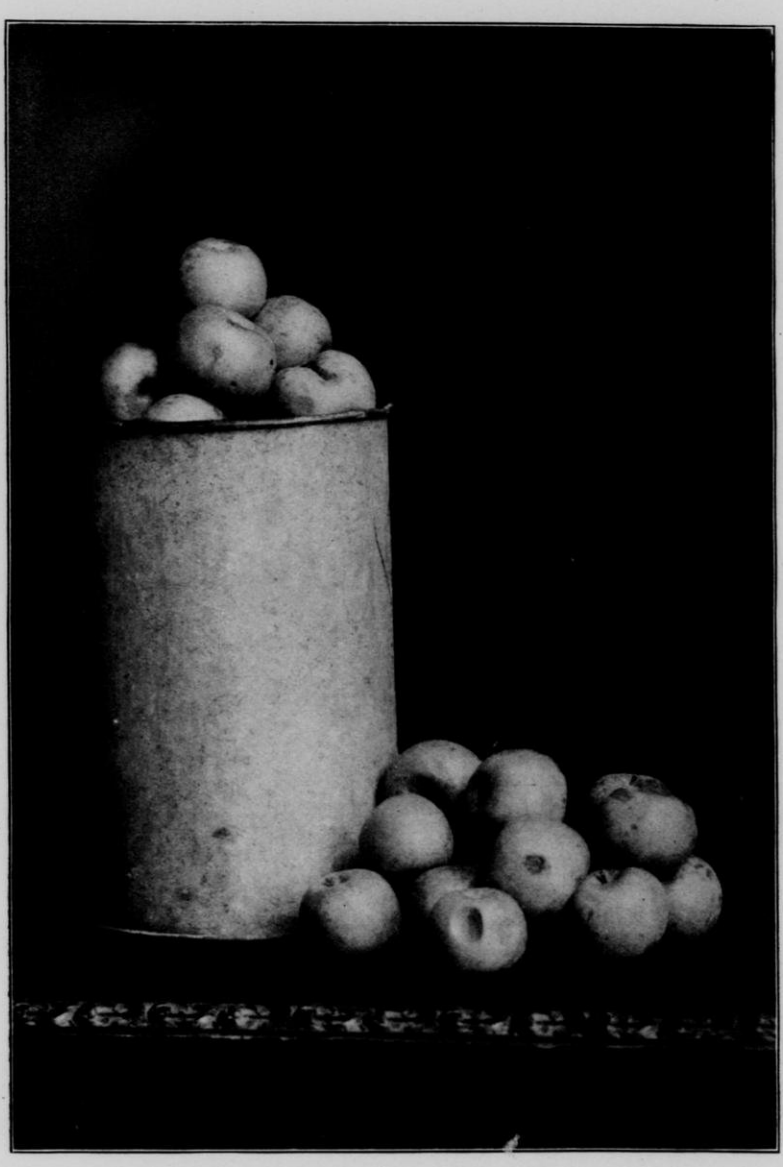


FIG. 25.—SHOWING SHORTAGE IN PECK OF APPLES MEASURED IN "BOTTOMLESS" MEASURE.

basket, box or hamper, instead of by standard weight, standard measure or numerical count, is a common method of deception. People have been encouraged to buy in the above indefinite manner, and until this year such methods were entirely legitimate. The investigation carried on by this department has brought into evidence the great variety of such containers. The illustration on p. 58 portrays a few of such non-standard containers. Repacking baskets used by retailers in transferring fruits from large containers are seldom if ever of standard size. Legislation is necessary to prevent the sale of such non-standard containers in this state. The laws of the state now provide for a standard fruit and vegetable barrel of 105 quarts, a standard crate of 35 quarts, a standard cranberry barrel and standard sized berry boxes. The enforcement of the law relating to such standards would be greatly simplified by national legislation. A bill providing for a standard barrel for fruits, vegetables and other dry commodities is now before Congress with a fair prospect of passage. But the neglect of Congress to perform its duty in the above matter should not deter the state from passing laws that will aid in the protection of its citizens.

REPORTS OF INSPECTORS

REPORT OF F. M. BUZZELL, CHIEF FOOD INSPECTOR

I herewith submit to you this report of work done by me as chief food inspector for the dairy and food commission, for the biennial period ending June 30, 1912.

My time has been devoted to the inspection of groceries, drug stores, meat markets and other places where food products were being prepared, stored and sold; also to the inspection of linseed oils, paints, etc., and to the procuring of samples for analysis.

In connection with this work, much time has been given along sanitary lines. Under your direction Inspectors Cannon, Linzmeyer, P. A. Larson, Southard and Voigt reported to me sanitary inspections made by them of places where food products were being sold in their territory. From their reports, in many cases a second and sometimes a third inspection was required. The systematic campaign of sanitary inspections by the above named inspectors resulted in much good.

Reviewing the work done in the territory that I have been able to cover, I am able to report a marked improvement in the quality of foods on sale, as well as better conditions under which foods are being protected from flies, dust and other contaminations. These changes were more noticeable in groceries than elsewhere. There exists, however, a necessity for improvement among the groceries in some localities. These conditions are found in meat markets as well.

Where such unsanitary conditions were found to exist and the dealer persisted in disregarding the warnings to clean up and protect his foods from dirt, etc., prosecutions followed, resulting in conviction in every case.

I have forwarded to the laboratory 339 samples for analysis, and have caused to be brought 25 prosecutions, resulting in 23 convictions.

REPORT OF E. L. ADERHOLD, CHEESE FACTORY, DAIRY AND FOOD INSPECTOR

Following is a report of work done by me as cheese factory, dairy and food inspector for the biennial term ending June 30, 1912:

Summary.

Cheese factory inspections	210
Creamery inspections	44
City milk plant inspections	36
Patrons' cans and milk inspected	2975
Dairy separators inspected	115
City milk wagon with utensil inspections	167

Samples of city milk and cream tested	113
Dairy barns inspected	194
Grocery store inspections	338
Oleomargarine inspections	140
Fruit dealers' premises inspected	88
Number of stores where berry boxes were inspected	87
Number of slaughterhouses inspected	33
Number of meat markets inspected	206
Farmers' Institute meetings addressed	82
Dairy conventions addressed	18

Prosecutions:

For unsanitary dairy conditions	47
For selling adulterated milk	2
For offering for sale meat from a diseased animal	1
For operating unsanitary meat market	2
For selling fruit not protected from flies, filth, etc.	1
Total	53

The above court cases resulted in one dismissal, one disagreement by jury, and fifty-one convictions.

DAIRY BARNS

During the period covered in this report I have observed that in many localities the improvement of out-of-date dairy barns has been carried on at a satisfactory pace. Cement floors are displacing filthy and unspeakable floors; windows are crowding darkness out of barns; and unsuitable stalls, which for many years were thought "good enough," are yielding their places to more modern equipment. A large number of handsome new barns that are a credit to the dairy industry have been constructed.

There are, however, localities where progress along this line has been too slow; where in the winter time there are more filthy cows than clean ones; where it will be necessary to instil into the milk producers a more profound appreciation of the meaning of cleanliness in dairying, and with it considerable more respect for our dairy laws.

UTENSILS

I am unable to report much progress in the improvement of dairy utensils as I have found a great many milk cans that were extremely rusty or that had open seams filled with filth.

CHEESE FACTORIES

The betterment of these plants in a general way is easily noticeable. A number of the most dilapidated cheese factory buildings have been entirely abandoned and new ones erected in their stead.

At many factories there is room for improvement in the handling of whey, the whey tank being filthy much of the time. At some factories during the fore part of June surplus whey is dumped near the factories, befouling the soil and causing most disgraceful surroundings.

SLAUGHTERHOUSES

The old-time slaughterhouse, the synonym of filth and stench, while not so common as it was a few years ago, is still to be found in scat-

tering localities. Many butchers have improved their slaughterhouses with cement floors and more sanitary walls. In some cases entirely new plants have been constructed, and the surroundings are much less objectionable than formerly.

RETAIL STORES

As to grocery stores, fruit stores, and meat markets, I can say in a general way that they are reasonably sanitary, and where I have found them otherwise the operators have been, with rare exceptions, willing to make the improvements I suggested.

The custom of displaying fruits and certain other wares where they are exposed to street dust and flies has been generally discontinued.

With reference to retailers of foods I can say that, with rare exceptions, I have found them heartily in sympathy with the sanitary laws, striving individually and, in some cities, collectively to furnish to the trade foods that are wholesome and clean.

REPORT OF J. D. CANNON, CHEESE FACTORY, DAIRY AND FOOD INSPECTOR

Following is a report of my work as cheese factory, dairy and food inspector for the biennial term ending June 30, 1912:

Cheese factories and creameries inspected	215
Milk fat determinations made	452
City milk and cream samples purchased and tested	161
Herd samples taken and expressed to chemist	12
Sediment tests made at factories and city milk plants	894
Patrons' and dealers' milk cans inspected	10,000
City milk wagons and utensils inspected	264
Cheeses scored at national and international dairy shows, cheese makers' conventions, Minnesota state and county fairs	650
Farmers' cream separators and premises inspected	53
Oleomargarine inspections	194
Berry box inspections	125
Meat markets and grocery stores inspected	450
Dairy barns inspected	247
Ice cream plants and parlors inspected	130
Fruit dealers' premises inspected	40
Slaughterhouses inspected	5
Butter samples purchased for analysis	8
Ice cream samples purchased for analysis	3
Sausage samples purchased for analysis	2
Prosecutions	25
Convictions	25

In my territory, which comprises Outagamie, Waupaca, Oconto, Shawano, Marinette, Forest, Langlade, Oneida, Florence, and Vilas counties, progress has been quite satisfactory, especially in the last named counties and in regard to better and cleaner conditions in stores and meat markets.

In the last two years I have inspected 450 grocery stores and meat markets, and in a few cases I have found meat markets in an undesirable condition, especially the rear part of the building, where all

the trimmings of the meat are brought to be manufactured into sausage. Where such conditions existed after second inspection was made, prosecution was brought. Occasionally an unclean and carelessly kept grocery store is found, the cellars especially, where food stuffs are stored, being mouldy, dirty and emitting a strong odor.

During this time I have inspected 212 cheese factories and creameries, mostly the former, and will say that I found seven-eighths of them in a good sanitary condition. But there are always a few who keep just a short distance from the danger line, while others get way beyond that line. The latter ought not to be allowed to manufacture cheese or any other food, as they are naturally dirty and have no regard for cleanliness. This is where a license law would work well, —a law which I believe we ought to have and will have in time. Where these bad cases exist, (and there are only a few in my territory) I always give the parties responsible an opportunity to meet a judge or justice, as the case may be.

I have made it a practice during factory inspection to remain at the factory part of the day, if I thought the maker needed instruction. In one case which I recall, I found a cheese maker using a thermometer that was twenty degrees out of the way, and was coagulating his vat of milk at 100° F. and cooking to 120°. On examining his rennet test, I found the hole where the milk runs off to determine the acidity partly clogged with a straw from a broom. On further investigation, I found that it took one hour and ten minutes to draw off the vat of whey. This maker had previously complained to me, stating that he was absolutely sure some patron must be delivering his milk from diseased cows. But after being shown the condition of his thermometer he realized he was entirely to blame. I remained at the factory during the process of manufacturing that day's cheese. This cheese sold at the market price and represented a saving of fifteen dollars to the maker on that day's make. Up to this time he had been very discouraged at his losses, and felt much relieved when he knew they could from that time on be prevented.

This is only one of the large losses I have remedied the past two years, and I take occasion to mention this because it was something unusual.

I had visited this same factory prior to this time, then under different management, and during inspection condemned twenty cans, some of which had been in use twenty years and were covered with rust from top to bottom. Gave instruction in regard to manufacturing of cheese, whey disposal and location of whey tank, and suggested many other changes. My instructions were followed out exactly and on my next visit to this factory I found that the maker was having great success. His cheese which previously had been scoring 91 and 92 now scored 95 and 96 which entitled him to many prizes which were being offered at the monthly scoring contests and cheese makers' convention of that year.

We have a great many good cheese makers in this state,—men who are making fancy cheese the year around, but these men are masters of their business. They demand of their patrons good, clean, wholesome milk, and are always ready to give advice to their patrons regarding better feeding for the cattle and a betterment of barn conditions. On the other hand, we have young boys making cheese who have spent probably a few months as helper under some poor, unsuccessful maker, and who have the idea they are masters of their vocation. They start out and rent a factory or hire out to some concern which pays them considerably less wages than they have been in the habit of paying. Some of these young men get along fairly well, while weather conditions are good, but just as soon as the warm

season arrives and things do not work well, they are at a loss to know what the trouble is, ofttimes losing from three to five cents per pound on cheese. Much trouble comes from the keeping of composite samples. They allow them to remain where the temperature rises to 95° or 100° F. and probably make fat determinations at this temperature, and in most all cases the samples are black and cloudy, this being no test at all. Cheesemakers should realize that when they make a fat determination of composite samples, they should be made accurately, as it means much to the patrons when they are paid for their milk on the fat basis.

When inspecting factories, I also test all patrons' milk by using the sediment test. When more sediment is found than should be, an inspection of the patron's barn and premises is made, and in nearly all cases where unclean milk is delivered to the factory, conditions on the farm correspond. The stables are equipped as they were twenty years ago,—high mangers, cows tied with ropes or chains and standing on earth floors having no drop or gutter. In most cases the barn is reported cleaned daily, but occasionally places are found that are only cleaned once or twice a month. Such conditions are quite common in some localities, although most of the people are gradually making some improvements.

Along with barn inspection comes the inspection of the dairy utensils, especially the cream separator and its location. In quite a number of cases the dairy separator law has been ignored entirely. Many farmers think that the dairy separator belongs with the cow, but after explaining the law it is not a hard matter to convince the average farmer that he is wrong, and in all cases where the law has been explained, the separator has been removed to some clean place.

At different times I have purchased samples of city milk supplies and examined all the utensils, and must say that the practice of adulterating milk is gradually disappearing. Occasionally I find utensils that are rusty and battered and poorly washed, but vast improvement in this line has taken place during the last two years.

During the biennial period covered by this report I have made 195 oleomargarine inspections and have found, with the exception of a few, all dealers complying with the law. Occasionally oleomargarine was found that was somewhat colored, but in all cases the dealer claimed to be innocent, stating that he did not think the manufacturer ought to ship him oleomargarine that did not comply with the state law. But in every case the dealer of his own volition reboxed the oleomargarine and returned it to the manufacturer, demanding lawful goods in its place.

REPORT OF FRED MARTY, CHEESE FACTORY, DAIRY AND FOOD INSPECTOR

Following are the totals of inspections and work done by me during the biennial period ending June 30, 1912, in itemized form, a full report of each inspection and test having been submitted to you upon the respective form sheets and cards:

Cheese factory inspections	414
Creamery inspections	21
City milk venders' samples tested, utensils and wagons inspected	138
Dairy herds and barns inspected	57

Samples of milk and cream purchased and tested	500
Grocery stores, meat markets and oleomargarine inspections	356
Samples of food products sent to chemist	26
Conventions addressed	3
Fairs and conventions, judging cheese	10
Condensing factories inspected	2
Weights and measures inspections	93
Prosecutions	7
Convictions	7

In connection with the above inspections, I have also inspected thousands of milk and cream cans at different cheese factories, creameries and depots in which milk and cream are delivered and shipped to cheese factories, creameries and ice cream manufacturing plants. Where dirty, rusty, or open-seamed cans were found, suitable action was taken in each case.

CHEESE FACTORY AND CREAMERY INSPECTIONS

The inspection of cheese factories and creameries has mostly to do with sanitary conditions existing in the process of the manufacture of cheese and butter, the utensils of the patrons in which the milk and cream were delivered to the cheese factory and creamery, and sanitary conditions surrounding the premises.

During the two years covered by this report, remarkable progress has been made in my territory as to the condition of the cheese factories, with special reference to screen doors and windows to exclude flies from the cheese making room; separators for the manufacture of whey butter are to-day the rule instead of the exception, and the old gravity system will soon be a thing of the past, thus assuring protection to the manufacturers of cheese, since the whey by the separator system is returned to the patron from fourteen to fifteen hours after delivering; whereas, under the tank gravity system, the whey remained at the cheese factory from twenty-six to forty hours before it would be returned to the patron. This system means thousands of dollars to our industry, as practically all of the fat is now made into butter and the whey when returned to the patrons contains a much higher per cent of milk sugar than under the gravity system. Under the gravity system, a large percentage of the fat would adhere to the patrons' milk utensils, which in connection with the age of the whey, has undoubtedly often been the direct cause of gassy trouble in the cheese, and last, but not least, the consuming public, under the separator system, is assured of a more sanitary product. Floors in factories are found of good, substantial cement and sewage disposal found with few exceptions in good condition.

NECESSITY FOR PRACTICAL INSTRUCTIONS

The manufacture of Swiss cheese is a very delicate one, since it is dependent upon the fermentation process in developing the eyes or holes in the finished product. Swiss cheese makers and coöperative companies that experience gassy troubles in the manufacture of Swiss cheese or other sweet curd cheese have become accustomed to at once call for my assistance, which in the last ten years has given me a varied assortment of experiences in locating the various gassy troubles.

I shall cite here one case in particular of gaseous trouble in the manufacture of Swiss cheese which caused a damage of thousands of dollars. A coöperative cheese company located in the township of

Wayne, LaFayette county, Wisconsin, requested the manager and cheese maker to get my assistance to help locate the trouble. In this case there seemed to be a misunderstanding between the cheese maker and the patrons, each blaming the other for the cause of the trouble, until after a period of nearly two and a half months of serious trouble, they decided to stop making cheese, which they did. After branching out to some three cheese factories for fifteen days and finding that the cheese was working fine at all the factories where they had branched out, they decided to start up again at their own factory, which they did the first of August. After operating the factory a few days, the same trouble again appeared, which meant almost a total loss. It was at this time that the patrons and cheese maker agreed to a show down, as neither would take the blame. Responding to their request for my assistance, I found after examining the cheese that the trouble was all of the same nature,—a very pronounced gassy fermentation with a very tough, ropy texture, the flat side as well as the sides cracked open. As it had been very hot and dry for a long time, the nature of the cheese called my attention to impure water, which is very often the cause of such fermentation. Preparing to start for the investigation of the cause, I left the cheese cellar accompanied by the maker. I asked him for a drink of water, as I noticed the pump was stationed in the cheese making room. After being offered a drink from that pump, I decided not to extend my investigation any further, as I felt I had located the trouble. Samples of this well water were later sent to the Wisconsin Experiment Station and pronounced to be heavily contaminated with gas-producing organism. As it is the practice in the manufacture of Swiss cheese to use about one-third water in preparing the home-made rennet, which is left in a jar from two to three days, you will see that that water, mixed with whey and a calf stomach, set aside for three days at a temperature most favorable to the ripening process, will propagate into the highest stage of gas-producing organisms. In connection with the addition of this preparation of home-made rennet, it is the custom by the best of makers to add to the milk at time of setting from one to two pails of water, which is done for different reasons,—some to guard against "glass" others to cool down the milk, etc. The following results will show that all their trouble and thousands of dollars of loss was due to the water in the well at the cheese factory; as the very first cheese that was made after I got there was made with rennet that I had brought with me and the water was brought to the factory by a nearby patron, turned out absolutely normal and sound as a dollar, as all the rest thereafter until the close of the season: sterilization of whey and utensils of course followed to stop all possible propagation of that gas-producing organism. Investigation of the well in the factory, after breaking up the cement floor around the pump, brought to light the fact that a sewage pipe from a department of that factory which passed directly by the pump had sprung a leak and entered into the pump, while another sewage outlet was clogged up and backed the sewage from the factory into the well. After all the foul dirt and slush was dug out down around the pump stock and refilled with unslacked lime, the pump had a thorough cleaning and after a course of two weeks of more or less pumping, the water was again used.

DAIRY HERD AND BARN INSPECTIONS

The inspection of dairy herds and barns was mostly made in connection with city milk inspections, calling upon producers of milk furnished to city milk dealers. Considering the absolute necessity of producing sanitary milk and cream for city supplies, due credit must

be given to a number of city milk producers who have equipped themselves with modern, up-to-date barns with proper floor and gutter arrangements (which eventually means a clean herd); a proper ventilation system and sufficient light; also a suitable place for dairy utensils and for keeping and cooling milk and cream.

Many herds furnishing milk to city milk supplies were found to have been tuberculin-tested. In the course of inspections, I found and reported many herds and barns in filthy, dirty conditions, barns in very dilapidated condition with leaky floors and gutter arrangements, with ineffective ventilation and insufficient light.

CITY MILK INSPECTIONS

The inspection of city milk and cream supplies was chiefly to ascertain the quality and purity of the milk and cream delivered. The unsanitary bulk or can milk distribution system on dirty, dusty streets is fast on the decline and is being replaced by the more sanitary bottle system.

Milk peddlers and dealers are beginning to take considerable pride in keeping their vehicles and utensils in neat, attractive condition. However, I found some milk peddlers of whom sanitary condition of milk and utensils could hardly be expected, and who would hardly be improved much by prosecution, as they themselves were found untidy. Repeated warning and prosecution affect such men only to such an extent as to be considered by them as unnecessary hardship forced upon them. For the production and handling of milk that is intended for direct consumption, such men as above described are a menace to the public and have sadly missed their calling.

THE POOLING SYSTEM

The system of buying milk by the hundred pounds irrespective of the quality, in my territory, prevails to a large extent. Numerous requests are made of Commissioner Emery by cheese factory managers or owners from this territory for testing milk suspected of adulteration. The cheese makers are yet to a large extent without testing apparatus or even a knowledge of these appliances and have been accustomed to look to the commission to do their testing for them. Apparatus for making these tests should be installed in every factory and operated by competent persons.

OLEOMARGARINE, SANITARY STORE AND MEAT MARKET INSPECTIONS

During the period covered by this report my time was also devoted to visiting three hundred fifty-six (356) oleomargarine dealers, grocery stores and meat markets in the different cities of my territory. These inspections were for the purpose of ascertaining whether the dealers were complying with the law in regard to the sale of oleomargarine, and whether their places of business were kept in a sanitary condition. Grocery stores are fast doing away with the old system of exposing and displaying food: sanitary counters have been installed in practically every store. Meat markets have shown a marked improvement in sanitary conditions of sausage room, sausage machines, utensils in general, and refrigerators.

REPORT OF JAMES VANDUSER, CREAMERY, DAIRY AND FOOD INSPECTOR

I have been engaged during the biennial period ending June 30, 1912, in inspecting creameries, cheese factories, skimming stations, dairy barns, milk depots, city milks, cream routes, oleomargarine, sanitary inspection of groceries, meat markets, slaughterhouses, and utensils used for handling and transporting dairy products, and in try-out work on weights and measures.

CREAMERY AND CHEESE FACTORY INSPECTION

I have made 209 inpections in this line of work during this period besides making a great many tests and inspecting the testing of composite samples by butter makers. Have also assisted Inspectors Dufner, Marty and Guse in reinspection work and they in turn have assisted me.

Am pleased to report a decided improvement in the sanitary condition of creameries and cheese factories. More attention is being paid to putting on screen doors and windows, repairing drains and the disposal of sewage, the installation of better and more up-to-date machinery such as sanitary piping, modern cream ripeners, sanitary pumps, and butter testers; also better floors, mostly cement. Buildings have been remodeled and painted. Buttermilk, skim milk and whey tanks are kept cleaner, as galvanized tanks are taking the place of the old wooden tanks. There is still some chance for improvement at some cheese factories, as they still stick to the old wood tank sunk in the ground which is very difficult to clean properly and ofttimes neglected.

The method at many factories of getting the whey to the patrons' cans from these tanks is very unsanitary as a pump with buckets is used which is very unhandy to clean and sometimes found very unclean.

The introduction of the sediment test is very helpful at cheese factories and milk depots as the patron witnesses the operation and the sediment filtered is there to convince him.

I have had to make several reinspections at creameries and cheese factories, and in all but one was able to convince the operator, owner or manager that it was better to comply with the law than to appear in court. In this one case the man was prosecuted and fined.

The old method of taking composite samples of cream and holding same in a metal-covered jar is very unsatisfactory and is fast going out of use. The method now practiced by nearly all creameries of testing every delivery is much better, as the operator is able to check up each day.

I have done some reinspection work at cheese factories with Inspector Guse which resulted in convictions as will appear in his report.

CREAM ROUTE INSPECTION

During the period covered by this report I have made 353 such inspections, in most instances accompanying the cream hauler on his route. A copy of the dairy laws was left with each patron. Suggestions were made for bettering the conditions in a sanitary way where needed, and the patron instructed in the proper method of caring for cream. One of the faults in handling hand-separator cream is the

mixing of warm and cold cream before properly cooling the former. Another is in not thoroughly stirring and cooling and holding at a low enough temperature, to both of which faults the patron's attention was called. As nearly all the creameries in this section gather their cream at least every other day, a little effort on the part of the patron makes a decided improvement. A result of this inspection is the removal of a great number of separators from the barns and placing them in buildings built for that purpose only. At most of the farms visited I was able to make some suggestions for improvement at the barns, such as providing more light, better ventilation, whitewashing walls and ceilings, and suggesting the replacing of old wood floors with cement. All of this has brought good results as I have been informed by the owners and managers where such work has been done.

CITY MILKS

The milk of thirty cities has been sampled, fat tests made, and lactometer readings taken. A decided improvement is noticeable in the quality of milk and cream furnished these places over former years, as I had to swear out complaint for only one man for selling milk or cream below the legal standard, who pleaded guilty and paid his fine. This man was delivering milk to a party who was bottling it and, with milk produced by himself and others, was supplying his customers. The milk was bought on the street in the usual way and found below standard. I went to the milk dealer's place of business and took samples as each patron delivered his milk and in this way located the guilty party.

The old system of storing milk in cans and delivering from cans carried from house to house accompanied by an old graduated measure is fast becoming a thing of the past, as nearly all the city milk and cream in my district is bottled and there is not the chance of the product becoming contaminated. Nearly all the places where milk or cream was being produced for city use were inspected, also cans, coolers and other utensils used. In a number of cities the milk dealers have made great improvement in their dairy houses and barns by employing more sanitary methods in handling the product, installing modern stalls, letting in more light, better ventilation and keeping the cows cleaner. Most of the cities in my territory make the tuberculin test compulsory.

DAIRY BARNS

I have made 88 inspections of dairy barns since the last report and where reinspections have been made have noticed a decided improvment. In some instances hundreds of dollars have been spent in improvements and a general trend toward better sanitary conditions around the barns on most farms is noticeable.

SANITARY INSPECTIONS

During the period covered by this report 300 such inspections have been made. I am able to report a decided improvement. Where formerly fruits and vegetables were displayed on the sidewalks in front of the place of business subject to all unclean street conditions, the display is now mostly made inside. A few dealers have shelves or tables built two or three feet above the sidewalk. Dealers are fast coming to realize that the buying public is taking notice. The sign "Sanitary Grocery" is often seen.

About two hundred of these groceries were handling oleomargarine. Where signs were not displayed the dealer's attention was called to the fact and the law read. In two cases the oleomargarine sold was in semblance of yellow butter. In both cases the product was promptly boxed and shipped back to the wholesaler.

MEAT MARKETS

As a rule I have found the markets to be conducted in a sanitary way, but some men have no conception of cleanliness. I have made a number of reinspections in company with Mr. H. C. Larson, some of which have resulted in prosecutions and convictions.

WEIGHTS AND MEASURES TRY-OUT WORK

A good deal of time the last three months has been devoted to try-out work on berry boxes. Nearly every groceryman in my territory has been visited and the law explained. In the cities of Racine and Kenosha I was accompanied by Inspectors Voigt and Winder. The dealers as a whole were anxious to learn the requirements and ready to comply. I have made 100 such inspections.

REPORT OF P. A. LARSON, CREAMERY, DAIRY AND FOOD INSPECTOR

The following is a report of work done by me from June 30, 1910, to April 30, 1911:

Creameries inspected	99
Cheese factories inspected	21
Meat markets inspected	86
Grocery stores inspected	142
Restaurants and confectioneries inspected	8
Sausage factory inspected	1
Samples sent to chemist	54
Samples of city milk and cream bought and tested	216
Samples tested at creameries	159
Prosecutions for adulteration	8
Prosecution for maintaining unclean and unsanitary cheese factory	1

REPORT OF W. F. SCOTT, FOOD INSPECTOR

I hereby submit a report of work performed by me as food inspector during the biennial period ending June 30, 1912.

I have inspected grocery stores, meat markets, drug stores, bottling works, slaughterhouses, places where paints and oils were sold; have also done some work in bakeries, confectionery stores and lunch rooms.

I have collected 359 samples of foods, drinks, drugs, linseed oil, white lead and turpentine suspected of being adulterated or misbranded, and have delivered the same to the chemist for analysis.

Much of my time has been spent in the bringing of 41 prosecutions against violators of law, as follows:

Selling adulterated pop	7
Selling adulterated sausage	13
Selling adulterated canned cherries	5
Selling adulterated mustard	1
Selling unlawful flavoring extracts	2
Maintaining unclean and unsanitary meat market	1
Selling adulterated linseed oil	9
Selling adulterated white lead	3

I have made inspections in 96 cities, (some of which I have visited a number of times) in my territory which covers southern and eastern Wisconsin, and have done work in some northern counties. I have also investigated many complaints received at the office and referred to me by you.

I am pleased to report that there is great improvement along food and drug lines and in the character of the products sold for linseed oil and white lead.

The sanitary conditions in places where foods are sold are very much improved. The display of foods on the streets and sidewalks in most cities is more sanitary. Meat markets as a rule are kept in better condition as regards the cleanliness of tools, refrigerators, etc. But there are some dealers who do not keep their places clean unless brought under strict supervision.

REPORT OF R. B. SOUTHARD, CHEESE FACTORY, DAIRY AND FOOD INSPECTOR

During the period, July 1, 1910, to July 1, 1912, my work has been more varied than during the two previous years, when cheese factory and creamery inspections formed its principal part. Sanitary inspections of grocery stores, meat markets, sausage kitchens, dairy barns and utensils used in handling milk and cream on the farms, have been given a large share of my time the past two years.

In making inspections of cheese factories and creameries, when possible, I have been at the factory in the morning in order to inspect the milk as delivered from farm to factory, and have inspected cans as to cleanliness, freedom from rust, and as to their seams,—whether closed and filled with solder. Where cans had been previously inspected or parties had been warned, and cans were still found unclean or open-seamed, I have brought prosecutions. From my observation of conditions at creameries and factories, will say that the majority of the makers take pride in their creameries and cheese factories and keep them in good condition, and at such places there is little use of watching farmers' cans, as makers watch the conditions and talk to their patrons and generally have good, bright, clean cans, and good milk brought to their factories. It is at the factory where both the premises and the maker look as though they needed a good scrubbing that most of the unclean cans are found, for the maker takes no interest in the factory further than to get through with the day's work as soon as possible and collect his wages when due.

While making inspections of dairy barns, and utensils used in the handling of milk at the farm, I have noted conditions and find a

large and growing sentiment among the farmers to handle the milk and cream under sanitary conditions, such as keeping barns and cattle clean, adding more and larger windows to barns and putting in some good system of ventilation.

In the fall of 1910, working with Mr. Cannon, we collected samples of the milk supply of thirty cities and towns, and in addtion to testing samples for adulteration, we tested same for preservatives. There were no samples found to contain preservative. A few were found adulterated and the parties selling same were prosecuted. The cans and utensils used were nearly all found to be in good condition.

While making sanitary inspections of grocery stores and meat markets, have also inspected oleomargarine as to color.

Upon first inspections of grocery stores I have always seen all storage rooms and basements and if food products were carelessly stored or left uncovered, I have called the proprietor's attention to the law, and to the danger of contamination from dust, flies or other unclean conditions. The condition of food products in storage rooms or basements or exposed for sale was found to be far better at the time reinspections were made.

When inspecting meat markets I have always examined saws, knives and steel used at meat block as well as condition of room and cooler. Where sausage was manufactured I have examined inside and outside of machines, benches or tables used to cut or mix meats on, and if unclean or in unfit condition, have shown same to the proprietor and have usually found him willing to make improvements. Some, however, did not see the use of cleanliness as the people who bought meats did not see the condition of machines and workroom. In places where conditions were bad and no improvements had been made at time of reinspection, the proprietors have been prosecuted.

The few slaughterhouses inspected by me have nearly all been in poor condition,—floors and walls unclean and bad odors in and around the premises. Where the butcher's attention has been called to such conditions improvement has been made, but the slaughterhouse as a rule is built back in the woods where nobody sees it and few know where it is or see the conditions under which the meat they buy is slaughtered and handled.

For the past two months nearly all my time has been taken measuring berry boxes and measures and instructing merchants and dealers how to stamp containers if of other than standard capacity. In nearly all cases dealers were willing to comply with law but did not understand what was required of them.

While making inspections in the different lines of work I have delivered copies of laws and circular letters to ice cream parlors, grocery stores, hotels, and meat markets, calling attention to laws relating to the line of work in which these people were engaged.

Following is a brief statement of inspections and other work performed by me for the two years:

181 inspections of cheese factories.
101 inspections of creameries.
225 inspections of dairy barns.
533 inspections of grocery stores and meat markets.
362 reinspections of grocery stores and meat markets.
227 samples milk and cream from 30 cities and towns.
11 inspections of slaughterhouses.
172 stores were visited and where fruits were sold, containers and measures were inspected and the law explained as to stamping if containers were of other than standard capacity.
34 prosecutions were brought for the following causes:
Maintaining unclean and unsanitary cheese factories and creameries 4

Maintaining unclean and unsanitary farm separators	9
Maintaining unclean and unsanitary meat markets and sausage rooms	5
Selling or delivering unsanitary milk in unclean cans	7
Selling or delivering adulterated milk and cream	7
Serving oleomargarine at hotel	1
Displaying fruits outside place of business without protection	1

REPORT OF S. J. DUFNER, CREAMERY, DAIRY AND FOOD INSPECTOR

During the biennial period ending June 30, 1912, I have been engaged in inspecting creameries, cheese factories, city milk supplies, farm dairies, ice cream factories, meat markets, slaughterhouses, grocery stores, oleomargarine and during the latter part of the period have given considerable time to the inspection of weights and measures.

CREAMERIES

I am pleased to be able to report that nearly all of the creameries in my territory are in very good condition and much progress and improvement has been made during the two years just past along all lines of creamery work. Quite a number of new creameries have taken the place of old ones which had become unfit places in which to manufacture human food. Many new floors of concrete have taken the place of worn-out wooden floors. In many instances drainage systems have been improved or completed which had previously been unsanitary and a menace to health. Creameries, and in particular the weigh-rooms, have been screened as a protection from flies. Many of the old weight-rooms were not so constructed as to be easily screened. The best weigh-rooms that I have found are those made by partitioning off a part of the creamery room large enough to conveniently accommodate the scales and weigh can, with plenty of room for test jars and a hot water tank for washing the cans. My observations have led me to the conclusion that all cans in which milk or cream is delivered at creameries, cheese factories city milk depots or other places, should be thoroughly washed at the place where delivered, as at such place an abundance of hot water may be easily supplied. At creameries where the cream is brought in by haulers in the large, jacketed cans, I recommend the installing of a weigh can and scales of sufficient capacity to weigh up at one draft any load delivered. This system will enable the creamery man to keep an accurate check on haulers as to weight of cream and fat delivered and will also enable him to keep a check on his own work.

The testing apparatus should be located in a room adjacent to the weigh room, and should be supplied with windows to admit all of the light possible. I have induced many of the creamery operators in my territory to make daily tests of all cream delivered, it being nearly impossible to obtain accurate results from composite samples. In order that composite samples may give accurate results, it is necessary that each sample taken be in proportion to the weight of the cream samples, also that there be no loss of moisture by evaporation, —conditions that are practically impossible. An example that I fre-

quently use to demonstrate the inaccurate results of composite sampling is as follows: We will assume that on one day a patron delivers 20 pounds of 40% cream, which would contain 8 pounds of fat. On another day he delivers 40 pounds of 20% cream which would contain 8 pounds of fat. Now, we will assume that the same amount of cream is taken for a test sample from each delivery, which would give an average for the two tests of 30%. Now, as the two deliveries 40 pounds and 20 pounds would make 60 pounds of cream and the test 30% we would have 18 pounds of fat by the composite method, and we know that only 16 pounds of fat has been delivered. I think that it is safe to predict that by another two years very few creameries will be making composite tests.

Another evil that I have encountered is the skimming of a very thin cream. I have found many creameries where the average test of all cream delivered was less than 20% fat. In the first place, by skimming a cream so low in fat the farmers lose much valuable skim milk which should be kept on the farm. A thin cream will not keep nearly as well as a cream containing from 30 to 35 per cent of fat, owing to the fact that all bacterial changes occur in the serum and not in the fat of cream. The loss of fat in buttermilk at the creamery from thin cream is something enormous. At a creamery receiving very thin cream, I recently made some tests with the following results: 5940 pounds of cream had been received on the day previous to my visit, the average test of which was 18% fat; 1246 pounds of butter were made from the 5940 pounds of cream; therefore, there were 4694 pounds of buttermilk. A sample of buttermilk taken at intervals while it was running from the churn showed that it contained .75% of fat. Consequently, there were lost in the buttermilk on this particular day 35 pounds of fat which at that time was worth 30 cents per pound, or $10.50. If this cream had contained 30 to 35 per cent fat, so that it could have been churned at a temperature of from 50° to 52° F., the loss would not have exceeded one tenth of what it was and as this was a coöperative creamery, the short-sighted farmers were the losers. This condition had probably been going on day after day and we can easily estimate what enormous proportions this loss would assume for a year or a period of years. I have addressed a number of farmers' meetings with regard to their cream and have urged them to skim a cream that will contain from 30 to 35% butter fat. Some progress in the right direction has been made, but there is a prejudice in that territory among farmers against a heavy cream that will take some time to overcome.

I have made quite a number of cream route inspections, going over the routes with the drivers, making observations on the farms as to the conditions under which the cream is produced, and in some cases bringing prosecutions for violations of law. My opinion is that there will be need of much of this kind of work on cream routes in the future.

CHEESE FACTORIES

There has been considerable improvement in the cheese factories in my territory, especially in the addition of concrete floors and the screening of intakes to keep out flies. Quite a number of cheese factories are using the Babcock test as a means of determining the value of the milk, but some are still run on the pooling system, which is detrimental to all concerned and encourages the patrons to keep cows that will give milk containing as near as possible the minimum of fat and other solids.

BARNS

I have visited quite a number of barns and find the general conditions gradually improving, though in many instances there is still much to be done. Many modern, sanitary barns have been built, equipped with concrete floors, abundant light and ventilation. Many barns are frequently whitewashed, which is a most commendable practice. The U. S. government formula for whitewash is to be recommended and it is best applied with a spray pump operated by some power other than hand. Whitewash should be applied twice a year to the walls and ceilings of all buildings where milch cows are housed. Many dairy houses have recently been built on farms and all producers of milk should provide them. Such a building should be used only for milk and milk utensils and should be provided with a tank of water in which the milk or cream should be kept at a temperature of 55° F. or lower until delivered to the place where sold. My opinion is that milk and cream are usually spoiled by lack of sufficient cooling. Cream is often spoiled by being kept too long on the farm. All cream should be delivered before it is more than forty-eight hours old, and should in all cases be perfectly sweet, in clean utensils and entirely free from any foreign taints or odors. The use of ice is resorted to by many farmers where abundant supply of well or spring water cannot be had. In my territory considerable cream is handled by centralizers, most of them outside of the state. They usually pay less per pound for butter fat than the local creameries and are willing to handle cream in any stage from good to rotten.

CITY MILK SUPPLIES

The supply of milk used in towns and cities has been much improved in recent years. It is nearly impossible at this time to find adulterated milk or cream on the market, whereas a few years ago there were nearly always prosecutions to follow a city milk inspection. Nearly all of the milk handled for city trade at this time is in bottles, which is a much more sanitary way than the old method of peddling from a can into which dust could blow each time the cover was removed.

Great improvement has been made in the manner of caring for cows from which city milk supplies are obtained, nearly all cows being kept under conditions which are quite sanitary.

I have found the sediment test a great help in city milk and cheese factory work, as by its use we are able to show the milk producer just how much solid dirt his milk contains, and when this is presented to him in such a way as to be entirely visible, he is usually in a receptive mood for information as to how such dirt may in the future be eliminated.

The use of sanitary barns, daily brushing of cows, clean utensils, the use of closed top milk pails and thorough cooling of milk will about solve the milk problems of any city.

ICE CREAM FACTORIES

I have visited many ice cream factories and find most of them operated in a cleanly manner. The most undesirable part of the ice cream business that I have observed is brought about by people who peddle the article in cones not protected from "filth, dirt and flies" as the law provides.

MEAT MARKETS

I have visited nearly all of the meat markets in my territory and have found most of them in good condition, though in a few cases I have found sausage rooms and back rooms that were far from sanitary. I have had very little trouble in getting these people to comply with the law in so far as sausage rooms and back rooms were concerned.

SLAUGHTERHOUSES

Quite a number of slaughterhouses that I have visited were in an unsanitary condition, being old buildings with poor floors, inadequate drainage and often connected with hogpens where the refuse was thrown, without regard to sanitation. In all such cases I have recommended the installing of concrete floors with provision for drainage, the removal of the hogpens to a distance of at least fifty feet, and the use of a little carrier for carrying the refuse to the pens; also the screening of the slaughterhouse doors and windows in warm weather as a protection from flies. A number of slaughterhouses of the above description have recently been built in my territory.

GROCERY STORES

I have visited most of the grocery stores, making a sanitary inspection of all food products sold and have found the grocery business generally conducted in a sanitary manner. In all cases where conditions were bad I have after reading the law to the proprietor made a second inspection within a few days and have in all cases obtained compliance with the law.

OLEOMARGARINE

I have visited nearly all the oleomargarine dealers and in some places have found the signs not posted. In other cases the letters used in such signs were not of the size prescribed by law, and in two cases I found the goods of a shade of yellow which was unlawful. After the law had been read to these parties, they in all cases complied.

WORK DONE AS SEALER OF WEIGHTS AND MEASURES

Since my appointment as a sealer of weights and measures I have devoted such time as I have been able to spare from my other duties to that line of work. Most of this work has consisted of inspections of containers used for fruits and berries. As the law was new, many persons handling such commodities were not aware of the existence of laws governing their sale. In most cases the dealers have willingly complied after they have been made acquainted with the requirements of the law.

SUMMARY

The following is a summary of my work from July 1, 1910, to June 30, 1912:

Creameries inspected	287
Cheese factories inspected	47
Cream routes inspected	20
Barns and dairies inspected	42
Oleomargarine inspections	75
Grocery stores inspected	98

Meat markets inspected	51
Slaughterhouses inspected	12
City milk supplies inspected	24
Milk and cream samples tested	700
Cans inspected	5,000
Weights and measures inspections	68
Samples submitted to chemist	52
Prosecutions for unsanitary conditions	4
Prosecutions for adulterations	5
Convictions	9

REPORT OF W. A. VOIGT, CREAMERY, DAIRY AND FOOD INSPECTOR

Ex Officio Sealer of Weights and Measures

As creamery, dairy and food inspector, from July 1 to November 6, 1911, I made the following inspections:

Creameries and skimming stations	184
Cheese factories	65
Groceries, meat and oleomargarine markets	536
Dairies, barns, separators and utensils	42
City milk wagons and utensils	52

Have bought and tested 126 samples of milk and cream from city milk supplies; tested 135 samples of milk and cream at factories, and collected 5 herd samples at farms. Have sent 51 samples of milk, cream and butter to chemist. Have judged dairy products at Northern Wisconsin State Fair, also at Marathon county and Clark county fairs and county butter makers' meetings. Have brought 10 prosecutions and secured 10 convictions, 6 for unclean and unsanitary conditions at creameries and cheese factories, 3 for selling adulterated milk and 1 for maintaining an unsanitary meat market. Have also made a number of second inspections, creameries, cheese factories, groceries, and meat markets together with Inspectors Buzzell and Southard, which in various cases resulted in prosecution and conviction.

I was unable to perform my duties as dairy and food inspector for nearly three months during the winter of 1911 owing to sickness.

While making creamery and cheese factory inspections, I have wherever possible examined the milk and cream and cans containing the same; have inspected hundreds of cans at buying stations and depots. Wherever conditions were found unsatisfactory, suggestions were made to overcome the same, open-seamed and rusty cans and cans that were dirty were tagged and the owners' attention called to the law in regard to the same. In most instances compliance with the requirements of law was obtained without recourse to the courts.

The conditions at creameries and cheese factories as a whole were very satisfactory, as a good number of the makers take great pride in their work, in keeping their factories clean and in using their skill to avoid all losses possible and to improve the quality of their output. More than two-thirds of the creameries of this territory are coöperative and many are well equipped with modern buildings and apparatus, but some seem to have only one object in view, to keep down expenses as much as possible regardless of results,—electing incompetent managers and employing poor, inexperienced makers. These factories

as a rule are unsuccessful through losses incurred by ill management and a failure to employ strict business principles and methods in their operation.

The following are a few illustrations of the incompetence and unbusinesslike methods observed: Arriving at a certain creamery I found that the butter maker made two churnings a day. Not having sufficient vat room to properly ripen the cream, he added considerable ice to the cream in the vat separated in the morning at the factory, and added to this, to make a churning, the cream from one of the routes brought in at noon. I found the temperature to be 52° F after the cream from the route had been added. This unripened cream was put in the churn at once to make room for the loads of cream from other routes. The management tried to save the expense of a larger or additional ripener, or perhaps their attention had not been called to the fact that losses are always very great in churning unripened cream. The buttermilk taken from said churning showed a loss of 2.8% and the loss in the wash water was .4%. At this rate of waste, it was found that the maker lost in this one churning considerably more than the wages paid to the butter maker, helper and haulers. After the figures were presented to the management they were much surprised and remedied conditions at once.

In another creamery which had started two cream routes but was uncertain as to whether same would be a paying proposition, they tried to get along as cheaply as possible, and hired to gather the cream an old man known to be honest but who did not know the first thing about cream or sampling or testing the same. Sometime later the butter maker discovered that the overrun was not as high as it should be. He had been negligent in checking up the work of the haulers, especially the one above referred to. The haulers either through ignorance or negligence were not always taking the cream samples properly and accurately. In this particular case the hauler was sampling day after day from the cans of separator cream set out for delivery to the creamery by the patrons. Some patrons also set out cans containing the whole of the evening's milking. The cream collected by the hauler from these cans of milk the following day was separated by the gravity system, which would almost invariably test considerably lower in butter fat than the separator cream. The inexperienced hauler delivered both the separator and gravity cream to the creamery having sampled only the separator cream or the higher testing cream of the two lots. The butter maker weighed up both lots, multiplying the total number of pounds of cream by the fat test of the separator cream only, thereby charging the churn with more butter fat than went into it, hence the low overrun.

I am pleased to report that these and numerous other sources of loss were stopped at once after attention was called to them.

In my work among the creameries and cheese factories I found about the same rate of improvement as in former years. Up-to-date apparatus takes the place of the old whenever new is installed. More care is given to drainage and good floors. The quality of the butter and cheese has improved, especially from factories whose makers have taken part in the monthly scoring contests conducted in this state.

The sanitary conditions of grocery stores and meat markets were in many instances not good on first inspection, especially in regard to the protection of food from dust, filth, flies, etc., but on second inspection in most instances decided improvements had been made, although in some cases only with the purpose of escaping prosecution, as there is a certain class of people who will obey the laws only so long as strictly enforced.

WORK DONE AS SEALER OF WEIGHTS AND MEASURES

I beg to report the following work done by me as sealer of weights and measures from November 6, 1911, to June 30, 1912:

Number of establishments inspected	648
Number of measuring devices inspected	6,677
Number condemned	985
Number condemned for repairs	923
Number adjusted	617
Number sealed	4,769
Number of stores visited on try-out inspections	196

Of the total number of measuring appliances tested, the per cent condemned was 14.8. Of these about 70% were liquid and dry measures. It was surprising to find so many of the liquid and dry measures short, but the dry measures are now being done away with entirely and the dealers are acquiring the habit of selling by weight only. Wherever new liquid measures have replaced the old, I have found them correct. About 20% of the apparatus condemned were spring scales, balance counter scales, and weights.

The per cent condemned for repairs was 13.8. Of this a large number were counter tacks with too large or incorrectly placed heads, and scales which were found incorrect.

Nine and two-tenths per cent of the total number inspected were adjusted by me and then sealed. In nearly all cases this apparatus consisted of different types of scales. Occasionally incorrect scales were found which registered in favor of the purchaser but much more often the error was in the dealer's favor. Weights found incorrect were usually light—either worn from constant use, the adjusting lead gone, had been sent from the factory incorrectly adjusted, or had been deliberately tampered with.

The 4769 pieces of measuring apparatus reported as sealed include 617 which were first adjusted by me and then sealed. So that it will be seen that the number of appliances actually found correct as in use by the dealers was 4152, or 62.2% of the total number inspected.

Am pleased to report that I find the majority of the people, merchants and consumers alike, clearly see the benefits to be derived from a strict enforcement of the weights and measures act, which protects the honest merchant as well as the consumer.

REPORT OF P. W. GUSE, CREAMERY, DAIRY AND FOOD INSPECTOR

During the period covered by this report I have made the following inspection and prosecutions:

Creameries	134
Cheese factories	226
Condenseries	2
City milk plants	10
City milk and cream supplies	15
Samples tested at creameries and cheese factories	385
Grocery stores and meat markets inspected	249
Samples submitted to chemist	49
Herd samples procured	16
Prosecutions	14
Convictions	*14

*In two cases defendants pleading nolo contendere.

In addition to the above, I made inspections of the sanitary conditions of lunch counters and confectionery stands at the State Fair Park; also assisted in the mailing of biennial reports, circular letters, pamphlets, etc., for the commission.

There has been a marked improvement in regard to sanitary conditions and management of creameries and cheese factories during the time covered by this report. Sanitary piping is used to conduct the milk and cream in the place of the rusty pipe and rubber hose that at one time were in common use. The open cream vat is fast disappearing and is being replaced by the modern cream ripener. Practically all factories have screens on windows and doors and the operators are making an effort to keep out the flies. Wood floors have largely been replaced by cement; also sewage disposal has received more attention than formerly. In places where streams are not available for carrying off sewage, cess wells or septic tanks are being used with good success. This does away with the bad odor that was formerly found around some of these places.

In that section of my territory where milk is bought by the pooling system, about sixty-five Babcock testers have been installed during the last year. Although not paying on fat basis, it gives the factory operator a means of detecting adulterated milk and has greatly reduced this source of trouble.

Skim milk, buttermilk and whey tanks as a rule are kept in a clean condition. But the whey tank that is set in the ground is still in existence. It is hard to clean and is very often found in an unclean condition. In many cases the whey tank has been elevated and the whey pumped either with a steam jet or rotary pump. This system has been found to be more satisfactory as elevated tanks can be easily drained and washed. An unclean whey tank is the root of a large portion of the trouble found at cheese factories, very often causing a heavy loss to both makers and patrons. In several cases a yeast ferment developed from this cause, inoculating the patrons' milk cans. These, not being properly washed and scalded, in turn contaminated the milk delivered to the factory and in this way the trouble was carried on for weeks and months at a time. Another disadvantage that the underground whey tank has, is the use of pumps. Many factories use a pump that is equipped with an endless chain of wooden buckets, these being constructed in such a way that they are almost impossible to clean and this style of pump is generally found in an unclean and filthy condition.

Where possible milk and cream cans and their contents were inspected. In several cases prosecutions were necessary, but the percentage of open-seamed, rusty and unclean cans is rapidly growing smaller.

Instruction was also given along with the work of inspection, and help given makers and managers where possible.

The inspection of city milk and cream supplies consisted of buying and testing samples of milk and cream and in the inspection of wagons and utensils for sanitary conditions. With but a few exceptions utensils were found to be clean. The dealer's attention was called to these unclean conditions and upon second inspection this trouble had been overcome. Sediment tests were also made of the milk supply at a number of city milk plants. This resulted in much good as the farmer could be shown the amount of dirt the milk delivered by him contained, which caused him to exercise greater care.

The displaying of food stuffs in grocery stores and meat markets has undergone a great change. Where formerly goods were displayed in open boxes, barrels, on top of counters and on platforms in front of buildings, exposed to dust, flies and other contamination, they are

now displayed under glass covers or protected in such a way that the dust and flies do not reach them.

REPORT OF J. B. LINZMEYER, CHEESE FACTORY, DAIRY AND FOOD INSPECTOR

During the biennial period ending June 30, 1912, I inspected 176 cheese factories, 19 creameries, 143 dairy barns and the utensils used in the handling of milk and cream, or butter, at those places; tested 1,035 milk and cream samples; made 187 inspections of meat markets and stores as to the sanitary condition of same; made 85 inspections under the weights and measures department, which resulted in one prosecution and conviction; inspected a number of city milk wagons and depots and their utensils; also tested a large number of samples of milk with the sediment tester.

A number of prosecutions were necessary and convictions obtained with the little cotton disc of the sediment tester as the chief and indisputable evidence.

There is a marked general improvement in the cheese factories and creameries, throughout my territory, including a few places where radical improvements were made. One specific instance being in Brown county where the receiving-room floor was poor and the leakage of milk through it caused an unsanitary condition and bad odor in the creamery. Operations were suspended on the morning of my visit and the necessary improvements made at once.

In another instance where upon first inspection about one-third of the milk cans at a creamery were found unclean or open seamed, upon a second visit only one dirty can was found and the owner of that can was prosecuted and convicted.

In another case a cheese factory in Kewaunee county where a prosecution was the result of my visit, the cheese maker and owner of the factory told me later that the prosecution was the best thing that ever happened in his factory, as it helped to better the condition in general.

Another instance was a dirty meat market in Manitowoc county which was cleaned up without prosecution but with the help of the district attorney and the local health officer. Also, a grocer in the same county who kept some of the groceries in bulk, exposed to the dust and flies, was induced, with the help of the district attorney, to protect said food from dust, flies and other contamination.

In the grocery stores there is a noticeable improvement in keeping foodstuffs protected from flies and dirt and also in keeping same well out of the reach of dogs.

In the dairy barns, the improvement is slow, but constant and permanent, so that the percentage of dirty cows is gradually getting less and the milk offered for sale is cleaner in the same proportion.

REPORT OF S. B. COOK, DAIRY AND FOOD INSPECTOR

During the period from November 6, 1911 to June 30, 1912, I have been engaged in the inspection of creameries, cheese factories, cream-buying stations, dairies, city milk supplies, meat markets, grocery stores, oleomargarine markets and in measuring berry boxes and fruit containers and explaining the provisions of the new weights and measures law relating thereto.

INSPECTIONS

Ceameries	74
Cream-buying stations	6
Cheese factories	14
Meat markets	71
Grocery stores and meat markets combined	9
Grocery stores	129
Oleomargarine markets	174
City milk supplies	4
Dairies	9
Cream routes	2
Weights and measures try-outs	55

Wherever it has been possible to be at a creamery or cheese factory when the milk or cream was being received, I have done so and inspected the same as received. Much of the cream being received at the creameries is gathered by haulers and the weighing and sampling is done by them. I have made a few trips out on the routes with the haulers on their cream gathering days and have found this to be very satisfactory as in this way I have been able to inspect the utensils used, such as pails, cans, separator, and the place where separator is kept; also where cream is kept. I have found in most instances the cream is kept in the cellar. Where this is the case I have suggested the building of a small concrete tank and placing it between the pump and large stock tank. In some instances I have found the separator in the feed alley or stall of the barn, and have made the owner or manager familiar with the law in regard to the sanitary production of cream.

In my work among the creameries and cheese factories I have found most of them in clean, sanitary condition. Some of the old frame buildings are being torn down and replaced with brick and concrete. The old wood floor is disappearing and is being replaced with cement. Where the cheese factory or creamery is built on low land, some trouble exists in the securing of proper drainage. A number of the creameries have installed septic tanks but are having trouble with them on account of their being too small. The septic tank should be large enough to hold the sewage of five or six days, and to get good results all clear water should run out to a cesspool.

In my work among the grocery stores and oleomargarine dealers this last winter, I found conditions very good in most places as to sanitary conditions. I found some stores where boxes and barrels containing sugar, coffee, oatmeal, etc., were not protected with coverings. I drew the merchants' attention to the necessity of protecting same from dust, and found them ready and willing to do so.

In my work among the oleomargarine dealers I only found a few packages in semblance of yellow butter. I drew the merchants' at-

tention to the law relating to selling oleomargarine in semblance of yellow butter (Section 4607d, statutes of 1898) and in most instances, what was left was ordered shipped back to tne packer. In some instances the signs were not properly displayed. After reading the law to the dealers, they immediately put up the proper signs or sent for same.

Much time has been spent in connection with the new law relating to weights and measures. In all places where possible berry boxes and fruit containers have been measured and the laws relating thereto explained.

I have attended Wisconsin Cheese Makers' Association, presided at Wisconsin Butter Makers' Association and attended the North Western Wisconsin Butter Makers', and Polk County Butter and Cheese Makers' Association meetings, taking part at each.

REPORTS OF SEALERS OF WEIGHTS AND MEASURES

REPORT OF WILLIAM WINDER, SEALER OF WEIGHTS AND MEASURES

Following is a report of work done by me as sealer of weights and measures from the date of my appointment, November 6, 1911, to June 30, 1912.

Cities and villages where work has been done	130
Establishments inspected	992
Stores where various commodities have been reweighed and remeasured for the purpose of detecting shortage	120
Articles, including package goods, sugar, coffee, potatoes, meats, butter, and fruit packages, reweighed and remeasured to detect possible shortage	152
Articles found short weight or measure	63
Scales inspected and sealed	543
Scales inspected and condemned	199
Liquid measures sealed	1,410
Liquid measures condemned	354
Dry measures sealed	46
Dry measures condemned	65
Linear measures sealed	1,286
Linear measures condemned	562
Automatic measuring pumps and tanks sealed	115
Automatic measuring pumps and tanks condemned	34
Automatic measuring pumps and tanks adjusted	36
Scale weights sealed	844
Scale weights condemned	145

Of the period covered by this report about two weeks were spent at the office at Madison in getting instructions and preparing for the work to be done and, in company with other sealers and the chief inspector, visiting various manufacturing plants and repair shops for the purpose of getting a working knowledge of the mechanical construction of the various makes of scales.

In the above summary the figures do not give the true percentage of incorrect scales and measuring devices. The proportion of incorrect articles found upon the first inspection is much in excess of that shown by the above figures. In explanation of this, would say that since Jan. 18 my work has been reinspection, or, at an interval of a few weeks, to follow the other sealers with the purpose of inspecting new and repaired scales, measures and measuring devices, and seeing that the necessary corrections were being made as required by law. As would be expected, the percentage of incorrect articles found on this second visit is very much smaller than at the first visit.

In this, the first inspection under a new law, the work has been to a great extent what might be termed missionary or educational, and in large part has been to explain to the public the requirements of the law.

Numerous times I have been detailed to do special work in the way of investigating claims from various parts of the state regarding shortage in weights and other infringements of the law.

Considerable time has also been spent in visiting various large cities in connection with the enforcement of the berry box regulations and in an inspection of several fruit package manufacturing concerns, with the view of ascertaining the sizes of various boxes and baskets to be used as fruit containers.

REPORT OF JOHN E. BOETTCHER, SEALER OF WEIGHTS AND MEASURES

Received preliminary instruction in sealing of weights and measures in the office of the Weights and Measures Department from Nov. 6th to Dec. 6th, 1911. Started actual work of sealing Dec. 7th, 1911 and continued during the remainder of the biennial period, with the exception of thirty days from the 4th of May, during which time work was done at the office.

Summary.

Appliances inspected.	Sealed.	Adjusted.	Condemned for repairs.	Condemned.	Total.
Scales	600	80	147	34	781
Dry measures	16	.....	.....	43	59
Liquid measures	812	.....	23	314	1,149
Automatic pumps	42	12	40	.....	82
Linear measures	107	2	427	.....	534
Weights	1,697	161	96	28	1,821
Total					4,426

Cities visited, 40. No. of establishments, 573.

REPORT OF HENRY L. BORNHEIMER, SEALER OF WEIGHTS AND MEASURES

The following is an itemized report of the work done by me during the period beginning November 7, 1911, and ending June 30, 1912:

After spending two weeks at the office testing and sealing the various standards that were to be used by us and studying the law and regulations relating to weights and measures by which we were to be guided in our work, also getting instructions as to the mechanical principles of scales at the office and by visiting some of the scale factories and repair shops in the state, Chief Inspector Downing gave Inspector Warner and me our first experience in practical work in the field, as follows:

Sixty-four establishments in one city were visited.

	Sealed.	Condemned for repairs.	Condemned.	Total.
Counter scales	45	4	1	49
Computing scales	10	6	.....	16
Spring scales	9	2	7	18
Dry measures	6	.....	18	24
Liquid measures	131	.....	31	162
Yardsticks, tapes, etc	13	.....	1	14
Yard counter tacks	15	94	.....	109
Automatic pumps	2	2	.....	4
Weights	147	.....	15	162
Total	.....	.....	.....	558

In company with Inspector Boettcher the following inspections were then made:

Eighty-three establishments in three cities:

	Sealed.	Condemned for repairs.		Condemned.	Total.
Counter scales	43	(1 adj.)	10	.....	53
Computing scales	18	2 "	9	.....	27
Spring scales	1	.....	9	2	12
Dry measures	.....	.....	.....	11	11
Liquid measures	131	.....	1	88	220
Yardsticks, tapes, etc	15	.....	1	.....	16
Yard counter tacks	.....	.....	92	.....	92
Automatic pumps	4	.....	11	.....	15
Weights	192	.....	11	12	215
Total	.....	.....	.....	.....	661

Following this I worked alone in ninety-three cities, towns and villages on first inspection, inspecting a total of 1086 establishments:

	Sealed.	Adjusted.	Condemned for repairs.	Condemned.	Total.
Counter scales	713	147	53	11	777
Computing scales	341	85	47	3	390
Spring scales	220	35	66	49	335
Dry measures	46	.....	.....	53	99
Liquid measures	2,433	11	17	871	3,321
Yardsticks, tapes, etc	108	.....	.....	.....	108
Yard counter tacks	349	68	1,282	23	1,654
Automatic pumps	263	131	49	2	314
Weights	2,745	411	136	34	2,915
Total	.....	.....	.....	.....	9,913

On second or reinspection I visited 9 towns, inspecting 101 places:

	Sealed.	Adjusted.	Condemned for repairs.	Condemned.	Total.
Counter scales	23	1	2	1	26
Computing scales	12	2	1	.....	13
Spring scales	10	.....	3	1	14
Liquid measures	76	.....	.....	11	87
Yard counter tacks	182	.....	10	4	196
Yardsticks, etc	5	.....	.....	.....	5
Automatic pumps	21	2	3	.....	24
Weights	105	11	7	....	112
Total	.....	.....	.....	.....	477

I condemned 26 charts in computing scales. Made 27 try-outs, mostly of print butter.

Inspector Warner and I visited 4 cities on berry box inspection, visiting 57 establishments.

Inspector Marty and I visited 1 city, inspecting 24 places.

Inspector Southard and I visited two cities, inspecting 36 places.

I visited 7 cities, inspecting 82 places.

REPORT OF GEORGE WARNER, SEALER OF WEIGHTS AND MEASURES

Following is a report of the work done by me since my designation as creamery, dairy and food inspector, ex officio sealer of weights and measures, November 6, 1911, to and including June 30, 1912:

Appliances inspected.	Sealed.	Adjusted.	Condemned for repairs.	Condemned.	Total.
Scales	950	157	193	132	1,275
Dry measures	23	.....	.....	216	229
Liquid measures	2,727	.....	.....	730	3,457
Linear measures (counter tacks, yardsticks)	425	.....	.....	1,210	1,635
Weights	2,304	....	.....	165	2,469
Automatic pumps	224	... .	... .	114	338
Total	....	.....	.....	....	9,413

Cities and villages visited, 98.

Establishments inspected, 1140.

In connection with this work, purchases were made at various times and packages reweighed to detect possible shortage.

About two weeks were spent in the office at Madison studying the construction and operation of the various types of scales in use in the state, also in visiting some of the scale manufacturing plants.

I also spent about three weeks inspecting some of the larger cities of the state with the city sealers to see if dealers were complying with the law in selling berries.

I also worked with Mr. Boettcher on heavy scale inspection for about two weeks, which work is covered in his report.

REPORT OF WALTER J. KRAMER, SEALER OF WEIGHTS AND MEASURES

I hereby submit a report of work done by me as sealer of weights and measures from January 25, 1912, the date of my appointment, to and including June 30, 1912.

FIELD WORK

No. of cities visited	22
No. of grocery stores visited	6
No. of general stores visited	18
No. of butcher shops visited	4
Other places of business visited	47
Total	75

Appliances inspected and tested:

	Tested.	Sealed.	Adjusted.	Condemned for repairs.	Condemned.
Scales	66	47	9	9	1
Measures	300	185	6	40	69
Weights	119	93	2	5	19
Total	485	325	17	54	89

Dealers were given instruction in marking of short berry boxes and other fruit measures and a copy of the weights and measures law and regulations was left at each place of business.

WORK DONE AT OFFICE

Appliances inspected and tested:

Sealers' balances	27
Dry measure gauges	30
Dry measures	163
Yardsticks	16
Steel tapes	10
Sealers' weights	1058
Total	1304

Creamery glassware calibrated:

	Tested.	Sealed.	Condemned for repairs.	Condemned.
Cream test bottles	1.544	1.129	.....	415
Milk test bottles	772	768	.....	14
Pipettes	32	29	.....	3
Acid measures	5	2	.....	3
Cream scales	25	23	2	.....
Moisture scales	2	2	.....	.....
Nine and eighteen gram weights.	12	10	.....	2
Total	2.392	1,963	2	437

INDEX.