



Departments Exhibit at Dairy Cattle Congress
Waterbury—1921

STATE OF IOWA

1921

REPORT OF THE

DAIRY AND FOOD COMMISSIONER

FOR THE

YEAR ENDING OCTOBER 31, 1921

W. B. BARNEY

STATE DAIRY AND FOOD COMMISSIONER
DES MOINES, IOWA

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Des Moines

LETTER OF TRANSMITTAL

HON. N. E. KENDALL, Governor.

Sir: In compliance with the law, I have the honor to submit herewith the Thirty-fifth Annual Report of the Dairy and Food Commissioner.

W. B. BARNEY,
Dairy and Food Commissioner.

Des Moines, December 15, 1921.

REPORT OF COMMISSIONER

From our 1920 report we quote the following as to economic conditions.

Economic readjustment has been the chief problem of the past year. Disturbed and abnormal conditions, the heritage of every great war, mean a trying period of reconstruction for every nation involved—a period of economic warfare between conflicting interests during which many suffer and few are benefited. Following every great crisis comes a period of high prices and great business activity during which extravagance is the rule of the hour and a false feeling of prosperity, induced by the circulation of tremendous amounts of deflated money, gives the wage earner in particular, a feeling of financial security which history does not show to be justified. This in turn is followed by a true period of readjustment, when, because of the inability of the great mass of consumers to pay the prices established by inflation, prices again seek their normal level.

We are free to admit at this time that we have not passed through this period without serious difficulties and that this is especially true in its application to the farmer.

It is very well for some of our economists to travel over the country telling our people that the worst is over, but times in this and other agricultural districts are not going to be very much better so long as the farmer must accept from 20 to 25 cents for oats and from 30 to 35 cents for corn and 2 to 3 cents for green hides, all of which are less than pre-war prices, much less than the cost of production.

These prices lessen his purchasing power, so that he is no longer able to pay forty to sixty dollars for a suit of clothes and one to one dollar and a half for a neck-tie and eight to twelve dollars for a pair of shoes, with other articles of wearing apparel for himself and family in the same proportion.

Conditions will not be materially improved until the farmer can get at least somewhere near the cost of production, or a little profit. This he cannot do at this writing. Either his products must be materially increased in price or the things he is obliged to purchase must stand somewhere near the same per-

centage of reduction he has been obliged to accept on his products.

Corn sold as high as \$1.60 to \$1.80. We will admit that possibly this was an unreasonably high price, perhaps just as far from its real value as 25 to 30 cents is at this time. I recently overheard the following conversation between two gentlemen, coming out of a restaurant. One asked the other if he had had a good meal; the answer was that he should have had, as he had eaten three bushels of corn.

There is no reason why the railroads should get more for transporting a bushel of corn to the seaboard than the Iowa farmer gets for raising it. There has been too much alarm about some of our railroads going into bankruptcy and too little consideration given to the farmer who is, or will be, in bankruptcy. The railroads should do their share of bringing the country back to normal, the same as the farmer has had to do. An industry as well organized as our railroads, generally is quite able to protect itself. It is only through the help of the Iowa Farm Bureau that the farmer has received the protection that he has been able to get.

The dairy farmer has suffered less in the readjustment than any other branch of the agricultural industry. Dairy products have not depreciated in price in the same proportion that grain, cattle and hogs have. This matter will be treated at greater length in another part of this report.

TUBERCULOSIS IN OUR DAIRY HERDS

A great advance has been made in cleaning up our milk producing herds within the last two or three years. Possibly, in no other year have as many applications been filed requesting the tests as in the year just drawing to a close. The fact that the Thirty-Ninth General Assembly put a provision in the law giving preference to dairy herds had a good effect. Besides this, the new law gave cities and towns greater authority than they had ever before enjoyed to enact ordinances having for their purpose the regulation of the milk supply.

House File No. 361 reads as follows, and is of no little importance to those who are interested:

Cities and towns, including cities under special charter, in addition

to powers already granted, shall have within their corporate limits the power by ordinance (1) To provide for the inspection of milk, skimmed milk, buttermilk and cream, for domestic or potable use. (2) To establish and enforce sanitary requirements for the production, handling and distribution of milk, skimmed milk, buttermilk and cream for domestic or potable use. (3) To compel the tuberculin test by an accredited veterinarian for dairy cattle supplying milk for human consumption. (4) To provide for the pasteurization of milk, skimmed milk and cream, except that produced from a cow or herd of cows which have been placed and maintained under state or federal supervision for the eradication of tuberculosis, provided that, a cow or herd of cows shall be considered under such supervision when there is on file in the office of the commission of animal health an application for such supervision, and except that produced from a cow or herd of cows which have been tested and found free of tuberculosis by an "accredited" practicing veterinarian.

Any ordinance requiring a tuberculin test of a cow or herd of cows, whose milk is or shall be sold within the corporate limits of any city or town, as provided in this act, shall further provide that if such test has not been previously made, it may be applied at any time within six (6) months from the date of the passage of such ordinance, and the provisions thereof shall apply only after the expiration of said period.

For the purposes of this act an "accredited" practicing veterinarian is one who has successfully passed an examination of the bureau of animal industry of the United States Department of Agriculture and the commission of animal health of this state and is authorized to make tuberculin tests of accredited herds of cattle under the provisions of section six (6) of the uniform methods and rules governing accredited herd work which was approved by the bureau of animal industry of the United States Department of Agriculture, December 6, 1920.

Nothing in this act shall be construed as giving to such cities and towns authority to adopt ordinances in conflict with the state law, or to abrogate the authority now or hereafter vested in the state dairy and food commission.

During the early part of 1921, this department began receiving numerous requests for copies of an ordinance that would be suited to the needs of the different towns and cities throughout the state. It is perfectly easy to understand that it would be an extremely difficult matter to draw up an ordinance that would be suited to each and every city within the state, the variation in the size of the different places having much to do with conditions under which milk is produced.

I, finally, concluded to counsel with the different bodies, whose names you will find at the end of a "Proposed Milk Ordinance" which follows and is made a part of this report. With

the help of the attorney general and after a number of conferences, with interested parties, we brought out what we termed a proposed ordinance. We assume that it has met with considerable favor, as we have reason to believe that it has been enacted in one hundred or more places. Quite a number of places have made only slight changes, but this was expected.

PROPOSED MILK ORDINANCE

Issued May 18, 1921, by W. B. BARNEY, Dairy and Food Commissioner of the State of Iowa and approved by Animal Health Commission, State Board of Health, League of Iowa Municipalities, State Dairy Council.

Subject to such changes as may be deemed necessary to suit conditions in cities and towns where adopted.

AN ORDINANCE providing for the inspection of milk, skim-milk, buttermilk and cream; to establish and enforce sanitary requirements for the production, distribution and handling thereof, and to require pasteurization, and for tuberculin tests of herds supplying same, and prescribing penalties for violation.

Be it ordained by the Council of the City of Iowa:

Section 1. For the purpose of this ordinance, milk is the fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept; cream is the portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, is fresh and clean, and skim-milk is the portion of milk, poor in fat, from which the cream has been removed. The term "skim-milk" shall also include the fresh, clean, lacteal secretion of one or more healthy cows and containing less than three per cent of milk fat or less than eleven and one-half per cent of milk solids.

Sec. 2. It shall be unlawful to distribute or intend to distribute any milk, skim-milk or cream which is adulterated.

For the purpose of this ordinance, milk, cream and skim-milk shall be considered adulterated:

In case of milk, cream, and skim-milk:

First. If any water or any other substance has been added.

Second. If it contains any visible dirt or be contained in any container which is not clean.

Third. If it be obtained from any animal having disease, sickness, ulcer, abscess or running sore or which has been obtained from a cow within fifteen days before or five days after calving.

Fourth. If it be obtained from a cow stabled in an unhealthful place or fed upon any substance in a state of putrefaction or of an unhealthful nature.

In the case of milk:

If it contains less than three per cent (3%) of milk fat or less than eleven and one-half per cent (11½%) of milk solids.

In the case of cream:

If it contains less than sixteen per cent (16%) of milk fat.

Sec. 3. It shall be unlawful to distribute or intend to distribute any misbranded milk, skim-milk or cream.

For the purpose of this ordinance, milk, cream and skim-milk shall be considered to be misbranded.

If it is labeled or branded so as to deceive or mislead the purchaser or if the package bears any statement, design or device which is false or misleading in any particular.

Sec. 4. It shall be unlawful to distribute or intend to distribute any milk, cream or skim-milk without obtaining a milk license from the Dairy and Food Commission of the State of Iowa and recording such license with the clerk. The clerk shall keep a permanent record of all such licenses and all revocations thereof.*

*Under section IV of this ordinance no one distributing milk shall be required to take out a license except those distributing from a vehicle or store as provided in section 1444 C. C.

Sec. 5. It shall be unlawful to distribute or intend to distribute milk, skim-milk or cream unless the same is produced and distributed in strict compliance with the following rules and regulations:

(a) All milk shall be bottled but shall not be bottled on any delivery wagon or at any other place than in the milk house or milk plant, and shall be delivered in the original bottle. Nothing in this paragraph shall apply to consumers taking two gallons or more at one delivery.

(b) No dirty or unwashed bottles shall be received or be in the possession of any distributor of milk. Milk bottles, milk cans or other containers for milk shall not be used for any other purpose than containing milk and milk products. Bottles, cans or other containers shall not be left at any dwelling or other building under quarantine so long as quarantine is maintained; but shall be emptied into a receptacle provided by the person desiring milk at such quarantined place.

(c) All raw milk, skim-milk or cream shall be the product of a healthy cow or herd of cows as determined by a physical examination, and produced from a cow or herd of cows which have been placed and maintained under State or Federal supervision for the eradication of tuberculosis, provided that, a cow or herd of cows shall be considered

under such supervision where there is on file in the office of the Iowa Commission of Animal Health an application for such supervision, or which have been tested and found free of tuberculosis by an "accredited" practicing veterinarian. A cow or herd of cows other than those placed under State or Federal supervision shall be tested for tuberculosis at least once a year, and where reactors are found, they must be removed and a retest conducted within six months. No cow or cows shall be allowed to associate with or added to a cow or herd of cows which have been found free of tuberculosis, as above provided, except such cow or cows as have been found free of tuberculosis. For the purpose of this ordinance, an "accredited" practicing veterinarian is one who has successfully passed an examination of the Bureau of Animal Industry of the United States Department of Agriculture and the Commission of Animal Health of this State and is authorized to make tuberculin tests of accredited herds of cattle under the provision of section six (6) of the Uniform Methods and Rules governing accredited herd work which was approved by the Bureau of Animal Industry of the United States Department of Agriculture, December 6, 1920. Such tuberculin test of a cow or herd of cows, whose milk is to be distributed, may be applied at any time within six (6) months from the date of the passage of this ordinance.

(d) No milk or cream shall be distributed or intended for distribution except that produced from a cow or herd of cows as provided by paragraph (c), except it shall first have been efficiently pasteurized. Milk shall be deemed to have been efficiently pasteurized when it has been subjected to a temperature of approximately 145 degrees Fahrenheit and not less than 142 degrees, and held at this temperature for at least thirty minutes. Every pasteurizing apparatus shall be equipped with a standard type automatic time and temperature recording device which shall be attached, adjusted and used in a manner prescribed by the dairy inspector. The recording chart shall be dated and filed at the pasteurizing plant, and be available for inspection by the dairy inspector. No milk produced by a cow or cows which have reacted to the tuberculin test shall be pasteurized and distributed or intended for distribution as fluid milk.

(e) Barns in which milk is produced shall be clean, well lighted and ventilated, and shall have floors constructed of cement or other impervious material. Manure shall not be allowed to accumulate within fifty (50) feet of the barn. Cows shall be clean and free from visible dirt at all times. Milking shall be done with clean dry hands into some form of small top pail with smooth seams or with a properly cleaned and sterilized mechanical milker.

(f) Milk shall be removed from the barns immediately after milking to a clean place and strained through new cotton or other clean efficient strainer. Milk shall be cooled immediately after milking to a temperature approximating that of well water or less and maintained

at that temperature until delivered, except during the process of pasteurization.

(g) All milk houses, milk depots, milk plants and milk distributing vehicles shall be kept in a clean and sanitary condition at all times, in accordance with the standards and regulations fixed by the State law.

(h) All utensils which come in contact with milk shall be thoroughly washed and sterilized with live steam or boiling water or by any other effective and harmless method of sterilization approved by the dairy inspector.

(i) All persons engaged in the production, handling and distribution of milk shall be free from all communicable diseases and from any contact with any communicable disease. Every operator of a dairy farm, milk depot, milk distributing plant or milk delivery wagon shall within twenty-four hours notify the mayor or dairy inspector of the presence of any communicable disease on his farm, among his employees or the families of his employees.

(j) Every producer of milk which is distributed or intended for distribution, shall within twenty-four hours notify the mayor or dairy inspector of the presence of any disease among the cows producing any of the milk distributed by him.

Sec. 6. It shall be unlawful to return any dirty or unwashed milk bottle, can or container to a distributor of milk, but all such shall be thoroughly rinsed with clean, cold water immediately after being emptied; or use any milk bottle, can or other container for any other purpose than containing milk or milk products. In case of quarantine, consumer shall provide a receptacle into which milk, skim-milk, butter-milk or cream shall be emptied.

Sec. 7 The council shall appoint a suitable person as dairy inspector at a salary to be fixed by the council by resolution. The dairy inspector shall familiarize himself with all State laws, ordinances and rules and regulations of all State officers and of the State and local Board of Health relating to the production and distribution of milk, skim-milk and cream, and shall see that all such laws, ordinances and rules are strictly enforced. He shall take samples of milk, skim-milk and cream distributed or intended for distribution for determining whether such complies with all State laws, ordinances, rules and regulations of all State officers, and of the State and local Board of Health. He shall inspect all dairies from which milk is distributed and all distributing stations and places where milk is kept for distribution, together with their equipment and employees. A complete record of all conditions found shall be filed with the mayor. The powers and duties of the dairy inspector may be exercised by, combined with or delegated to any other officer or employee by action of the council by resolution. In the discharge of his duties he shall co-operate with the State Dairy

and Food Commissioner, the Animal Health Commissioner, and the State Board of Health.

Sec. 8. Any one violating any of the provisions of this ordinance shall, upon conviction, be subject to imprisonment not exceeding thirty days or to a fine not exceeding one hundred dollars. Whenever the fine and costs, imposed for the violation of this ordinance, are not paid, the person convicted may be committed to jail until such fine and costs are paid, not exceeding thirty days.

Sec. 9. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Sec. 10. This ordinance shall be in force from and after its passage and publication as provided by law.

Dated at Des Moines, Iowa, May 18, 1921.

Approved by

DAIRY AND FOOD COMMISSION
STATE BOARD OF HEALTH
ANIMAL HEALTH COMMISSION
LEAGUE OF IOWA MUNICIPALITIES
STATE DAIRY COUNCIL

This department has nothing to do with the enforcement of the law having for its purpose the eradication of tubercular cattle. We work in close co-operation with Dr. Peter Malcolm, State Veterinarian, but all correspondence in this matter should be addressed to him.

PROPOSED DAIRY BUILDING AT FAIRGROUNDS

In my 1920 Report, I called the attention of the Legislature in the following language:

"An appropriation for the erection of a dairy building at the State Fair will be asked from the Legislature this winter. (See cut in fore part of Report.) That Iowa's great dairy industry should have only two small booths and a refrigerator display to represent it, at the greatest of all state fairs, is a matter of great surprise to visitors from other states. This apparent indifference to the dairy industry has been a source of considerable dissatisfaction to the various dairy organizations throughout the state. Complaints from exhibitors of dairy machinery and supplies are growing more numerous each year, until they have now reached the stage where threats to discontinue exhibiting are being heard. It is my opinion that this building should be second to none in the country. Besides ample space for the exhibiting of dairy machinery and supplies, it should be large enough to permit

of the serving of dairy products and contain a working model of all phases of dairy manufacturing. By this, I mean that a creamery, market milk plant, ice cream factory, and cheese factory should be in actual operation each day of the fair. The opportunity to carry on educational work among the men of Iowa's dairy plants by model factories of this kind is very great. Not only would a building of this kind possess great educational value but it would be a source of considerable revenue to the fair board."

The above was written early in the summer, by the time the Legislature convened, agricultural products had taken such a drop and conditions were such that it seemed unwise to do anything or urge the erection of such a building, until materials and labor had declined in price in something like the same proportion as farm products.

I sincerely hope that as early as 1923 the readjustment period will have passed and times will be normal, so that the Fortieth General Assembly may deal generously with this most important matter.

DAIRY COMMISSIONERS

NAME	County From Which Chosen	Date of First Appointment	Years served
Henry D. Sherman	Jones	May 1, 1886	1886—1890
Augustus C. Tupper	Mitchell	May 1, 1890	1890—1894
William K. Boardman	Story	May 1, 1894	1894—1898
*Levi S. Gates	Delaware	May 1, 1898	1898—1898
Byron P. Norton	Howard	Nov. 8, 1898	1898—1902
Herbert R. Wright	Polk	May 1, 1902	1902—1906

*Died October 11th, 1898. Byron P. Norton appointed to fill vacancy.

Note: Name of Office changed by Act of Thirty-first General Assembly to Dairy and Food Commissioner.

DAIRY AND FOOD COMMISSIONERS

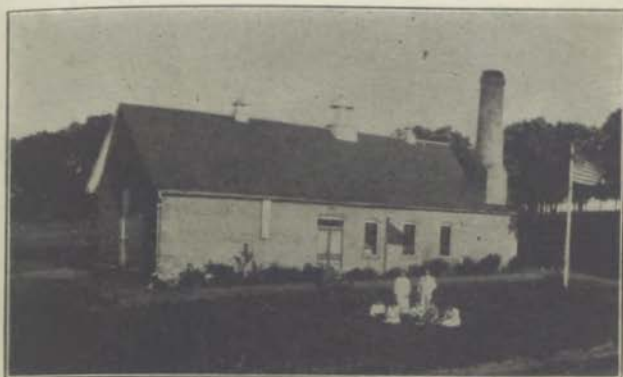
Herbert R. Wright	Polk	July 1, 1906	1906—1910
William B. Barney	Franklin	May 1, 1910	1910—



Farmers Co-operative Creamery
Garnaville, Iowa.



Farmers Co-operative Creamery
Festina, Iowa.



Farmers Co-operative Creamery
Northwood, Iowa.



Farmers Co-operative Creamery
Monticello, Iowa.



Farmers Co-operative Creamery
Plymouth, Iowa.



Farmers Co-operative Creamery
Nashua, Iowa.

DAIRY PRODUCTS

Estimates of the income, received by the State, from Dairy Products, during the past year place the figures at \$130,147,679.36, derived from the following sources:

Creamery Butter	\$47,896,805.29
Ice Cream	6,138,839.30
Market Milk	24,869,492.83
Cheese	81,113.89
Cottage Cheese	260,000.00
Farm Dairy Butter	18,528,750.00
Condensed Milk	372,678.05
Skim-milk & Buttermilk	12,000,000.00
Fertilizer	20,000,000.00

With the exception of creamery butter, you will find that the foregoing figures show a decided decrease in values, as compared with the figures given in my 1920 report. I account for this by the declining of prices on all of our markets during the past year, as well as by a decrease in the amount of some of the products manufactured.

I, naturally, expected that prices would decline this year. However, I have been more than gratified during the entire year with the condition of our Dairy Markets, especially, when compared with the market values of all other farm products and we are confident that the milch cow has saved thousands of Iowa farmers from financial ruin.

Corn, oats and other grains, as well as all forage crops produced on our Iowa farms have been selling below the cost of production. Considering the favorable market value of Dairy Products, I decided that it was an opportune time to impress upon the Iowa farmer the necessity of marketing considerable of his cheap grain, through the butterfat route, by feeding it to milch cows and with this in mind and with the help of Wallaces' Farmer and some suggestions from the Dairy Husbandry Department of the Iowa State College, we issued the following poster.

DAIRY FARMERS ATTENTION

Market your corn and oats in the form of butterfat.
No doubt you have heard considerable protesting against the low

prices which producers are receiving for corn and oats. The figures mentioned below give a comparison of the return for corn and oats when fed to milk cows and should be of interest to all having to do with the dairy industry.

Milk Cows Give the Following Values to Grains:

Butterfat Price	Corn Value	Oats Value
36	54	37
38	57.6	40
40	61	42
42	65	44.6
44	68.3	47
46	72	49.5
48	75.4	52
50	79	54.5

This value of corn and oats takes into consideration the added labor of butterfat production and investment in cattle.

SUGGESTIONS FOR FEEDING.

The Dairy Husbandry Department of the Iowa State College, suggests the following rations to feed milk cows for the promotion of butterfat production and maximum use of Iowa's surplus corn crop:

- 400 pounds cracked corn or corn and cob meal;
- 200 pounds Ground Oats;
- 100 pounds Oil Meal or Cotton Seed Meal.

One hundred pounds of ground soy beans is superior to oil meal or cotton seed meal and is being grown in some localities of Iowa. A ration not quite as satisfactory as the above may be made up of equal parts by weight of corn and cob meal, or cracked corn and ground oats. With this clover hay and corn ensilage should be fed. Generous feeding of milk cows with thoughtful management of the herd will do more to increase production of butterfat than anything and develop a higher cash market for Iowa's corn and oat crop.

STATE DAIRY AND FOOD COMMISSION.

W. B. BARNEY, Commissioner.

We are inclined to believe that the suggestions offered on this poster were more or less popular at this time, as we have issued over 60,000 copies, all of which have been distributed over the state and they were mailed out only upon request.

There has been very little change in the consumption of farm butter. However, I still believe, as I have stated in previous reports, that "While the use of good dairy butter upon the farm, or in towns adjacent to the place of its manufacture is not

to be condemned, I feel that in general Iowa dairymen would profit more and more by sending a good grade of cream to the creamery, instead of converting it into butter on the farm. This applies, particularly, to dairy butter, which is traded in at the country store for merchandise, a practice which is still in vogue in many parts of this state. In many instances, these country stores receive such a large amount of dairy butter, of widely differing grades, that the only means which they have of disposing of it, is to send it to the renovating plant, where it is manufactured into low-grade butter. It is almost impossible to estimate the loss sustained from this practice but it is safe to say that it is very large."

This not only applies to the farmer, or producer, but to the country merchant as well and I am inclined to place the blame for considerable of this loss upon the merchant, for the reason, that very few, if any, merchants are making a differential in the price per pound paid for the different grades of dairy butter. We understand that a great many Iowa merchants are more or less worried over this proposition, at this time, especially in southern Iowa and I would recommend as a solution of this problem, that all Iowa farm dairy butter be paid for strictly according to grade or quality.

Reports from creameries show that over 5,000,000 pounds more of creamery butter was sold within the state than during the previous year. We are inclined to believe that this is due to the decline in price, which has enabled a great many people of moderate means to use creamery butter, instead of oleomargarine, which was the case when butter was beyond their reach in price.

From a recent report, issued by the Internal Revenue Department, we are informed that there has been a 47½% decrease in the consumption of oleomargarine, during the first nine months of the past year. We also learn from reports from the Federal Dairy Division that there has been a 19% increase in the production of dairy products, these reports are interesting, when compared with the reports from cold storage warehouses, which show that there is less creamery butter in cold storage than on the same date one year ago. This indicates

that the consumer prefers butter to oleomargarine, when there is not too great a difference in the price.

This, also, confirms the fact that the American people prefer butter to any of its substitutes.

In view of the fact that we have had such an enormous increase in production, during the past year and with every indication pointing towards still greater production, during the coming year, I would recommend that the dairy interests of the state do all they can to stimulate the consumption of dairy products, by appropriating liberal amounts for advertising and educational work, especially such work as is being carried on by organizations, such as the National Dairy Council, etc.

A great amount of interest is now being taken by our Iowa Creameries in our State Butter Mark or as it is better known and more commonly called our State Brand. We have had a few more creameries each year who have applied for and qualified for the use of this Brand, however, the interest has not been as keen as we would like to have it. Market conditions at the time the Brand was originated were not as discriminate, as far as quality was concerned, as they are today and there was not much of an inducement for creameries to go to the expense and trouble of qualifying for the use of the Brand. However, the plants who have stayed by the Brand are now winning out, as market conditions have changed considerably.

I believe there is a ready market, within the state, which would be willing to pay a premium for all the State Brand Butter which will be manufactured in Iowa for some time to come, providing, the State Brand creameries get together and arrange a plan for putting their product on our home markets.

CREAMERY BUTTER

The year 1921 shows a remarkable increase in Iowa's butter production. Iowa Creameries have manufactured 98,740,419 pounds of butter, which is 12,520,807 pounds more than was manufactured in 1920 and 1,111,631 pounds more than was manufactured in 1917, which was formerly our largest year of production, since I have been Commissioner.

Despite the fact that the market price has declined considerable during the year, the total value of creamery butter

manufactured has increased, due, of course, to the increase in production. This year's output sold for \$47,896,805.29. This is \$32,351.87 more than the total value last year, making this the **Banner Year**, as far as values are concerned.

That there has been a marked improvement in the quality is not denied by any one, this condition has been brought about by several agencies, mainly, by market conditions, greater interest in grading and attention to details by our operators, increased interest in dairying on the part of all producers, which naturally, means greater interest in quality and by the increased efforts of this Department and the Dairy Manufacturing Division of the Extension Department of the Iowa State College, along with the help of all our State Dairy Organizations.

To back us up with our contention that this is also our **Banner Year**, in regard to the improvement in quality we wish to refer you to the Banner, which was won on butter exhibited at the National Dairy Show, by our Iowa creameries. (A cut of which appears elsewhere in this report, along with the men who made the butter).

A banner of this kind is offered each year by the National Creamery Buttermakers' Association. The state of Minnesota has won every banner, previously offered, I am very much gratified to know that Iowa can once more proclaim herself a quality butter producing state.

I noticed considerable more interest was being taken in the improvement of quality early in the year, especially was this true in regard to the butter scoring contests, which were held each month and after the exhibit at the Iowa State Fair and the Dairy Cattle Congress, at Waterloo, we found such a marked improvement in the quality that we predicted Iowa had a very good chance to win the Banner at the National Show and later results proved that our prediction was correct.

I am satisfied that most of the credit for improvement in quality must be given to our creamery operators. We are each year putting more and more of our creameries in charge of wide-awake, trained and up-to-date men, more of this sort of men are becoming interested in creamery work, for the reason,

that our creamery managers, directors, etc., have begun to realize that they must pay salaries that will attract first class men to this work.

To become a first class operator, it is necessary for a man to serve several years' apprenticeship and receive some Dairy School training. Helpers, or second men, as we sometimes call them, generally receive small salaries. Dairy School training costs considerable money and good wide-awake men will not spend the time or money necessary to make them first class operators, unless they receive a salary commensurate with the training required to fit them for this class of work.





H. C. Stendel



William Helgason, Wallingford



C. R. Conway, Garner



H. C. Ladage, Strawberry Point

IOWA BUTTERMAKERS--WINNERS OF THE NATIONAL ASSOCIATION BANNER



W. H. Eischeid, Edgewood



J. E. Morris, Jessup



Henry Segebarth, Fairbank



F. H. Harms, Tripoli



E. H. Rohrsen, Waverly



E. M. Guiney, Tripoli

IOWA BUTTERMAKERS--WINNERS OF THE NATIONAL ASSOCIATION BANNER

CONDENSED MILK

The manufacture of condensed milk has gradually decreased in Iowa since 1919. It seems that this product continues to be a drug on the market, which condition can, probably, be accounted for by the fact that during the war there was an unlimited demand for this product. A very great amount of the output of this country was exported. During this time, (due to the enormous demand for this product), a great many new condenseries were erected, especially in some of the dairy districts of Wisconsin and some of the eastern states. Foreign demands, naturally, fell off with the close of the war, with the result that the markets of this country were flooded with condensed milk. A great many eastern plants have closed down during the past year or have installed the necessary equipment to convert their product into butter.

We are in hopes that this condition will clarify itself during the coming year and that the industry will once more get back to a normal basis.

As was reported last year, Iowa has but two condenseries, which are still operating although they have converted some of their product into butter. Their total output decreased in value during the year from \$733,521.34 to \$372,678.05.

CHEESE

The manufacture of cheese in Iowa shows a decrease of 458,640 pounds less than last year. Reports received by this department also show that there were but ten factories operating, as compared with seventeen one year ago and but one of these ten is in operation, at this time, the others having been closed, temporarily, due to the unsatisfactory condition of our cheese markets and the fact that they were unable to pay the producer satisfactory prices for milk.

Our ten factories, which only operated part time during the year, manufactured a total of 331,483 pounds, which was valued at \$81,113.89. This is far below the amount consumed by the state and we are sorry that conditions are such that Iowa must import a large amount of this product to supply home demands.

As I have stated before, cheese should occupy a prominent

place in our dietary, especially, on account of its high nutritive value and palatability.

Iowa manufactures and consumes over 2,000,000 pounds of cottage cheese, annually, and this valuable food is becoming more popular with the housewife each year.

ICE CREAM

The ice cream industry of the state has survived another strenuous year, price reductions, high manufacturing costs and express rates, war taxes, shortage of ice and poor collections have been the cause of constant uncertainty and worry to the manufacturer and retailer, as well.

In spite of stringent financial conditions, which resulted in a great many people being out of employment, the consumption of ice cream has increased 144,000 gallons in this state during the past year.

Our factories manufactured, approximately, 5,580,763 gallons, which sold for a total of \$6,138,839.30. Although we have had a slight increase in the amount manufactured the total valuation of this product decreased \$657,103.70, due to a decline in the wholesale price.

The war tax placed upon the sale of ice cream is, undoubtedly, partly responsible for the failure of the public to consume a larger amount of ice cream. This is brought about through the tendency, on the part of certain retailers, to advance the price to the next even nickel, when a war tax of one or two cents is placed upon each dish served. That is, a dish of ice cream retailing for fifteen cents incurs a war tax of two cents. Many dealers simply advance the total price to twenty cents and absorb the war tax. Needless to say, this extra three cents are not shared with the manufacturer, and from his standpoint is harmful, since there is no gainsaying the fact that this levying of an additional five cents does keep many people from making a purchase.

I am satisfied that the tax on ice cream should be eliminated as the citizens of Iowa, at least, do not class ice cream as a luxury but consider it one of our most valuable food products.

The wholesale price was reduced by the manufacturer to some extent this year, however. I believe that most manufac-

urers would welcome still greater reductions, providing, they were assured that the retailers would make corresponding reductions and the public would get the benefits to be derived from such a move.

MARKET MILK

This year has seen a large increase in the production of milk, due in large part to the financial condition and the drop in price of all farm products.

The producer has found out that the dairy cow affords him a steady supply of cash which he has needed so badly. The result has been, in many cases, a production in excess of the demand, which has kept prices down to the producer and has been reflected in lower prices to the consumer. These conditions have, also, kept the price of all manufactured dairy products, as cheese, butter and condensed milk, much lower than they have been for several years.

It is apparent that these conditions will continue unless there is a greater consumption in dairy products. Educational campaigns have been made in many cities on the value of milk as a food and in every case an increased consumption has been noted. It is unfortunate that in times of low income the housewife will in most cases reduce the amount of milk for the family, in preference to any other food. She must be taught that she can better conserve the health of her family by reducing the amount of any other article of food.

One of the purposes of the National Dairy Council is to promote the consumption of market milk by teaching the public the value of milk, as a food and its necessity in the diet. Large amounts of literature and illustrated posters have been distributed to accomplish this and the results have been gratifying. Marked results have been obtained among school children, in many cities, by inducing them to drink milk each day at school. An especial effort has been made in these schools to get under-nourished children to drink milk and the records show that this class of children have made a marked improvement in their mental as well as physical condition, after taking the milk for several months.

I believe that the quality of the market milk in Iowa compares very favorably with that of any other state. A law re-

quiring dairy cattle to be tested for tuberculosis, passed by the Thirty-Ninth General Assembly and appearing elsewhere in this report, will materially improve the quality of our milk supply. Last fall this department conducted a market milk contest, in which eleven cities entered. The scoring was made in accordance with the rules followed by the United States Department of Agriculture, the scoring being made upon the results of chemical analysis, cleanliness and bacteria. By means of these contests we are able to locate any milk unfit for food and the cause for this condition.

With this information the inspector can give the necessary instructions for making the milk safe and in compliance with the law.

In the scoring of milk, the perfect score is as follows:

35 points for bacteria.
25 points for flavor and odor.
10 points for cleanliness.
10 points for fat.
10 points for solids, not fat.
5 points for acidity.
5 points for the container.

The scores in the contest are as follows:

Ottumwa	61.80
Davenport	64.08
Des Moines	76.20
Burlington	69.35
Marshalltown	63.26
Mason City	62.58
Dubuque	77.36
Sioux City	80.57
Fort Dodge	61.64
Cedar Rapids	88.93
Waterloo	68.83

While only a few of the scores are close to a perfect score of 100, it does not indicate a dangerous condition as the low scores were produced by high bacterial counts due to not cooling the milk properly, which allows the harmless lactic acid bacteria to develop in large numbers. The inspection of the market milk supply is of prime importance and the law provides that the Commissioner may appoint a milk inspector in cities of 10,000 or more population. But there is not sufficient

funds to pay them for full time, thus they are placed upon a per diem basis, they receiving pay for from five to fifteen days each month, according to the population.

Much good can be accomplished by the city and state appointing the same man and employ him full time and the combined salaries insures the employment of more efficient inspectors. The state authority gives the added advantage to the city of dairy farm inspection outside the city limits which a city inspector would not have. Dairy farm inspection is a very important part of market milk supervision, as it reaches the source of the supply where lax methods and poor equipment are often the cause of impure milk.

CREAM GRADING

Ever since the advent of the cream separator, the grading of cream has been advocated, in some form or other, and as the whole milk creameries and old fashioned skimming stations gradually began to decrease, it was generally believed by those in touch with the situation that eventually some uniform system would have to be established, governing the handling and purchasing of cream, used in the manufacture of butter.

From the standpoint of improving the quality of cream received by the creamery the use of an efficient system of cream grading is all important. Until recent years the cream grading has received very little attention by our creameries. Little, if any, grading was done and the same price was paid for good and poor cream. This has resulted in a general depreciation of the quality of the cream furnished by the farmer, there was no material inducement to the farmer to make a special effort in the care of the cream on the farm. Unless his personal pride and decency prompted him to produce a clean, sanitary and properly cooled cream, he was all too ready to follow the line of the least resistance and pay no attention to the quality of the cream he furnished. In fact, the failure of the creamery to grade cream put a premium on shiftless and careless handling of cream on the farm and on the receipt of poor cream in the factory.

In consequence of this disregard for quality of raw material, much of the butter annually reaching the market was of un-

satisfactory quality, the keeping property of much of this butter was inferior, causing it to come out of storage in a deteriorated condition, large quantities of butter had to be sold under market quotations, inviting keen competition by foreign butter and butter substitutes and rendering the establishment of a reputation for American butter in foreign markets exceedingly slow and difficult.

Within the last five to ten years, the pure food wave that has swept the country awakening the public to a keener appreciation of the value of wholesome food products of good quality, the realization on the part of the creamerymen of the necessity of supplying the market with better butter in order to dispose of it at a satisfactory margin, and the efforts of the dairy educational forces to introduce practical methods for the systematic grading of cream, have been mighty factors in focusing the attention of the creamerymen on improving their cream supply by cream grading and quality-paying.

The earliest efforts at cream grading were largely abortive. In isolated cases some concerns had the courage and determination to grade and pay on the basis of grade only. But the great majority of creameries, while acknowledging the fundamental correctness of cream grading, lacked the courage to undertake it. Their intentions foundered on the rock of competition in the cream supply territory. They lacked confidence in each other to stand by mutual agreements to start grading and quality-paying. They were fearful of losing patrons and of working into the hands of their competitors. Gentlemen's agreements, drafted in sectional and national conferences of creamerymen to grade cream, proved futile. Attempts to place legislative measures on the statute books, requiring the grading of cream, proved unconstitutional, and Government inspection of the creameries for the purpose of compelling nationwide cream grading did not materialize because of the enormity of the proposed undertaking.

While most of these proposed and apparently ideal plans failed to materialize and were automatically abandoned, one after another, the constant agitation of the subject did not fail to have its good effect. While it became clear to all practical creamerymen that the industry was not ripe as yet for an organ-

ized state- or nation-wide plan of cream grading by mutual agreement between creameries, farsighted creamery-men realized that this complex and difficult matter was a problem to be solved independently by each individual creamery and that it was to the unquestioned advantage of each individual concern to introduce cream grading in their own plants.

Today most of the really progressive creameries, large and small, are grading their cream and many of these creameries pay the farmer on the basis of quality. Those who have taken this important step are already convinced of its permanent advantages and it is only a question of time when all creameries, for their own protection, will adopt a rational system of cream grading and paying on the basis of quality. They are bound to come to the inevitable conclusion that, in order to secure satisfactory returns from the market, they must furnish the market with good butter, that they cannot hold the patronage of the cream producer to furnish good cream unless they pay him a differential on the basis of quality, and that the paying of top prices for butterfat of poor quality must ultimately spell financial loss and ruin.

Keeping in mind the obstacles which have confronted the creamery that has been a pioneer and started a grading system and at the same time considering market conditions during the last two or three years, these conditions having, generally, been annoying to the manufacturer of lower grade butter, I decided that something should be done to stimulate more of an interest in cream grading and that some uniform grading system should be established in Iowa.

A meeting was held at this office early last winter, at which representatives of the co-operative and centralized creameries, Dairy Department of the State Agricultural College, State Dairy Council, Creamery Managers' and Secretaries' Association, State Buttermakers' Association and members of this Department were present. At this meeting the various problems relating to the grading of cream were discussed at length. The Department, after getting the judgment of the various members of the dairy industry represented at the meeting, established the following grades of cream and rules and regulations governing its purchase.

YEASTY—Cream having a flavor resembling yeast and which has a tendency to foam when cream has been held under too high temperature.

CHEESY—Cream which smells and tastes like cheese, caused by holding sour cream for too long a period at too high temperature, under conditions not sufficiently clean.

WEEDY—Cream which has the flavor of onions, rag-weed, rape, cabbage, etc.

BITTER—Bitter cream has a taste closely resembling quinine. It is cream which has been held too long at a low temperature.

The above regulations shall be observed in the purchase of all cream by creamerymen and station operators, and by producers of cream.

W. B. BARNEY,

Dairy and Food Commissioner.

Approved July 18, 1921, by Executive Council of Iowa.

TACK THIS POSTER IN A CONSPICUOUS PLACE

Clean utensils and cooling tanks will help you to have cream which will grade Extras and Firsts.

REGULATIONS FOR CREAM GRADING

Under authority granted by Sec. 4999-a-18, the following grades of cream are hereby established.

EXTRAS

Extras shall consist of sweet cream, clean in flavor and not to contain more than .2 of 1% of acidity.

FIRSTS

Firsts shall consist of cream that is clean, smooth, free of all undesirable odors, clean to the taste and only slightly sour.

SECONDS

Seconds shall consist of cream that is too sour to grade as Firsts; may contain undesirable flavors or odors to a slight degree, also that which is too old to pass as Firsts. All sour cream containing less than 25% butterfat shall be graded as Seconds.

ILLEGAL CREAM

Under the Law, cream is a food and any cream produced from an unhealthy cow or consisting in whole or in part of a filthy, rancid, decomposed or putrid substance shall not be offered for sale. Neither shall such cream be purchased.

The following undesirable flavors and odors will not be allowed except in a slight degree in cream grading Seconds, and will be turned back as illegal.

STALE OR MUSTY—Stale flavors are caused by holding cream

too long or holding cream in stale cans, or using stale water in washing or rinsing cans. Musty cream is the result of holding cream in a cave, cellar, or room having stale or musty surroundings.

VERY SOUR—Cream having a very high acidity. It is the result of holding cream too long and at too high a temperature.

OILY—Oily flavor is caused by having cream near coal oil, gasoline or other similar product; also by carelessness in handling separator oil, or using cans in which any of these products have been handled.

METALLIC—Metallic flavor is that flavor which is frequently caused by cream coming in contact with rusty or poorly tinned separators, cream cans or other utensils.

EXTRAS

Extras shall consist of sweet cream, clean in flavor and not to contain more than .2 of 1% of acidity.

All containers for cream grading Extras shall be properly designated.

A space of at least 2 feet shall separate Extras from any other grade of cream.

This placard shall be tacked in a conspicuous place on the wall, immediately above the containers of cream grading Extras.

W. B. BARNEY,

Approved April 1, 1921. State Dairy and Food Commissioner.

This card in white.

FIRSTS

This placard shall be tacked in a conspicuous place on the wall immediately above the receiving container of cream grading Firsts.

Firsts shall consist of cream that is clean, smooth, free from all undesirable odors, clean to the taste and only slightly sour.

All containers for cream grading Firsts shall be properly designated.

A space of at least 2 feet shall separate Firsts from any other grade of cream.

W. B. BARNEY,

Approved April 1, 1921. State Dairy and Food Commissioner.

This card in blue.

SECONDS

This placard shall be tacked in a conspicuous place on the wall, immediately above the receiving container of cream grading Seconds.

Seconds shall consist of cream that is too sour to grade as Firsts, may contain undesirable flavors or odors to a slight degree, also that which is too old to pass as Firsts. All sour cream containing less than 25% butterfat shall be graded as Seconds.

All containers for cream grading Seconds shall be properly designated.

A space of at least 2 feet shall separate Seconds from any other grade of cream.

W. B. BARNEY,

Approved April 1, 1921. State Dairy and Food Commissioner.

This card in red.

These grades are printed in card form in different colors and are posted up in the cream station at different places and the various grades placed near the card which designates the grade to which it belongs.

PURE FOOD LEGISLATION AND ITS BENEFITS

The passing of the National Food and Drug Act, in 1906, was the most beneficial legislation ever passed by Congress in the interest of the consumers of foods and drugs and honest manufacturers of these products.

Practically all of the states now have similar laws and their proper and fearless enforcement insures to the people food, which is produced and handled in a sanitary and healthful manner, free from adulteration and labeled to show their true composition.

The laws of Iowa give the consumer this full protection and manufacturers vie with one another in putting out high class foods, produced under sanitary conditions and from fresh raw materials. By using these fresh raw materials and properly sterilizing the finished products, the use of preservatives has been found unnecessary, contrary to the former belief that it was impossible to keep food products for any length of time without using liberal quantities of chemical preservatives. Eternal vigilance, however, will always be the price the states and nation must pay for clean, wholesome and honestly labeled foods and drugs. As it is necessary to maintain a police force it is likewise necessary to maintain food and drug officials, to protect the consumers of these products.

Much work has been done in building up a system of cooperation between the Federal Food Authorities and the states, and much good is being accomplished in running down adulterated and misbranded products and prosecuting those responsible for placing them on the market. Under the present system,

this department is notified, by the Federal Authorities, when illegal foods and drugs have been shipped into Iowa, our inspectors are then instructed to collect samples and these are sent to the Government laboratory and if found to be illegal the shipments are seized under Government orders and the manufacturer is cited to appear, with the result that he is fined and his goods destroyed or returned to him to be relabeled to comply with the law, he giving a bond that this will be done properly. Under this system it makes it difficult for the unscrupulous manufacturer to operate for any great length of time.

While there is considerable difference in the requirement of the food laws of the various states, there is a general belief that they should be as nearly uniform, as possible, so as to avoid the extra expense of having different lots of labels and foods for the different states. The added expense of such necessity under the present condition must be borne by the consumer of these products. Many of the states have modeled their food and drug laws after the Federal Act and no doubt in the not distant future, there will be close conformity between all laws which regulate the manufacture and sale of these products, which will be much to the advantage of all concerned.

All danger does not lie in food that is knowingly adulterated by the manufacturer. Outbreaks of food poisoning are a serious menace to the public and require prompt action by food authorities.

In the last few years there have been several outbreaks, in widely separated localities, of botulism due to the presence of the bacillus botulinus in certain classes of foods. It has been found by investigators that this bacillus is widely distributed in nature and is a potential source of danger.

This bacillus itself is not poisonous but is a spore former and the poison is formed when it develops, thus the bacillus may be present in foods but unless conditions have been favorable for its growth, there is no danger in consuming the food. Boiling temperature will destroy the toxin produced by this bacillus but it will not destroy the bacillus itself, so that if the food after being heated to this temperature is kept under proper conditions, the toxin will again be produced. It is important

that proper factory methods be used in preparing foods as a safeguard against this danger.

This bacillus is as liable to be found in home canned foods as those canned in factories. During the outbreak of this poisoning, in ripe olives, this department was furnished a list of shipments which had been sent into Iowa, by the Federal Authorities and we, at once, instructed the inspectors to order from sale all these shipments, which still remained on the grocers' shelves. By this quick action, possibly an outbreak of this poisoning was prevented in Iowa. This demonstrates the value of co-operation between state and Federal Food Authorities.

At times there have been attempts, in Congress, to nullify the powers of the states over its food supplies, which are shipped from other states, thus having entered inter-state commerce. The Calder Bill, now in Congress, exempts foods which have been shipped into a state, from the requirements of the state laws. This would take from the states their constitutional right to protect the health of their citizens. While a law of this kind is of doubtful constitutionality, it should not be permitted to be placed upon the statutes and every effort should be made to prevent its passage.

IMITATION EVAPORATED MILK

The Thirty-eighth General Assembly, at the solicitation of this Department, passed a law requiring all evaporated milk, made from skim-milk and cocoanut oil, to be branded "Imitation Evaporated Milk."

Owing to evils which were practiced in selling this product, it was deemed advisable to require some sort of labeling which would enable the consumer to know the nature of the product he was buying.

It was found that some grocers would sell this product for evaporated milk and were content to let the consumer think that he was getting an evaporated whole milk. By branding this product as required by law, in large prominent type, on the main label we believe the consumer is afforded a means of protection and the producer can be protected against this product by placing a tax upon each package sold.

CANNED FOODS

(E. L. Redfern—State Chemist.)

The ever increasing amount of canned foods consumed makes their inspection of prime importance. While the canners are supposed to use every precaution to produce a salable product, as a matter of self preservation, faulty packages often get by and are to be found on the market. Cans often go bad after they have left the cannery due to faulty packing or improper handling or storing by the grocer, such as in damp cellars.

The inspector must judge by the exterior appearance whether samples should be taken and submitted to the laboratory. If the ends of the can are cupped or concave they should be given a sharp rap on the edge of a table or something solid to see if the lower end comes up even or remains cupped. If the end does not remain concave there is not sufficient vacuum in the can, provided the temperature of the weather is not too high, in which case the can would likely be a "springer" i.e., the ends could be pressed back and forth. From this it will be seen that a can may be normal one week and a springer the next, due to the change of the weather.

The above conditions, when found, are no cause for alarm as such goods are perfectly good and salable.

The question of swelled goods is a more serious problem, and where such goods are found, they should be condemned and if possible, thrown on the dump in the inspector's presence. The slightest bulge in the end of a can is just cause for condemnation, as this is due to pressure from the inside from gases produced by fermentation or bacterial action, especially is this true in the case of such foods as peas, corn, etc. However, in acid fruits, swelling is often caused by the action of the fruit acids on the tin which liberates hydrogen gas in sufficient amounts to bulge the ends of the can, except where the can is leaky in which case the swelling is due to decomposition. The action of the fruit acids on the tin is also influenced by the temperature, being hastened when the goods are stored in a hot climate or under a metal roof during the hot summer months in this climate and retarded when held in a cool store room or during the winter months. It can be easily seen then

how under certain conditions cans may be normal and under others "springers". Where there is doubt in the inspectors' mind regarding canned goods, an inspection of the contents of the can will solve the matter.

The number of vent holes in the top of a can is one which might be misleading. More than one vent hole is no proof that the goods have been reprocessed as some canners still seal the can before cooking and when the cans are removed from the kettles they are punctured to allow the air to escape, resoldered and put into the kettles and cooked the second time. Even a third vent hole is sometimes made when the second hole has failed to give the proper exhaust, due to particles of the contents stopping the hole. With the sanitary can whose use is becoming so common it is possible to find a vent hole although this is unusual and occurs when by mistake the brine or liquid has been left out and is placed in the sealed cans by means of a vent hole. Also some salmon and crab canners still prefer to vent the sanitary cans and give them a short cooking in the retorts before sealing. Sometimes upon opening a can of beans or peas there is a discoloration on the sides of the can and even on top of the food. This color which is usually black or nearly so is due to a very thin film of metallic sulphide in colloidal form. There is not enough of these materials present, however, to be injurious while they present a suspicious appearance and usually result in complaints by the purchaser. An example of this condition came to the laboratory last fall when a lady brought in a glass quart can of corn. She had canned this herself. There was a black coloration on the surface of the contents and around the neck of the jar. An examination showed that she had used one of the new brass looking covers now sold for Mason jars which has no glass lining. The brass like appearance on the cover proved to be due to lacquer and the cover was made of iron. The lacquer had broken away and exposed the iron to the contents with the result that the surface had become black and uninviting in appearance. In corn canning factories this same discoloration has sometimes appeared and is supposed to be due to the corn coming in contact with metals in the cooking kettles or pipes through which the corn is passed. The National Canners'

Laboratory, under the direction of Dr. Bigelow, has put much study upon this problem and I understand has practically eliminated this trouble. The Cannery Association in recent years have done much to standardize the quality of their products and the sanitary conditions under which they are produced.

Their inspection service in the principal canning states gives them close control over their products. Reports during the last two years show that much salmon has been canned which was in various stages of decomposition with the result that the Bureau of Chemistry has condemned large quantities of salmon in various parts of the country. The cause of this practice seems to be that salmon were delivered to the cannery faster than they could be handled with the result that the fish would start to decompose before they were canned. The salmon canners have instituted an inspection service, and no doubt much of this practice will be eliminated, at least among members of the salmon canners' association.

The good work of the Bureau of Chemistry, in locating interstate shipments of canned foods, is a great help to the state authorities thereby eliminating illegal goods from the state markets and allowing the inspectors to devote more of their time to intra-state goods. The state officers' principal work on canned goods is to locate and destroy swollen goods as therein lies much danger. A survey of the Botulinus poisoning last year shows that in nearly every case the consumer or the person who cooked the spinach or who served the ripe olives admitted that they detected something was wrong with them.

Every consumer should be taught never to eat any goods that are swelled or that do not have a natural odor and taste.

The standardization of the amount of water and product to be placed in cans of the various foods by the Standards Committee will practically stop loading with water which has been practiced by some canners in the past.

IOWA EGG LAW

The purpose of the egg law is to promote fair dealing in eggs, and increase the market value of Iowa's egg crop.

As with any other produce, the market value of any lot of

eggs is governed by its quality. Bad eggs are worthless; good eggs command the highest market price.

In interpreting the egg law for the purpose of issuing rules and regulations, the purpose of the law has been kept clearly in mind, and such rules and regulations formulated as will tend to put our egg crop on a quality basis and thereby secure for the Iowa farmer the best price for this cash crop. Only such restrictions have been placed on buying as are necessary to prevent bad eggs entering market channels and thus lowering the market value of good eggs. These restrictions are not intended in any way to hinder free traffic in eggs by honest buyers, but to prevent the demoralization of the market by unfair buying methods.

While reliable information, showing the number of eggs produced is not available, Iowa probably ranks first as an egg producing state. The total income received by the state from this source, during the last year, probably amounts to about \$51,376,600. The average farm price for eggs during this period was 38.6 cents, which means that 133,100,000 dozen of eggs were marketed. This does not take into account, of course, the large number consumed on the farms of the state.

The following tabulations showing the contrast between present egg prices and those of a few years ago, will be of interest:

AVERAGE PRICE PAID TO IOWA FARMERS FOR EGGS ON THE FIRST DAY OF EACH MONTH OF THE YEARS SHOWN

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910	28	28	21	18	18	17	16	14	17	20	22	25
1911	26	21	14	13	14	13	12	12	14	17	20	25
1912	27	28	23	17	17	16	15	16	17	19	22	25
1913	23	20	17	15	15	16	15	14	16	19	23	29
1914	27	26	22	16	16	16	16	16	20	21	21	26
1915	28	30	22	16	17	16	15	15	16	20	23	27
1916	28	27	22	17	18	19	19	20	21	26	30	34
1917	35	36	33	25	30	31	27	28	32	34	35	39
1918	42	47	38	30	31	28	28	33	33	39	42	51
1919	56	45	30	34	37	38	33	37	38	47	52	59
1920	55	45	39	37	38	33	37	44	48	53	64	61
1921	49	32	21	18	16	20						

There is only one method for distinguishing good eggs from bad

ones, or which can be used for the purpose of grading, and that method is candling. Of the numerous devices sold for this purpose, the single hole or two hole candle operated in a darkened room has proven the most satisfactory. Devices designed for handling more than one egg at a time permit mistakes and carelessness to creep in and, as far as this department is concerned, their use is not advised.

Rules and Regulations Governing Licensed Egg Dealers.

1. The first licensed buyer of eggs (the huckster, the local retail merchant, or others) shall candle every lot of eggs that he buys (this should be done before settlement is made).

2. The licensee shall discard all eggs known as "addled," "moldy," "black-rots," "white-rots," "blood rings," "adherent yolks," eggs with bloody or green whites, eggs incubated beyond "blood ring" stage and all other eggs commonly classed as inedible.

3. The licensee shall pay only for good, edible eggs.

4. The licensee shall return to the producer, if requested or if possible, the "rejects" for the producer's own examination.

5. The good eggs shall be kept in a cool, dry place until sold or shipped.

6. Eggs should be shipped to cold storage within forty-eight hours. If held longer than forty-eight hours they must be recandled before shipping unless they are kept at a temperature of less than sixty degrees Fahrenheit. If kept at a temperature of from forty to sixty they must be recandled if held more than seven days. If kept below forty degrees no recandling is necessary.

7. Eggs known as "large hatch spots," "heavily shrunken eggs," "settled yolks," and "leaking eggs," are fit for consumption but will not stand transportation. They should be used only by the home community.

8. All "checks" and "cracks" shell eggs should be shipped in cases stenciled that they contain crack or check shell eggs.

9. All receivers of eggs should use care and intelligence in handling them, always keeping in mind that it is a waste of eggs, fillers, flats, and valuable transportation space to ship "rejects" or other eggs of doubtful character.

10. "Rejects" shall not be sold for human consumption.

11. Eggs unfit for food must not be held in possession unless they are broken into a container and denatured so they cannot be used for human food.

The following denaturants are approved for general use; carbolic acid, creosote and crude oil.

Special denaturants for special purposes shall not be used unless approved by this office.

12. Dirty eggs and washed eggs should be used where produced. They must not be accepted at a reduction in price equivalent to their market value.

13. All merchants, dealers and hucksters shall after candling eggs place on the top layer of every case of candled eggs a certificate stating the date of candling, by whom candled, and license number of licensee. This certificate shall be of the following form: (Note—this form should not be smaller than 2½ by 4¼ inches.)

This case of eggs is packed and candled in compliance with the Iowa Egg Law and regulations provided for therein.	
Candled	by
Date	Name of candler
Iowa Egg License Number.....	
HENERY PRODUCE CO., Nester, Iowa	

Since the question is often asked, "Who must be licensed?" the regulation pertaining to this subject is herewith re-printed:

"WHO MUST BE LICENSED?"

The law requires the following classes of dealers to take out egg dealers' licenses:

1. All merchants, hucksters and others buying eggs from producers unless such producers are also licensed egg dealers.

2. All dealers, regardless of the nature of their business, who sell eggs in quantities in excess of one case at a time.

The following are not required to take out a license:

1. Merchants who buy all their eggs from licensed dealers and who do not sell in lots greater than one case.

2. Farmers and other producers of eggs who do not sell or trade in eggs other than those produced by them or their tenants.

3. Bakeries, restaurants, etc., buying eggs for their consumption only are not classed as engaged in the business of dealing in eggs and are, therefore, not required to secure a license to buy the eggs consumed by them.

The licenses now in force expire March 1, 1923, at which time a new license must be taken out. A suitable blank for applying for the license will be sent to each dealer having a license expiring on that date, before it expires.

RULES AND REGULATIONS GOVERNING ISSUANCE OF LICENSE

1. After May 25th, it is necessary that all dealers engaged in the business of buying, selling, dealing in or trading in eggs, except those retailers who buy direct from dealers, having an Iowa license, and who do not sell in lots greater than one case, obtain an egg dealer's license.
2. The license fee is \$1.00 for the period ending March 1st, each year.
3. A separate license must be obtained for each place of business where eggs are sold.
4. Each license is numbered and numbers are usually assigned in the same order as applications are received.
5. Farmers and other producers of eggs are not required to secure a license for the purpose of selling or trading in eggs produced by them.
6. Buying, selling, dealing in or trading eggs in violation of the egg law, by any person, firm or corporation, is an offense and renders the offender subject to a fine of not less than \$10.00 nor more than \$50.00.

WEIGHTS & MEASURES

In presenting our annual report I feel that the work has much to commend itself to right thinking people. It is a work of tremendous proportions which affects all classes of citizens, as the application and the underlying principles of the weights and measures law affect more people than do any other laws on the statute books. More stress is laid on the enforcement of weights and measures laws since they affect the class of citizens who can least afford to protect themselves.

Some of the activities should be enumerated here in order that the public may know of the great scope of the work. All scales, weights and measures in the state are inspected. In the last few years, much has been said and done regarding the inspection and regulation of gasoline measuring devices. No phase of our work has received more attention and rigid inspection. The work of testing the thousands of gasoline pumps and measuring devices requires much time and labor. The most encouraging feature of it being the wholehearted co-operation given by the various manufacturers of these devices and oil companies, with the result that these devices have not only been remodeled and improved upon, but a number of entirely new types have been put on the market, made to meet the

weights and measures regulations. The reweighing of commodities in the various stores, and of loads of coal, as well as checking up the peddler, who has been the cause of more trouble to weights and measures men than any other type of merchant. This class of trade is made up of individuals of miscellaneous morals and dispositions. Many of them honest and willing to do what is right, but we are sorry to say, a great number with tendencies to increase their profits by trickery if given a chance. So it is that they must be constantly watched at all times. Many of them persist in using incorrect equipment, others take chances and give short weight.



This shows a few of the illegal weights and measures which have been found in use in the state. They were all condemned and confiscated by the department.

We have many complaints against coal dealers delivering short weight and upon a recent investigation of a complaint from one of our large cities in the state, we found some extreme shortages. The guilty parties were prosecuted in the courts,

were convicted and fined. Some of the shortages are as follows:

340 pounds short on 2,000 pounds.
425 pounds short on 4,000 pounds.
660 pounds short on 4,000 pounds.

One coal man whose scale was condemned, defied the state and continued to weigh on them and tore the tag off. He was arrested and given a fine of \$50.00 and costs.

The routine office work has been materially increased, particularly in the matter of correspondence. Questions are continually being submitted by individuals as well as by manufacturers. The Thirty-Ninth General Assembly enacted a law providing a \$3.00 license fee on all gasoline pumps and meters; which materially increases the office work. There is also a great deal of correspondence resulting from daily reports of inspectors; reports of shortages from various sources; requests for scale inspection; prosecutions; complaints and reports of similar nature, which demand a large amount of attention from the Chief Inspector of Weights and Measures. Hundreds of scales and measures of various types have been confiscated and condemned. The increase in the use of the Auto Truck has been the cause of many new scales being installed. The department's records show that there have been 4,480 platform scales, 4,900 counter, 4,600 creamery scales inspected. These do not include the number of weights and measures submitted by cities, firms and individuals for verification as to their accuracy. Ten per cent were found to be incorrect. There were also 1,710 gasoline pumps inspected, of which 26½% were found incorrect; 663 measures of which 130 were incorrect.

During the year ending November 1, 1921, the department inspected 4,025 "heavy" scales, that is, scales used by grain elevators, coal mines, retail coal dealers, railroad stock scales, sugar refineries, canning factories, etc. The revenue received by the state for the inspection of these scales amounted to \$12,710.98.

The charge for inspection of scales of a capacity over 500 pounds up to and including 4,000 pounds capacity is \$1.00; over 4,000 pounds up to and including 21,000 pounds capacity, \$3.00 each; scales over 21,000 pounds capacity not including railroad

track scales \$5.00 each; railroad track scales \$10.00 each; all hopper or Automatic scales \$2.00 each.

The revenue received by the state for scale licenses is \$6,048.00. Of the number of scales inspected 356 have been condemned for repairs; more than 280 were adjusted or their operators were instructed to make changes that would render them accurate.

The revenue received by the state for gasoline pump licenses from July 1, 1921, at which time the law became effective, up to November 1, 1921, is \$13,500.00.

All fees collected under this act, as listed above, are immediately turned over to the State Treasurer and credited to the general fund of the state. This department is operated by a direct appropriation of the Legislature and cannot use any of the fees collected.

Honest weight and measure can only be secured through the vigilance of the purchaser.

The housewife should buy only by weight and she should have a pair of scales and make a check of the various purchases from time to time to determine whether she is getting correct weight. Just recently we received a call from a lady who had purchased five one pound packages of nuts and she stated she was one ounce short on each package, as she said she had a scale and weighed them. Upon investigation we found the merchant's scale was off one ounce on one pound. She received her five ounces of nuts for which she had paid fifty cents (50c) per pound. It is also necessary that the purchaser have a knowledge of the number of pounds he should receive for a bushel or fractional part thereof.

Following is a list of the articles or commodities which must be sold by avoirdupois weight.

WEIGHTS OF ONE BUSHEL, ONE PECK, AND ONE QUART OF CERTAIN PRODUCTS AS PROVIDED BY THE LAWS OF IOWA.

	1 Bush. Pounds	1 Peck Pounds	Oz. 1 Qt.
Apples	48	12	24
Apples, Dried	24	6	12
Alfalfa Seed	60	15	30
Barley	48	12	24
Beans, Green	56	14	28
Beans, Dry	60	15	30
Beans, Lima	56	14	28
Beets	56	14	28
Brome Grass Seed	14	3½	7
Brass	20	5	10
Bromus Inermis	14	3½	7
Broom Corn Seed	50	12½	25
Buckwheat	48	12	24
Carrots	50	12½	25
Castor Beans	50	12½	25
Charcoal	20	5	10
Cherries	40	10	20
Clover Seed	60	15	30
Coal	80	20	40
Coke	40	10	20
Corn, Ear	70	17½	35
Corn, Unshelled	75	18¾	37½
Corn, Shelled	56	14	28
Corn Meal	48	12	24
Cucumbers	48	12	24
Emmer	40	10	20
Flax Seed	56	14	28
Grape, Stems	40	10	20
Hemp Seed	44	11	22
Hickory Nut, Hulled	50	12½	25
Hungarian Seed	50	12½	25
Kaffir Corn	56	14	28
Lime	80	20	40
Millet Seed	50	12½	25
Oats	32	8	16
Onions	32	8	16
Onion Top Sets	28	7	14
Onion Bottom Sets	32	8	16
Orchard Grass Seed	14	3½	7
Orange Orange Seed	32	8	16
Parasol	45	11¼	22½
Peaches	45	11¼	22½
Peaches, Dried	33	8¼	16½
Peanuts	22	5½	11
Pears	45	11¼	22½
Peas, Unshelled	50	12½	25
Peas, Dried	60	15	30
Plums	48	12	24
Pop Corn, Cob	70	17½	35
Pop Corn, Shelled	56	14	28
Potatoes	60	15	30
Quinoss	48	12	24
Rape Seed	50	12½	25
Redtop Seed	14	3½	7
Rutabagas	60	15	30
Rye	56	14	28
Salt	80	20	40
Sand	130	32½	65
Sherts	20	5	10
Sorghum Seed	50	12½	25
Spelta	40	10	20
Sweet Corn	50	12½	25
Sweet Potatoes	50	12½	25
Timothy Seed	45	11¼	22½
Tomatoes	50	12½	25
Turnips	55	13¾	27½
Walnuts	50	12½	25
Wheat	60	15	30
All root crops not specified above	50	12½	25

1 dry qt.—67.2 cu. ins. 1 liquid qt.—57.75 cu. ins. A dry qt. holds 14 per cent more than a liquid qt. Dry commodities must be sold by weight or dry measure.

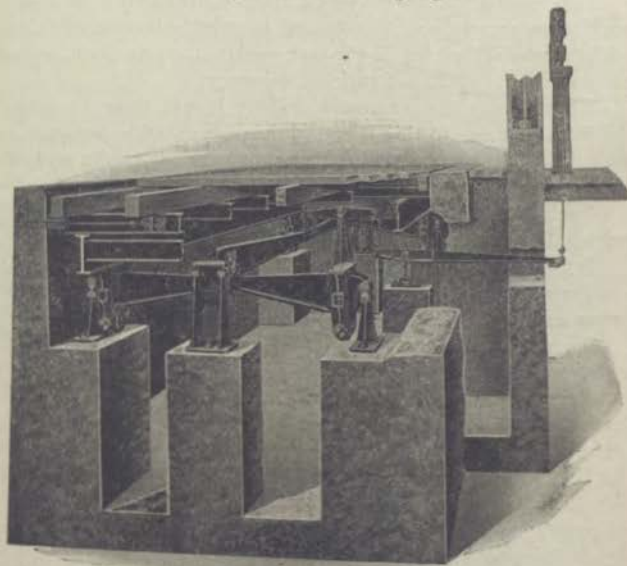
DON'T buy by the package, pail or other meaningless term.
DON'T fail to verify your purchase by correct scales or measures.
DON'T verify your purchase by incorrect scales and measures.
DON'T forget that our business integrity is the backbone of our morality.

DON'T let the honest merchant suffer because you are careless.
DON'T ever kick or complain about the high cost of living or business conditions if you make no effort to protect yourself and others.

Be sure your scales are correct before you criticize or condemn your dealer.

Make your complaints to the state dairy and food commission and sign your name; they will be treated confidentially.

Little ounces that are stolen,
Because you're careless when you buy,
Make poor your honest tradesman,
And your cost of living high.



This type of scale is of 20,000 pounds capacity for heavy auto trucks. The scale is of heavy construction, supported on heavy concrete walls and pillars. This kind of installation recommended.

IT IS TIME TO MILK

(By Hugh G. Van Pelt.)

It is of record that once upon a time an Irishman stole a watch and a Dutchman stole a cow. Both were caught and lodged in jail in adjoining cells. Time passed slowly and became tiresome under the conditions.

To break the monotony and to twit the Irishman, the Dutchman said, "Pat, vat time it is?" and, characteristic of his nationality, Pat replied, "It is toime to milk."

Ever since I heard Judge Quarton of Guernsey fame tell that story the first time—and I say the first time advisedly—I have wanted to repeat it because it carries a peculiar significance that is not to be ignored by individuals, communities, states or nations.

It is legend that there came a time in the history of Denmark when as a nation, poverty and seemingly insurmountable indebtedness stared her in the face—when the one great problem was that of restoring national solvency.

Then it was that Denmark decided it was time to milk, and from that day to this Denmark has advanced in prosperity until she ranks among the richest countries per capita and as the most noted producer of dairy products.

Such is the significance of Pat's reply, "It is toime to milk" as it applies to nations.

It is no secret that in the early days of Wisconsin wheat was grown continuously year after year until wheat would no longer grow profitably nor would any other farm crop.

Then it was that the question of what to do arose and the reply was "It is time to milk."

Recently, in an address to bankers, the head of the Federal Reserve Bank of the Northwest made the statement that in Wisconsin there was not one of the 990 banks delinquent and that they had sent more than \$50,000,000 into the Chicago district during the past year; this during a year when states that are practicing other forms of agriculture almost to the exclusion of dairying are clamoring for credit.

Such is the significance of Pat's reply, "It is toime to milk" as it applies to states.

In the September 15th issue of the Dairy Farmer appeared

an editorial telling of a community in North Dakota that is this year experiencing its sixth consecutive crop failure.

One crop failure, especially if it came this year, would suffice to discourage most sections, but not the stout-hearted North Dakota community because:

In the early days of crop failures when the inevitable question of what to do was propounded someone said "It is time to milk," and last year the average gross income from 17 farms in the crop failure district was \$2,325.83.

Strange as it may seem, these men, under the worst of farming conditions, are enjoying greater prosperity than their fellow farmers in sections of the state that have bumper farm crops.

Such is the significance of Pat's reply, "It is toime to milk," as it applies to communities.

John W. Newman, former Commissioner of Agriculture of Kentucky, has eight farms operated by tenants. During the war the price of tobacco was high and these tenants specialized to the extreme in growing the weed. Mr. Newman says they profited to the extent that each of them became worth from \$4,000 to \$5,000 and then a year ago, when the price of tobacco dropped, they lost all and began borrowing money of him to operate the farms.

After loaning them a total of \$3,000 Mr. Newman called them together and in his own words said, "not another cent will I loan you. I will place on each of your farms 10 cows, eight sows and 100 chickens and if you can't make money off the farms, you cangotoel".

In other words he told them, "It is time to milk."

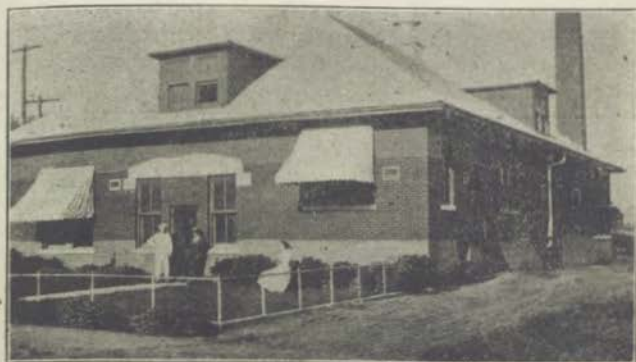
Continuing, Mr. Newman said, "Since that time each of these tenants is coming to me with money instead of for money."

Such is the significance of Pat's reply, "It is toime to milk", as it applies to individuals.

From every section of the United States comes the cry that farm crops are selling below cost of production and yet the individual, the community, the state or the nation that is milking good cows, breeding up productive herds and caring for them well is prospering.

Compared with prices of all other farm commodities and on the basis of cost of production, the prices of dairy products are higher today than they were at any time during the war when everybody admitted they were rich.

Further arguments are unnecessary to carry the conviction that of all times within the memory of the present generation the hour has arrived when to every man who farms there is much significance in Pat's reply, "It is toime to milk."



Farmers Co-operative Creamery, Hull, Iowa.

DEVELOPING YOUR HOME MARKET

We have always been of the opinion that there is nothing too good for Iowa and we believe that the majority of the people of this state want the best food products, which money can buy.

We are quite sure that the citizens of Iowa are getting very little of our best **Iowa Butter**, which is a condition we are sorry exists and we are inclined to place the responsibility in this matter entirely with the management of our Iowa creameries, as we are satisfied that there is a ready market within the state for all of our best butter, especially "State Brand" butter, at a premium over what the same product would sell for on the eastern markets.

The following article, by A. M. Hein, manager of the Farmers Co-operative Creamery, at Hull, Iowa, proves that our assertions are correct. Mr. Hein has given this subject a great deal of study and has demonstrated that it is possible to develop a home market for quality products, such as is found in our State Brand butter.

In developing local markets for your butter two important factors are necessary. First, quality and second, publicity.

You may get along very well when you have the quality, but I have found that to make double time, just spend a little

money advertising, telling the public what you have, and if it is different or better than any other brand tell them so, and be sure the goods you advertise will back you up. Then the rest will shape its way.

I want to first take up in a brief way five points that I consider the most important as to why local marketing is more profitable.

First—the Price. You all know money is what makes the things go, and so we are all after the price. Many of us cannot tell definitely what our butter is going to net us when we ship to the big markets, so you have this advantage in home marketing that you make the price. If you make it too low that is your lookout, but we will leave that to you.

Second—the Freight Transportation is and has been high, amounting approximately to 3c per pound of butter from our station; this is a nice little sum that would pay for advertising and distributing the butter in local markets.

Third—Deterioration in Transit. The results from this deterioration when butter is at its best benefits no one. The refrigerator car people or the railroad company will not say that your butter is too good to be piled in a moldy, musty car—no, it is to pile it in and take your medicine with the rest of the guys. If you have a poor quality butter the result will also be a heavy cut in price.

Fourth—Shrinkage. There is usually some loss on every tub of butter shipped. Some buttermakers may think because they allow one-half pound to every tub that there is no shrinkage—the half pound was given in as good weight I suppose.

Fifth—Market Conditions. You no doubt are all aware of the fact that market conditions have much to do with the sale of your butter in the big markets. If the goods arrive on a sluggish market and prices are going down, the chances are the goods will not be sold until the bottom is reached. This again results in a heavy loss. In local marketing you will have the goods sold at a high price when you were paying the high price for fat, and when the drop comes you will be paying considerably less for fat, so the danger for losing is only slight.

Now then, why is it not more profitable to develop local

markets for your butter in this state? With a little advertising and getting right after it you can get good results.

We have found it considerably harder to get started in a big city with our butter than in smaller towns. Most large cities have one or more creameries where the small towns we furnish have no creamery.

In giving you our experience how we managed to get our butter started in a city something like 60,000 population where three big central plants are located. It has been whispered to me several times that it is a hard thing to get started in the big cities for several reasons. One of them was the service the city merchant would receive from their home creameries—they would not need to stock up for more than a day's supply, etc. The other main reason was that the majority were boosters for their home product.

These were the two factors we had to deal with before undertaking this proposition of placing our State Brand in Sioux City.

There was only one thing to do and that was to create a demand for our butter and this had to be done by advertising.

We decided to start a parcel post business and in this way get in touch with the consumers who were looking for a good quality of butter. We ran a large display ad twice a week with the State Butter mark in the daily papers. After a short time we cut the ad to a small one with a small cut of the butter-mark, and made the price for three days on each ad. We worked up quite a business in this way, not only in Sioux City, but from other towns in this state, and other states as well.

After a month or so we began to think about getting some one to take over this sale and work it through the best groceries. We managed to get in touch with a good man in the city that had been in the grocery business for some time, but had sold out his business, and he took over exclusive sale on this butter.

When this man went to call on the stores it was almost impossible to get the merchant to listen to his butter story, as they already handled three brands and some of them more. So nothing could be accomplished in this way. We made up our mind to put on another advertising campaign—one that would

take effect at once. This we did by hiring some women demonstrators who would make a house to house canvass taking small samples of butter about an inch square and one-fourth inch thick, or a little less, put up in a small waxed paper sack. These were given to the lady of the house with some literature pertaining to "State Brand Butter." We had four girls for a number of days to do this work. At the same time orders were taken for one or more pounds for a trial order to be delivered by the grocery with whom they did their trading. This worked out very well, and in the evening these orders were sorted out and when 10 or more pounds were sold through any of the stores our man would deliver this amount the next day to the grocery store for delivery. In this way we had the merchant where he could not very well refuse, because his customers demanded this butter from him. Some stores ran up to 30 pounds during the day's campaign. In this way we reached better than one hundred stores and meat markets. However, we have sifted them down to something like 50, as 25 per cent would not keep our State Brand in stock, because the price was too high and because we would not promise them that we would meet competition in price, etc., and the other 25 percent were slow pay.

Right after the week or so of our demonstrations from house to house we ran a 30 foot reel in five of the picture shows. Alternately we did this for thirteen weeks, and we believe that this is one of the cheapest ways of bringing some thing before the public that they will talk about. Our butter was very well advertised all over the city and I wish to say that we enjoyed a very large business during the past season from our adventures—we sold as high as 1,000 pounds some days in prints in Sioux City alone then we had considerable other local trade which amounted in all during the best month last summer to over 31,000 prints.

During our advertising campaign we emphasized strongly that there was no neutralizer used in the manufacture of this brand. The word neutralizer was used more or less in the daily papers at the time we started our advertising. People read about the neutralizer decision being postponed from time

to time and the consuming public began to inquire about this new process that they never heard of before.

I remember the first time I went to see our ad in the movies. As it happened a couple was sitting ahead of me—I presume they were a married couple. When our State Brand appeared on the screen in that large circle, leaving ample space at the top for these words—THERE IS NO SUBSTITUTE FOR GOOD BUTTER—. Then on the right of the trade-mark came flashing the words—THE STATE PROHIBITS THE USE OF A NEUTRALIZER IN THIS BRAND. Down a little farther it reads—TAKE ADVANTAGE OF THIS PROTECTION OFFERED. DEMAND IT OF YOUR GROCER. At the bottom the distributor's name appeared with his phone number.

Now about this couple which I mentioned amused me somewhat when the word "neutralizer" flashed on the screen the lady turned to her man inquiring: "What was meant by neutralizer?" He replied: "Some kind of dope to make it look natural". Not a bad guess, was it? I believe the word "neutralizer" was new to both of them. It is just a year ago next month that we started out with the parcel post business, and in these eleven months we are well satisfied with what we have accomplished, and had many more ideas worked out to use in connection with our campaign had we gotten warmed up with our competitors but as it was we have got along fine thus far.

Opportunities for working up a home market for quality butter are good most any where. You may have to figure out your own salvation how it's best to place it on the market so the public can get it.

But remember that quality and publicity with plenty of tact behind will do the business.

Try it and see for yourself.

DAIRY FARMING, THE MOST PERMANENT INDUSTRY

As a safe and permanent occupation, none of the common forms of farming compare with dairying. Still, many dairymen have regarded the future of the industry with doubt. Falling prices during the early months of the present year,

lead them to wonder and worry regarding their heavy investments in live stock, land, buildings and machinery. Let them consider the following seven reasons why dairying is the most permanent form of farming. We could give more and will gladly do so, if called upon, however, we rest assured that seven good reasons will more than remove the last vestige of doubt from the minds of most people.

First—Milk and milk products are absolutely essential to life, health, and normal growth. This point is becoming better known year by year to our reading and reasoning public; as a consequence the consumption of milk and milk products is steadily increasing. So is the use of substitutes, you may say, and you would be right. War prices and highly commendable patriotism popularized the use of substitutes. But none of the so-called substitutes, no matter how extensively advertised, dare meet pure milk products in open battle. Why? Because milk products contain vitamins, and vitamins are absolutely essential to normal health and growth. They are not found in appreciable quantity in other animal oils and in vegetable oils, and it is these oils that form the base of all substitutes on the market.

Second—During the past five years our population has increased seven per cent; milk consumption has increased ten per cent in the same period. What do these indisputable facts promise for the future? The population of the United States is increasing rapidly and history will show that it has been on the steady increase for the past century. Immigration and the natural increase through births assure further growth. Education in child welfare and general health insists on milk for the growing child. Therefore we may expect to see milk consumption increase far more rapidly and markedly in the next generation than in the decade just ended. What could be a more promising guarantee for the future than an ever increasing and expanding market.

Third—Dairy products are a source of regular and reliable profit. The market for dairy products has never been controlled by a few; it never will be. Through co-operative creameries and cheese factories farmers can supply a staple, finished product, ready to be disposed of direct to the ultimate

consumer if necessary. This in a sense makes possible the elimination of the middleman, and has been used by farmers where it was found that the "split" in profits was going against them. Once a month, twice a month, or even every week or day in some cases, the dairyman receives payment for the work his cows have done for him—and cows don't work on an eight-hour day basis either. Thus the dairy farmer is enabled to pay cash for things he buys and is free to "stand firm under" when hard times threaten.

Fourth—Dairying and diversified farming are one and the same. Diversified farming produces a variety of crops for market; a failure of any one or two does not mean bankruptcy for the farmer. The dairyman does not have "all his eggs in one basket." Contrast this condition with the Corn Belt where wealth is measured in terms of corn, hogs, and steers. This year has seen the "bottom drop out" of the market for the three things he produces—commodities he has always considered as legal tender. As a consequence there is no money in circulation, farmers are not able to meet their obligations, farm sales made a year ago at high prices are falling through, and banks are unable to assist farmers in making loans. In Wisconsin, primarily a dairy state, conditions are much better in spite of decreased prices. Banks are still able to take care of the needs of farmers, and farmers seem to be able to "scare up the cash" with which to meet their debts. Why? Because diversified farming with the timely aid of dairy dollars can meet and is successfully meeting the emergency.

Fifth—The dairy herd conserves and even increases soil fertility, assuring good yields of farm crops in future years. At the same time the herd provides a sure, prompt, and profitable outlet for grains and roughage grown on the farm. Land that supports good dairy herds becomes richer year by year whereas land devoted to raising grains and hay for market soon becomes sadly depleted unless carefully managed and unless commercial fertilizer is purchased. Every ton of corn sold off the farm, worth in normal times about \$20.00 takes with it \$6.50 worth of plant food; every ton of wheat worth \$35.00 takes \$17.00; every ton of butterfat worth about \$1,000.00 takes only 49 cents worth of plant food! Meanwhile the herd

is returning many times this amount in fertility. It pays to market crops in the milk can. Keep these facts in mind when you haul away your next load of oats or hay.

Sixth—Our biggest and most successful dairymen, with years of practical experience to back up their statements, say, "The dairy crop is the only one which has never known a complete failure." They base this statement on a few simple facts. In the first place dairying is more quickly adjustable to new conditions and prices than any other kind of farming. We can easily see why. Field crops are marketed once a year, and the price is forced down—temporarily—because of the overload of any single crop on the market. The marketing period is not distributed. To purposely hold for higher prices means to wait for the money tied up in the crop. Not so with the dairyman. He markets his "crop" every day, or every few days at most, and is paid once or twice a month or oftener. His returns no doubt do vary in times such as the present when all lines of industry are being readjusted, but a few months of low prices do not condemn the industry. The reasoning farmer notes a drop of 15 to 25 percent in milk prices, then compares this to the drop of corn from \$1.50 per bushel to around 60 cents, and pork from 23 cents to 9 cents. He figures his average earnings for the last two years and is satisfied. He knows that no business is entirely free from ups and downs; he also knows that none are more highly favored than dairying in this respect.

Seventh—The dairy cow is a home builder. Farming, no matter how profitable, never reaches the position of dignity which is its heritage until the farm home becomes so attractive that it is the greatest pride of the entire family, something to be handed down from generation to generation. The growing boy or girl does not look forward with pleasure to the time when they will inherit a mortgage-ridden, impoverished ruin. They do thrill at the thought of a farm both fertile and fair, stocked with the blood left as the breeders' handiwork of father and grandfather. The dairy herd always has stood and always will stand as a symbol of permanence for the good farm, the real farm home, the farm from which the boys are not easily attracted to the job in the city nor the girls lured away to the office.

WORK OF THE NATIONAL DAIRY COUNCIL

The National Dairy Council has been functioning under its present plan for a period of two years with considerable success and in consideration of financial support from the Dairy Industry is adequately prepared through contact with and co-operation from educational and welfare agencies, as well as commercial, to enter into the following agreement:

I. To promote a clearer understanding of the service of Dairy Products in the diet of the nation with consequent increases in consumption of those products and favorable market conditions by means of

A. Education work in the schools, colleges, and universities, access to which has been granted by authorities because this is an "Educational Organization." Its help has been sought by over 30,000 school teachers.

B. Educational, health, and welfare clubs and associations, such as Red Cross, Parent-Teachers, etc., have sought and secured publicity material, pamphlets, speakers, etc., from the National Dairy Council, because it is educational, which service will continue without question.

C. Conducting milk and Dairy Products campaigns where whole cities and communities join to emphasize the need of Dairy Products in the diet.

D. The Public Press, Billboards, Window Space, District, State and National Fairs and Conventions, and Commercial agencies, have been used where such service was warranted.

During the past year the National Dairy Council has supplied over four million (4,000,000) pieces of literature to the consuming public, it has circulated three motion picture films, thirty seven picture show slides, four billboard posters, several mechanical devices which graphically demonstrate food values of Dairy Products at fairs and in window displays. The Council has supervised more than one hundred campaigns in cities and towns fostering increased use of Dairy Products, notable among these being Philadelphia, Cleveland, Minneapolis, St. Paul, Trenton, and Youngstown. It has also maintained booths at the National Educational Association Convention with 8,000 teachers attending and at the American Medical

Association Convention with 10,000 doctors present. These functions are increasing almost more rapidly than they can be cared for with the present force of workers—thirty-two in number.

The results of this type of work and stimulation of interest cannot be presented concretely. However, these facts are pertinent. During the seven months, March to September, Philadelphia milk sales were 6.65% greater than for the same period of 1920 in spite of a decrease in population. Detroit reported an increase of 20% over a preceding similar period as a result of a campaign. One milk distributor in a western city said, "My milk sales are 18% greater than in 1920, which I attribute entirely to the education work which has been done." Butter production has been 100,000,000 pounds larger during the first ten months of 1921 than for the same period of 1920 and smaller storage stocks prevailed at the close of the period in 1921. Most leading butter manufacturers state that the educational work of the Dairy Council has stimulated much of the consumption which has made the butter market favorable. The manufacture of margarines during the first nine months of 1921 decreased almost 50% as compared with 1920. And, all of this increase in consumption of Dairy Products has been maintained in the face of a most serious national business depression with decreased sales of practically all other foods.

II. The National Dairy Council agrees to scrutinize and combat such false advertising and publicity of butter substitutes as may come to its attention. It has already secured the withdrawal of large numbers of false billboards, newspaper and circular advertising, by complaint to the vigilance committee of the associated advertisers, Federal Trade Commission, Attorney General of the United States, and State Educational Institutions.

III. The National Dairy Council agrees to place its educational material and publicity in such channels as appear most serviceable but believe that to serve the butter industry best it should distribute most throughout the area of New England and North Atlantic States where more than 50% of the creamery butter is consumed and one-third of the entire population of the United States are located.

IV. The National Dairy Council agrees to maintain receipts from the butter industry in a separate fund, expenditure of which shall be supervised by a committee of butter manufacturers, selected by the butter interests supporting the Council, in co-operation with the officers of the National Dairy Council. It is suggested for the approval of such committee that the fund be budgeted as follows:

- 40% Billboards and window posters;
- 30% Pamphlets, etc., for educational work;
- 20% Dairy Products Campaigns;
- 10% in general publicity and investigational work.

V. In consideration of your financial support the National Dairy Council will make report of receipts and disbursements with explanation at least semi-annually.

To do the most successful and far-reaching work a fund of \$150,000 seems advisable for butter publicity work as outlined under Division No. IV. To raise this amount it will be necessary to receive payments in the amount of 25 cents per thousand pounds of butter manufactured, or 30 cents per thousand pounds of fat handled, in creameries making a total of 600,000,000 pounds of butter. Do not look upon this as a contribution, or as joining one more organization. The money you pay to sales agencies, advertising agencies, commission firms, transportation mediums, etc., is based upon volume. Here you are doing fundamental market development work which cannot be done individually. You are buying a service just as truly as any other one of your marketing agencies.

We are submitting this report of the work accomplished by the National Dairy Council for the reason that thousands of dairymen in this state are supporting this work, through their creameries and other marketing organizations and we believe that it will be of interest to everyone to know just how this work has been handled.

WORK OF IOWA STATE DAIRY ASSOCIATION

(By J. P. Eves, State Dairy Expert.)

The demand made on the Iowa State Dairy Association, during the past year has been greatly increased in spite of the financial depression. This condition, however, is only to be expected since farmers always appreciate the possibilities of dairying during the period of hard times.

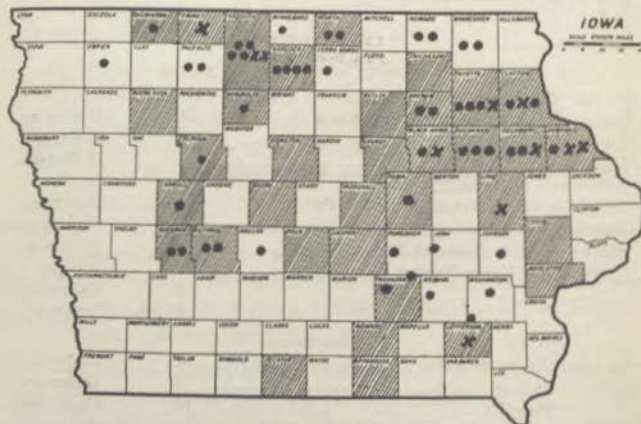
The past year has shown a very decided trend toward dairying. This holds true in practically every county in Iowa. A comparison of the financial conditions in various counties of Iowa, as well as the comparison between states, has proven conclusively that the dairy sections are weathering the times in a very satisfactory manner as compared with practically every other agricultural section. This fact has been the cause of an almost un-suppliable demand for dairy cows. Bankers who would not ordinarily loan money for any purpose have been very free in the loaning of money to men to buy cows. It is a very noticeable fact in Iowa that this demand is coming from sections where the grade calf clubs, previously organized by the Dairy Association, have been in existence. These clubs brought, in many instances, the original dairy cattle into the communities. The farmers have finally realized the value of special purpose dairy cattle on the Iowa farm. I can cite one community where a grade club was organized in 1919. During the fall of 1921 five car loads of grade dairy cows have been purchased and distributed in this same community.

It has been the attitude of the Dairy Association, however, that many farmers are not to be encouraged to turn to dairying. With a percentage of the farmers, it is only a temporary idea with the one purpose of merely supplying a satisfactory temporary market for their grain and hay and to help carry them over the hard time period. We have contended that it is wise to encourage only those men who are interested in going into dairying as a permanent enterprise.

In comparing one year's report with another, we necessarily find that there is a constant changing of the line of work followed. The activities of the Dairy Association must of necessity respond to the demand placed on it and the change of

financial conditions has, of course, made a greater change than one would expect between one year and another.

This map will illustrate clearly the counties in which work was done by Iowa State Dairy Association Representatives during 1922.



- x Represent the calf clubs organized in 1921.
- Represent the calf clubs organized in previous years.

DAIRY CALF CLUB WORK

The boys' and girls' dairy calf club work, in spite of the fact that most calf clubs have suffered a decrease during the past year, gained in popularity. The Dairy Association is co-operating with and receiving the hearty co-operation of the Club and Dairy Extension Divisions of the Iowa State College in this work.

1921 was the banner year from the standpoint of the number of pure bred clubs organized and the number of members owning calves in these clubs. The comparison of three years' work in which the clubs have been organized shows the following:

1919	Four	Pure Bred Clubs Organized	90 Members.
1920	Six	Pure Bred Clubs Organized	81 Members.
1921	Eight	Pure Bred Clubs Organized	123 Members.

With but very few exceptions, the bankers in all localities are willing to finance the dairy clubs in spite of close money because they realize the importance of developing the dairy industry. To my knowledge, only two clubs were held back this year because of lack of finances.

1921 CLUBS
Pure Bred Calves.

Organized by	No. of Calves	Breed
Dubuque Co. Holstein Brdrs. Ass'n	24	Holsteins
Linn Co. Holstein Brdrs. Ass'n	25	Holsteins
Fayette Co. Farm Bureau	5	Holsteins
Jefferson Co. Farm Bureau	8	Jerseys
Delaware Co. Holstein Brdrs. Ass'n	5	Holsteins
Dubuque Co. Guernsey Brdrs. Ass'n	25	Guernseys
Blackhawk Co. Holstein Brdrs. Ass'n	13	Holsteins
Clayton Co. Farm Bureau	10	Jerseys
	4	Guernseys
	4	Jerseys
Grade Calves		
Kossuth Farm Bureau	7	Holsteins
Fenton	2	Guernseys
Titonka	10	Guernseys
Emmet Co. Farm Bureau—Ringsted	11	Guernseys
	14	Holsteins

It has been considered advisable to make some change in the distribution of time spent on club work and, consequently, more time is being spent on the follow-up work of the clubs already organized and less time given to the matter of organizing new clubs. It has proven that the greatest success is not possible unless a very close personal touch is maintained with the club member. This takes time, necessitates a number of visits to the club during the year, but has been the means of establishing the clubs on a good deal firmer and more successful basis.

The number of clubs organized in which grade calves were distributed has, in accordance with this policy, been limited to those counties in which the Farm Bureau was willing to get behind the club in the same manner in which they would follow up a pure bred club. This has, of course, limited the number of clubs considerably but we believe, in the long run, it will be the more effective. The grade club has proven to be

a mighty effective means of introducing good productive blood around cooperative creameries where they are often sadly in need of a better class of cows. In every instance where a grade club has been organized, it has been a forerunner to the introduction of grade cows and pure bred sires. In a number of localities the demand for a pure bred club has resulted from the previous organization of a grade club.

All grade clubs have been organized in the past with the purchase of "baby calves", by which I mean young calves three to five weeks old which are shipped in by express. Great care has been paid in the purchase of these calves. During 1921 all calves were purchased from Waukesha County, Wisconsin, through the Breed Associations. The present demand for cattle has been the means of advocating, in many instances, the organization of clubs with older bred heifers, believing that this would bring a much quicker return. We have found that the bankers have been more willing to finance such a club because of the quicker returns possible.

An added feature of the three period for clubs is just developing because the oldest pure bred heifers have just freshened during the past year. The members are being required to keep a record of the milk and butterfat produced during the year and some very creditable records are being secured. In Fayette County, where liberal prizes were offered by a local banker, an interesting competition developed. Two prizes of \$50.00 each to be given to the members, making the highest seven day record, provided the incentive. Bob Stewart, aged ten years, won the prize of \$50.00 on the heifer making her record as a senior two year old. This club heifer, Miss Diana Butterboy Beets, produced in seven days 21 pounds of butter from 405 pounds of milk. Mike Stewart, his older brother, with his club heifer, Miss Eliza Highland Johanna 3rd, won the \$50.00 prize for the heifer freshening, as a junior two year old with a production of 17.2 pounds of butter from 326 pounds of milk. Bob Stewart's heifer has been continued on her test by his father and will complete a record of very close to 600 pounds of butter.

The success of a calf club can be pretty well decided by the public opinion of the people connected with it. It has been

a source of satisfaction during the past year to see the greatest interest in clubs exist in those counties where the most work had been done previously. We now have a number of counties in which at least four clubs had been organized. Fayette County has organized three consecutive pure bred clubs. Dubuque County first organized a pure bred club in 1920 and came back strong in 1921 by the organizing of two more with a total enrollment of 58 members. Kossuth and Buchanan Counties are continuing their clubs that have all been organized on the three year basis. The grade calf club has proven very effective in Kossuth County around the creameries and has been a decided advantage in stimulating the interest in dairying.

EXCHANGE BUREAU

At all times an effort is made to place the buyer and seller of dairy cattle in touch with each other. Assistance is always offered to those parties who are buying their initial dairy cattle and wish experienced help. The past year has shown the greatest results of these efforts. A large number of cows and heifers have been purchased as well as a number of pure bred sires secured to place at the head of herds that have not previously used registered dairy bulls. It is a conservative estimate that at least \$25,000.00 worth of dairy cattle have been purchased during the past year through the medium of the State Dairy Association. At least fifteen pure bred sires have been purchased through the efforts of the Association's representatives.

BREEDERS' ASSOCIATIONS

A greater amount of time has been given to assisting the state and county dairy breed associations during the past year. It is the belief that through such organizations this office can do more effective work in improving dairy conditions within the state and within the individual county. Fifteen different breeders' association meetings were attended during 1921. Of this number, nine definite organizations are now in existence. It is planned that such organizations should adopt some definite piece of development work to improve and develop the dairy industry.

CLUB EXHIBITS AND JUDGING CONTESTS

1921 witnessed the first exhibit of pure bred dairy club heifers at the Iowa State Fair and Dairy Cattle Congress. The start was not a large one but it bids fair to develop into one of the more interesting and educational exhibits of club work. In addition to these, two larger exhibits of all counties in which pure bred dairy calf club work is being followed had their individual county exhibits.

Fayette County can be cited as having one of the most successful county exhibits. The County Fair at West Union and the Farm Bureau are co-operating in the maintenance of a club camp. All club members are required to show their calves at the County Fair and the camp is maintained so as to provide for the members a comfortable, as well as a safe place to sleep. A competent cook and care-taker, to provide meals and look after the members in a general way, is secured. This club is proving one of the big features in popularizing the work in that county.

Considerable stress has been placed on the judging demonstrations and judging contests conducted among the different club members. This work has developed a great deal of interest and friendly competition. Judging demonstrations and assistance in training was given to five different county teams previous to the State Fair. In addition, time and assistance was given in training the three calf club boys selected to represent Iowa in the Dairy Judging Contest at the National Dairy Show.

OTHER PROJECTS

There are always calls coming on various projects that could hardly be listed under the major lines adopted by the Association. These requests are varied and rather out of line with the usual work of the Association, but assistance is given whenever possible. We have had the co-operation of the State Dairy Council, The Extension Department of the Iowa State College and the Dairy and Food Commission at all times. Assistance has been given these organizations whenever possible.

PROJECTS FOR 1922

The plans for 1922 call for the pushing of the work much the same as during the past year.

The calf club work will be featured because I predict a great increase in the numbers and in profitable results during the coming year. Many counties are being urged by the bankers to take up this line of work. The interest of the farmers themselves and of the boys and girls is also rapidly turning toward the dairy calf club work.

The pure bred sire work will be one of the features. It is hoped that some form of pure bred sire campaign will be mapped out that will be effective in Iowa. It is certainly an opportune time to push this line of work because of the comparatively reasonable price at which good pure bred dairy sires can be purchased.

Assistance to state and county breed associations will be given additional attention. It is the belief of the Dairy Association that these different organizations should be fostered and given all possible co-operation and assistance.

The Exchange Bureau will be continued and an effort made to make it more effective.

These many lines, in addition to the general demand, always coming during the year will give the representative of the Iowa State Dairy Association a full schedule for 1922.

The work of the Laboratory is shown in the following table:

Cream and Milk	1978	Samples
Ice Cream	141	Samples
Miscellaneous Foods	65	Samples
Paints and Oils	19	Samples
Butter	194	Samples
For Attorney General and		
County Attorneys	243	Samples
Insecticides	43	Samples
Board of Control	10	Samples
Seeds	35	Samples
Stock Foods	180	Samples
Pharmacy Commission	2	Samples
Bacteriological	140	Samples
TOTAL	3050	Samples

The amount of work done in the Laboratory this year is gratifying, being a material increase over last year and represents the work of two chemists with the exception of about

two months of work by a third chemist, employed on half time.

CITY MILK LICENSES.

Table showing the number of milk licenses issued to city milk dealers for each year from 1911 to 1921. In each case the year ends on July 4th.

Year	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
No.	1,310	1,908	2,088	2,189	2,305	2,729	2,858	2,936	2,718	3,061	3,455

LOCAL STATE MILK INSPECTORS OF THE STATE OF IOWA

Cities	Inspectors.
Boone	W. H. McLain, M. D.
Burlington	W. F. Schoeder
Cedar Rapids	Phillip Pray
Clinton	J. H. Spence
Council Bluffs	B. A. Moore
Davenport	A. B. Haskins, D. V. S.
Des Moines	W. B. Barney, Jr.
Dubuque	J. N. Graham, D. V. S.
Ft. Dodge	B. Gilles
Iowa City	C. S. Chase, M. D.
Keokuk	Geo. B. Narley, M. D.
Marshalltown	R. M. Allen, D. V. S.
Mason City	A. L. Wheeler, M. D.
Muscatine	C. J. Hackett, D. V. S.
Ottumwa	Dr. E. F. Lowry
Sioux City	W. D. Hayes, C. P. H.
Waterloo	P. A. Hodge

SUMMARY

During the year ending November 1, 1921, our inspectors have inspected a total of 23,476 establishments, as follows:

Grocery	9,025
Meat Market	4,062
Bakery	1,024
Slaughter House	146
Restaurant	1,325
Coal Dealer	23
Elevator	9
Feed Store	80
Ice Cream Factory	538
Creamery	1,052
Dairymen	457
Farm Dairy	347

DAIRY AND FOOD DEPARTMENT

Confectionery	655
Wholesale Grocer	12
Seed Dealer	1
Bottling Works	31
Cream Station	2,984
Produce	1,555
Miscellaneous	149
TOTAL	23,476

DAIRY AND FOOD COMMISSION
FEES RECEIVED YEAR ENDING OCTOBER 31, 1921

Inspection Fee Tags	\$ 15,988.50
Seed Analyses Fees	12.00
Feeding Stuffs Analyses Fees	79.00
Stock Food Licenses	2,050.00
Egg Licenses	7,188.00
Babcock Test Licenses	8,507.50
Scale Tag Licenses	6,000.00
Scale Inspection Fees	12,710.98
Sanitary Law Licenses	16,908.00
Milk Dealers Licenses	4,713.00
Gasoline Pump & Meter Licenses	13,296.00
Cold Storage Licenses	625.00
Commercial Fertilizer Licenses	480.00
TOTAL	\$ 88,557.98

Fees collected by this Department, as listed above, are not used by the Department but are turned over to the State Treasurer as soon as received.

DAIRY AND FOOD COMMISSION
EXPENSES YEAR ENDING OCTOBER 31, 1921

NAME	SALARY	EXPENSE	TOTAL
W. B. Barney	\$ 3,300.00	\$ 241.86	\$ 3,541.86
*W. A. Gordon	108.33	19.89	128.22
*M. E. McMurray	2,208.25	214.10	2,422.35
E. L. Redfern	2,700.00	93.32	2,793.32
B. O. Brownlee	2,100.00	1,460.97	3,560.97
T. A. Clarke	2,100.00	1,135.88	3,235.88
H. E. Forrester	2,100.00	1,454.94	3,554.94
H. E. Ritter	1,984.87	1,156.69	3,141.56
F. W. Stephenson	2,100.00	1,190.42	3,290.42
*O. P. Thompson	1,750.00	1,138.85	2,888.85
*F. C. Gilmore	1,708.28	1,272.62	2,980.90
*E. W. Neasham	1,787.47	1,278.38	3,065.85
*F. L. Odell	1,583.31	868.88	2,452.19
Roy Scoles	1,833.42	1,285.64	3,118.96
E. A. Countryman	1,953.18	698.56	2,651.74
*C. C. House	1,350.00	1,072.87	2,422.87
**M. E. Flynn	350.00	80.59	430.59
*M. W. Knapp	750.00	330.49	1,080.49
J. W. Milnes	2,100.00	997.59	3,097.59
J. M. Morrow	1,945.79	1,018.13	2,963.92
C. Ottosen	2,100.00	1,256.40	3,356.40
H. A. Stearns	2,026.58	885.80	2,912.38
S. O. Van De Bogart	2,100.00	698.94	2,798.94
C. S. Bogle	2,400.00	43.81	2,443.81
A. B. Briggs	2,100.00	1,527.72	3,627.72
E. J. Nolan	2,100.00	1,833.28	3,933.28
W. G. Jordan	2,100.00	7.86	2,107.86
A. W. Day	2,000.00	.....	2,000.00
R. V. Barker	1,500.00	.....	1,500.00
*Minnie Benson	900.00	.....	900.00
*Blanche Lindblom	362.28	.....	362.28
Maupine Mack	1,200.00	.....	1,200.00
C. G. O'Connell	1,200.00	.....	1,200.00
*W. H. Davis	127.00	.....	127.00
*Fannie Conaway	373.84	.....	373.84
*R. B. Edmunds	380.80	.....	380.00
*Vera Thompson	13.47	.....	13.47
*R. T. Lustig	264.00	.....	264.00
*J. W. Lytton	1,073.10	.....	1,073.10
Laboratory Expense .....	.....	611.91	611.91
Weights and Measures Expense .....	.....	2,182.49	2,182.49
Misc. Office Expense .....	.....	2,031.64	2,031.64
Milk Agents' Expense .....	.....	635.11	635.11
Milk Agents' Fees .....	.....	6,630.00	6,630.00
Inspection Fee Tags .....	.....	2,465.00	2,465.00
Telephone .....	.....	51.68	51.68
Telegraph .....	.....	26.61	26.61
Electricity .....	.....	16.51	16.51
Express and Drayage .....	.....	368.43	368.43
TOTALS	\$60,133.87	\$38,293.96	\$98,427.83

*Employed less than a year.

**Deceased.

LAWS ENFORCED BY DAIRY AND FOOD COMMISSIONER

DAIRY LAW

The object of the dairy law is to insure the manufacture of clean, wholesome dairy products of uniform quality and possessing high nutritive value, and to encourage and promote all branches of the dairy industry, thereby securing for Iowa farmers a steady and fair market for one of Iowa's most valuable agricultural products.

FUNCTIONS OF ASSISTANT COMMISSIONERS AND DAIRY INSPECTORS

Inspection and educational work relative to sanitary conditions of dairy farms, cream buying stations, creameries, condensed milk factories, cheese factories, ice cream factories.

EDUCATIONAL WORK AT CREAMERIES

Instructs buttermakers in new methods of handling raw materials and manufacture of butter.

Confers with and addresses creamery boards and assists in moulding policies of the creameries.

Assists in the building of new and remodeling of old creameries, and installation of new equipment.

Periodically checks moisture content of the butter being made.

Periodically checks salt content of the butter being made.

Studies methods of manufacture at the creameries for the purpose of increasing the efficiency of the plant.

Checks cost of production and costs of marketing.

Advises creamery as to the best sources of equipment and materials.

Assists in securing frequent and regular transportation facilities.

Assists in securing satisfactory markets in eastern cities for butter.

Tests creamery scales, both test scale and platform scales, to insure accuracy and fair dealing.

Schools operators in conducting Babcock test.

Holds examinations to determine competency of candidates to hold license to perform Babcock test.

Checks and controls production of navy butter.

Checks and controls production of Iowa trade-marked butter.
Assists in the organization of cow-test associations and calf clubs.
Assists in educational work tending to promote greater and more economical production of milk and cream.

INSPECTION WORK IN THE FIELD

Inspects stocks of butter and butter substitutes at warehouses, stores, bakeries and restaurants to see that illegal butter and illegal butter substitutes are not carried on stock or offered for sale.

Investigates and conducts cases relative to testing of milk and cream by unlicensed Babcock operators.

Investigates complaints relative to unlicensed milk plants and milk depots.

Investigates complaints relative to false reading of Babcock test and other unfair practices.

Investigates complaints relative to the application of the antidis-crimination law as affecting the purchase of butter fat.

FUNCTION OF THE LOCAL MILK INSPECTORS

In charge of local milk inspection work under supervision of State Milk Inspector.

Inspects dairy farms supplying market milk to his district.

Inspects conditions, scores and keeps records as to sanitary conditions of dairies, milk plants and milk depots.

Periodically tests percentage of fat and solids in milk sold in his territory.

Periodically secures and forwards samples to the department laboratory for scoring and bacteriological analysis.

Investigates complaints as to quality of milk delivered and relative to violations of the laws pertaining to production and sale of milk in his territory.

FOOD LAW

The object of the food law is to prevent the manufacture and sale of harmful, deleterious and adulterated foods, or foods which are sold under false representation as to their quality or value.

FUNCTION OF FOOD INSPECTORS UNDER FOOD LAW

Inspect Iowa establishments where foods are manufactured to see that no harmful or fraudulent adulterant enters their composition.

Inspects conditions under which foods are stored, transported and sold to see that adulteration is not practiced.

Surveys and forwards to laboratory samples of foods which he suspects or concerning which he receives complaint as to quality, adulteration or short weight.

Inspects retail establishments to see that no illegal foodstuffs are carried in stock.

Inspects quality of eggs, poultry and other farm produce sold to buyers and handled through trade channels to see that these products are not spoiled or in a condition which would lead to their being spoiled before reaching the consumer.

SANITARY LAW

The object of the sanitary law is to insure cleanliness in the manufacture, distribution and sale of foods.

FUNCTIONS OF INSPECTORS UNDER SANITARY LAW

Determine sanitary conditions in establishments where foods are manufactured, prepared, stored and sold.

Sees that raw materials are in sound condition and that decayed and other unwholesome materials are kept out of food products.

Sees that no diseased persons are employed in establishments where foods are manufactured or sold.

Sees that foods are properly protected from dust, dirt, foul odors, flies, rodents and other contaminating agencies.

Sees that restaurants, hotels and other similar establishments maintain proper toilet and washroom facilities in order that employes can keep clean.

SEED LAW

The object of this law is to prevent the sale of undesirable varieties of seeds, seeds of low germination, dirty seeds, seeds containing excessive amounts of weed seeds, and seeds which are short in weight.

FUNCTION OF INSPECTORS

Inspects seed houses to see that seeds are properly cleaned and stored.

Traces origin of seeds to see that undesirable and too slow maturing varieties are not imported.

Sees that packages of seeds are full weight.

Investigates complaints relative to fraudulent dealing in seeds.

Samples stocks of seeds and sends samples to laboratory for analysis.

WEIGHTS AND MEASURE LAW

The object of the Weights and Measure Law is to secure for all the true weight or measure of the commodity sold or purchased.

FUNCTION OF WEIGHT AND MEASURE INSPECTORS

Inspects and tests accuracy of all weights, measures and scales used in the purchase and sale of articles of commerce.

Checks weights and measures of articles bought and sold by weight or measure to see that proper weights and measures have been given.

Inspects heavy wagon, elevator and mine scales to see that they are properly installed and kept adjusted.

Investigates complaints relative to false weights and measures and other violations of the weights and measure law.

CONCENTRATED COMMERCIAL FEEDING STUFFS LAW

The object of this law is to secure fair dealing in the sale of commercial feeds.

FUNCTION OF INSPECTORS

Examine stocks of foods to see that they are properly labeled as to quality, etc., and to forward samples to laboratory for analysis and comparison of feeding value.

Inspects stocks of feeds to see that packages bear tax tags.

Other laws enforced by this department are:

Paint and Linseed Oil Law.

Egg Law.

Turpentine Law.

Cold Storage Law.

Commercial Fertilizer Law.

Calcium Carbide Law.

Insecticide and Fungicide Law.

The duties of inspectors under these laws are similar to their duties under the laws in which duties are set forth in detail.

CREAMERY STATISTICS OF IOWA

SHOWING POUNDS OF MILK AND CREAM RECEIVED, POUNDS OF BUTTER MADE AND DISPOSITION OF SAME, SO FAR AS REPORTED.

COUNTY	Number of Creameries reported	Pounds of Milk Received	Pounds of Cream Received	Pounds of Butter Manufactured	Pounds sold to Patrons	Pounds Sold in Iowa	Pounds Outside of Iowa
Adair.....	1	49,911	762,023	284,483	20,998	86,599	178,894
Adams.....	1	180,000	64,800	14,800	20,000	20,000	20,000
Allamakee.....	7	5,253,345	1,780,710	62,804	146,854	1,607,000	
Appanoose.....	1	216,227	57,284	19,314	433	19,091	
Audubon.....	3	34,029	2,855,721	363,518	10,865	45,261	294,275
Benton.....	3	108,000	472,671	217,674	3,150	177,559	92,974
Blackhawk.....	9	5,206,390	2,825,350	1,797,454	79,435	960,256	718,218
Boone.....	2	119,580	113,074	6,007	70,532	38,533	
Bremer.....	23	47,383,070	1,696,246	2,631,421	246,175	268,750	2,157,973
Buchanan.....	7	8,545,108	1,997,247	1,650,924	83,621	649,884	919,869
Buena Vista.....	3	312,539	613,153	15,963	214,881	16,789	134,190
Butler.....	11	5,095,660	5,855,300	1,523,457	83,362	189,753	1,137,000
Calhoun.....	4	93,733	324,715	295,436	28,734	110,545	136,235
Carroll.....	8	381,603	2,612,320	1,125,398	11,536	632,300	481,941
Cass.....	2		874,891	1,471,891	44,220	830,469	
Cedar.....	6	2,572,043	1,080,913	30,900	376,004	585,068	
Cerro Gordo.....	9	2,804,841	5,055,672	2,547,892	63,770	349,044	2,135,079
Cherokee.....	1	13,139	8,754		3,754		
Chickasaw.....	9	3,270,473	6,053,964	1,918,802	190,850	37,462	1,701,325
Clay.....	5	310,000	510,999	177,045	14,525	31,552	130,340
Clayton.....	15	14,380,290	6,965,161	3,343,728	160,963	255,009	3,981,140
Clinton.....	5	16,804	1,305,080	2,410,487	69,164	151,388	1,986,245
Crawford.....	1	213,670	1,858,503	780,890	3,140	13,882	783,874
Dallas.....	2		77,522	3,000	44,122	30,400	
Delaware.....	13	5,562,119	4,241,265	2,098,531	144,173	160,032	1,590,381
Des Moines.....	2	87,315		551,771	697	529,684	21,390
Dickinson.....	3		8,269,692	561,543	23,907	119,850	437,308
Dubuque.....	15	8,378,869	4,965,455	5,607,850	85,211	890,162	4,512,661
Emmet.....	3	33,866	977,226	291,415	28,577	35,286	227,552
Fayette.....	18	21,192,912	6,576,569	2,901,471	26,136	242,989	2,457,557
Floyd.....	4	144,263	1,997,788	639,237	36,600	196,736	605,301
Franklin.....	7	64,289	2,369,089	964,728	59,618	339,814	365,226
Greene.....	1	158,290	152,251	59,981		56,981	
Grundy.....	3	436,848	593,379	400,886	28,688	2,013	369,265
Guthrie.....	4	52,228	924,972	352,049	14,411	230,170	104,003
Hamilton.....	5	676,159	306,507	194,872	23,059	48,009	124,797
Hancock.....	6	29,384	2,334,476	913,867	64,241	121,640	732,567
Hardin.....	10	961,254	2,957,797	2,053,116	82,412	351,504	949,674
Henry.....	1		29,000	29,000			
Howard.....	9	5,429,610	1,538,882	38,934	30,341	898,353	
Humboldt.....	4	451,728	1,220,014	422,788	18,841	133,322	251,221
Iowa.....	2	131,152	222,276	164,826	4,504	92,022	8,842
Jackson.....	9	249,744	3,686,672	1,370,433	36,921	324,242	969,472
Jasper.....	1		300,400	73,730	1,323	72,407	
Johnson.....	2	1,050,000	377,049		110,221		267,828
Jones.....	6	140,174	6,345,433	1,946,284	130,634	175,755	1,640,328
Keshuk.....	2	6,000	468,006	154,434		154,434	185,426
Kossuth.....	12	871,485	4,221,706	1,294,611	121,122	139,422	881,782
Lee.....	2		248,659	1,881,040		255,982	1,574,517
Linn.....	6		3,889,934	1,683,136	75,655	390,004	1,233,352
Lucas.....	1			189,056		189,056	
Lyon.....	3		662,343	534,528	12,832	8,450	308,447
Mahaska.....	4	969,662	185,655	223,503	4,469	185,270	17,063
Marion.....	4			124,000		40,000	84,000
Marshall.....	4	982,689	1,617,925	679,590	28,490	233,332	415,768
Miller.....	2	196,790		165,599	2,500	92,420	70,649
Mitchell.....	7	325,182	10,380,944	1,512,269	164,934	70,263	1,690,335
Monroe.....	1	198,478	210,000	56,400		56,400	
Montgomery.....	2	138,878	107,885	260,986		178,214	84,672
Muskegon.....	1	33,351	493,557	156,695	8,340	99,606	48,749
O'Brien.....	4	230,004	1,779,606	650,307	40,404	304,333	396,371
Osceola.....	2	143,445	490,392	162,621	37,579	15,003	110,047

CREAMERY STATISTICS OF IOWA—Continued.

COUNTY	Number of Creameries reported	Pounds of Milk Received	Pounds of Cream Received	Pounds of Butter Manufactured	Pounds sold to Patrons	Pounds Sold in Iowa	Pounds Sold Outside of Iowa
Page.....	1			966,371		30,000	836,175
Palo Alto.....	7	129,253	2,496,262	810,541	77,640	277,397	452,212
Plymouth.....	1	749,304	52,520	17,351		17,351	
Pocahontas.....	1	30,000	509,436	160,651	70,017	129,084	50,460
Polk.....	4	1,117,380	6,134,600	4,782,497		2,327,941	1,456,017
Pottawattamie.....	2	906,698	131,234	1,797,354	19,906	325,216	1,015,599
Poweshiek.....	2		884,057	276,510	4,671	156,714	114,125
Sac.....	1		406,091	159,700	4,886	177,287	14,975
Scott.....	1		1,734,503	1,256,986		1,201,141	206,000
Shelby.....	1		889,985	129,347	14,212	24,641	90,494
Sioux.....	3	974,336	4,606,163	1,804,033	144,535	275,805	1,384,243
Surry.....	2	770,524	5,650,908	692,651	93,490	287,574	311,560
Tama.....	4		2,075,942	779,174	1,900	74,575	703,149
Taylor.....	1			120,460	10,022	25,862	78,575
Union.....	1		2,778,816	1,014,702	9,762	318,464	704,071
Van Buren.....	1			59,367			
Wapello.....	3		5,347,790	2,412,771		232,749	2,080,020
Washington.....	1		15,390	65,023		61,991	3,032
Wayne.....	2		2,857,959	991,248	2,000	44,000	945,548
Webster.....	3	2,149,325	1,185,190	475,909	11,890	455,478	8,671
Winnebago.....	8	82,545	4,132,535	1,385,574	165,895	96,201	1,330,570
Winneshiek.....	10		7,383,243	2,363,777	61,217	169,669	2,078,662
Woodbury.....	4	13,271,243	31,515,088	15,159,665	14,000	1,112,587	12,993,935
Worth.....	5	29,621	3,940,890	1,200,413	91,408	103,739	1,003,052
Wright.....	3	2,430,514	1,091,588	426,103	16,078	164,853	244,833
Total.....	414	152,619,481	212,937,945	98,526,996	3,369,495	19,267,688	75,962,956
Estimated on account of Creameries changed hands. Reports unobtainable.....				213,423			
Total.....				98,740,419			

CREAMERY LIST

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Adair County—					
Adair Co-operative Creamery Co.	Adair	D. J. Condon	Adair	J. R. Ryan	Adair
Greenfield Creamery Co.	Greenfield	W. A. Foster	Greenfield	R. Reynolds	Greenfield
Adams County—					
Prescott Creamery	Prescott	Chris Lundhigh	Prescott	C. Lundhigh	Prescott
Allamakee County—					
Artic Spring Creamery Ass'n.	Quandahl, 7 mi s of Spring Grove, Minn	O. C. Flatberg	Spring Grove, Minn	Olaf Goodno	Spring Grove, Minn
Calhoun Creamery	Lansing	F. E. Kerndt	Church	Vern Sires	Church
Farmers Co-operative Creamery Co.	Waterville	L. H. Gunderson	Waterville	J. V. Johnson	Waterville
Farmers Waukon Creamery Co.	Waukon	Tollef Johnson	Waukon	A. H. Hansmeier	Waukon
Ludlow Co-operative Creamery	Waukon	Henry Seibert	Waukon	W. P. Muth	Waukon
New Albin Co-operative Creamery	New Albin	R. G. May	New Albin	E. S. Rice	New Albin
Postville Farmers Co-op. Creamery	Postville	E. O. Bollman	Postville	B. F. Schultz	Postville
Appanoose County—					
Strickler Creamery Co.	Centerville	O. M. Strickler	Centerville	F. T. Strickler	Centerville
Audubon County—					
Audubon Creamery Co.	Audubon	J. C. Ahlstrup	Audubon	J. Johansen	Audubon
Audubon Township Creamery Ass'n.	Exira	L. P. Nelson	Exira	L. P. Nelson	Exira
Crystal Spring Creamery	Kimballton	Peter Nelson	Kimballton	Peter Nelson	Kimballton
Exira Creamery Co.	Exira	C. B. Peterson	Exira	C. B. Peterson	Exira
Sharon Creamery Co.	Audubon	Nielson Bros.	Audubon		
Benton County—					
Farmers Creamery	Belle Plaine	Peter Theussen	Belle Plaine	Peter Theussen	Belle Plaine
Model Creamery	Newhall	Wm. Gardeman	Newhall	Wm. Gardeman	Newhall
Vinton Creamery Co.	Vinton	Mm. Matter	Vinton	Wm. Matter	Vinton
Blackhawk County—					
Benson Dairy Co.	Benson	J. R. Dumond	Cedar Falls	J. F. Lorenzen	Cedar Falls
Cedar Falls Creamery Co.	Cedar Falls	G. E. Jensen	Cedar Falls	Gso. Holm	Cedar Falls
Cedar Valley Creamery Co.	Waterloo	J. H. Brandes	Waterloo	L. S. Johnson	Waterloo
Crain Creek Creamery	Denver	Wm. Meier	Denver R 1	Wm. Meier	Denver R 1
C. A. Fosse	La Porte City	C. A. Fosse	La Porte City	W. A. Harvey	La Porte City
Hudson Co-op. Dairy Ass'n.	Hudson	H. Lafrenz	Hudson	Wm. McFarland	Hudson

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

DAIRY AND FOOD DEPARTMENT

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Mount Vernon Creamery Co.	Bols	G. H. Moeller	Denver	Robt. Kerr	Cedar Falls R. 1
Orange Creamery	Waterloo	C. Bechtelheimer	Waterloo R 1	R. W. Chadwick	Waterloo R 1
Union Creamery Co.	Finchford	G. A. Everson		G. A. Everson	Janesville
Boone County—					
Peerless Ice Cream & Butter Co.	Boone	H. P. Serling	Boone	D. E. Wood	Boone
Rosendale Co-op. Creamery Co.	Story City	L. C. Peterson	Story City R 4	J. M. Gerton	Story City R 4
Bremer County—					
Artesian Creamery Ass'n.	Waverly R3	Henry Seigers	Waverly R 5	C. J. Meier	Waverly R. 5
Bremer Creamery Co.	Bremer	F. A. Boitz	Waverly R 2	R. J. Allenstein	Bremer
Climax Creamery Co.	Sumner	H. Sell	Sumner	A. L. Nichols	Sumner
Denver Creamery Co.	Denver	W. J. Moohling	Waverly R. 5	Otto Buchner	Denver
Excelsior Creamery Co.	Sumner	G. Rockdaschol	Sumner	C. A. Day	Sumner
First Maxfield Creamery Co.	Denver	H. C. Griese	Denver	H. C. Koeneke	Denver
Frederika Creamery	Frederika	Leigh Aleock	Tripoli	John Ambrose	Frederika
Fremont Creamery Co.	Tripoli	B. C. Fink	Tripoli R 1	Chas. Zell	Tripoli
Grovehill Creamery Co.	Fairbank	J. J. Kane	Fairbank	W. J. Spurbek	Fairbank
Janesville Creamery Ass'n.	Janesville	B. O. Squires	Janesville	B. O. Squires	Janesville
Klinger Co-op. Creamery Co.	Readlyn	Henry Otto	Readlyn	Henry Segebarth	Fairbank
Knitell Creamery Co.	Readlyn	J. Strotsmann	Readlyn R 1	F. H. Wehling	Readlyn R 1
Little Valley Creamery Co.	Sumner	Chas. Kruger	Sumner R 7	Jesse Nichols	Sumner R. 7
E. B. Olds Creamery	Sumner	E. B. Olds	Sumner	E. B. Olds	Sumner
Plainfield Creamery Co.	Plainfield	J. H. Brandes	Waterloo	R. P. Alderson	Plainfield
Potter Siding Creamery Co.	Tripoli	W. H. Barry	Tripoli R 2	E. M. Guiney	Tripoli R. 2
Readlyn Creamery Co.	Readlyn	H. A. Griese	Readlyn	H. A. Griese	Readlyn
Siegel Creamery	Tripoli	Fred Rodemeyer	Tripoli	E. R. Hersen	Waverly
Spring Fountain Creamery	Sumner	Wm. Zell	Sumner	P. W. Bremer	Sumner
Sumner Creamery Co.	Sumner	E. J. Dunhkopf	Sumner	A. C. Zierath	Sumner
Tripoli Creamery Co.	Tripoli	R. B. Bennett	Tripoli	H. H. Harms	Tripoli
Washington Creamery	Waverly	J. D. Monaghan	Waverly	C. L. Gamm	Waverly
Western Douglas Creamery Co.	Bremer	Carl Okerhen	Plainfield R 1	Ernest Hasse	Waverly R. 1
Buchanan County—					
Capper Creamery	Brandon	R. M. Hopkins	Brandon	E. C. Capper	Brandon
Fairbank Farmers Creamery Co.	Fairbank	A. J. Langley	Fairbank	C. E. Brant	Fairbank
Hazleton Farmers Creamery Co.	Hazleton	C. E. Riede	Hazleton	M. McDowall	Hazleton
Jesup Creamery Co.	Jesup	E. Rogers	Jesup	Earl Morris	Jesup
Lamont Creamery Ass'n.	Lamont	D. E. Cole	Lamont	E. A. Cole	Lamont

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

REPORT OF COMMISSIONER

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Waspie Valley Creamery	i-Independence	C. V. Rosenberger	Independence	Roy Stewart	Independence
Winthrop Creamery	i-Winthrop	J. C. Guthrie	Winthrop	Geo. Jensen	Winthrop
Buena Vista County—					
Clover Leaf Dairy	i-Alta	L. H. Hatch	Alta	V. Kleisohm	Alta
Farmers Creamery & Produce Co.	i-Newell	J. C. Aroe	Newell	N. C. Olson	Newell
Storm Lake Product Co.	p-Storm Lake	McCreery & Crowley	Storm Lake	McCreery & Crowley	Storm Lake
Butler County—					
Aldion Creamery Co.	i-Parkersburg	W. H. Chapman	Parkersburg	W. H. Chapman	Parkersburg
Aplington Co-op. Creamery Co.	i-Aplington	R. Meyer	Aplington	E. E. Brooks	Aplington
Clarksville Creamery	i-Clarksville	H. W. Stine	Clarksville	M. A. Jones	Clarksville
Community Creamery	i-Parkersburg	C. J. Rohde	Parkersburg	Arthur Brokaw	Parkersburg
Dumont Creamery	i-Dumont	E. M. Reed	Dumont	Raymond Reed	Dumont
Farmers Co-op. Creamery Co.	i-Allison	Wm. Allan	Allison	H. D. Sweet	Allison
Farmers Co-op. Creamery Co.	i-Greene	J. Jacobsen	Greene	J. Jacobsen	Greene
Jefferson Creamery Co.	i-Coster	L. C. Hahn	Clarksville	Robert Wagner	Shell Rock
New Hartford Creamery Co.	i-New Hartford	E. P. Perrin	New Hartford	P. W. Petersen	New Hartford
Shell Rock Creamery Ass'n	i-Shell Rock	D. C. Austin	Shell Rock	D. Daniels	Shell Rock
White Rose Creamery	i-Austinville	S. L. Patterson	Austinville	P. F. Anderson	Austinville
Calhoun County—					
A. Balrd & Co.	i-Lohrville	J. J. Stamen	Lohrville	J. J. Stamen	Lohrville
Bork Creamery Co.	i-Manson	A. J. Bork	Manson	A. J. Bork	Manson
Cedar Creek Creamery Co.	i-Somers	S. P. Peterson	Somers	A. M. Knudsen	Somers
Pomeroy Creamery Co.	i-Pomeroy	N. A. Albrecht	Pomeroy	Geo. Froom	Pomeroy
Carroll County—					
Carroll Creamery Co.	p-Carroll	C. C. Roberts	Carroll	C. C. Roberts	Carroll
Dedham Creamery	i-Dedham	H. Lauridsen	Dedham	H. Lauridsen	Dedham
Farmers Co-op. Creamery Co.	i-Breda	J. E. Polking	Breda	J. E. DuCharme	Breda
Halbur Creamery	i-Halbur	M. J. Wagner	Halbur	M. J. Wagner	Halbur
Jensen's Creamery	i-Coon Rapids	Jens Jensen	Coon Rapids	C. Hestbeck	Coon Rapids
Manning Creamery Co.	i-Manning	A. J. Bruck	Manning	A. Hughes	Manning
Ross Valley Creamery	i-Roselle	M. Friedman	Carroll R. 4	M. Friedman	Carroll R. 4
Templeton Creamery Co.	i-Templeton	John Bierl	Templeton	F. J. Donnayer	Templeton
Cass County—					
Central Ia. Poultry & Egg Co.	i-Atlantic	E. H. Busse	Atlantic	Jens P. Jensen	Atlantic

DAIRY AND FOOD DEPARTMENT

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Swift & Co.	i-Atlantic	J. G. Jeck	Atlantic	J. W. Cotter	Atlantic
Cedar County—					
Durant Farmers Creamery Ass'n	i-Durant	A. R. Lamp	Durant	H. G. Davis	Durant
Golden Star Creamery	i-Bennett	W. H. Kroeger	Bennett	A. Gudvangen	Bennett
Lowden Far. Mut. Co-op. Creamery	i-Lowden	K. Pauls	Lowden	W. L. Sloan	Lowden
Massillon Co-op. Creamery	i-Massillon	P. H. Schneider	Massillon	O. R. Ball	Massillon
Tipton Creamery	i-Tipton	A. J. Barth	Cedar Rapids	O. Wichman	Tipton
West Branch Creamery	i-West Branch	A. B. Sidwell	Iowa City	W. E. Hunter	West Branch
Cerro Gordo County—					
Dougherty Co-op. Creamery	i-Dougherty	R. J. Mullen	Dougherty	P. J. Galtzinger	Dougherty
Farmers Mut. Co-op. Creamery	i-Clear Lake	W. F. Paul	Clear Lake	S. M. Hudson	Clear Lake
E. B. Higley & Company	i-Mason City	V. S. Wilcox	Mason City	G. A. Swartz	Mason City
Lindhurst Creamery	i-Mason City	J. P. Snyder	Mason City	C. W. Peterson	Mason City
Plymouth Co-op. Creamery	i-Plymouth	E. E. Behnke	Plymouth	C. W. Hart	Plymouth
Rockwell Co-op. Creamery	i-Rockwell	F. C. Siegfried	Rockwell	J. S. Smith	Rockwell
Swaledale Creamery	i-Swaledale	Henry Donner	Swaledale	Henry Donner	Swaledale
Thornton Creamery Creamery Ass'n	i-Thornton	G. H. Assink	Thornton	H. Assink	Thornton
Ventura Farmers Creamery	i-Ventura	E. P. Conway	Ventura	E. P. Conway	Ventura
Cherokee County—					
Cherokee Creamery Co.	i-Cherokee	Goeh & Goeh	Cherokee	Dean Galleys	Cherokee
Chickasaw County—					
Alta Vista Mut. Co-op. Ass'n	i-Alta Vista	G. J. Scholz	Alta Vista	R. J. Tjornekoj	Alta Vista
Farmers Co-op. Creamery Ass'n	i-Nashua	W. N. Wayne	Nashua	M. H. Bullis	Nashua
Fredericksburg Butter Factory	i-Fredericksburg	C. L. Whitcomb	Fredericksburg	C. Ruzler	Fredericksburg
Ionia Farmers Creamery Ass'n	i-Ionia	C. B. Moody	Ionia	C. J. Faber	Ionia
Jerico Farmers Mut. Creamery Ass'n	i-Jerico	E. Attleson	Lawler	F. W. Nelson	New Hampton
Lawler Creamery Ass'n	i-Lawler	Ray Nutty	Lawler	J. Finnegan	Lawler
New Hampton Creamery	i-New Hampton	J. P. McGinn	New Hampton	D. W. Mohler	New Hampton
Saude Far. Co-op. Creamery Ass'n	i-Lawler	J. O. Lamsverk	Wausoma	J. E. Flakerud	Lawler
Williamstown Creamery Ass'n	i-New Hampton	C. M. Burmaster	Fredericksburg	Nate Tibbets	New Hampton
Clarke County—					
Burns Creamery Company	i-Osceola				

REPORT OF COMMISSIONER

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Clay County—					
Farmers Creamery Co.	Dickens	F. F. Austin	Dickens	Ben Cordray	Dickens
Langdon M.L. Co-op. Creamery	Langdon	Martha Caldwell	Langdon	John Sadler	Langdon
Royal Creamery	Royal	J. E. McCaffrey	Royal	J. E. McCaffrey	Royal
Spencer Dairy Produce Co.	Spencer	Jensen & Christensen	Spencer	E. Jensen	Spencer
Webb Creamery	Webb	Birdsall-Anderson	Webb	Harry Stowe	Webb
Clayton County—					
Crown Brand Creamery	Elkader	J. T. Leonard	Elkader	J. T. Leonard	Elkader
Farmers Co-op. Creamery Co.	Edgewood	W. A. Robinson	Edgewood	W. H. Elsiehd	Edgewood
Farmers Creamery Co.	Osterdock	John White	Garber	Carl Wilkinson	Osterdock
Farmersburg & St. Olaf Co-op. Crmy.	St. Olaf	Wm. Fuhrman	St. Olaf	J. F. Fisher	St. Olaf
Garber Farmers Co-op. Creamery	Garber	J. I. Berrett	Garber	P. J. Vanlentine	Garber
Garnavillo Creamery Co.	Garnavillo	A. J. Kregel	Garnavillo	F. W. Hessel	Garnavillo
F. H. Hatch Co.	Edgewood	F. H. Hatch	Edgewood	W. I. Dilger	Edgewood
Littleport Far. Co-op. Creamery	Littleport	G. C. Ruegnitz	Elkport	Earl Batchelder	Littleport
Luana Farmers Co-op. Creamery Co.	Luana	H. R. Roderick	Luana	Ben Frank	Luana
McGregor Co-op. Creamery Co.	McGregor			Sam Dotson	McGregor
Millville Creamery Co.	Millville	H. J. Friedlein	Turkey River	H. D. Ash	Turkey River
Northern Iowa Produce Co.	McGregor			H. M. Clough	McGregor
Strawberry Point Far. Crm. Ass'n.	Strawberry Point	W. A. Carrier	Strawberry Point	H. C. Ladage	Strawberry Point
Union Farmers Creamery Co.	Monona	John Sabbann	Monona	P. A. Jordahl	Monona
Volga Farmers Creamery	Volga City	A. E. Olinger	Strawberry Point	F. P. Gernaud	Volga City
Clinton County—					
Charlotte Creamery Co.	Charlotte	Martin Nielson	Charlotte	A. Roendfeldt	Charlotte
Clinton County Central Creamery	DeWitt	O. C. Capper	DeWitt	D. C. Capper	DeWitt
Farmers Co-op. Creamery Co.	Toronto	A. Diens	Toronto	Jerry Struck	Toronto
Farmers Co-op. Creamery Co.	Wheatland	W. A. Templeton	Wheatland	R. R. Long	Wheatland
Swift & Company	Clinton	F. H. Johnson	Clinton	I. W. Ames	Clinton
Crawford County—					
Nicholson Ice & Produce Co.	Denison	J. G. Handford	Denison	M. G. Hanson	Denison
Dallas County—					
Far. Co-op. Creamery & Produce Co.	Dexter	E. F. Lieghty	Dexter	W. L. McMeriamin	Dexter
Perry Packing Company	Perry				

*Central Churning Plant. e-Co-op. s-Stock. i-Individual. p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Delaware County—					
Colesburg Co-op. Creamery Co.	Colesburg	Robert A. Gull	Colesburg	A. L. Landis	Colesburg
Delaware Creamery	Delaware	A. W. Sackett	Delaware	M. E. Boots	Delaware
Earlville Creamery	Earlville	L. S. Hutton	Earlville	A. L. Bining	Earlville
Farmers Co-op. Creamery Co.	Greeley	L. J. Baskerville	Earlville	G. O. Miller	Greeley
Farmers Creamery Co.	Ryan	J. J. Hleberger	Ryan	L. W. Ross	Ryan
Farmers Mutual Creamery Co.	Sand Springs	J. L. Batchelder	Hopkinton	J. L. Batchelder	Hopkinton
Hazel Green Creamery Co.	Ryan, R. R.	Daniel King	Delhi	Alex Graham	Manchester
Hopkinton Creamery Ass'n.	Hopkinton	H. M. Reeve	Hopkinton	R. D. Flerstein	Hopkinton
Manchester Co-op. Creamery Co.	Manchester	E. J. Reed	Manchester	E. J. Reed	Manchester
Petersburg Farmers Creamery Co.	Petersburg	Joe. Dingbaum	Earlville R. 3	J. E. Taylor	New Vienna R. 1
Silver Spring Creamery Co.	Delhi	J. W. Swinburne	Delhi	R. J. Saverald	Delhi
Thorpe Farmers Co-op. Creamery Co.	Thorpe	Floyd Ryan	Manchester	G. Steussl	Manchester
Masonville Creamery Co.	Masonville	Krause & Gehring	Masonville		
Des Moines County—					
Burlington Farmers Merc. Co.	Burlington	Lyman Roth	Burlington R. 1	E. W. Romkey	Burlington
Burlington Creamery Co.	Burlington	H. R. Tweedell	Burlington	E. H. Griffith	Burlington
Dickinson County—					
Lake Park Co-op. Creamery Co. Ass'n.	Lake Park	J. G. Chrysler	Lake Park	E. E. Starr	Lake Park
Milford Farmers Butter & Cheese	Milford	F. W. Born	Milford	F. W. Horn	Milford
Spirit Lake Produce Co.	Spirit Lake	I. N. Clark	Spirit Lake	Victor Welter	Spirit Lake
Dubuque County—					
Balltown Farmers Co-op. Creamery Co.	Balltown	L. J. Segworth	Waupeton	Al Barker	Waupeton
Beatrice Creamery Co.	Dubuque	L. F. Ulrick	Dubuque	Walter Davis	Dubuque
Cascade Co-op. Creamery Co.	Cascade	J. N. Kremer	Cascade	C. A. Miller	Cascade
Farmers Golden Star Creamery Co.	Dyersville	Ralph Burke	Dyersville	D. T. Broers	Dyersville
Five Points Mutual Creamery Co.	Durango, R. R.	F. Frischer	Durango R. 1	F. McLean	Durango R. 1
Globe Creamery Co.	Luxemburg	John Langel	New Vienna	J. P. Crippner	New Vienna R. 1
Hague Creamery	Zwingle	H. A. Hague	Zwingle	H. S. Hagus	Zwingle
Hawkeye Farmers Creamery Co.	Epworth	C. B. Hanna	Epworth	W. W. Newland	Epworth
Hickory Valley Creamery	Dyersville	F. Osterhaus	Farley	J. J. Crippner	Farley
Holy Cross Creamery Co.	Holy Cross	F. J. Maers	New Vienna	John Dawson	N. Buena Vista
Iowa Dairy Company	Dubuque	A. Fleutsch	Dubuque	H. E. Williamson	Dubuque
New Vienna Central Creamery Co.	New Vienna	H. F. Smith	New Vienna	M. O. Brooker	New Vienna
Sherrill Mut. Co-op. Creamery Ass'n.	Sherrill	J. C. Boleyn	Dubuque	F. Koehler	Spechts Ferry R. 1
Swift and Company	Dubuque	C. A. Peacock	Chicago	C. D. Robbins	Dubuque

*Central Churning Plant. e-Co-op. s-Stock. i-Individual. p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Worthington Farmers Creamery	Worthington	W. D. White	Worthington	C. N. Beahler	Worthington
Emmet County—					
Etherville Creamery Co.	Etherville				Wallingford
Farmers Creamery Co.	Wallingford	O. F. Refsell	Wallingford	Wm. Helgason	Wallingford
Ringsted Co-op. Creamery Co.	Ringsted	S. O. Holten	Ringsted	J. C. Jensen	Ringsted
Fayette County—					
Alpha Farmers Co-op. Creamery	Alpha	A. A. Belknap	Alpha	A. W. Riser	Alpha
Center Valley Creamery Co.	Sumner, R. R.	R. O. Diemel	Sumner	Tel. Slack	Sumner
Clermont Valley Creamery Co.	Clermont	O. A. Olson	Clermont	A. Erickson	Clermont
Elgin Farmers Dairy Co.	Elgin	M. Luchsinger	Elgin	Ed. Hanson	Elgin
Farmers Co-op. Creamery	St. Lucas R. R.	G. H. Hackman	St. Lucas	J. T. Mogle	St. Lucas
Farmers Creamery Co.	Arlington	Floyd Finney	Arlington	Joe Antwine	Arlington
Far. Mut. Co-op. Crmy Ass'n. of Scott	Stanley, R. R.	L. G. Gleim	Arlington	Ralph Porter	Stanley
Fayette Mutual Creamery Ass'n.	Fayette	P. E. Jubb	Fayette	C. H. Pinch	Fayette
German Creamery Co.	Westgate, R. R.	W. H. Buhrow	Westgate	F. H. Benz	Westgate
Harlan Far. Mut. Co-op. Creamery Co.	Maynard	Frank Cummings	Maynard	F. H. Bowditch	Maynard
Hawkeye Creamery Co.	Hayward	H. F. Hauth	Hawkeye	R. C. Wilson	Hawkeye
Oelwein Farmers Creamery	Oelwein	E. E. Day	Oelwein	G. A. Hanson	Oelwein
Oran Creamery Company	Oran	J. N. Getz	Oran	B. F. Bentley	Oran
Richfield Creamery Co.	Sumner, R. R.	A. Morf	Sumner	J. B. Zbornick	Sumner
Riverside Creamery Co.	Wadena	W. H. McGuinness	Wadena	W. M. McGuinness	Wadena
Waucoma Farmers Co-op. Crmy. Ass'n.	Waucoma	E. J. Nulty	Waucoma	T. F. Shipton	Waucoma
Westgate Co-op. Creamery Co.	Westgate	F. S. Gabman	Westgate	L. C. Barnes	Westgate
West Union Farmers Co-op. Crmy.	West Union	Wm. E. Halsted	West Union	Geo. Hauer	West Union
Floyd County—					
Charles City Creamery Co.	Charles City	Nelson & Holness	Charles City	Paul Page	Charles City
Niles Creamery	Colwell	P. Brunner	Colwell	C. T. Zenath	Colwell
Nora Springs Creamery & Produce Co.	Nora Springs	W. F. Miner	Nora Springs	C. Erickson	Nora Springs
Rockford Co-op. Creamery Ass'n.	Rockford	R. F. Dunkelberg	Rockford	Max Walker	Rockford
Franklin County—					
Farmers Creamery Co.	Alexander	W. F. Dunn	Alexander	L. I. Born	Alexander
Farmers Creamery Co.	Dows	H. J. Iverson	Dows	A. O. Larson	Dows
Farmers Creamery Co.	Popejoy	J. J. Wachazel	Alden	H. J. Blinger	Popejoy
Hamilton Co-op. Creamery Co.	Coulter	Geo. Dohmann	Hampton	L. Anderson	Coulter
Latimer Co-op. Creamery Co.	Latimer	O. A. Johnson	Latimer	R. Nelson	Latimer

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CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Sheffield Community Creamery	Sheffield				
Swift & Company	Hampton	C. D. Simpson	Hampton	F. C. Koenig	Hampton
Greene County—					
Jefferson Creamery	Jefferson	Brunner Bros.	Jefferson	M. E. Brunner	Jefferson
Grundy County—					
Beaver Center Creamery Co.	Stout, R. R.	A. J. Meyer	Stout	T. E. Dilger	Stout
Buck Grove Creamery	Aplington	H. G. Kramer	Aplington	H. G. Kramer	Aplington
Fern Creamery Company	Parkersburg, R. R.	W. H. Henning	Parkersburg	B. T. Soles	Stout
Guthrie County—					
Casey Creamery Co.	Casey	J. H. Smith	Casey	F. L. Langbehn	Casey
Farmers Creamery & Produce Co.	Guthrie Center	M. J. VanDam	Guthrie Center	M. J. VanDam	Guthrie Center
Menlo Creamery Co.	Menlo Center	B. J. Varley	Menlo	A. A. Nolte	Menlo
Panora Co-op. Creamery Co.	Panora	F. F. Wilcox	Panora	F. F. Wilcox	Panora
Hamilton County—					
Ellingson Mathre & Co.	Webster City	Ellingson Mathre Co.	Webster City	R. L. Hall	Webster City
Ellsworth Creamery Co.	Ellsworth	Jim Slaughter	Ellsworth	Jim Slaughter	Ellsworth
Randall Farmers Creamery Co.	Randall	L. E. Nelson	Randall	L. E. Nelson	Randall
Thompson Creamery Co.	Jewell	Fred Thompson	Jewell	Fred Thompson	Jewell
Webster City Dairy	Webster City	Ubben & Grange	Webster City	E. S. Ubben	Webster City
Hancock County—					
Britt Creamery Ass'n.	Britt	H. A. Schaper	Britt	G. G. Koltzoff	Britt
Crystal Creamery Co.	Crystal Lake	H. P. Stahr	Crystal Lake	R. O. Rasmussen	Crystal Lake
Farmers Co-op. Creamery	Garner	J. Kiesel	Garner	C. R. Conway	Garner
Kanawha Far. Mut. Co-op. Crmy. Co.	Kanawha	W. Johnson	Kanawha	O. W. Albright	Kanawha
Klemme Co-op. Creamery Co.	Klemme	V. Jostan	Klemme	A. D. Gimer	Klemme
Woden Farmers Creamery Co.	Woden	J. F. Bayhen	Woden	Geo. Breen	Woden
Hardin County—					
Ackley Creamery	Ackley	R. R. Hadley	Ackley	G. L. Armstrong	Ackley
Alden Co-op. Creamery Co.	Alden	E. C. Edwards	Alden	Floyd Kidd	Alden
Cleves Creamery Co.	Cleves	W. F. Sharp	Ackley	J. F. Sharp	Cleves
Concord & Scott Creamery Co.	Radcliffe	D. H. Bobb	Radcliffe	D. H. Bobb	Radcliffe
Eldora Creamery	Eldora	Herbert Soballe	Eldora	I. Andersen	Eldora
Farmers Co-op. Creamery	Wasa				

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CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Hubbard Creamery Co.	sHubbard	H. K. Granner	Hubbard	Fred Hersog	Hubbard
Iowa Falls Creamery	cIowa Falls	G. H. Fredericks	Iowa Falls	J. R. Jones	Iowa Falls
Steamboat Rock Creamery	sSteamboat Rock	A. M. Whitney	Owasa	A. M. Whitney	Owasa
Swift & Co.	sIowa Falls	C. A. Peacock	Chicago	J. D. Fiets	Iowa Falls
Henry County—					
Pleasant Hill Dairy	sMt. Pleasant	R. C. Campbell	Mt. Pleasant	R. C. Campbell	Mt. Pleasant
Howard County—					
Cresco Creamery	sCresco	D. A. Palmer	Cresco	D. A. Palmer	Cresco
Elma Co-op. Creamery Co.	cElma	Mary T. Dunton	Elma	J. P. Kelly	Elma
Farmers Co-op. Creamery Ass'n.	cChester	J. M. Hughes	Chester	C. C. Plummer	Chester
Farmers Co-op. Creamery	cProtivin	W. C. Dostal	Protivin	C. W. Chyle	Protivin
Farmers Creamery Co.	cCresco	C. V. Johnson	Cresco	J. P. Hyberger	Cresco
Maple Leaf Creamery Co.	cElma	D. Lane	Elma R. 1.	M. W. Graf	Elma R. 1
Saratoga Co-op. Creamery Co.	sSaratoga, R. R.	J. P. Welch	Cresco	Hans Witske	Saratoga
Schley Creamery	sCresco R. R.	F. N. Fosse	Ridgeway	T. C. Yeoman	Cresco
Whelan Produce Company	sElma	J. P. Whelan	Elma	Earl Kelly	Elma
Humboldt County—					
Humboldt Creamery Co.	sHumboldt	W. F. Priebe	Chicago	Watson Shick	Humboldt
Bode Creamery & Produce Co.	cBode	H. C. Olson	Thor	L. C. Knutson	Bode
Thor Creamery Co.	sThor	J. E. Donning	Thor	E. Reiersan	Thor
Wacousta Creamery Co.	cOttofen	C. O. Lomen	Ottofen	L. J. Bremsen	Ottofen
Iowa County—					
Marengo Creamery Co.	sMarengo	Ady & Sullivan	Marengo	H. A. Mels	Marengo
E. E. Montgomery	sWilliamsburg	E. E. Montgomery	Williamsburg	E. E. Montgomery	Williamsburg
Victor Creamery Co.	cVictor	H. F. Lenocker	Victor		Victor
Jackson County—					
Bellevue Co-op. Creamery Co.	cBellevue	H. B. Pogeman	Bellevue	C. W. Rouse	Bellevue
Farmers Co-op. Creamery	cAndrew				
Farmers Union Co-op. Creamery Co.	cMaquoketa R. R.	G. H. Bruhn	Maquoketa	H. C. Thompson	Maquoketa
Hansen Produce Co.	sMaquoketa	L. B. Hulman	Maquoketa	G. S. Wing	Maquoketa
Monmouth Creamery Co.	cMonmouth	A. A. Preston	Monmouth	A. P. Schundiack	Monmouth
Preston Creamery Ass'n.	cPreston	Max Ehler	Preston	A. J. Spohn	Preston
St. Donatus Creamery	sSt. Donatus	J. L. Heinrich	St. Donatus	G. P. Byrne	St. Donatus
Springbrook Creamery	sPreston	A. J. Negus	Preston	Ed. Rubsamen	Preston

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CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Sterling Creamery	sLamotte	Hoffman Cry Co.	Lamotte	J. M. Hoffman	Lamotte
Jasper County—					
Dairyland Dairy Co.	sNewton	Guy M. Lambert	Newton	Walter Anderson	Newton
Johnson County—					
Iowa City Produce Co.	sIowa City	A. J. Feeney	Iowa City	Frank Francisco	Iowa City
Sidwell's Dairy Co.	sIowa City	A. B. Sidwell	Iowa City	W. E. Hunter	Iowa City
Jones County—					
Amber Co-op. Creamery Co.	cAmber	P. B. Day	Amber	O. Bailey	Amber
Anamosa Fair Co-op. Creamery Co.	cAnamosa	Burton Brown	Anamosa	F. C. Koenig	Anamosa
Farmers Creamery Co.	cCenter Jet	Grace Mead	Center Jet	Harry Johnson	Center Jet
Farmers Mutual Creamery	cLangworthy	Carl W. Siebels	Langworthy	John M. Wolford	Langworthy
Farmers Mutual Creamery	cMonticello	O. W. Brasleton	Monticello	Fred Lehman	Monticello
Iowa Creamery Company	sOxford Jet	E. T. Barker	Oxford Jet	Herman Schneider	Oxford Jet
Keokuk County—					
C. E. Brown Creamery	sWhat Cheer	C. E. Brown	What Cheer		
Geo. M. Griffin Creamery Co.	sSigourney	C. A. Griffin	Providence, R. I.	Snowden Clary	Sigourney
Kossuth County—					
Algona Co-op. Creamery Co.	cAlgona	M. P. Christianson	Algona	M. P. Christiansen	Algona
Bancroft Co-op. Creamery Co.	cBancroft	F. A. Fangman	Bancroft	H. E. Thies	Bancroft
Burt Co-op. Creamery Co.	cBurt	M. E. Warner	Burt	Paul Macauley	Burt
Farmers Co-op. Creamery Co.	cAlgona	A. R. Cruikshank	Algona	F. C. Rucker	Algona
Fenton Creamery Co.	cFenton	C. F. C. Laage	Fenton	H. W. Jarchow	Fenton
Germania Creamery Co.	cLakota	J. E. Smith	Lakota	F. C. Rucker	Lakota
Ledyard Co-op. Creamery	cLedyard	P. A. Wessman	Ledyard	H. M. Dyer	Ledyard
Lone Rock Co-op. Creamery Co.	cLone Rock	W. J. Christensen	Lone Rock R. 1.	J. M. Hanson	Lone Rock
Lotts Creek Co-op. Creamery Co.	cLone Rock R. R.	O. Wichtendahl	Lone Rock	H. R. Smith	Lone Rock
Swea City Co-op. Creamery Co.	cSwea City	S. V. Carter	Swea City	J. C. Sorensen	Swea City
Titonka Co-op. Creamery Co.	cTitonka	J. C. Neville	Titonka	John Povelsen	Titonka
Whittemore Farmers Creamery Co.	cWhittemore	M. W. Pandel	Whittemore	Albert Fenger	Whittemore
Lee County—					
Fort Madison Creamery Co.	sFort Madison	R. K. Peters	Fort Madison	J. W. Peters	Fort Madison
Swift & Company	sKeokuk	J. A. Peacock	Chicago	R. Merrick	Keokuk

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CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Linn County—					
Blue Valley Creamery Co.	Cedar Rapids	G. T. Guthrie	Chicago	H. W. McCoy	Cedar Rapids
Central City Creamery Co.	Central City	O. E. Crane	Central City	E. R. George	Central City
Coggon Creamery	Coggon	M. L. Ware	Coggon	L. C. Popenhagen	Coggon
Sanitary Butter Store	Cedar Rapids	Palmer & Gwyne	Cedar Rapids	Chas. Ruettner	Springville
Springville Creamery	Springville	Earl George	Springville	W. A. Stone	Central City
Valley Farm Creamery	Central City	E. E. Henderson	Cedar Rapids		
Lucas County—					
Douglas Ice Cream Co.	Chariton	L. P. Douglas	Chariton	Roy E. Adams	Chariton
Lyon County—					
Farmers Creamery Co.	Inwood	L. B. Holland	Inwood	A. W. Willander	Inwood
George Creamery Co.	George	C. A. Rasmusson	George	Ed. Wilson	George
Rock Rapids Creamery Co.	Rock Rapids	W. J. Purchase	Rock Rapids	A. E. Robertson	Rock Rapids
Mahaska County—					
Gasperi Creamery Co.	Oskaloosa	Mike Gasperi	Oskaloosa	Mike Gasperi	Oskaloosa
Keola Produce Company	Oskaloosa				
Love's Creamery Co.	Oskaloosa	J. G. Love	Oskaloosa	Chas. Love	Oskaloosa
Producer's Co-op. Dairy	Oskaloosa	Chas. Wilhoit	Oskaloosa	Chester E. Crandall	Oskaloosa
Marion County—					
Pella Creamery	Pella	Ben Kuyk	Pella	H. F. Lenocker	Pella
Marshall County—					
Jackson Dairy Co.	Marshalltown	Jackson Dairy Co.	Marshalltown	G. C. Richardson	Marshalltown
Minerva Valley Co-op. Crm. Ass'n	Clemens	Theodore Helmick	Clemens	W. F. Hughes	Clemens
Nelson Butter & Ice Cream Co.	Marshalltown				
State Center Farmers Crm. Ass'n	State Center	F. C. Brown	State Center	Chris Jessen	State Center
Mills County—					
Glenwood Creamery Co.	Glenwood	C. M. Gray	Glenwood	C. M. Gray	Glenwood
Malvern Cold Storage Co.	Malvern	Bruce Hochner	Malvern	John Goodman	Malvern
Mitchell County—					
Little Cedar Creamery	Little Cedar	Hans Larson	Little Cedar	Hans Larson	Little Cedar
New Haven Creamery	New Haven	Julius Brunner	Osage R. 3	L. J. Ethen	Osage R. 3
Osage Co-op. Creamery Ass'n	Osage	John Torsieff	Osage	Geo. Burdette	Osage
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DAIRY AND FOOD DEPARTMENT

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Riceville Creamery	Riceville	W. A. Futz	Riceville	W. A. Futz	Riceville
Rock Creek Creamery Ass'n	Osage R. R.	H. K. Klemesrud	Osage	M. J. Mickelson	Osage
St. Ansgar Creamery Co.	St. Ansgar R. R.	M. A. Telfeson	St. Ansgar	H. R. Bullis	St. Ansgar
Stacyville Creamery Co.	Stacyville	W. A. Schrandt	Stacyville	A. F. Matson	Stacyville
Monroe County—					
Albia Creamery	Albia	N. H. Kroeger	Albia	F. C. Burlingame	Albia
Montgomery County—					
Lee Blue Ice Cream & Bottling Co.	Red Oak	Lee Blue	Red Oak	W. F. Coonley	Red Oak
Tyler Brothers	Villisca	R. F. Tyler	Villisca	H. Wolfe	Villisca
Muscatine County—					
West Liberty Co-op. Creamery Co.	West Liberty	E. Buckman	W. Liberty	W. H. Sampson	West Liberty
O'Brien County—					
Hartley Creamery Co.	Hartley	A. Lagge	Hartley	C. B. Jensen	Hartley
Sheldon Co-operative Creamery	Sheldon	George Berhave	Sheldon	L. E. Woodliss	Sheldon
Sutherland Creamery Co.	Sutherland	A. Christensen	Sutherland	C. W. Green	Sutherland
Osceola County—					
Ashton Creamery	Ashton	E. den Herder	Ashton	Paul Meuller	Ashton
Johannes Produce Co.	Sibley	J. F. Johannas	Sibley	V. V. Johnson	Sibley
Page County—					
Swift & Co.	Clarinda	Hal Gillmore	Clarinda	E. Gustafson	Clarinda
Palo Alto County—					
Emmetsburg Creamery Co.	Emmetsburg	L. Stuchmer	Emmetsburg	W. A. Thayer	Emmetsburg
Farmers Co-op. Creamery Co.	Ruthven	H. P. Junker	Ruthven	M. F. Junker	Ruthven
Farmers Creamery Co.	Grattinger	J. Anderson	Grattinger	Henry Hansen	Grattinger
Lost Island Creamery	Grattinger R. R.	L. M. Anderson	Emmetsburg	A. P. Andersen	Grattinger
Mallard Creamery	Mallard	C. L. Carmichael		R. Bliss	Mallard
Silver Lake Creamery Co.	Ayrshire	C. G. Nelson	Ayrshire	C. G. Nelson	Ayrshire
West Bend Co-op. Creamery	West Bend	A. L. Frye	West Bend	C. W. Dubbs	West Bend
Plymouth County—					
Le Mars Creamery	Le Mars	W. R. Hutchinson	Sioux City	H. R. Greene	Le Mars
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REPORT OF COMMISSIONER

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Pocahontas County—					
Laurens Creamery	Laurens	J. G. Hinn	Laurens	F. W. Johnson	Laurens
Palmer Creamery Co.	Palmer	E. V. Johnson	Palmer	L. H. Nelson	Palmer
Pocahontas Creamery	Pocahontas	Gust Wehler	Pocahontas	Gust Wehler	Pocahontas
Polk County—					
Beatrice Creamery Co.	Des Moines	H. R. Wright	Des Moines	S. B. Pemberton	Des Moines
Des Moines Creamery Co.	Des Moines	J. F. Dawson	Des Moines	A. L. Larson	Des Moines
Harding Cream Co.	Des Moines	J. M. Harding	Omaha, Nebr.	J. F. Petersen	Des Moines
Swift & Co.	Des Moines	G. H. Rex	Des Moines	John Etridge	Des Moines
Pottawattamie County—					
Bloomer Cold Storage Co.	Council Bluffs	R. E. Hurd	Council Bluffs	G. S. Superman	Council Bluffs
Malvern Cold Storage Co.	Council Bluffs		Council Bluffs		Council Bluffs
Superior Cream Co.	Council Bluffs	C. I. Palm	Council Bluffs	Clarence Miller	Council Bluffs
Poweshiek County—					
Brooklyn Creamery Co.	Brooklyn	E. C. Kamoss	Brooklyn	E. C. Kamoss	Brooklyn
Maplehurst Dairy Co.	Grinnell	E. G. Squire	Grinnell	H. E. Crowder	Grinnell
Sac County—					
Sac City Creamery Co.	Sac City	H. F. Lange	Sac City	A. G. Redman	Sac City
Scott County—					
Bell Jones Co.	Davenport	M. V. Jones	Davenport	Geo. Ferris	Davenport
Pioneer Creamery Co.	Davenport	E. Amos	Galesburg, Ill.	Louis Rasmussen	Moline, Ill.
Tri City Butter Co.	Davenport	P. J. Lumpholm	Davenport	A. C. Norakow	Davenport
Shelby County—					
Buck Valley Creamery Co.	Harlan R. R.	J. Rasmussen	Harlan R. 5	C. W. Anderson	Harlan R. 5
West Hamlin Creamery Co.	Elk Horn	M. Nelson	Extra R. 2	Carl Lyne	Elk Horn
Sioux County—					
Farmers Co-op. Creamery Co.	Boyd	Hy Vogts	George	H. J. Wargowsky	Boyd
Farmers Co-op. Creamery Ass'n.	Hull	J. W. Smit	Hull R. 2	A. M. Hein	Hull
Farmers Mutual Co-op. Creamery	Sioux Center	T. Schut	Sioux Center	A. Yonker	Sioux Center
Farmers Mutual Co-op. Creamery Ass'n.	Orange City	J. A. VerSteig	Orange City R. R.	F. J. Havens	Orange City
Farmers Mutual Creamery Co.	Hospers	Jno. Toetzel	Hospers	J. F. Van de Moer	Hospers
Hawarden Creamery	Hawarden	E. Zorr	Hawarden	E. Zorr	Hawarden

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CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Rock Valley Creamery Co.	Rock Valley	R. Klay	Rock Valley		Rock Valley
Story County—					
Dairy Department, Iowa State College	Ames	Prof. M. Mortensen	Ames	F. C. Hinze	Ames
Farmers Co-op. Creamery Co.	Slater	J. H. Wald	Slater	C. Clark	Slater
Huxley Farmers Co-op. Creamery Co.	Huxley	Sam Maland	Huxley	O. A. Jonsen	Huxley
Nevada Ice Cream Factory	Nevada	C. H. Case	Nevada	F. J. Wollie	Nevada
Roland Farmers Creamery Co.	Roland	C. E. Rod	Roland	L. H. Larsen	Roland
Story City Creamery Co.	Story City	Martin C. Hanson	Story City	G. C. Harland	Story City
Zearing Creamery Co.	Zearing	C. P. Bean	Zearing	C. M. Peterson	Zearing
Tama County—					
D. H. Bobb Creamery	Garwin				
E. C. Grady Produce Co.	Gladbrook	E. C. Grady	Gladbrook	A. McArchie	Gladbrook
J. H. Nell Creamery Co.	Tama	R. G. McFarland	Tama	C. Christensen	Tama
Traer Creamery Co.	Traer	Nelson & Walker	Traer	L. Neilsen	Traer
Taylor County—					
Bedford Creamery	Bedford	Frank Daniel	Bedford	Leslie Klopp	Bedford
Union County—					
Afton Creamery Co.	Afton	V. O. Williams	Afton	V. O. Williams	Afton
Boyd Dairy Co.	Creston	J. I. Boyd	Creston	C. R. Lane	Creston
Swift & Co.	Creston	Ray Peterson	Creston	Ed Woodward	Creston
Van Buren County—					
Blue Grass Creamery	Stockport	S. C. Morris	Stockport	Harry Kloth	Stockport
Wapello County—					
F. G. Buxton Creamery Company	Ottumwa	F. G. Buxton	Ottumwa	P. N. Keltner	Ottumwa
Swift & Co.	Ottumwa	P. A. Erickson	Ottumwa	D. K. Williamson	Ottumwa
Yorkshire Creamery Co.	Ottumwa	R. N. Morrell	Ottumwa	R. O. McRae	Ottumwa
Washington County—					
Brighton Creamery Co.	Brighton	N. G. Whisler & R. B. Hallock	Brighton	N. G. Whisler	Brighton
W. S. Reister & Sons	Washington	Reister & Sons	Washington	H. J. Hays	Washington

*Central Churning Plant.

c-Co-op.

s-Stock.

i-Individual.

p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Wayne County—					
Jas. L. Humphrey, Jr. Creamery	Humeston	J. L. Humphrey, Jr.	Humeston	M. W. Bixby	Humeston
Webster County—					
Fort Dodge Creamery	Fort Dodge	A. B. Sayles	Ft. Dodge	B. Jensen	Ft. Dodge
Gold Bar Creamery	Fort Dodge	L. A. Doncker	Ft. Dodge	R. Dencker	Ft. Dodge
Gowrie Co-op. Creamery Co.	Gowrie	F. E. Magnuson	Gowrie	P. T. Christensen	Gowrie
Winnebago County—					
Buffalo Center Co-op. Creamery Co.	Buffalo Center	B. B. Bruhns	Buffalo Center	H. P. Engen	Buffalo Center
Forest City Co-op. Creamery Ass'n.	Forest City	J. E. Read	Forest City	J. B. Frible	Forest City
Lake Mills Creamery Co.	Lake Mills	Ole T. Groe	Lake Mills	Carl Hovland	Lake Mills
Leland Co-op. Creamery Co.	Leland	O. Michaelson	Leland	S. O. Rusley	Leland
Lincoln Co-op. Creamery Co.	Rake	A. A. Sheldon	Rake	L. K. Bjerke	Rake
Scarville Creamery Ass'n.	Scarville	J. E. Hermanson	Scarville	Sorn Kristensen	Scarville
Thompson Creamery Co.	Thompson	A. T. Nell	Thompson	B. Sovik	Thompson
Virje Creamery Ass'n.	Scarville R. R.	A. C. Engebretson	Scarville	A. C. Knutson	Scarville
Winneshiek County—					
Furr Oak Farmers Co-op. Creamery Co.	Burr Oak	A. C. Erickson	Burr Oak	Floyd Ferris	Burr Oak
Calmar Creamery Co.	Calmar	A. A. Olson	Calmar	F. D. Warner	Calmar
Decorah Farmers Ice Cave Crmy. Co.	Decorah	N. O. Bendickson	Decorah	M. C. Bendickson	Decorah
Festina Co-op. Creamery Co.	Festina R. R.	H. J. Schupanzitz	Festina	Mike Hauser	Festina
Haberaman Creamery	Fort Atkinson	Geo. Haberman	Ft. Atkinson	Geo. Haberman	Ft. Atkinson
Highlandville Creamery Co.	Highlandville	Bidne & Akre	Highlandville	P. J. Bidne	Highlandville
Lincoln Creamery Co.	Ridgeway	O. O. Rae	Ridgeway	J. W. Bakken	Ridgeway
Nordness Creamery Co.	Nordness	Wm. Linnevoid	Decorah	J. Block	Decorah R. 2
Pleasant Co-op. Creamery Co.	Decorah	N. O. Faldet	Decorah R. 7	A. H. Kraby	Decorah R. 7
Silver Spring Creamery Co.	Ossian	W. E. Cornell	Ossian	O. O. Hauge	Ossian
Woodbury County—					
Blue Valley Creamery Co.	Sioux City	G. T. Guthrie	Chicago, Ill.	C. L. Smith	Sioux City
Fairmont Creamery Co.	Sioux City	L. E. Hertz	Omaha, Nebr.	John Bathen	Sioux City
Hanford Produce Company	Sioux City	J. H. Whittemore	Sioux City	M. C. Wheelock	Sioux City
Roberts Sanitary Dairy Co.	Sioux City	J. R. Roberts	Lincoln, Nebr.		
Worth County—					
Farmers Butter & Cheese Ass'n.	Northwood	M. D. Johnson	Northwood	Louis H. Beach	Northwood
Farmers Co-op. Crmy Ass'n. of Tenoid	Kensett, R. R.	O. K. Storre	Kensett	H. C. Stendal	Northwood

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or Near	Name of Proprietor, Secretary or Manager	P. O. Address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. Address of Buttermaker
Farmers Creamery	Grafton	E. M. Glassel	Grafton	P. Refsdahl	Grafton
Farmers Creamery Co.	Kensett	G. J. Nelson	Kensett	Joel Gilbertson	Kensett
Farmers Creamery Co.	Manly	C. J. Hill	Manly	Ray Trebil	Manly
Fertile Co-op. Dairy Co.	Fertile	J. A. Johnson	Fertile	J. A. Johnson	Fertile
Hanlontown Creamery Co.	Hanlontown	E. A. Gudvangen	Hanlontown	E. A. Gudvangen	Hanlontown
Hartland Creamery Co.	Northwood R. R.	H. L. Boe	Northwood	N. O. Dahlen	Northwood
Joice Creamery Co.	Joice	L. L. Skutle	Joice	Olivier Kvale	Joice
Wright County—					
Clarion Creamery	Clarion	M. Anderson	Clarion	C. W. Larson	Clarion
Farmers Co-op. Creamery Co.	Belmond	G. F. Euler	Goldfield	C. H. Jennings	Belmond
Goldfield Co-op. Creamery Co.	Goldfield	John Roberts	Chicago	John Roberts	Goldfield

*Central Churning Plant. c-Co-op. s-Stock. i-Individual. p-Partnership.

CHEESE FACTORY LIST

NAME OF FACTORY	Location	Name of Proprietor	Address of Proprietor	Name of Cheesemaker	Address of Cheesemaker
Allamakee County—					
*Cherry Mound Cheese Factory	Waukon, S. E.	D. J. Murphy	Waukon	F. W. Hatch	Harpers Ferry, R. R.
*Dorchester Cheese Factory	Waukon, N. W.	D. J. Murphy	Waukon	H. J. Murphy	Dorchester
*English Bench Cheese Factory	Waukon, S.	D. J. Murphy	Waukon	H. J. Murphy	Dorchester
*Forest Mills Cheese Factory	Waukon, N.	D. J. Murphy	Waukon	E. E. Austin	Postville
*Hanover No. 1 Cheese Factory	Waukon, N. W.	D. J. Murphy	Waukon	L. Ammerman	Dorchester
*Hanover No. 2 Cheese Factory	Waukon, N. W.	D. J. Murphy	Waukon		
*Rossville Cheese Factory	Waukon, S. E.	D. J. Murphy	Waukon	A. S. Klemme	Rosaville
*Volney Cheese Factory	Waukon, S. E.	D. J. Murphy	Waukon	R. Gerber	Monona, R. R.
Howard County—					
Jamestown Cheese Factory	Riceville, E.	J. Stettler	Riceville	J. Stettler	Riceville
Winneshiek County—					
*Frankville Cheese Factory	Waukon, S. W.	D. J. Murphy	Waukon	P. A. Johnson	Postville, R. R.
*Closed Temporarily	i-Individual				

CONDENSED MILK LIST

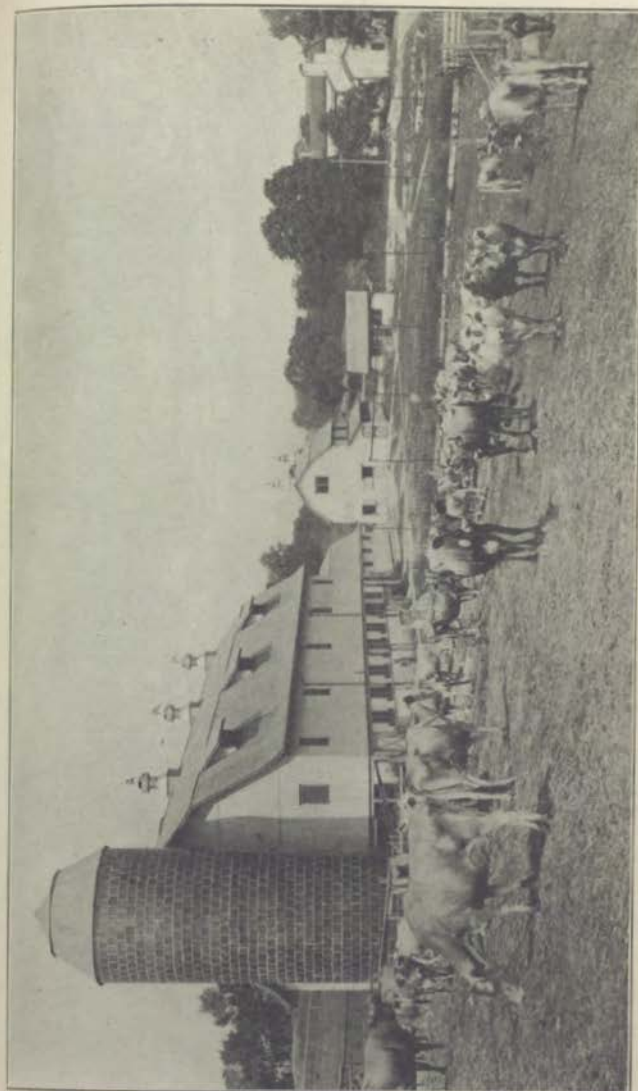
NAME OF FACTORY	Location	Name of Proprietor	Address of Proprietor
Mohawk Condensed Milk Company	Waverly	W. A. Anderson	71 Hudson St. New York
Perry Packing Company	Perry	Leroy Corliss	Omaha, Nebr.

OFFICERS AND EMPLOYES OF THE DAIRY AND FOOD DEPARTMENT

Commissioner.....	W. B. Barney.....	Des Moines
Deputy.....	M. E. McMurray.....	Des Moines
Chief Chemist.....	E. L. Redfern.....	Des Moines
Chief Weights & Measures Insp.....	C. S. Bogle.....	Des Moines
Assistant Commissioner.....	B. O. Brownlee.....	Atlantic
Assistant Commissioner.....	T. A. Clarke.....	West Bend
Assistant Commissioner.....	H. E. Forrester.....	Gladbrook
Assistant Commissioner.....	H. E. Ritter.....	Des Moines
Assistant Commissioner.....	F. W. Stephenson.....	Oelwein
Assistant Commissioner.....	E. W. Neasham.....	Fairfield
Assistant Chemist.....	W. G. Jordan.....	Des Moines
Dairy Inspector.....	O. P. Thompson.....	Waterloo
Dairy and Food Inspector.....	F. L. Odell.....	Sioux Rapids
Dairy and Food Inspector.....	Roy Scoles.....	Nashua
Food Inspector.....	Chris Ottosen.....	Ottosen
Food Inspector.....	C. C. House.....	Davenport
Food Inspector.....	S. O. Van De Bogart.....	Des Moines
Food Inspector.....	I. W. Milnes.....	Creston
Food Inspector.....	I. M. Morrow.....	Douds
Food Inspector.....	E. A. Countryman.....	Council Bluffs
Food Inspector.....	H. A. Stearns.....	Cedar Rapids
Food Inspector.....	M. W. Knapp.....	Aurora
Inspector Weights & Measures.....	A. B. Briggs.....	Ottumwa
Inspector Weights & Measures.....	E. J. Nolan.....	Des Moines
Inspector Weights & Measures.....	F. C. Gilmore.....	Marquette
Chief Clerk.....	A. W. Day.....	Des Moines
License Clerk.....	R. V. Barker.....	Des Moines
Stenographer.....	Blanche Lindblom.....	Des Moines
Stenographer.....	Maurine Mack.....	Des Moines
Stenographer.....	Catharine O'Connell.....	Des Moines

LAWS ENFORCED BY THE COMMISSIONER

Dairy Law	Turpentine Law
Pure Food Law	Weight and Measure Law
Agricultural Seed Law	Sanitary Law
Concentrated Feeding Stuffs Law	Cold Storage Law
Condimental Stock Food Law	Commercial Fertilizer Law
Paint and Linseed Oil Law	Calcium Carbide Law
Insecticide and Fungicide Law	Egg Law



DAIRY PRODUCTION BRINGS PROSPERITY

DAIRY COMMISSIONERS

NAME	County From Which Chosen	Date of First Appointment	Years Served
Henry D. Sherman	Jones	May 1, 1886	1886—1890
Augustus C. Tupper	Mitchell	May 1, 1890	1890—1894
William K. Boardman	Story	May 1, 1894	1894—1898
*Levi S. Gates	Delaware	May 1, 1898	1898—1898
Byron P. Norton	Howard	Nov. 8, 1898	1898—1902
Herbert R. Wright	Polk	May 1, 1902	1902—1906

*Died October 11th, 1898. Byron P. Norton appointed to fill vacancy.

Note: Name of Office changed by Act of Thirty-first General Assembly to Dairy and Food Commissioner.

DAIRY AND FOOD COMMISSIONERS

Herbert R. Wright	Polk	July 1, 1906	1906—1910
William B. Barney	Franklin	May 1, 1910	1910—1922
Russell G. Clark	Hamilton	May 1, 1922	1922—

REPORT OF COMMISSIONER

We whose lots have been cast in Iowa have much to be thankful for. The oft-repeated expression that we live in the best state in the Union has more to it than mere local pride. If all the states were scored (a term used in this department in grading) I doubt if there is one that would equal ours. Iowa is indeed a wonderful state. It is first in so much and a close second so often I am afraid that we are becoming more or less indifferent to our own resources and opportunities. You hardly take up a paper that you do not run across an article giving interesting information about our state, like the following:

"MORE REASONS FOR CONFIDENCE IN IOWA"

"The average value per farm including all farm property in Iowa is \$39,941.10. The same average for the entire United States is \$12,084.00. Iowa's nearest competitor is Illinois and our total farm values exceed theirs by \$1,703,778,724," and so on with a series of comparisons that seem almost too good to be true.

Farming is the big business of this state and it is a business that is susceptible to all the intelligence and experience that one may put into it. I want to say here that at no time in its history have the teachings of our agricultural colleges, experimental stations, and associations which have their representatives in every community extolling the virtues of the pure bred, been listened to and acted upon as at present.

The deflation through which this country has gone during the last year and a half hit the farmer first, and on him was the most severe, with the result that all now agree more attention must be paid to diversified farming. That means a better utilization of feed grains and crop by-products, by feeding out a great number of beef cattle, by winter dairying and egg production, by planting better gardens and more small fruits. This insures to the home a wholesome variety of foods and thereby lessening the household expenses. The margin between income and outgo must be widened if the present values of our farms are to be sustained. The land owner as well as the renter has a right to expect more than a mere living. They got that when

The question of the importance of the sire at the head of the dairy herd has been discussed and proven so often that it is almost an axiom. Almost everyone realizes that a man's future with his dairy herd depends almost entirely on the bull he uses *now*. Nearly every farmer knows that he should head his herd with a pure-bred bull of advanced registry, or registry of merit breeding. In the past, the cost of this kind of sire has prevented many from making a purchase; however, at the present time, anyone can purchase bulls with the best of breeding at a nominal figure.

I am at this time heartily in favor of the better sire campaigns which have been inaugurated and especially do I think that community breeding by means of the co-operative bull clubs will bring about more economical production and assure dairy prosperity.

The foundation for the industry in this state has been laid carefully and sound. As an indication of this, I have but to refer you to the scores of sanitary, modern creamery buildings of fireproof construction erected the past few years by farmers' co-operative associations, which are taking the place of older frame buildings, which indicates that the farmers are planning to stand by this industry the best of breeding at a nominal figure.

Although this country has manufactured more dairy products than was ever produced in one year before, it is gratifying to know that consumption has kept pace with production, which is indicated by the fact that there is less butter in cold storage November 1, 1922, than on that date in 1921, the public having consumed all of this year's enormous increase. We are inclined to believe that this is due to the continued decline in prices, which has enabled everyone of moderate means to use creamery butter instead of oleomargarine, which was in demand when butter was beyond their reach in price.

However, much credit should be given the publicity and educational campaigns which the dairy organizations have carried on through the National Dairy Council. This work has tended to awaken the public to the necessity and value of dairy products in the diet. The results of this work have been especially noticeable during the past year.

Consumption within the state has also kept pace with production as reports from creameries show that they sold 25,714,769 pounds at home, which is 3,087,486 pounds more than they disposed of locally during 1921. The following table showing the amount of creamery butter sold in Iowa during the past ten years may be of interest:

1912	12,694,729 lbs.
1913	14,716,555 lbs.
1914	15,105,725 lbs.
1915	15,842,119 lbs.
1916	16,439,883 lbs.
1917	12,958,678 lbs.
1918	16,827,457 lbs.
1919	15,842,119 lbs.
1920	18,719,251 lbs.
1921	22,627,283 lbs.
1922	25,714,769 lbs.

The foregoing figures represent butter manufactured by Iowa plants and does not include butter consumed within the state manufactured by plants located in adjoining states.

Please note that the consumption during 1922 is practically twice the amount consumed during 1917.

CREAMERY BUTTER

ONE OF IOWA'S BIGGEST ASSETS

Iowa went over the top during 1922, and we have another banner year in the production of creamery butter. Our creameries manufactured 124,168,089 pounds of butter, which is 25,740,419 pounds more than was ever manufactured in this state before.

The foregoing figures show a gain of 25.7 per cent over 1921 and, although the market price has declined during the year, the total value of creamery butter manufactured has increased, due to the enormous increase in production.

This year's output sold for \$48,462,805.12. This is \$565,999.83 more than the total value last year. We are satisfied that the quality of Iowa butter is steadily improving. The past few years show some rapid strides forward being made in a great many communities, especially where cream grading, scoring, and improvement contests have been started.

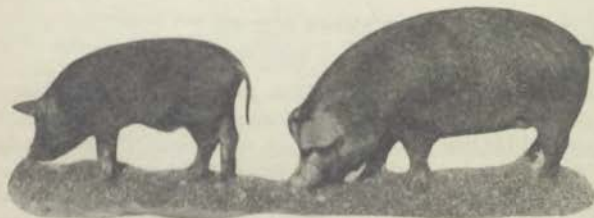
The progress with this line of work was at first very slow, but as the work progressed and results began to appear, creameries became interested until at the present time the Dairy Extension Department of the Iowa State College, who have had charge of this work, are unable with their small force of men to accommodate all of the creameries desiring to get started with this work.

Some of the dairy inspectors in this department have been assisting as much as their other duties would permit and no doubt during the coming year we can arrange to be of a great deal more assistance than we have in the past, providing we begin early in the year to plan our work and outline a plan whereby we can co-operate with

the creameries and everyone interested in this work, with the idea in mind of getting as many plants as possible interested.

Grading of cream has many advantages and few disadvantages. Such work should be thoroughly studied first. More failures are due to the fact that a careful study of the problem has been neglected than any other one thing. If you have never paid according to grade the best thing to do is to get in touch with this department, the dairy department of the Iowa State College, or some creamery where they are grading successfully.

Not all of the interest in grading and cream improvement has been centered in the co-operative plants, as practically all of the



These pigs were started on their rations at the same time. The one on the left had wheat meal and wheat gluten as its source of protein; weight, 55 lbs. The one on the right received wheat meal and skimmed milk in approximately the proportions 1 to 1, weight, 165 lbs.

large centralized plants in this state have been holding meetings, etc., during the past year and are completing plans for the adoption of a grading program for their many stations which are distributed over the entire state.

Early last spring the creameries operating stations in Monroe, Appanoose, Wapello, Davis, Jefferson, Van Buren, Henry, Lee and Des Moines counties, located in the southeastern part of the state, started a grading program as a sort of tryout or experiment and, although the proposition was not pushed as it should have been and was not followed up properly, yet the results were such that all the companies interested are satisfied and are at this time outlining an extensive program for the coming year.

We have during the past year found that the regulations covering cream grading which have been issued by this department needed some slight changes, and, after consulting the dairy department of

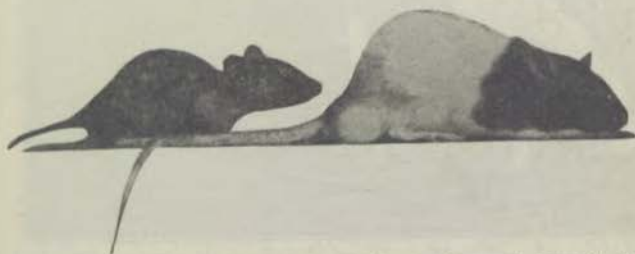
Iowa State College and representatives of all the creamery and dairy organizations, we have now amended them so that we think they cover the situation thoroughly.

MARKET MILK

The increased production of market milk noted last year has continued during this year and much to my gratification statistics gathered by the department show that there has been an increased consumption of this valuable food.

Figures compiled show a 10 per cent increase in the use of market milk, while the value this year of all market milk sold in the state was \$24,664,968.34, as against \$24,869,492.83 last year. This is accounted for by a reduction in the price.

The value of milk in the diet, especially that of children, cannot be overestimated. The experimental evidence which has been ob-



Plant oils lack vitamin A, without which growth cannot proceed. The rat on the left received 5% of cotton seed oil and the one on the right 1.5% of butterfat instead of cottonseed oil; otherwise the rations were alike and the rats were the same age.

tained is so overwhelming in its results that every diet should contain a liberal amount of milk. Numerous cases are on record where under-weight and under-nourished children have been brought up to normal by adding milk to their diet. Many of our public schools are giving the children milk to drink each day and in every case an improvement is noted in the studies and the appearance and activity of the children. Milk furnishes the material to make bones and teeth, and keeps the heart beating regularly, strengthening the nerves and every part of the body. It has a growing force which makes weak bodies grow into strong ones and keeps healthy bodies healthy. In addition to the mineral salts and the easily digested proteins contained in milk, there are the vitamins so essential to growth and proper development of the body. Many experiments have been con-

ducted on animals to show the presence of vitamins in milk, which produce these results, and in every case the animal which received milk in its diet develops normally, while the animal deprived of milk is backward and under-weight.

In noting the value of milk as a food it is understood that reference is made to milk that is produced from healthy cows and handled



These two dogs were fed the same diet except that the larger dog received milk. They are both from the same litter.

with due regard to its cleanliness. This department, for a number of years, has been doing much work to improve and keep safe the milk supply of the various cities of the state. Frequent tests and inspections of the dairies are made with this in view. Many cities have passed ordinances regulating the quality of milk. The value of milk as a food and the need to have it pure is generally realized.

To stimulate interest among dairymen for milk of high quality, the department holds an annual market milk contest between the different cities in the state. This contest is held the week previous to the Dairy Cattle Congress and the results and samples of the milk are placed on display there. Council Bluffs had the highest score with 82.67 points; Mason City was second with 80.88 points, and Dubuque third with 78.57 points. The individual scores and the total scores for each city entered in the 1922 contest is herewith tabulated:

COUNCIL BLUFFS	Bacteria per c.c.	Flavor & Odor	VIS. DIRT	Fat %	Solids not Fat %	Acidity	Bottle & Cap	Total Score
Average Score, 82.67.								
Grub Jersey Farm	19,000			4.5	9.66	.22		
Points allowed	27.	23.00	9.0	10.0	10.0	3.0	4.5	86.50
A. & S. Sanitary Dairy	5,200			3.8	9.17	.20		
Points allowed	21.5	22.0	8.0	9.5	10.0	5.0	4.5	90.00
Klaus Run	109,000			4.4	9.40	.22		
Points allowed	10.	22.75	8.50	10.0	10.0	3.0	4.5	68.75
Peter Nelson	15,000			3.6	9.47	.25		
Points allowed	28.	22.75	9.0	9.2	10.0	0.0	4.5	83.45
Wm. Harris	45,000			4.3	9.30	.23		
Points allowed	22.	22.75	9.0	10.0	10.0	2.0	4.5	80.25
Sam Christensen	51,000			2.8	8.72	.19		
Points allowed	20.	22.25	9.0	2.0	10.0	5.0	4.5	72.75
Jungferman Dairy	6,000			3.7	9.63	.23		
Points allowed	31.5	23.0	9.5	9.4	10.0	2.0	4.5	89.90
Robert Dairy	8,000			5.5	9.80	.25		
Points allowed	30.5	23.75	8.50	10.0	10.0	0.0	4.5	86.25
Pleasant View Dairy	27,000			3.8	8.92	.20		
Points allowed	25.	22.75	8.75	9.6	10.0	5.0	4.5	85.60
MASON CITY: Average Score, 80.88.								
Lindenhurst Dairy	32,000			3.5	9.01	.18		
Points allowed	24.	22.50	8.50	9.0	10.0	5.0	4.5	83.50
Dave Ryan	8,500			3.5	9.20	.18		
Points allowed	30.	22.75	8.0	9.0	10.0	6.0	4.5	80.25
E. J. Fritz	21,900			4.0	9.23	.19		
Points allowed	26.	23.00	8.0	10.0	10.0	5.0	4.5	86.50
Hermannson Bros.	6,600			3.5	8.86	.15		
Points allowed	31.	22.50	8.0	9.0	10.0	5.0	4.5	90.00
H. B. Howard	24,000			3.8	8.07	.19		
Points allowed	26.	22.25	8.75	9.6	9.6	10.0	5.0	86.10
E. J. Holschuh	250,000			4.1	9.57	.18		
Points allowed	0.	22.75	0.0	10.0	10.0	5.0	4.5	82.25
Silver Brook Dairy	27,000			4.6	8.83	.20		
Points allowed	25.	22.50	3.0	10.0	10.0	5.0	4.5	80.00
Schmerhorn Farms	108,000			3.8	9.33	.18		
Points allowed	10.	23.00	8.0	9.6	10.0	5.0	4.5	80.10
J. M. Hale	15,900			3.1	8.58	.15		
Points allowed	27.	22.25	7.5	5.0	9.0	5.0	4.5	80.25
DUBUQUE: Average Score, 79.57.								
Metzloff & Brunskill	310,000			3.8	9.19	.22		
Points allowed	0.	23.25	9.5	9.6	10.0	3.0	4.5	69.85
Crown Dairy	79,000			4.0	9.23	.21		
Points allowed	15.	22.75	9.75	10.0	10.0	4.0	4.5	76.00
Twin Valley Dairy	23,700			3.7	9.10	.19		
Points allowed	26.	22.80	8.75	9.4	10.0	6.0	4.5	86.15
Lova Dairy Company	43,000			3.9	8.69	.18		
Points allowed	22.	23.0	9.0	9.8	10.0	5.0	4.5	83.30
Sanitary Milk Company	1,000,000			3.4	9.32	.21		
Points allowed	0.	22.75	9.0	8.0	10.0	4.0	4.5	58.25
Fairmont Farms	2,500			5.8	10.15	.25		
Points allowed	33.	23.0	9.5	10.0	10.0	0.0	4.75	90.25
J. Allen Wallis	1,300			5.7	9.85	.25		
Points allowed	33.5	21.75	9.25	10.0	10.0	0.0	4.5	89.00
R. A. Van Zile	1,100			4.0	9.83	.20		
Points allowed	33.5	22.50	8.25	10.0	10.0	5.0	4.5	93.75
FORT DODGE:								
Average Score, 78.57.								
Ft. Dodge City	33,000			3.9	8.99	.18		
Points allowed	24.	22.75	8.5	9.8	10.0	5.0	4.5	84.55
Gold Bar City	126,000			3.6	9.15	.18		
Points allowed	8.	21.75	8.0	9.2	10.0	5.0	4.5	66.45
H. S. Stanbery	25,000			4.0	9.83	.20		
Points allowed	26.	21.80	8.5	10.0	10.0	5.0	4.5	85.50
Sanitary Dairy	199,000			3.8	8.97	.19		
Points allowed	7.	22.00	8.0	9.6	10.0	5.0	4.5	66.80
Orchard Glenn Dairy	13,100			7.3	10.0	.22		
Points allowed	28.	22.75	8.25	10.0	10.0	3.0	4.5	86.80
C. W. Johnson	280,000			3.8	9.51	.21		
Points allowed	0.	22.50	7.75	9.6	10.0	4.0	4.5	56.35
Churchill Dairy	20,000			4.0	10.60	.18		
Points allowed	33.5	21.25	8.0	10.0	10.0	5.0	4.5	92.25
Oakdale Dairy	64,000			3.4	9.29	.18		
Points allowed	18.	22.75	7.0	9.0	10.0	5.0	4.5	76.25
Lova Dairy	5,600			4.6	9.24	.20		
Points allowed	31.5	21.75	8.0	10.0	10.0	5.0	4.5	90.75

ICE CREAM

The ice cream industry has gone through another strenuous year, with both manufacturers and retailers doing their best to get back to normal. This they have accomplished so far as high manufacturing costs, express rates, shortage of ice, and poor collections would permit.

Both the retail and wholesale price was reduced somewhat. This has had a tendency to increase consumption. Figures we have been able to compile show that 5,748,185 gallons were manufactured this year, as compared with 5,580,763 gallons during 1921.

Although we have had an increase in the amount manufactured, there has been a decrease in the total value.

Total sales of the product during 1922 amounted to \$5,460,775.75, as compared with \$6,138,839.30 during 1921, which is due, of course, to the decline in price.

High express rates have been a disadvantage to some manufacturers and have compelled some to establish small plants at different points in the state which has enabled them to eliminate long hauls by express.

We hope that a great many of the difficulties confronting this industry in Iowa can be overcome and ironed out during the coming year. On account of its palatability and food value, there is no other product that is sometimes termed a luxury which comes nearer being a necessity. With this in mind, we believe that the sooner we return to a generous ten-cent dish of ice cream, the greater the consumption will be and the consumer will be thereby benefited because of the essential life-giving properties contained in this popular dairy product. This increased consumption will likewise be of financial benefit to both manufacturer and dealer.

CONDENSED MILK

Iowa's two condenseries increased their output this year. Their product sold for \$408,641.48, as compared with \$372,678.05 during 1921.

This state imports large quantities of this product; in fact, production never has equaled the demand. Imitation evaporated milk has been making considerable headway in this state due to the fact that it retails for less money and the merchant with most brands has a larger margin of profit which encourages him to push the sale of the imitation product in preference to genuine condensed milk.

We have found many merchants advertising and selling these imitation products as regular condensed milk and the department

has found it necessary to make numerous prosecutions of these offenders.

Imitation evaporated milk, or, as it is more commonly known, "filled milk," is condensed skim milk to which has been added cocoanut oil which was designed to take the place of the butterfat which the milk originally contained.

We believe it is unfair to allow manufacturers to place on the market in the state of Iowa a product which has been deprived of a large amount of its food value. Wisconsin and several other states have already passed laws prohibiting the manufacture and sale of "filled milk." In Wisconsin the constitutionality of this law was contested and the courts have held that it was constitutional.

A bill known as the "Voight Filled Milk Bill" is also before congress at this time, which prohibits the interstate shipment of this product. This bill passed the house of representatives with a large majority and is now being considered in the senate.

We believe that a law similar to the Wisconsin law should be passed in this state.

CHEESE

The manufacture of cheese in this state is almost a thing of the past and unless conditions change a cheese factory soon will be looked upon as a relic of bygone days.

During 1920 we had seventeen factories operating; during 1921 this was reduced to ten, and we now have but five who have been able to survive and continue operations.

These five factories only manufactured 256,415 pounds of cheese during the past year. This is a lamentable condition, as this state consumes large quantities of cheese and we have a great many communities that could be benefited by establishing cheese factories.

THE STATE BUTTERMARCK

Increased interest concerning the use of the Iowa Butter mark has been very noticeable on the part of both the creameries and the butter buyers during the past year. More creameries have qualified for the use of the brand this year than have ever qualified during any year since the brand was established. Most of those qualifying during the past year have been located in Bremer county, and we hope during 1923 that the creameries in this county will be able to say that they are 100 per cent state brand.

The fact that so many creameries located in one county have started using the brand has attracted the attention of a great many



IOWA'S HONOR ROLL
Butter Makers Operating State Brand Creameries.



IOWA'S HONOR ROLL
Butter Makers Operating State Brand Creameries.

buyers and several of them have been negotiating to purchase the entire output of all these plants, getting the product together at some central point and shipping to the markets in carload lots.

We believe as more creameries begin using the state brand and larger quantities of this quality of butter are available that the competition and interest on the part of buyers will be more noticeable. We also believe that the consumers of this state are anxious to obtain our state brand butter and are willing to pay a premium for it providing the creameries will get together and arrange to place their product on our home markets.

License No. 1 was issued to the Strawberry Point Farmers' Creamery in May, 1916, and since that time 18 creameries have been issued licenses, 2 of which have been forced to discontinue the use of the brand, which was due to various local conditions affecting both plants.

We think that the butter makers who have been able to line up their creameries so that they could meet the strict requirements necessary to be able to use this brand have never been given as much credit as they should have had for the pioneer work they have done; neither have they or the creameries using the brand had the publicity due them. With this in mind, we are publishing below a list of the state brand creameries and elsewhere in the report you will find the photographs of Iowa's honor roll or the butter makers responsible for their creameries using the brand.

LIST OF LICENSED IOWA CREAMERIES USING STATE TRADE-MARK

Strawberry Point Farmers Cry. Assn., Strawberry Pt.	License No. 1
Farmers Creamery Company.....Manly	" No. 2
Algona Co-operative Creamery Co.....Algona	"
Bremer Creamery Company.....Bremer	" No. 6
Hull Co-op. Creamery Co.....Hull	" No. 7
Center Valley Creamery Co.....Sumner	" No. 8
Lake Mills Creamery Co.....Lake Mills	" No. 9
Washington Creamery Co.....Waverly	" No. 10
Tripoll Creamery Co.....Tripoll	" No. 12
Tenold Creamery Co.....Northwood	" No. 13
Denver Creamery Co.....Denver	" No. 14
Klinger Creamery Co.....Readlyn	" No. 15
Readlyn Creamery Co.....Readlyn	" No. 16
Artesian Creamery Co.....Waverly	" No. 17
Farmers Co-op Creamery.....Oselwein	" No. 18
Siegel Creamery Company.....Tripoll	" No. 19

The state of Iowa created and adopted the state trade-mark for butter manufactured in the state of Iowa "for the purpose of insuring a higher standard of excellence and quality, and to insure a more

healthful product for consumption at home and abroad." Furthermore, it is the purpose of the law to promote educational work which will assist the Iowa butter makers in producing the butter to be marketed under the state trade-mark and thereby secure a more uniform butter market and a higher market value for the butter.

The mark as adopted consists of a heavy circle with an inner light circle, the center space being occupied by an outline of the map of Iowa and within the outline shall appear in prominent letters the words, "Iowa Butter." In the space above the outline and within the light circle shall appear the words "First Quality. License No. ——" and the words "State Butter Control" shall be inserted in the space below the outline of the map and within the light circle.



Trade-Mark Adopted for First Quality Iowa Butter.

Said trade-mark and its use and regulations shall be in charge of and under the control of an executive committee of five members, consisting of the president of the Iowa State Dairy Association, the president of the Iowa State Butter Makers' Association, the dean of the Division of Agriculture of the Iowa State College of Agriculture and Mechanic Arts, the professor of Dairying of the same institution and the Dairy and Food Commissioner of the state of Iowa.

The state trade-mark shall be controlled, used, manufactured and issued under such rules and regulations as may be found necessary,

from time to time, by the executive committee. Such executive committee shall have power to make such changes in the rules and regulations for the use of the said trade-mark as it may from time to time deem necessary.

The rules governing the use of such trade-mark shall be published by, and through bulletins issued by the State Dairy and Food Commission. Such labels, stamps, or other means of imprinting such trade-marks upon the manufactured product, or the receptacles containing the same shall be furnished to those entitled to the use thereof by the State Dairy and Food Commissioner at actual cost.

RULES AND REGULATIONS GOVERNING USE OF THE IOWA BUTTER
TRADE-MARK

1. Butter sold under the trade-mark shall be manufactured in a creamery which meets the requirements of the Iowa Sanitary Law. Such creameries shall obtain a score of 85 or above, 100 being perfect, scored in accordance with the Iowa State Score Card for creameries.
2. The butter shall obtain a score on the quality of not less than 93 points, 100 being perfect, on 75 per cent or more of the scoring. A creamery obtaining a score on butter below 92, or a creamery that has more than 25 per cent of its scoring below 93, shall forfeit its right to the use of such trade-mark until such time as the creamery is again in a position to meet the necessary requirements.
3. All butter marked with the Iowa state mark shall comply with the Iowa state standards and contain not less than 80 per cent of butter fat, and shall contain less than 16 per cent of moisture. No preservative, neutralizer or adulterant shall be added to butter or to cream from which the butter is to be manufactured.
4. Butter sold under said mark shall be manufactured from cream, which has been pasteurized, either in the form of milk or cream. Pasteurization shall consist in heating the milk or the cream to a temperature of not less than 140 degrees F. and holding above 140 degrees F. for a period of not less than 20 minutes, or heating the milk or cream to a temperature of not less than 180 degrees F. when flash heat is applied.
5. If the butter is solid packed in tubs, the tubs shall bear the Iowa state mark on two opposite sides, the marks shall be placed immediately below the upper hoop or hoops, said mark to be three inches in diameter. In addition to the markings as stated, the top surface of the butter shall bear an imprint of the said mark, this im-

print to be five inches in diameter and the imprint into the butter shall be from one-sixteenth to one-eighth of an inch in depth. Butter in boxes either solid packed or in print, shall bear similar markings on both ends of the boxes as those placed on the outside of the tubs. A similar imprint shall be made into the butter if solid packed.

6. The date of manufacture of the butter shall be marked on the outside of the tub or box close to the state mark, in letters not less than one-half inch in height, the same being placed in the following manner: $\frac{12-3}{6}$. The figure 12 designates the number of the month, the figure 6 designates the day of the month, and the figure 5 designates the number of the churning on that day. Thus for the above markings the reading would be that the butter was manufactured on the twelfth month, sixth day and was the product of the fifth churning.

7. Parchments for print butter may be marked with the state trade-mark. The size of such markings shall be two inches in diameter. At this time the board does not require the marking of the date on individual prints.

8. Application, in writing, shall be made to the State Dairy and Food Commissioner, who after having satisfied himself that the manufacturer is qualified to comply with all the requirements will issue permit to use the state mark and also furnish copies of the mark and necessary equipment to the applicant. No other stamp or marking shall be used unless the same shall meet with the approval of the State Dairy and Food Commissioner.

9. Any creamery obtaining the privilege of using the Iowa state mark shall immediately upon request from the executive committee, send packages of butter for the purpose of scoring, to such places and in such quantities as may be designated by the executive committee. This butter shall be taken from the most recent churning made at the creamery. The butter after scoring will be disposed of, as nearly as possible, in accordance with the instructions furnished by the creamery.

10. The state dairy law makes it illegal for any person, firm, corporation, association or individual to use the said trade-mark for butter on their products without first complying with all the rules and regulations prescribed by the said executive committee for the use of the same.

11. Any person violating any of the provisions above shall be guilty of a misdemeanor, and upon conviction thereof shall be pun-

ished by a fine of not less than twenty-five nor more than one hundred dollars or by imprisonment for not less than thirty days in the county jail. [Dairy laws of the state of Iowa, section 2515-g.]

IOWA STATE DAIRY ASSOCIATION ACTIVITIES

J. P. Eves, Field Secretary

The year 1922 has shown a continuation of the dairy interest so manifest during the previous year. The maintenance of a very satisfactory butter market together with a continuation of low grain prices has maintained the ever-increasing interest in dairying and the demand for dairy cows. Iowa has long been following, more or less, a so-called dual-purpose type, but during the past year a decided change has been apparent. In practically every portion of the state where there was a decent market for milk or butterfat, demand for cows of our special purpose dairy breeds has been rapidly increasing. This condition is gratifying since permanent dairy development was impossible unless based on our dairy breeds as a foundation.

One drawback to the most rapid development of the industry has been the fact that Iowa has been made more or less of a dumping ground by neighboring states for their inferior quality dairy cattle. In many instances, these cattle went into communities as the first representatives of their particular breed and in such cases have acted in retarding the development of that breed rather than increasing its popularity.

Our Iowa farmers have not been accustomed to paying the prices demanded by breeders for the highest producing quality of dairy cattle, hence they have been inclined to buy representatives of that breed that they could secure for their price. This condition, together with the fact that we have had too many speculators shipping in cattle from terminal stock yards bearing the marks of dairy breeds and sold as high-grade dairy cows have been severe detriments to the industry.

Figures alone give us an idea of the actual amount of money invested by Iowa farmers in dairy cattle during the past year. Accurate figures from Minnesota and from Wisconsin for year ending June 30, 1922, show some surprising facts. Dr. S. G. Eliason, state veterinarian of Wisconsin, reports that 5,379 head of dairy cattle were shipped into Iowa during the year mentioned, the total valuation of which amounted to \$516,240.00. Dr. Charles E. Cotton, secretary of the Minnesota Live Stock Sanitary Board, reports that during the same year Minnesota sold into Iowa 6,001 head of dairy

cattle valued at \$558,260.00. These figures show that from Wisconsin and Minnesota alone Iowa purchased 11,380 head of dairy cattle at a valuation of \$1,074,500.00. When we consider that many cattle were imported from Illinois, Missouri, Ohio, and other neighboring states, it is a safe estimate that our farmers purchased better than a million and a half dollars worth of dairy cattle or approximately 15,000 head. This amount of money was sent from the state during a year that our banks were supposedly harder pressed than any like year in their history.

These figures and the statements mentioned before would indicate that Iowa is very rapidly turning from beef raising to dairying. I do not want to give the impression that such a rapid change is being made. We must consider that a percentage of the men making this original investment in dairying are not dairy men, will not be permanently interested and many will be out of the business within a very few years with little profit to show for their experience.

BREEDERS DEMONSTRATE POSSIBLE PRODUCTION BY TESTING

The dairy breeders of the state have been doing a good job of bringing the producing ability of our representative breed more definitely to the attention of the milking farmers. The Holstein state milk record, which formerly stood at 26,300 pounds, has been beaten by two cows in the same herd. O. L. Hamer, Waterloo, with the great cow, White Beauty Concordia, and her half-sister has won this new honor. White Beauty completed her year with a production of 28,495.7 pounds of milk containing 1,107 pounds butter. These records are all the more creditable when we consider that they were made not by an experienced feeder or by one of our largest and best equipped farms, but by a practical farmer.

The Guernsey and Jersey breeders have both made remarkable strides. Possibly from the standpoint of state records made, the Sherman Nursery Company, at Charles City, holds the largest place in the limelight. Two state records have already been broken by cows owned in this herd. Brown Lady's Little Jewel is the new junior four-year-old champion. She produced in one year 12,290 pounds of milk containing 655.17 pounds butterfat. The other Sherman farm champion is the junior two-year-old heifer, Raleighs Torono's Lady, with a year's production of 10,237 pounds milk containing 563.5 pounds butterfat.

Still more important in my opinion is the information contained in the annual Iowa Cow Test Association report recently issued by

the extension department at the Iowa State College. It must be remembered that these records are made with just common farm care with twice a day milking, so that extreme production is not to be expected. Five herds in the state averaged over 400 pounds of butterfat per cow for the year. This production is two and one-half times as much as the average herd production in Iowa. These herds averaged \$80.00 to \$100.00 profit per cow above feed cost. Of the 322 herds tested, 62 herds averaged 270 pounds of butterfat per cow.

The foregoing statements are made to give just a little indication of the trend of dairying in the state. The interest has been growing by leaps, but we have discouraged rather than encouraged this rapid change, believing that too large a percentage of these beginners would lose rather than gain. A much more permanent and feasible plan and one that is urged at all times is to *feed the present herd more efficiently so as to make possible maximum production; test production of present herds in order to discard the unprofitable or boarder cows; and then select more carefully, breed for production dairy sires.*

1922 PROJECTS

DAIRY CALF CLUB WORK

The boys' and girls' dairy calf club work has been steadily growing in popularity because it is realized as one of the safe, permanent methods of increasing dairy interest and introducing the right kind of dairy cattle. The kind of clubs organized during the past year varied somewhat with previous years. With conditions unsettled, people were more reluctant to push the purebred club, but the clubs organized with grade calves increased in popularity.

The bankers in all parts of the state showed a splendid willingness to co-operate and push the project whenever they were asked. This support, of course, includes, in most instances, the entire financing of the club.

The number of clubs organized does not indicate the amount of time or effort required from the office in the field. All of our purebred clubs and some of our grade clubs are organized on a three-year basis. This requires follow-up work on the clubs organized one and two years previous in addition to those just started.

The three year or "long time" feature of our Iowa clubs is proving a very popular one because it gives each member a well-rounded experience not only in the care of the calf, but the growing out of that calf into a cow, the problem of selecting a correct kind of a sire

to breed to and being made to realize the possibility in reproduction when the calves from their club heifers are dropped and the profit to be made from the production of milk and butterfat.

1922 CLUBS

Pure-Bred Calves		No. of Calves	Breed
Organized by			
Polk Co. Guernsey Breeders' Ass'n.....	13	Guernseys	
Fayette Co. Farm Bureau.....	12	Holsteins	
Linn Co. Guernsey Breeders' Ass'n.....	13	Guernseys	
Grade Calves			
Hancock Co. Farm Bureau.....	20	Holsteins	
Crystal Lake.....	7	Holsteins	
Garner—Co-operative Creamery.....	2	Guernseys	
Kanawha—Co-operative Creamery.....	7	Holsteins	
	2	Guernseys	
Kossuth Co. Farm Bureau.....	21	Guernseys	
Titonka.....	4	Holsteins	
Lone Rock.....	9	Guernseys	
	4	Holsteins	
Fenton.....	5	Guernseys	
	4	Holsteins	
Poweshiek Co. Farm Bureau.....	8	Holsteins	
Brooklyn.....	8	Holsteins	

CLUB EXHIBITS AND JUDGING CONTESTS

In order to make our clubs a success much time and effort must be spent in arranging for means of bringing members together in friendly competition. Club exhibits, judging contests, etc., have proven very popular, as well as their educational value. In practically all of our clubs a calf club show and judging contest was held in connection with the county fair. At this time the five best calves from the various clubs and the three best junior judges were selected to compete in the contest held, under the supervision of this association, at the Dairy Cattle Congress at Waterloo. From this contest the three high members were selected to represent Iowa at the National Dairy Show.

The State Calf Club Show was held at the Dairy Cattle Congress and proved a real success, even though it was the first state exhibit. Fifty head of splendid heifers were proudly shown by their youthful owners.

BREEDERS' ASSOCIATION

Representatives from this association in the past have always worked with and co-operated with the dairy breeders of the state.

but it has been our opinion that this plan could be improved upon. Accordingly, a plan was agreed upon in which this association would perform a more definite work for the dairy breed associations and could then in turn expect a more liberal and loyal membership.

This plan includes a close co-operation of this association with the state breed associations. The representatives of the dairy association handle the field secretary work for the dairy breed associations, providing these organizations maintain their own organizations and finance same. The breed associations in turn guarantee membership in the State Dairy Association. This year the membership will run very close to the 1,000 mark by the end of the year.

By this plan of co-operation, the dairy association is able to get county breed associations to accept a definite program of work. With all of these breeders pushing the same plan that representatives of the dairy association are, there can be no doubt of the increasing results. During the past year we have worked through fifteen such county organizations.

EXCHANGE BUREAU

Through the co-operation of the state and county breed associations, and a close touch, in this way, with all breeders of the state, this association is able to handle a much more effective exchange bureau. A pretty definite file of grade and pure-bred cattle for sale in the state is kept at the association office and, in this way, buyer and seller are brought much closer together. We are trying to encourage Iowa inquiries to buy Iowa cattle because we believe they can come more nearly finding out the real value of the animal they are buying and can be more safely protected in their purchase.

CO-OPERATION OF EXTENSION ORGANIZATIONS

We are pleased to report that we have never experienced a more wholehearted and sincere cooperation from dairy and extension organizations than during the past year. The extension department, the dairy husbandry department, and the dairy manufacturing department of Iowa State College, the Dairy and Food Commission, and the State Dairy Council have co-operated with us and given us assistance whenever it was in their power.

PROJECTS FOR 1923

The plans for 1923 include an expansion of the work carried on this year. One representative handled all of the work for better than half of the past year. We are assured of the financial support

of the dairy breed associations, of membership funds, and we hope these will be sufficient to make possible the retaining of two representatives for the entire year, even though our small state appropriation will not. Without two men it is impossible to continue the old work in anything like an efficient manner and still handle the increasing demands.

IOWA EGG LAW

As has been frequently stated in previous annual reports, the purpose of the Iowa egg law is to promote fair dealing in eggs and increase the market value of our egg crop. In justice to most of the dealers in eggs I will say that they so take it, but there are some, more than there should be, who seem to feel that any restriction on their manner of doing business is an infringement upon their personal liberty.

It is the purpose of this department in making rules and regulations for administering the law to not only encourage the merchant who is disposed to be fair, but to protect him from the disastrous results of unfair buying. Also to encourage the farmer to market a better class of eggs. When you consider that during the spring months when we get our best eggs it takes 45 dozen eggs on the average to make a 30-dozen case of standard or No. 1 eggs, 15 dozen going into secondary grades (and this does not include the bad eggs that are rejected), you get some idea of what indifference on the part of the farmer as to what kind of eggs he markets has to do with the price he receives. The percentage of seconds has to be taken into account by the packer who makes the price.

During the hot and early fall months the percentage of seconds is much greater. There are times in the extreme hot weather when there are scarcely any No. 1 eggs except those furnished by near-by henneries, often No. 1 April packed storage eggs being preferred to the current receipts. It has been estimated that this state alone suffers a loss each year of \$5,000,000.00 to \$6,000,000.00 because of the indifference of so many of our farmers as to the kind of eggs they produce and the manner of their handling.

That it pays to give more attention to the quality of your product is evidenced by the fact that the price paid by the merchants and dealers in certain communities invariably ranges from two to five cents higher than in most places. Admitting that competition may in part account for this at times, I think you will find on investigating

that in the majority of cases the quality of the eggs enable the dealer to pay more.

The following tabulations will be of interest, as it shows the variations in price one month with another for the last twelve years. Also it compares the receipts and prices of this year with those of last. We are getting back close to pre-war prices.

EGGS

No. Doz. 1921.....	133,100,000
No. Doz. 1922.....	159,720,000
Average Price 1921.....	38.6c
Average Price 1922.....	27.26c
Total Value 1921.....	\$51,376,000
Total Value 1922.....	\$43,539,672

AVERAGE PRICE PAID TO IOWA FARMERS FOR EGGS ON
THE FIRST DAY OF EACH MONTH OF THE
YEARS SHOWN

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910	28	28	21	18	18	17	16	14	17	20	22	25
1911	26	21	14	13	14	13	12	12	14	17	20	25
1912	27	28	23	17	17	16	15	15	17	19	22	25
1913	23	20	17	15	15	16	15	14	16	19	23	29
1914	27	26	22	16	16	16	16	16	20	21	21	26
1915	28	30	22	16	17	16	15	15	16	20	23	27
1916	28	27	22	17	18	19	19	20	21	26	30	34
1917	35	36	33	25	30	31	27	28	32	34	35	39
1918	42	47	38	30	31	28	28	33	33	39	42	51
1919	56	45	30	34	37	38	33	37	38	47	52	59
1920	55	45	39	37	38	33	37	44	48	53	64	61
1921	49	32	21	18	16	20	22	26	27	37	46	44
1922	26	23	18	20	20	16						

NECESSITY FOR STRICT ENFORCEMENT OF THE SANITARY FOOD
LAWS

Sanitary food laws have been of inestimable value in procuring for the public a safe food supply. Wholesome foods are easily made dangerous by being handled or stored under insanitary conditions. Methods which obtained in the manufacturing and handling of our food supply a few years ago are a far cry from present-day methods, due to the enactment and enforcement of sanitary laws. Food officials found it difficult and were often met with opposition in trying to enforce these laws when they were enacted. The installation of cases to protect foods often involved considerable expense and the average dealer was loath to spend any money to safeguard the health of the public. Many can recall to mind the confectionery with long counters covered with trays of many hued candies with the prospective customer picking over and tasting the different varieties in search of one that struck his fancy. I dare say in many cases these

counters of candy were not even covered during the process of sweeping to remove the dust and dirt tracked in from the street on the feet of customers, mixed with the expectorations of those possibly tuberculous.

An illustration of these conditions is recalled wherein a large department store maintained a candy department of the "hollow square" type. The owner was advised that it would be necessary to put the candy in cases which would protect it from the contamination with dust and dirt. The order was complied with with some reluctance, but efficient plate glass cases were installed. In visiting this store to see if the order had been complied with, it was noticed that the clerk was busily engaged in wiping a very perceptible layer of dust from the top of the case. Upon inquiry as to how she liked the new case she complained that they kept her busy cleaning off the dust. When asked where the dust went before the cases were installed, she admitted that it must have collected on the candy. Many even more glaring instances of food contamination can no doubt be cited by many food officials.

In conjunction with the fight against dust and dirt in our foods there has been waged a relentless war against the housefly, possibly one of the greatest spreaders of the "white plague" and many other diseases of mankind. It is a wise provision that requires the use of proper screens over all openings in buildings or rooms where foods are handled, but in many instances, without the occasional visit of the inspector, these would be allowed to become full of rust holes and worthless. Sanitary laws have been directly responsible for the nation-wide educational campaigns, conducted in the various states, showing by circulars sent out by boards of health and food officials, the real menace of the common fly. His deadly work has been painted in pictures and recited in verse. Traps have been designed to catch him in vast numbers by means of an enticing bait and many cities have offered rewards for the boy or girl who could catch the largest number. Official bulletins point out his breeding places and tell of the proper treatment of these places to destroy the eggs and reduce his numbers. I venture the prophecy that the time will come when the law will require the destruction of the common rat, as he is a contaminator as well as a destroyer of foods. It is encouraging to know that in practically every case where dealers in food products have been compelled to install proper protection for foods that they say they would not think of returning to the old system; in fact, many have exceeded the requirements and invested heavily in plate

glass cases with white tile floors which are easily cleaned and displays their foods in an enticing manner. Cabinet manufacturers quickly saw the value of sanitary food display cases and many on the market today are the last word in the cabinetmaker's art. The reputable dealer has likewise recognized their value and their installation is a part of every modern grocery and market. From what I have said it might seem that the millennium in food sanitation was near, but we are far from it. Visit any of our large cities and you are likely to find bakeries being operated in basements with little ventilation and only artificial light and utensils of doubtful cleanliness. These places, although comparatively few, exist for various reasons. They have been found by the inspector and have been made to improve, but the owner is a man of small means, industrious, and a respectable citizen. He would like to have his bakery in a modern room, but he has not the means to buy or rent such a place and we suffer him to continue in such a place with the best possible sanitary conditions under such surroundings. Officials are in part excusable for such conditions, but food officials should strive for the elimination of every bakery or food factory in any basement not one-half above the ground with ample daylight and cement floors.

There is one class of manufacturers which should not be tolerated and that is the small bottler of soda waters who rents a shed or a ramshackle back room and with a foot-power bottling machine and a tub of warm or possibly cold water for washing his bottles makes a product which he offers to the public as a cool, refreshing beverage. In many cases these men are foreigners of the lowest class, with little or no conception of cleanliness, and there is enough authority in our laws to eliminate such places completely, and officials are derelict in their duty if they permit food to be produced under such conditions. Another problem which the food officials have to contend with is the foreign grocer and butcher in the foreign sections of our larger cities. They are in most cases naturally unsanitary and their customers being of the same or similar extraction are content to let them operate in this manner. Frequent inspection and the force of the law seems to be the only method which will maintain any semblance of proper sanitary methods and surroundings with this class of merchants. While the sanitary laws have improved the country slaughterhouse which was overrun with rats and surrounded with nauseating filth, such places should be eliminated, for such an institution has no place in modern times.

We can all remember when the butcher's wagon drove about the city loaded with dressed meats and unprotected from the dust and

filth constantly stirred up by the wind. Bread was even transported about unwrapped and in open delivery wagons, the driver handling the horses and no doubt his person without any attempt at washing his hands. The unwrapped loaves were corded up on his dirty coat sleeve, carried into the grocery and dumped into an open basket to be further exposed and handed to the customer by hands of doubtful cleanliness. As usual there was some opposition to protecting these foods, but the white canvas cover is now in general use on meat wagons and trucks and the baker has been quick to realize the sale value of his loaf of bread wrapped in a decorated transparent wrapper which advertised his product as well as protecting it from all possible contamination. Viewing the past and the present the efforts put forth by food officials to bring about these changes have certainly been worth while and they can be justly proud that they have had a part in this transition.

The proper control of dealers in foods can be had, I believe, by means of a licensing system, making the license fee nominal, but placing with it the power of refusal and revocation. Our sanitary laws should require every person who wishes to handle foods in any way to have his place thoroughly inspected before he is permitted to enter the business and his license withheld if the building or room is not suitable for maintaining in a strictly sanitary manner and a license only issued when it is possible to comply with the law in every detail. I believe every official who had had the enforcement of a sanitary law will agree that if we are to maintain a safe food supply the strict enforcement of the law is of necessity and that eternal vigilance will always be the price we must pay.

WEIGHTS AND MEASURES

A decade has passed since Iowa took up in earnest the subject of properly regulating weights, measures and trade practices in general involving these mediums of purchase and sale. True, there was some effort made previous to that time to take care of trade conditions, but not until 1913, when the legislature enacted a law that was to make possible much needed reform in the various branches of trade dealing in essential commodities through the enactment of the weight and measure law. The dairy and food commissioner was charged with the enforcement of this act, the duties of which were to regulate and supervise all matters wherein questions of quantity were involved, also the inspection of scales, weights and measures.

That this remedial action came none too soon is well known, and the beneficial value of such a department as a protective agency has

manifestly grown with the general trend of business and constant changes in economic conditions.

Since the enactment of the weight and measure law in 1913 steady advancement has been made year by year in every branch of the work. Special investigation due to various causes are, of course, always in order. No year passes without many of them claiming our attention, and the past year was no exception. Conditions in the various branches of trade must be continually looked into in order to make sure that the persons engaged in them are living up to the law's requirements. If at any time a particular business is not centered upon, it is because conditions in that line of trade are satisfactory to the department. However, just as soon as any tendency is discovered to overstep the bounds of honesty and fair dealing, no time is lost in getting back to that particular branch.

There are extensive commercial enterprises which must always be carefully watched, such as those dealing in coal, ice, groceries, meats and co-related lines of trade. Great stress is laid on the enforcement of weight and measure laws, since they affect the class of citizens who can least afford to protect themselves. Some of the activities are enumerated here in order that the public may know of the work of the department.

It is the duty of this department to make an inspection of scales, weights and measures wherever the same are kept for use in connection with the sale of merchandise or other commodities sold by weight or measurement. The testing of the many thousands of wagon or truck scales and gasoline pumps and measuring devices requires much time and labor. The reweighing of commodities in the various stores and of loads of coal as well as checking up the peddler or huckster, which has always given us trouble. The very nature of the way their business is carried on makes them an object of suspicion. These "roamers" make victims of the rich and poor alike; they have no fixed places of business, frequently drifting from town to town. They have many tricks at their disposal, as their enterprises usually are of the seasonable variety, their efforts are generally directed toward making a clean-up in the short time they have. Their stocks in trade may be anything from an orange to a ton of coal, though most of them seem to take very kindly to the produce business, for what reason can best be judged when it is realized that in practically no other line of trade is there such opportunity to defraud. It is difficult to realize why the people in general put so much faith in them instead of consistently dealing with

reputable merchants with established locations. So-called bargains, which the people think they receive from peddlers are, as a rule, more costly in the end than were the goods purchased at a store. Storekeepers are not so apt to stake their reputations on questionable practices.

The wagon scale or five-ton scale is being replaced by the heavy truck scale, ten-ton and larger. With so much heavy trucking by motors, some of which are almost as large as small freight cars, carrying loads that require scales of large capacity to handle, larger scales are being installed all over the state.

While in most cases incorrect scales are found weighing against the consumer, frequently a scale is found weighing against the dealer.

In a recent inspection of coal scales a scale was found that was giving the consumer 1,200 pounds for each 1,000 pounds. When the inspector discovered the error and notified the dealer he was frantic with grief and endeavored to call in all wagons which were out delivering coal from his bins. The scales were immediately repaired and hereafter no patron of his place of business will get more coal than is paid for.

We find material shortage from time to time in checking up the coal dealers. We have had a number of cases against them; in some cases they plead guilty, in others they stood trial. In one case we had recently the dealer plead not guilty. He was short 525 pounds on a one-ton load. His defense was that the wind blew it away, therefore he was not responsible for the shortage. The judge found him guilty and fined him \$15.00 and costs; he should have had the limit.

The inspector, in another instance, made an inspection of a scale and found the same to be 40 pounds light on each 1,000 pounds. They were condemned. They were to weigh 250 head of fancy beef cattle over these scales that day. The price being paid for these cattle was 12 cents per pound and the cattle averaged 1,000 pounds per head. The parties selling these cattle would have lost 10,000 pounds or 10 head of cattle at 12 cents per pound, amounting to \$1,200.00, a fair day's work for the buyer.

The inspectors find new scales that are not properly installed. By making the corrections the inspector protects the dealer as well as the public.

A unique bushel measure, made of galvanized tin, was confiscated from an apple peddler by the inspector. The measure is guaranteed to cheat each customer out of at least one-third ($\frac{1}{3}$) of a bushel of apples every time it is used. The peddler had taken a heavy hammer

and banged great dents in the sides of the measure; these dents took up the space which should have been filled with apples when a bushel of the fruit was sold. Housewives should purchase apples by the pound and not by the measure. They should insist on getting forty-eight (48) pounds for a bushel. Many of the measures used will hold only about thirty (30) to forty (40) pounds of apples.

The department continues to receive complaints regarding incorrect scales and requests for scale inspections. During the year ending October 31, 1922, there were 171 requests taken care of.

BREAD

We still receive complaints about loaves of bread not being branded with the net weight, also loaves being misbranded, in that the loaf does not weigh as much as is stated on the wrapper. We have continually tried to remedy this practice, with only partial success. The bakers state that the frequent fluctuation in the price of flour compels them to change the size of the loaf. Wrappers are purchased in large quantities branded with a certain net weight. Then if the size of the loaf is reduced the baker, in many cases, continues to use the same wrapper, leading the consumer to believe he is receiving a larger amount of the bread than he is.

We believe that the only remedy for this condition is a law regulating the size of all loaves of bread. This is concurred in by the United States Bureau of Standards and many of the other states. A committee consisting of weight and measure officials and representatives of the baking industry are drafting a uniform bread law as a guide to states desirous of such a law. Several states already have a standard bread law, upheld by higher courts.

GASOLINE PUMP INSPECTION

The inspection of gasoline pumps is one of the important phases of our work. During the year ending October 31, 1922, there were 1,682 gasoline pumps inspected, of which 19 per cent were found incorrect; 950 measures, of which 64 were incorrect. During the last year there has been an increase in number of gasoline pumps installed, new filling stations springing up all over the state.

Where the inspector finds a gasoline pump not delivering the correct amount, it is condemned for repairs. In one case the operator continued to use the pump, which was measuring one-half ($\frac{1}{2}$) gallon short on each five (5) gallons. Charges were filed, the defendant plead not guilty, demanding a jury trial. The jury found him guilty and he was fined \$50.00 and costs.

Refiners and marketers of gasoline are beginning to understand what accuracy means to them in the way of good will and increased

sales. They are very anxious that all gasoline pumps and meters are accurate. We have been very much encouraged by the co-operation which has been given the department by the oil companies and the various manufacturers of these devices, with the result that the measuring devices have been remodeled and improved upon.

The law provides that all gasoline pumps and meters shall be licensed, the fee being \$3.00 per year.

The revenue received for the gasoline pump licenses for the year ending October 31, 1922, is \$12,867.00.

During the year ending October 31, 1922, the department has inspected 3,217 "heavy" scales, that is, scales used by grain elevators, coal mines, coal dealers, railroad stock scales, sugar refineries, canning factories, etc.; 279 of this number were found incorrect and were condemned for repairs; 269 of these have been repaired or new ones installed to take the place of the old ones. The revenue received by the state for the inspection of these scales amounted to \$9,870.24.

The law provides an inspection fee for all scales over 500 pounds up to and including 4,000 pounds capacity, which is \$1.00; over 4,000 pounds up to and including 21,000 pounds capacity, \$3.00 each; scales over 21,000 pounds capacity not including railroad track scales, \$5.00 each; railroad track scales, \$10.00 each; all hopper or automatic scales, \$2.00 each.

The revenue received by the state for scale licenses is \$6,108.00.

The inspection of platform, counter and cream scales is also an important part of our work. Our records show there were 1,386 platform scales, 4,414 counter scales, 3,826 cream scales tested. Of the total number of these scales, which is 9,626, 505 were found to be incorrect, the same being condemned for repairs. A great many of these were found to be weighing in favor of the public. These scales have either been discontinued from use, replaced with new scales or repaired.

The total revenue received by this department, which is \$28,845.24, was turned over to the state treasurer and credited to the general fund of the state. This department is operated by a direct appropriation of the legislature and cannot use any of the fees collected.

WEIGHTS OF ONE BUSHEL, ONE PECK, AND ONE QUART OF CERTAIN PRODUCTS AS PROVIDED BY THE LAWS OF IOWA.

	1 bushel pounds	1 peck pounds	Ounces 1 quart
Apples.....	48	12	24
Apples, Dried.....	24	6	12
Alfalfa Seed.....	60	15	30
Barley.....	48	12	24
Beans, Green.....	56	14	28
Beans, Dry.....	60	15	30
Beans, Lima.....	58	14	28
Beets.....	58	14	28
Bluegrass Seed.....	14	3 1/2	7
Bras.....	30	7 1/2	15
Bromus Inermis.....	14	3 1/2	7
Broom Corn Seed.....	60	15	30
Buckwheat.....	48	12	24
Carrots.....	50	12 1/2	25
Castor Beans.....	50	12 1/2	25
Charcoal.....	20	5	10
Cherries.....	40	10	20
Cover Seed.....	60	15	30
Coal.....	80	20	40
Coke.....	40	10	20
Corn, Ear.....	70	17 1/2	35
Corn, Unshelled.....	75	18 1/2	37 1/2
Corn, Shelled.....	56	14	28
Corn Meal.....	48	12	24
Cucumbers.....	48	12	24
Eschschol.....	40	10	20
Flax Seed.....	58	14	28
Grapes, Stems.....	40	10	20
Hemp Seed.....	44	11	22
Hickory Nuts Hulled.....	50	12 1/2	25
Hungarian Seed.....	50	12 1/2	25
Kaffir Corn.....	56	14	28
Lime.....	80	20	40
Millet Seed.....	50	12 1/2	25
Oats.....	32	8	16
Onions.....	52	13	26
Onion Top Sets.....	28	7	14
Onion Bottom Sets.....	32	8	16
Orchard Grass Seed.....	14	3 1/2	7
Osage Orange Seed.....	32	8	16
Pumpkins.....	45	11 1/2	22 1/2
Peanut.....	48	12	24
Peanut, Dried.....	33	8 1/2	16 1/2
Peanuts.....	22	5 1/2	11
Pears.....	45	11 1/2	22 1/2
Peas, Unshelled.....	50	12 1/2	25
Peas, Dried.....	60	15	30
Plums.....	48	12	24
Pop Corn, Cob.....	70	17 1/2	35
Pop Corn, Shelled.....	56	14	28
Potatoes.....	60	15	30
Quinces.....	48	12	24
Rape Seed.....	50	12 1/2	25
Redtop Seed.....	14	3 1/2	7
Rutabagas.....	50	12 1/2	25
Rye.....	56	14	28
Salt.....	80	20	40
Sand.....	130	32 1/2	65
Shorts.....	20	5	10
Sorghum Seed.....	50	12 1/2	25
Spelts.....	40	10	20
Sweet Corn.....	55	13 1/2	27
Sweet Potatoes.....	60	15	30
Timothy Seed.....	50	12 1/2	25
Tomatoes.....	55	13 1/2	27
Turnips.....	50	12 1/2	25
Walnuts.....	60	15	30
Wheat.....	60	15	30
All root crops not specified above.....	51	12 1/2	25

1 dry qt.—67.2 cu. ins. 1 liquid qt.—67.75 cu. ins. A dry qt. holds 14 per cent more than a liquid qt. Dry commodities must be sold by weight or dry measure.

CANNING INDUSTRY OF IOWA

The canning industry of Iowa is a larger agricultural industry than is realized by those not closely associated with it. In view of this fact the following figures and information will give the people of this state an idea of its importance and magnitude.

The principal products packed in this state are: Sweet corn, tomatoes, pumpkin, kraut, and the winter lines of pork and beans, hominy, lima beans, kidney beans, etc. Other products canned in commercial quantities include green beans, beets, spinach and cherries.

Iowa leads the world in canned sweet corn production. The volume of canned tomatoes is small as compared with the output of

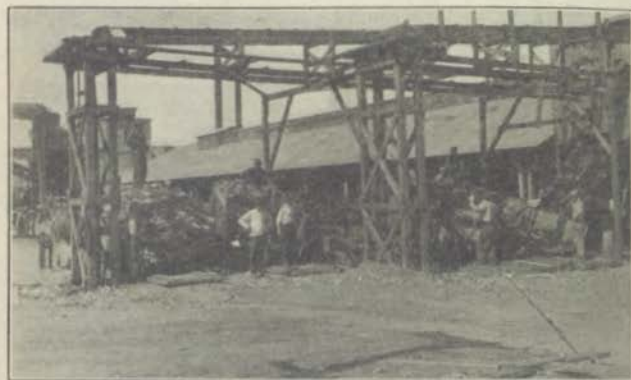


CORN ON THE WAY TO CANNERY.

some of the principal tomato packing states, but the quality of Iowa tomatoes is superior. The tomato, while native to warmer climates, grows to perfection here and judges readily concede that tomatoes grown north of the frost belt are superior in texture and flavor. Accurate statistics on pumpkin packs of other states are not available, but the extent of the pumpkin pack of Iowa has sufficient bearing on the market of the country to indicate that Iowa is one of the principal states in the production of this item.

While the volume of the sweet corn pack has reached the limit under existing freight rates, at least for the time being, there seems to be room for increased production of most of the other products.

The corn canning industry is suffering as the result of heavy overproduction in 1920, when the Iowa corn pack reached the total of 3,246,000 cases or 77,904,000 cans. This pack was produced at peak prices, for corn, cans, cases, labor and all other items going into cost of production, and had to be marketed on the falling market for food products which characterized the year 1921. The 1921



UNLOADING.

pack was very light, but there has been a partial recovery this year. The figures for production and market value for this year are, however, not yet back to normal.

Iowa normally packs one-sixth of the total sweet corn of the country. With exception of the years 1913, 1915, 1917, and 1921, Iowa has held first place in production, the Illinois packs for each of these years slightly exceeds the Iowa packs.

This year there were 42 plants operated for canning corn; 11 for tomatoes; 6 for pumpkin and 4 for other products.

The 1922 corn pack was 1,943,000 cases. The tomato pack was 163,819 cases.

The value of the corn pack at prevailing retail prices is \$6,000,000.

The value of the pack of canned tomatoes exclusive of pulp and catsup on the above basis is \$607,676.00; the pulp and catsup pack will approximate \$1,252,256.00 in value.

The annual expenditure for canning labor will exceed \$1,000,000. Acreages in Evergreen corn under contracts with canneries for the past four years together with approximate average price per ton paid:

Year	Acres	Average price
		Per ton
1919	47,811	\$16.00
1920	47,511	14.00
1921	14,398	9.00
1922	29,710	7.00

The average price per ton paid in 1914 was \$7.00; in 1915, \$8.00; in 1916, \$8.00; in 1917, \$12.00; in 1918, \$14.00.

Prices paid at various plants will vary from these prices by allowances for haul, unloading, etc.



HUSKING ROOM.

IOWA-NEBRASKA CANNERS ASSOCIATION

The Iowa Canners Association last year adopted a new constitution and by-laws and changed its name to Iowa-Nebraska Canners Association to include the four active Nebraska canneries. Eighty-one per cent of the 1922 Iowa pack or 1,571,000 cases, was canned by Iowa members of the association.

The activities of the Iowa-Nebraska association might be grouped under three heads—general association activities, technological, and sanitary inspection of member plants. General association work includes market survey and extension, freight rates, promotion of

uniformity of grades and standards of quality, business ethics, trade statistics and data on acreage, production and stocks and their movement. Technological activities include co-operative work on problems affecting production and quality such as improving varieties of sweet corn, with respect to yields per acre and quality; seed supply; farming; improvement of canning processes; machinery and equipment problems; bacteriology and technology of sterilization or processing; and container and shipping package difficulties. The

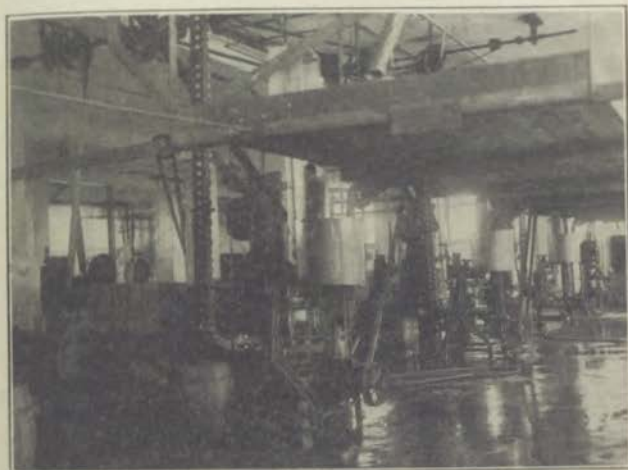


CANS READY FOR THE COOKER.

sanitary inspection of Iowa canneries by the association itself was instituted in 1919 as a division of the activities of the National Canners' Association. In 1922 the Iowa-Nebraska Canners' Association took over this work in Iowa and Nebraska. Under this service plants of members are inspected both before and during the packing seasons to see that the sanitary rules of the association are complied with. This self-imposed and self-conducted inspection has the advantage that inspections are conducted by a cannery specialist who is thoroughly familiar with all details of approved cannery construction, canning machinery, cannery operations, and cannery problems. It is open to the objection that it is applicable to members only and that the association has no police power with which to enforce compliance with its sanitary requirements, and that the association and

its inspectors are legally powerless to enforce regulations against any canner who may be inclined to ignore the inspector's recommendations or instructions. During the past season the department placed one man on the inspection of canning factories so that a general survey could be made and a knowledge of the methods and equipment used by each factory obtained.

His report shows that the majority of the canning factories are properly equipped with buildings and machinery to handle their products in a sanitary manner. Several were found, however, which



STEAM PRESSURE COOKERS.

were operating in old buildings with no proper means to dispose of waste matter, or of keeping floors and utensils clean. We expect next year to make a preliminary inspection of these factories and require such improvements to be made that will enable them to handle their products with strict regard to the legal requirements before the season opens. In case such requirements are disregarded it will be necessary to revoke their licenses which give them authority to operate. The inspection shows that the present sanitary law is too general in its requirements for canning factories.

Written as it is so as to render it applicable to bakeries, confectioneries, packing houses, slaughterhouses, dairies, creameries, res-

taurants, hotels, groceries, meat markets, and all other places where food is manufactured or stored, our sanitary law neither goes into sufficient detail nor is sufficiently specific to meet the needs of a cannery law. Under the sanitary law canners have difficulty in understanding what is required and the determination as to whether or not certain practices are in violation of the law is quite frequently not possible. To remedy this difficulty the sanitary law should be amended by adding specific requirements for canning factories.

Outbreaks of food poisoning which have occurred in the last few years have stimulated investigations as to their cause and the National Canners' Association, under the direction of Dr. Bigelow, has been active in this work. Other noted workers in this field are: Dr. M. J. Rosenau, of Harvard Medical School; Dr. K. F. Meyer, of Hooper Foundation for Medical Research; Dr. J. C. Geiger, of the U. S. Public Health Service; and Dr. E. O. Jordan, of the University of Chicago. Much of their work is completed, and among their conclusions are the following:

1. That many cases of illness are wrongly diagnosed as "ptomaine poisoning."

2. That of the total 41 known outbreaks of Botulism, which have occurred in this country, but 15 have shown commercially canned foods as the cause; most of the rest were caused by improperly prepared home canned foods or home canned foods which did not keep.

3. That Botulism cannot result from consumption of properly packed commercially canned foods.

The following shows comparatively the total sweet corn packs of commercial canneries for the past five years expressed in cases:

	1917	1918	1919	1920	1921	1922
Iowa	2,280,366	2,300,241	2,496,000	3,246,000	1,190,000	1,950,000
Illinois	2,421,953	2,199,344	2,225,000	2,271,000	1,711,000	1,939,000
Maine	899,498	1,112,912	1,862,000	1,588,000	811,000	1,056,000
Ohio	1,200,121	1,584,064	1,350,000	1,544,000	830,000	1,073,000
Maryland	2,051,544	2,012,944	2,361,000	2,217,000	1,120,000	1,844,000
New York	257,396	488,912	1,014,000	829,000	864,000	618,000
Wisconsin	165,492	372,924	635,000	890,000	878,000	625,000
Indiana	742,491	812,888	586,000	861,000	709,000	865,000
Minnesota	201,989	309,136	456,000	645,000	573,000	598,000
Michigan						
Delaware	659,087	389,295	777,000	784,000	440,000	701,000
Vermont						
Pennsylvania						
All other States	306,188	419,400	265,000	487,000	189,000	233,000
Total	10,802,932	11,721,980	13,530,000	15,040,000	5,843,000	11,419,000

CANNING PLANTS

The following is a list of the Iowa canning companies showing locations of plants and products packed in 1922:

KEY: A—Sweetcorn; C—Tomatoes; E—Green beans; F—Pumpkin; I—Hominy; J—Lima beans; K—Krust; N—Succotash; Q—Beans; R—Cherries; S—Pork and beans; T—Spinach; p—Pulp; r—Red kidney beans; t—Catsup; Sp—Specialties; (N.O.)—Not operated 1922. *Designates principal office of companies operating more than one plant.

Company	Location	Manager	Products packed
Ackley C. Co.	Ackley	T. J. Gillson	A
Ames C. Co.	Ames	Sid R. Clift	C
Anderson Bros. Co.	Oskaloosa	Jim DeBoard	C
Atlantic C. Co.	Atlantic	J. W. Cuykendall	A-F
Audubon C. Co.	Audubon	R. J. Loveland	A
Baxter Bros. Co. (office, Brunswick, Me.)	Wapello	J. P. Baxter, Jr.	A-N
Belle Plaine C. Co.	Belle Plaine	A. C. Geiger	A
Brighton C. Co.	Brighton	W. O. Schaefer	p-1
Cambridge C. Co.	Cambridge		(N.O.)
Cedar Falls C. Co.	Cedar Falls	H. S. Gilkey	A
Cedar Rapids C. Co.	Cedar Rapids	E. J. Reeler	C-E-Q-B
Center Point C. Co.	Center Point	E. W. Brookman	A
Charleville C. Co.	Charleville	W. Strippel	A
L. E. Denmire	*Montrose	L. E. Denmire	A
L. E. Denmire	Farmington		C
L. E. Denmire	Sandusky (mail Montrose)		C
Dexter-Farmer C. Co.	*Dexter	E. H. Gunter	A-F
Dexter-Farmer C. Co.	Frank Woods	Frank Woods, Supt.	A
Elgin C. Co.	Elgin	Al Schori	A
Gilman C. Co.	Gilman	E. W. Virden	(N.O.)
Glenwood Fruit Pro.	Glenwood	A. G. Beamer	C
Grimes C. Co.	*Grimes	W. J. Stewart	A-F-J-I-r
Grimes C. Co.	Altoona		A
Grimes C. Co.	Pella	E. Hardy, Supt.	A-F
Grimes C. Co.	Perry	L. B. Reeves, Supt.	A
Grimes C. Co.	Rockwell City	Roy Chard, Supt.	A
Grinnell C. Co.	Grinnell	Geo. H. Kelley	A
Growth's C. Co.	Council Bluffs		(N.O.)
Guttenberg C. Co.	Guttenberg	C. W. Lake	(N.O.)
Independence C. Corporation	Independence	F. J. Wickerwarth	A
Iowa C. Co.	*Vinton	G. E. Carrier	(N.O.)
Iowa C. Co.	Garrison	Ben McGill, Supt.	(N.O.)
Iowa C. Co.	La Porte	C. J. Powell, Supt.	A
Iowa C. Co.	Shellsburg	Harry Bender, Supt.	A
Iowa City C. Co.	Iowa City	Paul Reed	A
Iowa Valley G. Co.	Marion	B. S. Schwartzbaw	A
Kelley C. Co.	Waverly	O. C. Mitchell	A
Keokuk C. Co.	*Keokuk	W. V. D. Mass	C
Keokuk C. Co.	Fl. Madison		C
Lake Mills C. Co.	Lake Mills	Irving Nelson	A
Merrill C. Co.	Harris	G. W. Kirtley	A
Marshall C. Co.	*Marshalltown	Merritt Greene, Jr.	A-C-E-F-I-K-N J-I-j-p-r-t-Sp. (N.O.)
Marshall C. Co.	Hampton		(N.O.)
Marshall C. Co.	Roland	Joe Thompson, Supt.	(N.O.)
Monticello C. Co.	Monticello	H. M. Carpenter	(N.O.)
Osceola Fruit Pro. Co.	Hamburg	L. E. Shannon, Supt.	A
Red Oak C. Co.	Red Oak	A. E. Tracy	A
Riverside C. Co.	Hamburg	F. W. Castleman	C
Sac City C. Co.	*Sac City	M. W. Jones	A
Sac City C. Co.	Storm Lake	E. Marchant, Supt.	A
Story Farmer C. Co.	Story City	E. F. Farmer	A
Tipton Farmer C. Co.	Tipton	J. Lefky, Farmer	A
Tripp C. Association	Tripp	L. W. Stagner	A
Vinton C. Co.	Forest City	L. W. Perry	A
V. F. Farmer C. Co.	Mt. Pleasant	V. F. Farmer	A
Waterloo C. Co.	*Waterloo	E. C. Bell	A
Waterloo C. Co.	Dyersville	O. H. Loke, Supt.	A
Waterloo C. Co.	Dyersville	Tom Evans, Supt.	A
Weir C. Co.	Toledo	H. V. Weir	A
Wiegler C. & Pres. Co.	Muscataine	F. L. Grigg	C-E-F-p-1

CONDIMENTAL STOCK FOODS

The law regulating the sale of these products requires, among other things, that the manufacturer pay an annual license of \$100. Since the passage of this law several years ago there has been a contention by some of the manufacturers of these products that if their products were not labeled or represented as a food they were not required to pay the license.

The department has had several cases in the courts to settle this matter, but has never been able to get a decision in the higher courts which would establish any certainty as to the requirements for this class of products.

The result is that out of fifty-three manufacturers of these products in the state, but twenty-six have paid their licenses, and the rest refuse on the ground that the law does not include their products. It is unfair to these twenty-six who pay this license to permit the other twenty-seven to operate without paying.

I would recommend that the legislature amend this law in such a way as to clarify the situation and enable the department to enforce it without any misgivings as to the decisions of the courts. The law should define this class of products in such a way as to leave no question as to who is required to pay the license.

COMMERCIAL FEEDING STUFFS

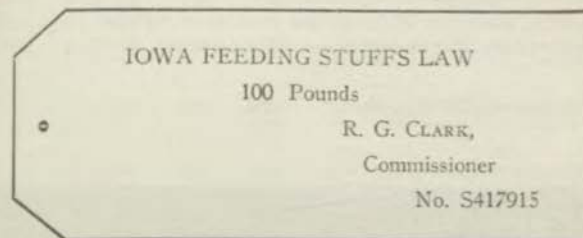
A list of commercial feeds analyzed by the department is given in the following table. The table shows the analysis as claimed by the manufacturer and that found by the department.

The purpose of the law is to require all commercial feeds which are offered for sale in Iowa to be registered with the department. This registration shows the analysis of the feed and a list of the ingredients of which the feed is composed. The law protects the consumer against misbranded, adulterated or short-weight feeds. It likewise protects the manufacture of honest feeds against dishonest competitors. The feeder is thereby enabled to select the best feeds for his purpose by reading the label on the package.

Registrations when made are permanent, but can be changed upon written request by the manufacturer.

The tax tag must be on every package of feed offered for sale, except wheat bran, shorts and middlings, rye bran, shorts and middlings, and buckwheat bran, shorts and middlings, manufactured in this state. It is a violation of the law if this tag is not properly at-

tached to each sack of feed. These tax tags are printed in 25-pound, 50-pound, and 100-pound denominations and are furnished by the department at 10 cents per ton.



This is the Iowa official tag for a 100-pound package of feed.

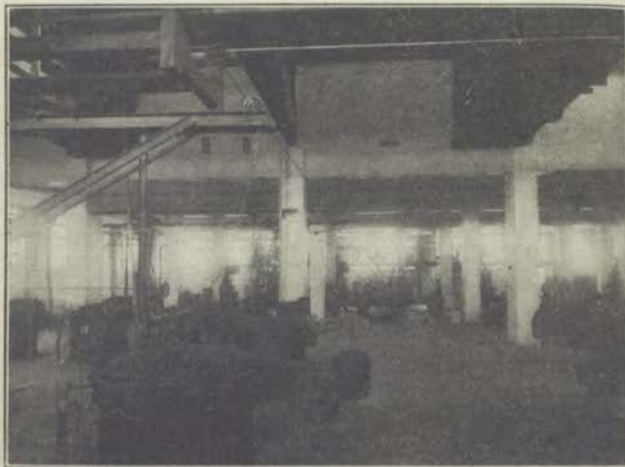
Some manufacturers frequently do not attach the tax tag to each sack, but instead put the required number of tags in the car of feed expecting the purchaser to place them on each sack. Often the dealer fails to do this and in some cases claims he saw no tags when he unloaded the car. The law requires the manufacturer to place these tags on each sack and he should not ask the dealer to do it for him, as the manufacturer is liable if the tags are not on each sack.

When the feeder has reason to doubt the correctness of the branding on the feed he buys he may take a fair sample of the feed and send to the Dairy and Food Commission with \$1.00 and an analysis will be made for him. Samples should be taken from several sacks and mixed well together and a portion of this submitted for analysis. The department cannot make analyses for manufacturers. They should obtain this from their own chemist or a commercial chemist.

The law makes no provision for the payment of a refund by the manufacturer, to purchasers of feeds which have been found to contain a less amount of protein than is stated on the label. Where there is no apparent intention of the manufacturer to violate the law, we will calculate the amount of refund on the basis of the protein deficiency to be paid to the purchaser. If the purchaser is a dealer it is understood that he will make a proper refund to each of his customers to whom he has sold some of the feed found below the guarantee. Payment of the refund, however, will not restrict the department from taking such legal action as it may deem advisable.

The analyses of feeds collected by the inspectors and reported in the following table shows that the manufacturer is observing the law

in all but a few cases. The greatest discrepancy is found in tankage. This is due no doubt to a failure of some manufacturers to have each lot of tankage analyzed before it leaves the factory. From samples of rendering house tankage submitted to the laboratory it is our opinion that very little of this product is suitable for feeding tankage. Much of it should be used for fertilizer.



Filling the Cans—An interesting part of the job of putting up Iowa's sweet corn crop.

ALFALFA MEALS

Lab. No.	KIND	MANUFACTURER	PERCENTAGE OF					
			Protein		Fat		Fiber	
			Claimed	Found	Claimed	Found	Claimed	Found
3417	Alfalfa Meal	Dew Moines Flour & Feed Co.	10.00	15.44	1.00	2.95	20.00	23.00
1371	Alfalfa Meal	M. C. Peters Mill Co.	10.00	14.04	1.00	2.49	20.00	20.82
1373	Alfalfa Molasses	T. R. Herd Alfalfa Meal Co.	10.00	13.62	1.00	2.41	20.00	20.50
1422	Alfalfa	Grain Belt Mills Company	10.00	9.58	.75	1.88	26.00	20.87
		MOLASSES FEED						
31	Molasses Feed	Grain Belt Mill Company	8.00	8.63	.50	9.07	25.00	18.70
32	Molasses Feed	M. C. Peters Mills Company	10.00	12.26	.50	.61	26.00	21.90
		HOG FEED						
1091	Hog Feed	Arms Manufacturing Company	25.50	26.58	5.00	7.61	7.00	10.70
1027	Hog Feed	Grain Belt Mills Company	20.00	21.00	3.50	5.02	8.50	8.00
797	Hog Feed	Ed. J. Butler Company	25.00	25.00	4.00	6.59	10.00	10.77
		WHEAT FEEDS						
23	Wheat Shorts	Leavenworth Mills	15.39	10.07	3.37	4.84	3.39	2.85
2234	Wheat Heads	Mixed Feed Company	20.00	24.53	8.00	11.31	3.00	2.91
35	Wheat Shorts (only)	Ant. Junius Mills Company	16.00	17.71	3.50	4.72	8.00	6.70
1626	Wheat Shorts and Screenings	Geack Milling Company	16.00	13.95	3.00	5.70	5.00	6.39
1443	Wheat Shorts	Geack Milling Company	16.00	13.95	3.00	5.70	5.00	6.39
3715	Bran	Dew Moines Flour & Feed Company	14.50	21.21	4.50	8.85	11.00	11.01
1096	Bran	Earl Akers	16.11	14.62	3.88	3.87	9.14	10.00
1093	Bran	Scott Logan Milling Company	13.00	14.92	4.00	5.50	7.00	12.19
1029	Bran	Russell Milling Company	10.00	18.17	4.00	6.08	11.00	11.59
1374	Bran	Scott Logan Milling Company	10.00	18.17	4.00	6.08	11.00	11.59
1375	Bran	Scott Logan Milling Company	10.00	18.17	4.00	6.08	11.00	11.59
1415	Bran and Screenings	Christen Flour & Feed Company	14.50	15.61	3.80	4.82	11.00	9.44
34	Bran and Screenings	Hopkirk Company	12.26	12.80	3.46	3.92	9.50	8.84
1095	Middlings	Ant. Junius Mills Company	14.50	17.75	3.50	4.44	11.00	9.53
793	Middlings	Scott Logan Milling Company	15.00	14.22	4.00	4.83	6.00	4.37
1443	Middlings	Rust Fogarty Milling Company	16.00	16.39	3.50	4.01	6.50	6.66
1370	Middlings	Scott Logan Milling Company	16.00	16.39	3.50	4.01	6.50	6.66
1389	Middlings	Watscho & Cedar Falls Milling Company	17.00	16.40	5.00	5.67	8.00	10.83
1370	Middlings	Wells Abbott Numan Company	16.05	16.61	4.00	6.91	7.00	6.19
1628	Wheat Bran	Wells Abbott Numan Company	14.50	12.11	3.50	4.73	10.00	6.01
3130	Wheat Bran	Cresc Mills	14.50	14.05	3.50	3.88	11.00	11.22
1280	Wheat Bran (conow)	Omaha Flour Mills Company	18.50	14.62	3.50	4.15	11.00	10.43
1728	Wheat Feed	Russell-Miller Milling Company	15.00	17.48	4.50	6.77	10.00	9.48

ALFALFA MEALS—Continued

Lab. No.	KIND	MANUFACTURER	PERCENTAGE OF					
			Protein		Fat		Fiber	
			Claimed	Found	Claimed	Found	Claimed	Found
1416	Wheat Feed	Quaker Milling Company	15.00	17.56	4.50	6.80	10.00	9.83
1730	Wheat Middlings	Russell & Miller Milling Company	15.00	17.03	4.50	6.32	8.50	7.29
1421	Wheat Middlings	Linneth Mills	16.25	17.03	3.75	3.87	2.85	4.01
1412	Wheat Shorts	Levington Mill & Elevator Company	16.00	15.63	3.50	4.38	2.00	1.71
798	Wheat Shorts	Centennial Mill Company	13.90	14.92	4.00	4.20	7.00	5.21
		MISCELLANEOUS						
799	Dry Mash	Quaker Oats Company	20.00	24.08	4.00	3.83	10.00	8.00
1229	Calf Meal (Oil Feed)	Blairfield Calf Meal Company	24.00	26.60	5.00	5.24	7.75	5.05
1366	Oil Meal	Scott Lumber	31.00	35.89	5.00	5.00	10.00	7.79
1367	Poultry Feed	Spencer Kenyon & Sons, Inc.	9.00	10.91	2.50	6.23	10.00	4.00
1424	Red Dog	Washburn Mills	15.00	17.03	4.00	5.28	4.00	4.46
33	Scratch Feed	Quaker Oats Company	10.00	10.43	2.00	2.90	5.00	2.90
1731	Linneth Meal	Des Moines Flour & Feed Company	24.00	26.12	5.00	7.81	11.00	8.29
1732	Middling	Des Moines Flour & Feed Company	32.00	37.26	3.50	5.01	8.00	7.24
1733	Scratch Feed	Des Moines Flour & Feed Company	10.00	10.90	2.50	4.43	5.00	3.49
375	Ground Linneth Cake	Minnesota Linneth Oil Company	31.00	28.62	05.00	00.00	00.00	00.00
2231	Oil Meal	Midland Linneth Company	32.00	33.17	00.00	00.00	00.00	00.00
2378	Oil Meal	Roswell Flour & Feed Company	23.00	32.17	00.00	00.00	00.00	00.00
1444	Oil Meal Linneth Cake	Minnesota Linneth Oil Company	24.00	32.75	00.00	00.00	00.00	00.00
36	Pure Linneth Oil Meal	Midland Protein Company	30.00	34.74	00.00	00.00	00.00	00.00
1062	Oil Meal	Farmer Co-operative Association	33.00	32.25	00.00	00.00	00.00	00.00
769	Tankage	Gen. A. Hornell & Company	60.00	67.29	00.00	00.00	00.00	00.00
1366	Swift's Meat Bone Straps	Yankerman Seed Company	60.00	54.97	00.00	00.00	00.00	00.00
783	Tankage	Armour & Company	60.00	49.69	00.00	00.00	00.00	00.00
784	Tankage	Swift & Company	60.00	50.88	00.00	00.00	00.00	00.00
1440	Tankage	Albert Lea Packing Company	60.00	60.42	00.00	00.00	00.00	00.00
792	Tankage	Boeggs Grain Producers Company	60.00	62.96	00.00	00.00	00.00	00.00
791	Tankage	Roosevelt Brothers	60.00	58.96	00.00	00.00	00.00	00.00
1372	Tankage	Edw. J. Butler & Company	60.00	63.13	00.00	00.00	00.00	00.00
1373	Tankage	Archibald Linneth Company	34.00	34.00	00.00	00.00	00.00	00.00
29	Cottonseed Meal	Shorts & Sons Company	34.00	43.02	00.00	00.00	00.00	00.00
77	Cotton Seed Meal	Shorts & Sons Company	43.00	43.96	00.00	00.00	00.00	00.00

795

2277

1374

3279

Tankage

Tankage

Tankage

Tankage

Gen. A. Hornell Company

Dobson & Sons

Edw. J. Butler Company

Edw. J. Butler Company

60.00

60.00

60.00

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INSECTICIDES AND FUNGICIDES

The law regulating the sale of insecticides and fungicides in Iowa became effective in 1917 and since that time fruit raising has become an industry of considerable proportions. The orchardist and the farmer with only a small orchard has found that without proper spraying of his fruit trees the crop is of little value.

The State Horticultural Association and the extension service of the state college has been instrumental in instructing fruit growers how to care for their trees and in the use of proper spraying materials. In order to determine the quality and the truthfulness of the labels on these products the department has analyzed a large number, the results of which are found in the following table. Arsenicals must contain their arsenic in combined form and too much water soluble arsenic must be avoided, as it will affect the foliage. It is the chemical compounds of arsenic which adhere to the foliage and wood of the tree that destroys the insects and fungi.

It will be noted that there is very little discrepancy between the branded analysis and that found by the chemists of the department.

INSECTICIDES AND FUNGICIDES ANALYZED BY DAIRY AND FOOD COMMISSION

KIND	MANUFACTURER	Total Arsenic Oxide, per cent		Water Soluble Arsenic, per cent	
		Claimed	Found	Claimed	Found
Lead Arsenate	Amibacher's	28.00	24.10	1.00	.82
Paris Green	Durbin Reynolds Co.	30.00	32.10	1.00	.82
Paris Green	Durbin Reynolds Co.	30.00	32.10	1.00	.82
Lead Arsenate	Durbin Reynolds Co.	15.00	16.45	.75	.20
Lead Arsenate	The Glidden Co.	15.00	16.62	.75	.22
Lead Arsenate	The Glidden Co.	31.00	32.15	.50	.47
Lead Arsenate	Tobols-Bee-Spray Co.	30.00	32.65	.50	.47
Lead Arsenate	The Glidden Co.	42.00	42.00	1.00	.43
Calcium Arsenate	The Glidden Co.	32.00	32.60	1.00	.43
Calcium Arsenate	Durbin Reynolds Co.	37.50	37.55	1.50	.62
		Total Arsenious Oxide, per cent		Water Soluble Arsenious Oxide, per cent	
		Claimed	Found	Claimed	Found
Paris Green	J. A. Blanchard Co.	50.00	55.20	3.50	3.42
Paris Green	Amibacher's	50.00	55.00	3.50	3.73
Paris Green	Durbin Reynolds Co.	50.00	54.45	3.50	3.40
Paris Green	Durbin Reynolds Co.	50.00	54.45	3.50	3.40
Paris Green	Rogers (Detroit White Lead)	50.00	54.50	3.50	3.63
Paris Green	Sherrin-Williams Co.	50.00	54.51	3.50	2.99
Paris Green	Rogers (Detroit White Lead)	50.00	54.53	3.50	3.10
Paris Green	Durbin Reynolds Co.	50.00	54.50	3.50	3.70
Paris Green	Durbin Reynolds Co.	50.00	55.50	3.50	3.75
		Per cent of Copper			
		Claimed	Found		
Boards	Amibacher's	12.00	11.40		
Boards	Amibacher's	12.00	11.94		
Boards	Amibacher's	12.00	12.56		
Boards	The Glidden Co.	16.00	15.92		
Boards	Durbin Reynolds Co.	11.00	10.81		
Boards	Durbin Reynolds Co.	11.00	11.03		
Boards	Durbin Reynolds Co.	11.00	11.12		
Dry Boards	Rogers (Detroit White Lead)	11.00	11.72		

KIND	MANUFACTURER	Calcium Polyphosphates per cent		Calcium Theophosphates per cent		Free Sulphur, per cent	
		Claimed	Found	Claimed	Found	Claimed	Found
Low Sulphur	Shaw's-Williams Co.	62.00	62.36	5.00	5.22	12.00	16.23
Line Sulphur	Shaw's-Williams Co.	63.00	61.71	5.00	6.22	12.00	16.18
Line Sulphur	Rogers (Darkest White Lead Works)	63.00	61.71	5.00	6.22	12.00	16.18
Line Sulphur	The Gladdo Company	63.00	61.71	5.00	6.22	12.00	16.18
Line Sulphur	The Gladdo Company	71.00	67.19	5.00	17.18	8.00	23.99
Line Sulphur Solution	Borden Drug Co. (St. Louis, S. D.)	38.00	32.98	1.00	6.40	1.17	19.95
Line Sulphur Solution	Toledo-Ice-Spray Co.	32.00	29.95	2.00	1.17	2.99	1.76
Total Sulphur						25.00	31.01
Bordeaux Arsenate	The Gladdo Co.		Water Soluble Arsenic	Claimed	33	Found	36
London Purple	Hemingway, & Co.		Total Arsenous Oxide	Claimed	21.00	Found	20.60
Bog Finish	Mitchigan (Titanum Co)		Water Soluble Arsenic	Claimed	7.50	Found	1.60
Potato Spray	Rogers (Darkest White Lead Co.)		Total Arsenic	Claimed	1.00	Found	1.00
			Water Soluble	Claimed	24.00	Found	30.15
				Claimed	3.00	Found	1.76

VIOLATIONS OF THE DAIRY LAW

No.	Sold for	Violation	Prosecution Against	Inspector
7291		Over reading Babcock Test	S. I. Mearns, Elliott	R. O. Brownlee
2371		Luminary conditions and manipulation of test	J. T. Hagen, Dale City	R. O. Brownlee
2370		Over reading Babcock Test	L. W. Woodruff, Panama	R. O. Brownlee
3366		Over reading Babcock Test	C. J. Case, Dohert	R. O. Brownlee
4321		Operating test in violation of law	E. C. Mohr, Ardena	R. O. Brownlee
4319		Operating test in violation of law	Paul High Schuler, Magnolia	R. O. Brownlee
4318		Over reading Babcock Test	Holstein Co-operative Creamery, Kincaid	R. O. Brownlee
4894		Below standard	Martin Larson, Honey Creek	R. O. Brownlee
2163		Serving colored oleomargarine	R. J. Beale, Schaller	T. A. Clarke
2162		Over reading Babcock test	R. S. Dahl, Ardena	T. A. Clarke
2171		Under reading Babcock Test	J. M. Mearns, Rock	T. A. Clarke
5163		Advertised	Mr. Harper, Boherville	T. A. Clarke
533				

3172	Cream Station	No license	J. S. Capelin, Dows	T. A. Clarke
425	Cream Station	No license	Mrs. Ed B. Vakeri, Cushing	T. A. Clarke
2389	Cream Station	No license	A. E. Rolland, Boherville	T. A. Clarke
2170	Cream Station	No license	Chas. Meyer Friedman, Forest City	T. A. Clarke
2379	Milk	Below standard	Nick Arroy, Ardena	T. A. Clarke
2395	Milk	Below standard	Charlie Taylor, Eckerville	T. A. Clarke
127	Oleomargarine	False advertising	Harry Goldman & Co., Des Moines	M. E. McMurray
128	Oleomargarine	False advertising	M. E. Sperry, Lake	F. L. Odell
9659	Oleomargarine	Misbranding	G. E. Kavan, Spencer	F. L. Odell
6584	Oleomargarine	Misbranding	Carlberg Bros., Ardena	F. L. Odell
6247	Oleomargarine	Misbranding	F. M. Williams & Son, Larchwood	F. L. Odell
6346	Oleomargarine	Misbranding	W. D. Patterson, Cherokee	F. L. Odell
9529	Oleomargarine	Misbranding	Main's Cash Grocery, Cherokee	F. L. Odell
9530	Oleomargarine	Misbranding	R. F. & G. Sperry, Lake	F. L. Odell
9031	Oleomargarine	Misbranding	Geo. E. Carson, Spirit Lake	F. L. Odell
9030	Oleomargarine	Misbranding	May's Cash Department Store, Spirit Lake	F. L. Odell
6077	Butter	Below fat standard	W. F. Herbst, Larchwood	F. L. Odell
1011	Oleomargarine	Serving colored oleo for better	Forman Mutual Creamery, Hoopors	F. L. Odell
127	Oleomargarine	Serving colored oleo for better	Nathan Selditz, Davenport	F. L. Odell
4675	Oleomargarine	Serving colored oleo for better	Jack Manley's Cafe, Ottumwa	F. L. Odell
6671	Cream	Below standard	A. L. Louis Cafe, Ottumwa	F. L. Odell
9565	Cream	Below standard	S. Hart, Keokuk	F. L. Odell
5927	Cream	Below standard	A. H. Rein, Keokuk	F. L. Odell
5919	Milk	Below standard	Washington Cafe, Muscatine	F. L. Odell
6900	Milk	Below standard	Ottumwa Hotel, Ottumwa	F. L. Odell
6998	Milk	Below standard	Blair Bird Cafe, Ottumwa	F. L. Odell
6997	Milk	Below standard	Puritan Cafe, Ottumwa	F. L. Odell
6998	Milk	Below standard	M. E. Sperry, Lake	F. L. Odell
5973	Milk	Below standard	Gulitzer Cafe, Davenport	F. L. Odell
5974	Milk	Below standard	Davenport Cafe, Davenport	F. L. Odell
5971	Milk	Below standard	Liberty Cafe, Muscatine	F. L. Odell
5970	Milk	Below standard	L. E. McDowell, Muscatine	F. L. Odell
5969	Milk	Below standard	Lincoln Cafe, Davenport	F. L. Odell
2062	Milk	Below standard	Louis Lunch Room, Davenport	F. L. Odell
2061	Milk	Below standard	Re. De Good, Albia	F. L. Odell
2815	Cream Station	No license	Corbetta & Mohrs, Davenport	F. L. Odell
2674	Cream	Incorporated	Ed Martens, St. Paul	F. L. Odell
2675	Cream	Serving colored oleo	Thos. W. Morris, Sheffield	F. L. Odell
1465	Oleomargarine	Serving colored oleo	T. C. Thomsen, Coeclair	F. L. Odell
1462	Oleomargarine	Over-reading Babcock Test	F. W. Baxter, Sheffield	F. L. Odell
1459	Cream Station			F. L. Odell

VIOLATIONS OF THE DAIRY LAW—Continued

No.	Sold for	Violation	Prosecution Against	Inspector
1519	Cream Station	Over-reading Babcock Test	P. E. Bessh, Van Cleve	H. E. Forrester
1520	Cream Station	Over-reading Babcock Test	A. M. Giger, Toledo	H. E. Forrester
1521	Cream Station	Over-reading Babcock Test	G. W. Stewert, Parkersburg	H. E. Forrester
1522	Cream Station	Under-reading Babcock Test	W. F. Stewart, Laurel	H. E. Forrester
1523	Cream Station	No license	Albena Srochola, Walford	H. E. Forrester
1484	Cream Station	No license	C. M. Nubbels, Garrison	H. E. Forrester
1485	Cream Station	No license	A. E. Sneyg, Dayton	H. E. Forrester
1486	Cream Station	No license	E. J. W. Adams, Welfelburg	H. E. Forrester
1487	Cream Station	No license	C. F. Crick, Webster City	H. E. Forrester
1488	Cream Station	No license	A. H. Lessall, Stratford	H. E. Forrester
1489	Cream Station	No license	Edith W. Newman, Welfelburg	H. E. Forrester
1490	Cream Station	Adulterated	H. E. Winstler, Marshalltown	H. E. Forrester
1491	Cream Station	Below standard	E. L. Munson, Tama	H. E. Forrester
1492	Cream Station	Not pasteurizing skim milk	G. M. Thompson, Marshalltown	H. E. Forrester
1493	Cream Station	Not pasteurizing skim milk	Little Valley Creamery, Summit	H. E. Forrester
1494	Cream Station	Not pasteurizing skim milk	Kenslyn Creamery Co., Keosauqua	H. E. Forrester
1495	Cream Station	Not pasteurizing skim milk	Devere Creamery Co., Deary	H. E. Forrester
1496	Cream Station	Not pasteurizing skim milk	A. E. Zernth, Sumner	H. E. Forrester
1497	Cream Station	Insanitary cream cans	Giger Prodous Co., Toledo	H. E. Forrester
1498	Cream Station	Failure to make annual reports	North Iowa Produce Co., McGregor	H. E. Forrester
1499	Milk and Cream	Below standard	L. C. Churchill, Dayton	Ray Stokes
1500	Milk	Below standard	Walter Humphrey, West Union	W. W. Stephens
1501	Oleomargarine	Serving colored oleomargarine	Epworth Hotel, Epworth	F. W. Stephenson
1502	Oleomargarine	Adulterated with formaldehyde	J. S. Wheeler, Monona	H. E. Ritter
1503	Oleomargarine	No license	A. H. Winstler, Baxter	H. E. Ritter
1504	Oleomargarine	Below standard	Waldo Bliver, West Union	H. E. Ritter
1505	Oleomargarine	Below standard	H. E. Winstler, West Union	H. E. Ritter
1506	Oleomargarine	Below standard	Hawkeye Dairy, Des Moines	W. B. Barney, Jr.
1507	Oleomargarine	Below standard	Columbia Lunch, Des Moines	W. B. Barney, Jr.
1508	Oleomargarine	Below standard	John Fraba, Waverly	O. P. Thompson
1509	Oleomargarine	Below standard	E. Eaton, Marquette	O. P. Thompson
1510	Oleomargarine	Below standard	W. C. Beck, Marquette	O. P. Thompson
1511	Oleomargarine	Below standard	C. H. Hicks, Marshalltown	R. M. Allen
1512	Oleomargarine	Below standard	New Virginia Cafe, Marshalltown	R. M. Allen
1513	Oleomargarine	Below standard	E. Ottum, Marshalltown	R. M. Allen
1514	Oleomargarine	Below standard	W. H. Mederhauer, Marshalltown	R. M. Allen
1515	Oleomargarine	Below standard	Wm. Springer, Marshalltown	R. M. Allen

18462	Cream	Below standard	Geo. L. Andrews Co., Marshalltown	R. M. Allen
18463	Cream	Not properly branched	Yost Bros., Davenport	H. J. High
173	Milk	Below standard	U. S. Dairy Co., Davenport	H. J. High
166	Milk	Below standard	Joe Zink, Cedar Rapids	Phillip Fry
3362	Milk	Below standard	Sanitary Dairy Co., Cedar Rapids	Chris Ottosen
3363	Milk	Below standard	M. O. Voelke, Parkersburg	Chris Ottosen
2241	Eggs	Decomposed	Chris Hartman, Waterloo	Chris Ottosen
2242	Eggs	Decomposed	W. Dugdale, LeRoyville	Chris Ottosen
2243	Eggs	Decomposed	W. A. Widrow, LeRoyville	Chris Ottosen
2247	Eggs	Containing saccharine	O. W. Stuber, Moulton	H. E. Ritter
1346	Ice Cream	Below standard	W. A. Widrow, Moulton	H. E. Ritter
1345	Ice Cream	Below standard	W. F. Berry Company, Moulton	H. E. Ritter
1347	Ice Cream	Below standard	Des Moines Milk Co., Des Moines	H. E. Ritter
2127	Cream	Decomposed	Paul O'Hara, Climax	J. W. Milnes
1645	Eggs	Decomposed	W. P. Murray, Malvern	J. W. Milnes
1413	Eggs	Decomposed	John Bennett, Tipton	J. W. Milnes
1414	Eggs	Decomposed	A. W. Self, Corcorville	J. W. Milnes
1415	Eggs	Not candling	W. M. Pratt, O'Leary	J. W. Milnes
1416	Eggs	Not candling	Samuel K. Rowe, Anthon	J. W. Milnes
1417	Eggs	Not candling	Samuel K. Rowe, Anthon	J. W. Milnes
1418	Eggs	Containing saccharine	Moore & Reed, Boone	J. O. Vandoe Rogart
177	Eggs	Decomposed	J. M. Jacobsen, Des Moines	J. A. Jackson
2029	Eggs	Decomposed	D. M. Leding, Hebron	J. A. Jackson
7523	Eggs	Decomposed	P. M. St. Lb., Mackey	J. A. Jackson
14345	Meat	Not candling	W. J. Brown, Mt. Vernon	J. A. Jackson
6882	Ice Cream	Below standard	Stewart Hotel, Washington	E. W. Neebhan
6883	Ice Cream	Below standard	Davenport Ice Cream Co., Davenport	E. W. Neebhan
313	Ice Cream	Below standard	Davenport Ice Cream Co., Davenport	E. W. Neebhan
2053	Ice Cream	Below standard	Davenport Ice Cream Co., Davenport	E. W. Neebhan
4909	Eggs	Decomposed	R. P. Store, Anna, Illinois	B. O. Browale
4812	Eggs	Decomposed	John Anderson, Brayton	B. O. Browale
4811	Eggs	Decomposed	H. P. Hanson, Brayton	B. O. Browale
4810	Eggs	Decomposed	A. C. Knudsen, Gates	B. O. Browale
4813	Eggs	Decomposed	Ever Mercantile, Jr., Hamlin	B. O. Browale
2267	Eggs	Decomposed	Boston Candy Kitchen, Chicago	B. O. Browale
4404	Ice Cream	Below standard	Shaw White Pharmacy, Chicago	B. O. Browale
814	Ice Cream	Below standard	Getling & Sires, Harper	B. O. Browale
790	Eggs	Not candling	Roy Hill, New London	B. O. Browale
192	Eggs	Not candling	Shaw White Pharmacy, Chicago	B. O. Browale
4943	Eggs	Not candling	Shaw White Pharmacy, Chicago	B. O. Browale
6100	Ice Cream	Misbranded	LaMara Bottling Works, LaMara	J. M. Morrow
6237	Ice Cream	Below standard	C. S. Brown, Arnold Park	J. M. Morrow
6239	Ice Cream	Below standard	C. S. Brown, Arnold Park	J. M. Morrow
6764	Eggs	Decomposed	James B. Conner, LeMars	F. L. Odell

VIOLATIONS OF THE DAIRY LAW—Continued

No.	Sold for	Violation	Prosecution Against	Inspector
1687	Eggs	No license	Albert Scheffer, Carmel	F. L. Odell
1688	Eggs	No license	P. Prince, Sr., Lebanon	F. L. Odell
1640	Eggs	No license	H. H. Bomgaars, Middleburg	F. L. Odell
1689	Eggs	Not candling	P. Prince, Sr., Lebanon	F. L. Odell
1690	Eggs	Not candling	Garret Klein, Sioux Center	F. L. Odell
1691	Eggs	Not candling	A. Arendsen, Sioux Center	F. L. Odell
1041	Eggs	Not candling	H. H. Bomgaars, Middleburg	F. L. Odell
5081	Pop.	Containing saccharine	L. G. Cross, Akron	L. P. Anderson
2228	Ice Cream	Below standard	Marcucci Bros., Bella Plaine	H. E. Forrester
1511	Ice Cream	Below standard	Ulben & Grange, Webster City	H. E. Forrester
1522	Cream	Decomposed	Carl T. Irish, Montour	H. E. Forrester
1521	Cream	Decomposed	B. M. East, Albion	H. E. Forrester
2232	Cream	Decomposed	Jackson Dairy Co., Marshalltown	H. E. Forrester
3317	Eggs	No license	H. Miller, Cedar Rapids	H. A. Stearns
2270	Eggs	No candling certificate	Farmers Union Exchange, Solon	H. A. Stearns
781	Eggs	Decomposed	Jake Smith, North English	H. A. Stearns
311	Pop.	Containing saccharine	Liddy & Rickfitts, Monticello	H. A. Stearns
6853	Pop.	Containing saccharine	R. W. Schuele, Durant	H. A. Stearns
3010	Eggs	Decomposed	T. Epstein, Sioux City	E. A. Countryman
3009	Eggs	Decomposed	M. Robinson, Sioux City	E. A. Countryman
3008	Eggs	Decomposed	E. Klase, Sioux City	E. A. Countryman
3006	Eggs	Not candling	H. Haskin, Sioux City	S. A. Countryman
3007	Eggs	Not candling	Wm. Ostroff, Sioux City	E. A. Countryman
3005	Eggs	Not candling	C. F. Baird, Climbing Hill	E. A. Countryman
2357	Eggs	Not candling	A. Maxman & Co., Rodney	E. A. Countryman
22041	Eggs	Not candling	Claus Ehlers, Reinbeck	M. W. Knapp
23042	Eggs	Not candling	Harold Graeber, Littleport	M. W. Knapp
1440	Eggs	Not candling	Consumers Mercantile Co., Ionia	Roy Scoles
9	Eggs	Not candling	Dolgin & Swarta, Waukon	Roy Scoles
6	Eggs	Not candling	Gus Mitchell & Son, Rockford	Roy Scoles
1441	Eggs	Decomposed	E. D. Hanson, Ionia	Roy Scoles
3516	Milk	Adulterated	Homer Card, Waterloo	O. P. Thompson
6154		Insanitary cans	Wm. Cutsford, Lawler	Roy Scoles
3381	Meat Market	Insanitary	Jordan Kirschhoff, Mason City	Roy Scoles
22033	Restaurant	Insanitary conditions	L. H. Johnson, Marshalltown	M. W. Knapp
22034		Unlawful street display of fruits	D. M. Caperic, Marshalltown	M. W. Knapp
1339	Restaurant	Insanitary restaurant and fountain	I. M. Cole, Roland	M. W. Knapp
1802	Grocery Store	Unprotected goods on display	Peoples Grocery, Sioux City	A. D. Hayes
2719	Bakery	No license	Henry Bentinger, Dannelson	M. E. Flynn
2724	5 and 10c Store	Unprotected goods on display	W. W. Woodworth, Burlington	M. E. Flynn
2723	Meat Market	No license	R. Pilgrim & Son, Muscatine	M. E. Flynn
2317	Grocery	Insanitary conditions	J. A. Furlong, Keokuk	M. E. Flynn
2926	Cream Station	Insanitary conditions	R. M. Dawson, Kennedy	H. E. Ritter
1974	Cream Station	Insanitary conditions	Geo. W. Chittenton, Milo	H. E. Ritter
2128	Cream Station	Insanitary conditions	C. C. Barker, Ackworth	H. E. Ritter
1340	Cream Station	Insanitary conditions	M. Millang, Roland	H. E. Ritter
1338	Confectionery	Insanitary fountain and basement	Stalpmann & Jorris, Grinnell	H. E. Ritter
1665		Insanitary ice cream containers	E. D. Seymour, Pleasanton	H. E. Ritter
2941	Slaughter house	Insanitary conditions	S. M. Holvick, Zearing	E. A. Countryman
3026	Meat Market	Insanitary conditions	S. A. D. Smith, Scranton	E. A. Countryman
3001	Meat Market	Insanitary conditions	Merriman & Co., Sac City	E. A. Countryman
3028	Meat Market	Insanitary conditions	Lawton Mercantile Co., Lawton	E. A. Countryman
3046	Meat Market	Insanitary conditions	Lawton Mercantile Co., Lawton	E. A. Countryman
2022	Cream Station	Insanitary conditions	Craven Cream Station, Tipton	E. W. Neasham
6890	Confectionery	Insanitary ice cream containers	T. W. Enelson, Denmark	E. W. Neasham
6891	Confectionery	Insanitary ice cream containers	Rollo Gill, Denmark	E. W. Neasham
3175	Restaurant	Insanitary ice cream containers	Conrad Bros., Brighton	E. W. Neasham
1098	Restaurant	Insanitary conditions	Jergen-Matzen, Lake Park	F. L. Odell
3716	Slaughter House	Insanitary conditions	Lee & Benjamin, Correctionville	F. L. Odell
1099	Bakery	Insanitary conditions	Jergen Matzen, Lake Park	F. L. Odell
9941	Meat Market	No license and insanitary conditions	Geo. G. Smith, Sheldon	F. L. Odell
9037	Cream Station	Insanitary conditions	Carl Fisher, Grandville	F. L. Odell
9036	Cream Station	Insanitary conditions	Ernest W. Graves, Adaville	F. L. Odell
9035	Bakery	Insanitary conditions	John Ogilvie, LeMars	F. L. Odell
9044	Meat Market	No license	Abraham Van Slunter, Sheldon	F. L. Odell
9040	Bakery	Insanitary conditions	Chas. Schmidt, Sheldon	F. L. Odell
7948	Grocery	Insanitary conditions	Jacob Etzelan, Newton	J. M. Morrow
413		Sidewalk display of fruits	Tony Gut, Waterloo	Chris Ottosen
415		Sidewalk display of fruits	Pete Carl, Waterloo	Chris Ottosen
2238	Confectionery	Insanitary fountain	Clarence Foster, Storm Lake	Chris Ottosen
2233	Restaurant	Insanitary condition	Nathan Warner, Storm Lake	Chris Ottosen
2228	Restaurant	Insanitary condition	J. W. Sparrow, Algona	Chris Ottosen
418	Slaughter House	Insanitary condition	Wurdern & Alva, Emmetsburg	Chris Ottosen
419	Slaughter House	Insanitary condition	Jones & Jackson, Emmetsburg	Chris Ottosen
2251	Meat Market	Insanitary condition	Walner & Strom	Chris Ottosen
414	Meat Market	Insanitary condition	Rabiener & Rabiener, Waterloo	Chris Ottosen
488	Restaurant	Insanitary condition	Johnson & Knutson, Clarion	Chris Ottosen
497	Meat Market	Insanitary condition	T. J. Manley, Palmer	Chris Ottosen
496	Restaurant	Filthy yard near kitchen	W. A. Cogiter, Pockhonias	Chris Ottosen
2237	Meat Market	Insanitary conditions	Geo. Reid, Lehighville	Chris Ottosen
8401	Bakery	Insanitary conditions	Smith Pie Co., Des Moines	J. A. Jackson
14326	Grocery	Insanitary conditions	Gus Lipschitz, Des Moines	J. A. Jackson
1425	Drug Store	Insanitary ice cream containers	Churdan Drug Co., Churdan	B. O. Brownlie
4399	Drug Store	Insanitary ice cream containers	Connor Bros., Churdan	B. O. Brownlie
4803		Insanitary ice cream containers	F. V. Myers, Des Moines	B. O. Brownlie
1359	Cream Station	Insanitary conditions	J. R. Crawford, McClelland	B. O. Brownlie
2175		Insanitary ice cream containers	O. C. Minsfeld, Clarion	T. A. Clarke
2174		Insanitary ice cream containers	V. C. Hawks, Clarion	T. A. Clarke
2173		Insanitary ice cream containers	T. B. Hood, Clarion	T. A. Clarke
2382		Insanitary ice cream containers	V. M. Benoid, Yetter	T. A. Clarke
2376		Insanitary ice cream containers	B. Chapman, Nemaha	T. A. Clarke

VIOLATIONS OF THE DAIRY LAW—Continued

No.	Establishment Operated	Violation	Prosecution Against	Inspector
2163		Insanitary ice cream containers	W. Campbell, Thompson	T. A. Clarke
2166		Insanitary ice cream containers	C. W. Dickinson, Dollyer	T. A. Clarke
2165		Insanitary ice cream containers	E. L. Barfoot, Dollyer	T. A. Clarke
2163		Insanitary ice cream containers	Oscar Pearson, Sava City	T. A. Clarke
2159		Insanitary ice cream containers	Chris Holyam, Lohrville	T. A. Clarke
2160		Insanitary ice cream containers	A. B. Haas, Rockwell City	T. A. Clarke
2161		Insanitary ice cream containers	G. E. Malady, Rockwell City	T. A. Clarke
2381		Insanitary ice cream containers	Milbrand Wilson, Rockwell City	T. A. Clarke
524		Insanitary ice cream containers	J. F. Sauer, Britt, Iowa	T. A. Clarke
2155		Insanitary ice cream containers	A. W. Stever, Lohrville	T. A. Clarke
2164		Insanitary ice cream containers	Quinn & Son, Cushing	T. A. Clarke
2157		Insanitary ice cream containers	Lane Brothers, Sae City	T. A. Clarke
2391		Insanitary ice cream containers	A. Fossini, Sibley	T. A. Clarke
2392		Insanitary ice cream containers	Ross & Liverfort, Corwith	T. A. Clarke
6776	Grocery	Insanitary ice cream containers	H. H. Hohn, Lytton	T. A. Clarke
6780	Cream Station	Insanitary conditions	A. F. Weiss, LeMars	T. A. Clarke
6976	Meat Market	Insanitary conditions	W. D. Bennett, Peterson	F. L. Odell
9026	Bakery	Insanitary conditions	Ben Smith, Doon	F. L. Odell
1046	Drug Store	Insanitary conditions	T. C. Hansman, Dickens	F. L. Odell
1524		Insanitary ice cream containers	C. T. Phillips, Toldeo	F. L. Odell
1523		Insanitary ice cream containers	Hunnicut Brothers	H. E. Forrester
1568		Insanitary ice cream containers	A. W. Forbes, Hudson	H. E. Forrester
1573		Insanitary ice cream containers	W. J. Hall, Morrison	H. E. Forrester
1570		Insanitary ice cream containers	H. E. LaFring, Hudson	H. E. Forrester
1569		Insanitary ice cream containers	J. D. Lee, Hudson	H. E. Forrester
1566		Insanitary ice cream containers	T. E. Hoag, Lincoln	H. E. Forrester
1565		Insanitary ice cream containers	C. A. Thersche, Lincoln	H. E. Forrester
1575		Insanitary ice cream containers	B. D. Bangs, Downs	H. E. Forrester
1576		Insanitary ice cream containers	C. E. Hemenway, Downs	H. E. Forrester
1477		Insanitary ice cream containers	G. F. Gustafson, Albon	H. E. Forrester
1478		Insanitary ice cream containers	Fred Peters, St. Anthony	H. E. Forrester
1480		Insanitary ice cream containers	C. R. Johnson, Lawn Hill	H. E. Forrester
1481		Insanitary ice cream containers	Geo. Banas, Sheffield	H. E. Forrester
1490		Insanitary ice cream containers	O. A. Adall, Greene	H. E. Forrester
1491		Insanitary ice cream containers	Owen Caspelt, Geneva	H. E. Forrester
1493		Insanitary ice cream containers	Thos. Blakey, Lazonon	H. E. Forrester
1497		Insanitary ice cream containers	S. L. Stay, Ellsworth	H. E. Forrester
1501		Insanitary ice cream containers	M. J. Swenson, Jewell	H. E. Forrester
1502		Insanitary ice cream containers	M. Berend, Raymond	H. E. Forrester
1506		Insanitary ice cream containers	Sanford Johnson, Stratford	H. E. Forrester
1508		Insanitary ice cream containers	Lespell & Poulson, Stratford	H. E. Forrester
1479		Insanitary ice cream containers	Geo. LaPlant, St. Anthony	H. E. Forrester

1572	Cream Station	Insanitary conditions	W. A. Elliott, Morrison	H. E. Forrester
1488	Cream Station	Insanitary conditions	M. R. Ebertson, Marshalltown	H. E. Forrester
2239	Cream Station	Insanitary conditions	A. J. Gruis, Aplington	H. E. Forrester
1874	Creamery	Insanitary conditions	Herbert Soballe, Eldora	H. E. Forrester
2229	Creamery	Insanitary conditions	Peter Thussen, Belle Plaine	H. E. Forrester
2238	Creamery	Insanitary conditions	Howard Kratz, Hampton	H. E. Forrester
1575	Dairy	Insanitary conditions	W. D. Wolfgang, Marshalltown	H. E. Forrester
45	Grocery and Meat Market	Insanitary conditions	Paul Regina, Centerville	J. M. Morrow
49	Grocery and Meat Market	Insanitary conditions	Dillon Grocery, Centerville	J. M. Morrow
48	Meat Market	Insanitary conditions	Bryant Meat Market, Centerville	J. M. Morrow
47	Meat Market	Insanitary conditions	H. & L. Roth, Centerville	J. M. Morrow
46	Grocery and Meat Market	Insanitary conditions	Peter Ardurino, Centerville	J. M. Morrow
7947	Meat Market	No license	D. Marcolis, Ottumwa	J. M. Morrow
2167	Cream Station	Insanitary conditions	Ed Lahf, Clare	T. A. Clarke
2152	Cream Station	Insanitary conditions	A. H. Jamieson, Spirit Lake	T. A. Clarke
2169	Cream Station	Insanitary conditions	Meyer Friedman, Forest City	T. A. Clarke
2269		Sidewalk display of food	P. Latio, Cedar Rapids	H. A. Stearns
3284	Meat Market	No license	Nelson Bros., Osaw	H. A. Stearns
3283	Meat Market	No license	B. L. Singley, Morley	H. A. Stearns

VIOLATIONS OF THE WEIGHT AND MEASURE LAW

No.	Sold for	Violation	Prosecution Against	Inspector
1887	Gasoline	Short measure	Transcontinental Oil Co., Sioux City	E. J. Nolan
1884	Gasoline	No license	J. T. Nieby, Milford	E. J. Nolan
1881	Coal	Short weight	L. G. Everest, Sioux City	E. J. Nolan
1883	Bread	Short weight	Clear Lake Bakery, Clear Lake	E. J. Nolan
1886	Scale	Incorrect scale	Roseveldt Bros., Ackley	E. J. Nolan
1880	Scale	Incorrect scale	Frank Mataka, Charles City	E. J. Nolan
3405	Apples	Short weight	S. Sundogo, Mason City	E. J. Nolan
959	Potatoes	Short weight	Baber & Sullivan, Des Moines	E. J. Nolan
960	Coal	Short weight	City Fuel & Supply Co., Des Moines	E. J. Nolan
858	Potatoes	Short weight	Ryer & Sullivan, Des Moines	E. J. Nolan
4337	Coal	Short weight	C. L. Barclay & Son, Waterloo	E. J. Nolan
1900	Scale	Incorrect scale	Farmers Elevator Co., Wallingford	E. J. Nolan
1879	Scale	Incorrect scale	Geo. McGillivroy, Carpenter	E. J. Nolan
1878	Gasoline	Short measure	Cresco Auto Co., Cresco	E. J. Nolan
4338	Scale	Incorrect scale	Kanard Bros., Sioux City	E. J. Nolan
1882	Coal	Short weight	H. Lavine Co., Sioux City	E. J. Nolan
2233	Gasoline	No license	C. B. Dodd, New Hartford	Chris Ottosen
6778	Gasoline	No license	J. C. Yancey, Newton	S. O. Van de Bogart
2255	Gasoline	No license	Hagen Bros., Grinnell	H. A. Stearns

VIOLATIONS OF THE WEIGHT AND MEASURE LAW—Continued.

No.	Sold for	Violation	Prosecution Agent	Inspector
965	Scale	No license	J. M. Barkley, Iowa City	H. A. Stearns
1203	Scale	Short weight	W. G. Bickler, Council Bluffs	H. A. Stearns
2017	Potatoes	Short weight	Nathan Thomas, Des Moines	J. A. Jackson
962	Potatoes	Short weight	City Fuel & Supply Co., Des Moines	C. S. Bogie
961	Coal	Using false ticket	City Fuel & Supply Co., Des Moines	C. S. Bogie
2722	Scale	No license	Samuel J. Butler Co., Davenport	M. E. Ryan
2723	Scale	No license	Metropolitan L & Ice Store, Davenport	M. E. Ryan
2720	Scale	No license	Wm. Hinchand, Davenport	Carl House
1441	Sugar	Misbranded	Bert Jenkins, Fortsnelle	J. W. Milnes
1439	Flour	Short weight	H. A. Piper, Conway	J. W. Milnes
1438	Flour	Short weight	W. G. Collins, Oil Co., Ottumwa	J. W. Milnes
220	Gasoline	No license	S. L. Collins Oil Co., Albia	A. B. Briggs
220	Gasoline	No license	Staff Bros. Coal Co., Cedar Rapids	A. B. Briggs
216	Coal	Short weight	Geo. Jordan, Ottumwa	A. B. Briggs
217	Coal	Short weight	Staff Bros. Coal Co., Cedar Rapids	A. B. Briggs
218	Apples	Short weight	M. D. Thomsen, Waverlo	J. M. Morrow
7946	Flour	Short weight	Nafziger Baking Co., Burlington	J. M. Morrow
3050	Bread	Incorrect scales	Georgia Pappas, Mason City	F. C. Gilmore
964	Scale	Short weight in possession	Carl E. Curson, Kimballtown	F. C. Gilmore
3402	Scale	Short weight	E. H. Shuler, Shurt City	F. C. Gilmore
4808	Apples	Short weight		H. O. Broward
4809	Potatoes	Short weight		H. O. Broward

THE LABORATORY

There has been an increase in the number of samples which has passed through the laboratory and much information has been obtained as to the character of the different products covered by the law. Farmers have been making an increased use of the laboratory to check up the quality of the concentrates they feed and the stock remedies they use.

The purpose of the law is to give them this service for a nominal fee and we are glad to see them take advantage of it. Much of the time of the chemist has been consumed in analyzing samples for county attorneys and attending court.

The following table gives a list of the number of samples which have been analyzed in the laboratory:

Milk and Cream	1916	Samples
Ice Cream	105	Samples
Miscellaneous Foods	217	Samples
Paints and Oils	16	Samples
Butter	272	Samples
For County Attorneys	256	Samples
Seeds	98	Samples
Stock Foods	38	Samples
Bacteriological	266	Samples
Total	3184	Samples

CITY MILK LICENSES

Table showing the number of milk licenses issued to city milk dealers for each year from 1912 to 1922. In each case the year ends on July 4th.

Year	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
No.	1,908	2,038	2,189	2,365	2,729	2,858	2,936	2,718	3,061	3,455	4,708

LOCAL STATE MILK INSPECTORS OF THE STATE OF IOWA

Cities	Inspectors
Boone	W. H. McLain, D. V. M.
Burlington	W. F. Schroeder
Cedar Rapids	Dr. A. R. Menary
Council Bluffs	B. A. Moore
Clinton	J. H. Spence
Davenport	A. B. Haskins, D. V. M.
Des Moines	W. B. Barney, Jr.
Dubuque	P. A. Hodge
Ft. Dodge	B. Gilles
Ft. Madison	R. L. Casey
Iowa City	C. S. Chase, M. D.
Keokuk	Geo. B. Narrley
Marshalltown	Dr. R. M. Allen
Mason City	Dr. G. W. Cady
Muscantine	Dr. C. J. Hackett, D.V.S.
Ottumwa	Dr. E. F. Lowry
Sioux City	W. D. Hayes
Waterloo	C. L. McDermott

SUMMARY

During the year ending October 31, 1922, our inspectors have made a total of 46,047 inspections, as follows:

Grocery	11,276
Meat Market	5,258
Milk Wagon	223
Bakery	1,218
Slaughter House	257
Restaurant	365
Coal Dealer	113
Elevator	14
Feed Store	157
Ice Cream Factory	611
Creamery	1,184
Dairymen	480
Farm Dairy	683
Confectionery	732
Wholesale Grocer	15
Seed Dealer	40
Bottling Works	46
Cream Station	4,430
Produce	3,144
Wagon Scales	3,217
Counter Scales	9,626
Gasoline Pumps	1,632
Measures	950
Miscellaneous	326
TOTAL	46,047

DAIRY AND FOOD COMMISSION

Fees Received Year Ending October 31, 1922

Inspection Fee Tags	\$ 20,216.20
Seed Analyses Fees	28.00
Feeding Stuffs Analyses Fees	77.00
Stock Food Licenses	2,350.00
Egg Dealers Licenses	7,361.00
Babcock Test Licenses	9,482.50
Scale Tag Licenses	6,204.00
Scale Inspection Fees	9,870.24
Sanitary Law Licenses	17,481.00
Milk Dealers Licenses	5,679.00
Gasoline Pump and Meter Licenses	14,061.00
Cold Storage Licenses	425.00
Butter Trade-mark Fees	90.00
Commercial Fertilizer Licenses	440.00
TOTAL	\$ 93,764.94

Fees collected by this department, as listed above, are not used by the department, but are turned over to the state treasurer as soon as received.

DAIRY AND FOOD COMMISSION
Expenses Year Ending October 31, 1922

NAME	Salary	Expense	Total
*B. G. Clark	\$ 1,650.00	\$ 98.88	\$ 1,748.88
*W. B. Barney	1,650.00	163.63	1,813.63
*M. E. McMurray	2,538.24	504.23	3,042.47
E. L. Redfern	2,700.00	20.83	2,720.83
*F. H. Abbott	311.58	339.35	650.93
B. O. Brownlee	2,100.00	1,445.44	3,545.44
T. A. Clarke	2,100.00	1,307.48	3,407.48
*H. E. Forrester	1,050.00	772.25	1,822.25
*L. F. Morrison	948.24	961.27	1,909.51
H. E. Ritter	2,094.02	1,094.05	3,178.07
F. W. Stephenson	2,100.00	1,387.36	3,487.36
D. P. Thompson	2,100.00	1,333.89	3,433.89
*P. C. Gilmore	333.33	197.45	530.78
F. L. Odell	2,083.32	1,159.73	3,243.05
Roy Seales	1,961.95	1,443.70	3,405.65
E. A. Countryman	2,100.00	899.68	2,999.68
C. C. Housa	1,875.00	1,368.28	3,243.28
*J. A. Jackson	1,383.33	345.00	1,628.33
M. W. Knapp	1,875.00	620.94	2,495.94
J. W. Milnes	2,100.00	954.97	3,054.97
J. M. Moore	2,048.66	967.62	3,016.28
*C. Ottoman	2,037.50	1,032.40	3,070.90
H. A. Stewart	2,100.00	824.80	2,924.80
*S. O. Van DeBogart	350.00	104.20	454.20
C. E. Bogle	2,400.00	219.33	2,619.33
A. B. Briggs	2,100.00	1,510.83	3,610.83
E. J. Nolan	2,100.00	1,815.57	3,915.57
W. G. Jordan	2,100.00	58.79	2,158.79
A. W. Day	2,000.00	.....	2,000.00
B. V. Barker	1,500.00	.....	1,500.00
Bianche Luthblom	1,200.00	.....	1,200.00
Maurine Mack	1,200.00	.....	1,200.00
Helen Teal	223.22	.....	223.22
*Fannie Conaway	879.38	.....	879.38
*C. G. O'Connell	432.30	.....	432.30
*Mary Coon	90.00	.....	90.00
J. W. Lytton	1,200.00	.....	1,200.00
Miscellaneous Office Expense .....	.....	3,155.78	3,155.78
Laboratory Expense .....	.....	185.97	185.97
Weights and Measures Expense .....	.....	319.50	319.50
Milk Agents' Fees .....	.....	9,212.50	9,212.50
Milk Agents' Expense .....	.....	624.38	624.38
Telephone .....	.....	62.68	62.68
Telegraph .....	.....	30.64	30.64
Electricity .....	.....	18.53	18.53
Express and Drayage .....	.....	348.20	348.20
Total	\$58,938.96	\$36,718.43	\$95,657.39

*Employed less than a year.

CREAMERY STATISTICS OF IOWA
Showing Pounds of Milk and Cream Received, Pounds of Butter Made and Disposition of Same, So Far as Reported

COUNTY	No. of creameries reported	Pounds of milk received	Pounds of cream received	Pounds of butter manufactured	Pounds sold to patrons	Pounds sold in farms	Pounds sold outside of Iowa
Adair	2	44,221	979,011	378,111	27,194	79,038	261,824
Adams	1	260,000	5,822,039	63,000	2,300	23,000	37,700
Albion	7	191,316	74,333	1,903,375	36,917	138,699	1,311,307
Algonquin	2	33,716	74,333	31,459	28,510	24,121	24,121
Anderson	3	3,000	1,271,335	240,545	38,580	67,418	674,084
Benton	3	7,666,596	4,872,089	2,282,667	90,797	1,237,547	892,181
Blackhawk	10	3,000	163,262	179,860	7,847	1,250,411	55,122
Bonne	2	63,281,833	2,488,790	3,276,978	235,383	293,548	2,717,573
Bureau	23	8,149,898	3,642,009	3,047,842	138,458	261,931	2,355,266
Buchanan	9	10,322,824	1,823,512	1,823,512	14,948	72,345	138,419
Burlington	11	10,382,203	10,135,844	1,242,921	14,948	117,457	1,211,529
Calhoun	4	82,850	645,827	418,641	12,659	117,457	1,211,529
Carroll	9	690,311	3,896,872	1,664,754	19,590	698,847	698,847
Cass	2	488,720	3,695,455	1,106,069	9,311	111,699	685,269
Cedar Rapids	6	2,841,313	3,695,455	1,106,069	28,061	330,788	690,788
Cherokee	2	2,841,313	3,695,455	1,106,069	31,339	510,833	2,355,266
Chickasaw	9	4,120,991	5,714,327	2,132,642	166,114	64,976	1,790,522
Clarke	1	218,400	619,000	77,373	16,446	77,373	62,652
Clay	4	16,006,028	9,996,316	3,702,788	138,296	396,096	3,147,786
Crawford	10	12,572	1,340,738	2,337,281	38,297	106,941	2,011,963
Dallas	2	2,295,077	58,181	103,053	3,302	16,752	51,608
Delaware	12	6,111,047	6,335,078	2,475,294	173,413	211,545	2,038,894
Des Moines	3	8,668,040	1,656,956	646,812	664	446,148	684,901
Dickinson	2	370,000	9,067,125	5,709,770	105,951	1,237,074	3,891,834
Dodge	14	29,580,224	7,303,028	3,653,462	235,214	69,029	336,112
Emmet	15	241,306	2,340,270	796,421	39,740	241,306	2,510,308
Fayette	4	27,803	2,361,839	680,803	47,127	58,111	601,956
Franklin	5	36,780	179,822	67,209	27,250	66,933	473,398
Greene	1	32,473	967,061	623,176	16,553	21,711	19,851
Guthrie	4	80,757	1,588,243	359,033	4,876	139,502	1,087,528
Hamilton	7	36,951	3,968,792	1,284,544	57,165	139,502	1,087,528
Hancock	6	425,165	3,027,242	3,459,303	80,868	622,077	2,764,598
Harlan	8	150,000	61,000	1,783,077	61,041	26,500	622,077
Hawley	9	396,308	1,113,001	1,783,077	61,041	26,500	622,077

Humboldt	4	396,308	1,113,001	1,783,077	19,863	166,721	283,601
Jackson	9	512,921	5,396,327	1,920,635	77,700	240,056	1,481,407
Jasper	9	447,200	373,130	136,600	77,325	57,237	79,038
Jefferson	1	246,940	91,460	31,460	3,443	60,167	27,850
Johnson	1	1,120,215	665,269	2,949,450	136,061	184,000	294,269
Kearney	3	6,819,965	6,819,965	2,949,450	136,061	132,434	1,411,966
Kossuth	12	319,042	5,388,820	1,738,625	197,862	178,280	1,411,966
Lee	2	314,629	314,629	2,120,662	321,646	321,646	1,683,181
Linn	7	5,878,971	35,198	2,389,222	78,848	35,198	1,781,109
Loras	1	102,508	96,843	1,565	1,565	40,123	319,868
Madison	1	817,781	275,931	370,113	13,000	139,412	40,450
Marion	2	75,000	3,240	160,000	40,332	53,332	106,667
Marshall	4	368,439	2,276,138	976,530	40,138	206,223	621,337
Mills	2	52,565	122,869	194,308	3,000	10,000	100,000
Monroe	1	302,000	5,149,710	1,323,025	136,417	66,333	1,468,229
Montgomery	2	138,299	149,119	273,975	40,404	40,404	4,720
Muscatine	1	399,922	684,035	204,536	12,530	114,709	77,198
O'Brien	8	207,656	2,238,339	804,927	26,651	179,622	666,278
Osceola	5	147,401	760,613	1,774,751	39,850	6,545	235,227
Palo Alto	2	101,662	3,107,663	1,039,641	104,010	67,147	788,003
Pocahontas	3	7,800	707,229	5,894,851	5,700	67,329	140,103
Polk	4	1,345,716	40,945,359	1,338,850	184	2,865,417	2,784,024
Portsmouth	1	452,020	724,124	290,039	1,066	316,480	1,022,370
Rowley	2	371,960	4,500,900	1,738,231	1,066	101,962	101,962
Scott	3	20	4,500,900	1,738,231	793,754	702,878	468,939
Shelby	3	20	4,500,900	1,738,231	28,451	5,741	159,751
Sioux	7	695,855	7,118,868	2,679,473	167,222	448,004	2,244,229
Story	9	3,039,190	2,039,083	1,901,511	385,730	385,730	845,742
Tama	1	12,000	891,144	1,131,091	11,314	173,104	813,373
Taylor	1	12,000	891,144	1,131,091	11,314	173,104	813,373
Union	3	268,502	1,088,013	1,379,524	4,600	481,736	457,404
Wapello	2	268,502	8,025,916	3,109,900	342,016	342,016	2,813,084
Washington	3	167,000	3,167,000	87,843	80,818	80,818	6,720
Wayne	1	3,229,324	3,229,324	1,126,449	2,000	5,000	1,998,449
Webster	2	4,796,278	1,711,333	1,711,333	679	618,298	30,960
Wentworth	1	153,280	4,796,278	1,711,333	178,541	178,541	2,160,228
Winnebago	10	30,821,007	10,821,007	2,558,528	60,031	313,756	2,160,228
Woodbury	3	4,699,816	64,950,688	22,607,168	15,000	1,168,736	21,614,627
Worth	4	25,580	4,414,500	1,403,961	39,239	62,895	1,123,021
Wright	9	95,856	4,414,500	1,403,961	39,239	228,107	308,569
Total	422	169,452,729	322,742,273	134,168,089	4,715,171	20,999,198	94,674,777

CREAMERY LIST

NAME OF CREAMERY	Located at or near	Proprietor, Secretary or Manager	P. O. address of Proprietor, Secretary or Manager	Name of Bottlemaker	P. O. address of Bottlemaker
Adair County— Adair Co-operative Creamery Co.	Adair	D. J. Cowden	Adair	J. T. Ryan	Adair
The Greenfield Creamery Co.	Greenfield	W. A. Foster	Greenfield	Romaine Reynolds	Greenfield
Adams County— Prescott Creamery Co.	Prescott	Chris Lundhigh	Prescott	Chris Lundhigh	Prescott
Alleman County— Arctic Spring Creamery Association	Quasahda, 10 mi. S. of Center, Minn.	O. C. Flatberg	Spring Grove, Minn.	Olaf Goodno	Spring Grove, Minn.
Callison Creamery	Leaning, 6 mi. W.	F. E. Knapp	Waterville	J. D. Johnson	Waterville
Farmers Co-operative Creamery Co.	Waterville	G. H. Gustafson	Watson	A. H. Hansmeier	Watson
Farmers Waton Creamery Co.	Watson	Tollid Johnson	Watson	Victor Johnson	Watson
London Co-operative Creamery Co.	Watson, 4 1/2 mi. S. W.	Henry Seibert	New Allan	E. Rise	New Allan
Keokuk Co-operative Creamery Co.	New Allan	R. G. May	Fourville	B. F. Schultz	Fourville
Forestville Farmers Co-operative Creamery Co.	Fourville	H. T. Humpfanger			
Aganippe County— Centrex Dairy	Centerville	H. R. Schulla	Centerville	Yane Thomas	Centerville
Stratker Creamery Co.	Centerville	F. T. Strickler	Centerville	F. T. Strickler	Centerville
Audubon County— Audubon Creamery Co.	Audubon	John Jensen	Audubon	Johanning Johannsen	Audubon
Audubon Township Creamery Association	Extra, 6 mi. E.	J. P. Nelson	Extra	L. P. Nelson	Extra
Cypress Spring Creamery Co.	Kimballton	P. Nelson	Kimballton	C. B. Peterson	Kimballton
Eden Creamery Co.	Extra	A. C. Nelson	Extra	M. Nilson	Audubon
Sharon Creamery	Sharon	Nelson Bros.	Audubon		Audubon
Benton County— Farmers Creamery	Belle Plaine	Peter Thomsen	Belle Plaine	Peter Thomsen	Belle Plaine
Model Creamery Co.	Newhall	Gardemann & Augshaw	Newhall	Henry Stelling	Newhall
Vinton Solutary Creamery	Vinton	Wm. Matter	Vinton	Wm. Matter	Vinton
Blackhawk County— Benson Dairy Co.	Benson	J. B. Desmond	Cedar Falls	J. F. Larson	Benson
Cedar Falls Creamery Co.	Cedar Falls	Ednaeth Biedel	Cedar Falls	Geo. Jolin	Cedar Falls
Cedar Falls Creamery Co.	Waterloo	J. H. Brandes	Waterloo	Louis S. Johnson	Waterloo
Wm. W. Loyal Creamery	Denver, 6 mi. S. E.	Wm. Miner	Denver	Wm. Miner	Denver
C. A. Foss Creamery	LaPorte City	C. A. Foss	LaPorte City	E. O. Res.	LaPorte City
Hudson Co-operative Dairy Association	Hudson	H. Lefram	Hudson	Wm. McFarland	Hudson
Union Creamery Co.	O. Cedar Falls	C. Beckhalsen	Cedar Falls	Robt. Kerr	Cedar Falls
Greene Creamery Co.	Waterloo	C. Beckhalsen	Waterloo		Waterloo
Satoriary Creamery Co.	Waterloo	C. Beckhalsen	Waterloo		Waterloo
Watson Co-operative Dairy	Waterloo	C. Beckhalsen	Waterloo	R. W. Chadwick	Waterloo
Boss County— Pondus Creamery	Boss	H. P. Scilling & Wood	Boss	C. J. Wells	Boss
Butler Co.	Story City	L. G. Petraman	Story City	L. G. Peterson	Story City
Rosebush Co-operative Creamery Co.	Story City		Story City		Story City
Brenner County— Artesian Creamery Co.	Waverly	Henry Sengers	Waverly	C. J. Meier	Waverly
Brenner Creamery Co.	Brenner	J. A. Bertr.	Waverly	H. J. Alford	Brenner
Dawson Creamery	Dawson	W. J. Weidling	Waverly	W. J. Decker	Dawson
Excelsior Creamery Co.	Sumner	Geo. Rocklaasch	Sumner	C. A. Day	Sumner
First Macfield Creamery Co.	Denver	H. C. Grime	Denver	H. C. Koepke	Sumner
Frontier Creamery	Frederika	Leah Alvick	Frederika	J. Ambrose	Frederika
Frontier Creamery	Frederika	R. C. Fink	Frederika	G. W. Zell	Frederika
Frontier Creamery	Frederika	R. C. Fink	Frederika	G. W. Zell	Frederika
Greene Hill Creamery Co.	Fourville	J. J. Knuts	Fourville	Edna W. Peterson	Fourville
Greene Hill Creamery Co.	Fourville	J. J. Knuts	Fourville	Edna W. Peterson	Fourville
Janerville Creamery Association	Janerville	B. O. Squires	Janerville	B. O. Squires	Janerville
Klinger Co-operative Creamery Co.	Readlyn	Henry Otto	Readlyn	Henry Segbarth	Readlyn
Kurtil Creamery Co.	Readlyn	J. Stroetmann	Readlyn	F. H. Wadling	Readlyn
Little Valley Creamery Co.	Sumner	Vilas Kruger	Sumner	John Nichols	Sumner
Little Valley Creamery Co.	Sumner	Vilas Kruger	Sumner	John Nichols	Sumner
Quality Dairy Creamery Co.	Sumner	E. B. Olney	Sumner	E. B. Olney	Sumner
Readlyn Creamery Co.	Readlyn	H. A. Grisso	Readlyn	H. A. Grisso	Readlyn
Spring Fountain Creamery Co.	Sumner	Fred Rodemeyer	Sumner	Ernest Robinson	Sumner
Sumner Creamery Co.	Sumner	G. C. Schwabe	Sumner	Fred Brenner	Sumner
Sumner Creamery Co.	Sumner	B. W. Wenzel	Sumner	Albert Ziebach	Sumner
Washington Creamery	Waverly	P. M. Predemeyer	Waverly	C. L. Gamm	Waverly
Western Douglas Creamery Co.	Brenner	O. C. Knutha	Waverly, R. 2	Ernest Hauke	Waverly, R. 1
Buchanan County— Copper Creamery	Keosauqua	Henry Lynn	Frederika	John Seiler	Frederika
Eden Creamery Co.	Eden	C. E. Bled	Hudson	Matt McDowell	Hudson
Hastings Farmers Creamery Co.	Hastings	D. E. Rogers	Jump	J. E. Morris	Jump
Jump Creamery Co.	Jump	D. E. Cole	Jump	R. A. Cole	Jump
Lamont Creamery Association	Lamont	J. R. Watson	Lamont	E. A. Cole	Lamont
Rowley Farmers Co-operative Creamery	Rowley	Walker	Rowley	C. B. Bracy	Rowley
Farmers Creamery Association	Aurora	W. J. Warren	Aurora	E. D. Mittlestaedt	Aurora
Waukegan Creamery	Waukegan	J. C. Guthrie	Waukegan	E. D. Mittlestaedt	Waukegan
Waukegan Creamery	Waukegan	J. C. Guthrie	Waukegan	G. C. Jensen	Waukegan
Waukegan Creamery	Waukegan	J. C. Guthrie	Waukegan	G. C. Jensen	Waukegan
Bureau Vails County— Chever Leaf Dairy	Alta	L. H. Haleh	Alta	Vigo Kuhlhorn	Alta

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Name of Proprietor, Secretary or Manager	P. O. address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. address of Buttermaker
Patrons Creamery & Produce Co. Strom Lake Produce Co.	Strom Lake	I. C. Aase L. W. McCleery and M. L. Crowley	Strom Lake	N. C. Olson L. W. McCleery and M. L. Crowley	Strom Lake
Butler County— Albia Creamery Co. Aurora Creamery Cherokee Creamery Community Creamery Dumont Creamery Farmers Co-operative Creamery Co. Genese Creamery Jefferson Creamery Co. New Hartford Creamery Co. Shell Rock Creamery Association White Rose Creamery	Parkersburg Aurora S. H. Lodi Parkersburg Dumont Albia Genese New Hartford Shell Rock Aurora	W. H. Chapman S. H. Ludeman H. P. Stone H. P. Stone Blood Bros. William Albin C. Jacobsen Geo. Harms New Hartford D. C. Austin S. L. Patterson	Parkersburg Aurora S. H. Lodi Parkersburg Dumont Albia Genese Shell Rock Shell Rock Aurora	W. H. Chapman S. H. Ludeman M. A. Jones Arthur Brock Charles Finner C. Jacobsen F. Ernest E. Brooks P. D. Peterson P. P. Anderson	Parkersburg Aurora Cherokee Cherokee Albia Genese New Hartford Shell Rock Shell Rock Aurora
Calhoun County— A. Reed & Co. Rock Creamery Co. Dexter Cretz Creamery Co. Fennery Creamery Co.	Lakeville Mason Sumner Fennery	I. J. Sturton I. J. Beck S. P. Peterson H. A. Atrecht	Lakeville Mason Sumner Fennery	I. J. Sturton I. J. Beck George Froom	Lakeville Mason Sumner Fennery
Carroll County— Carroll Creamery Co. Madison Creamery Farmers Co-operative Creamery Co. Bismarck Creamery Jensen Creamery Manning Creamery Co. Flow Valley Creamery Templeton Creamery Co.	Carroll Dubuque Bismarck Holt New Hartford Manning Templeton	C. C. Roberts H. American H. J. Polking M. J. Wagner J. Lee Johnson M. P. Friedman John Bierl	Carroll Dubuque Bismarck Holt New Hartford Manning Templeton	C. C. Roberts H. American J. E. DeChaux M. J. Wagner Carl Herlock Paul Bender Karl Jensen Frank J. Dempsey	Carroll Dubuque Bismarck Holt New Hartford Manning Templeton
Case County— Central Iowa Coultry & Egg Co. Swift & Co.	Atlantic Atlantic	E. H. Rupp G. G. Judd	Atlantic Atlantic	Ann P. Jensen A. V. Jensen	Atlantic Atlantic
Clay County— Dumont Farmers Creamery Association Golden Star Creamery	Dumont Bismarck	A. H. Lamp H. H. Kroeger	Dumont Bismarck	H. G. Davis Andrew Gustafson	Dumont Bismarck
Clayton County— Lewiston Farmers Mutual Coop. Creamery Assn. Madison Co-operative Creamery Tippon Creamery West Branch Creamery	Lewiston Madison Tippon West Branch	K. Pauls P. H. Schneider A. J. Barth Albert R. Sidwell	Lewiston Madison Cedar Rapids Iowa City	W. L. Sims O. H. Ball Oto Wichman W. E. Hunter	Lewiston Madison Tippon West Branch
Clayton County— Dougherty Co-operative Creamery Co. Patrons Mutual Co-operative Creamery E. R. Hildy & Co. Jensen Dairy Rockwell Co-operative Creamery Co. Shenandoah Co-operative Creamery Co. Thornton Creamery Co. Ventura Farmers Creamery Co.	Dougherty Clear Lake Mason City Mason City Rockwell Shenandoah Thornton Ventura	W. J. Pauls W. F. Fahl W. S. Wilcox F. H. Bryant W. B. Barnes Henry Donner Geo. and Henry Asmick H. H. Oberlander	Dougherty Clear Lake Mason City Mason City Rockwell Shenandoah Thornton Ventura	P. J. Goetzinger S. S. Holston G. A. Stewart C. W. Wynn John S. Smith Henry Donner Henry Asmick E. P. Conway	Dougherty Clear Lake Mason City Mason City Rockwell Shenandoah Thornton Ventura
Cherokee County— Cherokee Creamery Co.	Cherokee	John H. Geob and Paul J. Geob	Cherokee	Dennis Galley	Cherokee
Chickasaw County— Alta Vista Farmers Co-operative Creamery Assn. Farmers Co-operative Creamery Association Friedrichsburg Butter Factory Local Farmers Creamery Association Lawler Creamery Association New Hampton Farmers Creamery Association North Farmers Co-operative Creamery Williamston Creamery Association	Alta Vista Nashua Friedrichsburg Iowa Lawler New Hampton Lawler New Hampton	G. N. Schick W. N. Wyrne C. L. Whitcomb C. H. Moody R. E. Nichols Joe Darling J. P. Landwehr C. M. Burmaster	Alta Vista Nashua Friedrichsburg Iowa Lawler New Hampton Lawler New Hampton	T. F. Sullivan Geo. Rayburn N. D. Sweet W. W. Dilly John W. Yarnes D. W. Madsen J. E. Finkler K. B. Trickett	Alta Vista Nashua Friedrichsburg Iowa Lawler New Hampton Lawler New Hampton
Clake County— Buras Creamery	Osweka	B. H. Burns	Osweka	Fred S. Davis	Osweka
Clay County— Farmers Mutual Co-operative Creamery Association Lanigan Dairy Products Co. Webb Creamery	Dickens Lanigan Spencer Webb	O. P. Handberg Martha Caldwell Jensen & Christensen Bridahl-Andersen	Dickens Lanigan Spencer Webb	B. Conley Albert Skarsten E. Jensen Harry Stone	Dickens Lanigan Spencer Webb
Clatsop County— Crown Royal Creamery Parsons & St. Old Co-operative Creamery Co. Patrons Co-operative Creamery Co. Patrons Co-operative Creamery Co. Patrons Co-operative Creamery Co. Gardner Farmers Co-operative Creamery Gervaville Creamery Co.	Elkader St. Old Edgewood McKenzeg Gardner Gardner Gervaville	I. T. Larnaud W. F. Palmer W. A. Bobson Alan Bye J. J. Koppel A. J. Koppel	Elkader St. Old Edgewood McKenzeg Gardner Gardner Gervaville	I. T. Larnaud J. F. Fisher Dan Frank K. O. Ballman Fred C. Landis F. W. Hamel	Elkader St. Old Edgewood McKenzeg Gardner Gardner Gervaville

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Proprietor, Secretary or Manager	Proprietor, Secretary or Manager	P. O. address of Manager	Name of Bottlemaker	P. O. address of Bottlemaker
F. H. Hatch Co. Luther Farmers Co-operative Creamery Co. Luzon Farmers Co-operative Creamery Luzon Creamery Co. Star Creamery Co. Strawberry Point Farmers Creamery Association Strawberry Point Co-operative Creamery Co. Volcan Farmers Creamery Co. Volcan Valley Creamery Co.	Elkwood Elkwood Leans Milville North Buena Vista Strawberry Point Strawberry Point Volcan City Moderville	H. H. Hatch G. C. Baderick H. G. Friedman F. J. Schneider J. A. Scherer C. E. Olinger A. E. Dittmer	Elkwood Elkwood Leans Milville North Buena Vista Strawberry Point Strawberry Point Volcan City Moderville	Eldersport Elkwood Leans Milville North Buena Vista Strawberry Point Strawberry Point Volcan City Moderville	W. J. Diller Earl Rickelber C. C. Bombberger Howard D. Ash P. J. Van Aldine Otto Wagner F. G. Gammal Frank Gammal F. D. Ford	Elkwood Elkwood Leans Milville North Buena Vista Strawberry Point Strawberry Point Volcan City Moderville
Claiborne County— Clanton County Central Creamery Farmers Co-operative Creamery Farmers Co-operative Creamery Co. Beff & Co.	Chaletto DeWitt Toronto Wheatland Clinton	Maxie Nielsen O. C. Capper Milo G. Yale W. A. Templeton F. H. Johnson	Chaletto DeWitt Toronto Wheatland Clinton	Chaletto DeWitt Toronto Wheatland Clinton	Martha Nichols O. C. Capper Henry Strick H. W. Amos	Chaletto DeWitt Toronto Wheatland Clinton
Cayuga County— Nicholson Ice & Prod. Co.	Danison	J. G. Handford	Danison	Danison	J. C. Christmann	Danison
Dallas County— Farmers Co-operative Creamery & Prod. Co. Ferry Milk Producers Co.	Dexter Eastman Ferry	E. F. Lughly H. J. Ryan	Dexter Eastman Ferry	Dexter Eastman Ferry	W. L. McMenamin O. A. Foster	Dexter Ferry
Delaware County— Columbia Co-operative Creamery Farmers Co-operative Co. Farmers Creamery Co. Farmers Mutual Creamery Co. East Green Creamery Co. Highland Creamery Association Masonville Creamery Masonville Farmers Creamery Shaw Spring Creamery Co. Thorpe Creamery Co.	Coleburg Columbia Greenup Grove Sond Springs Evan Hopkinton Hopkinton Hopkinton Masonville Masonville Dahl Thorpe	Rich A. Gull A. W. Harris J. J. Heiberg John L. Buzselder Daniel King E. D. Taylor E. J. Ryan Krause & Goubring Joe Dingelhaus A. L. Clucke Fred A. Thiel	Coleburg Columbia Greenup Grove Sond Springs Evan Hopkinton Hopkinton Hopkinton Masonville Masonville Dahl Thorpe	Coleburg Columbia Greenup Grove Sond Springs Evan Hopkinton Hopkinton Hopkinton Masonville Masonville Dahl Thorpe	A. L. Landis C. W. Bachman C. W. Bachman Louis W. Ross John L. Buzselder Alex Graham R. D. Taylor E. J. Ryan F. W. Krause J. K. Taylor Ross J. Sovernald G. Stout	Coleburg Columbia Greenup Grove Sond Springs Evan Hopkinton Hopkinton Hopkinton Masonville Masonville Dahl Thorpe
DeKalb County— Burlington Creamery Co. Burlington Farmers Mercantile Co.	Burlington Burlington	H. K. Teweel Lyman Roth	Burlington Burlington	Burlington Burlington	E. H. Griffith Edgar Wiener	Burlington Burlington
Dickinson County— Lake Park Co-operative Creamery Co. Millard Farmers Butter & Cheese Association Spirit Lake Produce Co.	Lake Park Millard Spirit Lake	J. G. Chrysler Fred W. Born I. N. Clark and H. O. Dean	Lake Park Millard Spirit Lake	Lake Park Millard Spirit Lake	F. E. Starr Fred W. Born Vic Walter	Lake Park Millard Spirit Lake
Delaware County— Balltown Farmers Co-operative Creamery Co. Beattie Creamery Co. Ewald Creamery Co. Galena Milk Creamery Co. Five Point Mutual Creamery Co. Globe Creamery Co. Hague Creamery Co. Hickory Farms Creamery Co. Holy Cross Creamery Co. Iowa Dairy Co. New Vienna Central Creamery Co. Sherrill Mutual Co-operative Creamery Washington Farmers Creamery Co.	Balltown Delaplanche Delaplanche Derango Derango Lutzburgh Zemula Zemula Zemula Holy Cross New Vienna Sherrill Washington	L. J. Seward A. F. Ulrich F. H. Ulrich Ralph Bulth Frank Fischer John Lang H. S. Hagan W. L. Hildbrand L. O. Koppeling Leo Thoren Andrew Fhatsch H. F. Smith F. O. Buehr W. D. White	Balltown Delaplanche Delaplanche Derango Derango Lutzburgh Zemula Zemula Zemula Holy Cross New Vienna Sherrill Washington	Balltown Delaplanche Delaplanche Derango Derango Lutzburgh Zemula Zemula Zemula Holy Cross New Vienna Sherrill Washington	Al Barker W. C. De W. Miller D. T. Brown F. E. McLeon Gerald T. Armstrong H. S. Hagan W. L. Hildbrand L. O. Koppeling Leo Thoren Andrew Fhatsch H. F. Smith F. O. Buehr W. D. White	Balltown Delaplanche Delaplanche Derango Derango Lutzburgh Zemula Zemula Zemula Holy Cross New Vienna Sherrill Washington
Desmet County— Farmers Creamery Milk Depot Hannover Creamery Co. Haugsted Co-operative Creamery Co.	Wallingford Bathurst Esherville Ringsted	O. H. Refsdal H. H. Hanson M. L. Hammer S. C. Holen	Wallingford Bathurst Esherville Ringsted	Wallingford Bathurst Esherville Ringsted	W. H. Peterson H. H. Hanson M. L. Hammer J. C. Jensen	Wallingford Bathurst Esherville Ringsted
Fayette County— Albion Creamery Association Conant Valley Creamery Co. Clermont Valley Creamery Co. Elgin Farmers Dairy Co. Farmers Creamery Co. Farmers Mutual Co-operative Creamery Association of Scott Fayette Mutual Creamery Association German Creamery Co. German Co-operative Creamery Hawkeye Creamery Co. Hawkeye Farmers Creamery Co. Owens Creamery Co.	Alpha Sumner Clermont Elgin Atlington Stadley Fayette Wrightsville St. Louis Clermont Hawkeye Osburn Owens	A. A. Bellang R. O. Dabel J. W. Miller Melcher Lindinger Floyd Finney Peter Kraft Peter K. Jobb W. H. Buhner M. L. Haske C. H. Haske E. F. Hant E. E. Day J. N. Getz	Alpha Sumner Clermont Elgin Atlington Stadley Fayette Wrightsville St. Louis Clermont Hawkeye Osburn Owens	Alpha Sumner Clermont Elgin Atlington Stadley Fayette Wrightsville St. Louis Clermont Hawkeye Osburn Owens	W. A. Heger Theo. Stack Clarence H. Eckstead Ed Hanson Joe Anshen Ralph Porter C. H. Frick Earl Mitchell M. Land A. H. Best R. C. Wilson P. H. Barnes E. F. Bentley	Alpha Sumner Clermont Elgin Atlington Stadley Fayette Wrightsville St. Louis Clermont Hawkeye Osburn Owens

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Name of Proprietor, Secretary or Manager	P. O. address of Proprietor, Secretary or Manager	Name of Buttermaker	P. O. address of Buttermaker
Richfield Creamery Co.	Sumner	Alfred Morf	Sumner	J. B. Zbornick	Sumner
Riverside Creamery	Wadena	Will McGuiness	Wadena	T. C. Cline	Wadena
Waucoma Farmers Co-operative Creamery	Waucoma	H. E. Marron	Waucoma	J. T. Mogle	Waucoma
Westgate Co-operative Creamery Co.	Westgate	F. S. Cahman	Westgate	Chris Russeier	Westgate
West Union Farmers Creamery	West Union	W. L. Chamberlain	West Union	Geo. Hauser	West Union
Floyd County—					
Charles City Creamery Co.	Charles City	N. H. Nelson	Charles City	J. W. Holtzman	Charles City
Niles Creamery Company	Colwell	F. Brunner	Colwell	Chas. T. Zerath	Colwell
Nora Springs Creamery & Produce Co.	Nora Springs	W. F. Miner	Nora Springs	C. Erickson	Nora Springs
Rockford Co-operative Dairy Association	Rockford	R. F. Duakelberg	Rockford	M. L. Walker	Rockford
Franklin County—					
Farmers Co-operative Creamery Co.	Popejoy	J. C. Tjarks	Alden	H. J. Binger	Popejoy
Farmers Creamery Co.	Alexander	W. F. Dunn	Alexander	Leslie I. Born	Alexander
Hamilton Co-operative Creamery Co.	Coulter	Geo. Dohrmann	Hampton	John M. Hansen	Coulter
Laitimer Co-operative Creamery	Laitimer	O. A. Johnson	Laitimer	Rasmus Nelson	Laitimer
Sheffield Community Creamery Co.	Sheffield	E. W. James	Sheffield	J. D. Freie	Sheffield
Greene County—					
Jefferson Creamery	Jefferson	M. E. Brunner	Jefferson	M. E. Brunner	Jefferson
Grundy County—					
Beaver Center Creamery Co.	Stout	Andrew J. Meyer	Stout	T. E. Diller	Stout
Buck Grove Creamery	Aplington	Ralph Slight	Aplington	Arthur R. Sheppard	Aplington
Fern Creamery Co.	Parkersburg	W. H. Henning	Parkersburg	B. T. Soles	Stout
Grundy Center Creamery	Grundy Center	E. C. Kanoss	Grundy Center	R. G. Alderson	Grundy Center
Wellsburg Creamery	Wellsburg	H. G. Kramer	Wellsburg	H. G. Kramer	Wellsburg
Guthrie County—					
Casey Creamery Co.	Casey	Joe F. Oddy	Casey	Joe F. Oddy	Casey
Farmers Co-operative Creamery & Produce Co.	Guthrie Center	M. J. Van Dam	Guthrie Center	M. J. Van Dam	Guthrie Center
Memo Creamery Co.	Memo	Bryan Varley	Memo	A. A. Nolte	Memo
Panora Co-operative Creamery	Panora	F. F. Wilcox	Panora	F. F. Wilcox	Panora
Hamilton County—					
Ellsworth Creamery Co.	Ellsworth	Jim Slaughter	Ellsworth	Jim Slaughter	Ellsworth
Randall Farmers Creamery	Randall	L. E. Nelson	Randall	L. E. Nelson	Randall
Thompson-Rasmussen Creamery	Jewell	Anton Rasmussen	Jewell	Fred Thompson	Jewell
Webster City Cream Co.	Webster City	H. E. Forrester	Webster City	H. E. Forrester	Webster City
Webster City Creamery					
Webster City Dairy	Webster City	O. Ellinson	Webster City	E. I. Hall	Webster City
Williams Creamery Co.	Williams	E. S. Ubben	Webster City	E. S. Ubben	Webster City
Williams Creamery Co.	Williams	P. W. Petersen	Williams		
Hancock County—					
Britt Creamery Association	Britt	H. A. Schapers	Britt	G. G. Kolthoff	Britt
Crystal Creamery Co.	Crystal Lake	H. P. Stahr	Crystal Lake	Rasmus O. Rasmussen	Crystal Lake
Farmers Co-operative Creamery	Garnes	J. Klesse	Garnes	C. R. Conway	Garnes
Kanawha Farmers Mutual Co-operative Creamery	Kanawha	W. Johnson	Kanawha	O. W. Albright	Kanawha
Klemme Co-operative Creamery	Klemme	V. Josten	Klemme	A. D. Gimer	Klemme
Woden Farmers Creamery	Woden	John F. Boyken	Woden	Geo. Breen	Woden
Hardin County—					
Ackley Creamery	Ackley	R. R. Hadley	Ackley	W. C. DeSelm	Ackley
Alden Co-operative Creamery Co.	Alden	E. C. Edwards	Alden	Floyd Kidd	Alden
Cleves Creamery Co.	Cleves	W. F. Sharp	Ackley	J. F. Sharp	Cleves
Concord & Scott Creamery Co.	Radcliffe	Geo. Wick	Radcliffe	Geo. Wick	Radcliffe
Eldora Creamery	Eldora	Herbert Soballe	Eldora	Otto Nielsen	Eldora
Hubbard Creamery Co.	Hubbard	H. K. Grantor	Hubbard	James Fradette	Hubbard
The Iowa Falls Creamery	Iowa Falls	R. J. Mason	Iowa Falls	J. H. Jones	Iowa Falls
Swift & Co.	Iowa Falls	C. A. Peacock	Chicago	J. Buol	Iowa Falls
Henry County—					
Pleasant Hill Dairy	Mt. Pleasant	R. C. Campbell	Mt. Pleasant	Chas. Fankhauser	Mt. Pleasant
Howard County—					
Cresco Creamery Co.	Cresco	W. H. Escheid	Cresco	Frank Hall	Cresco
Elma Co-operative Creamery	Elma	Mary T. Dutton	Elma	Frank Barnes	Elma
Farmers Co-operative Creamery Association	Chester	John M. Hughes	Chester	C. C. Fummer	Chester
Farmers Co-operative Creamery	Protovin	W. C. Dostal	Protovin	C. W. Chyle	Protovin
Farmers Creamery Co.	Cresco	W. R. Libbey	Cresco	J. P. Heyberger	Cresco
Maple Leaf Creamery Co.	Maple Leaf	D. Lase	Elma	N. H. Graf	Elma
Saratoga Co-operative Creamery	Saratoga	A. G. Merrill	Cresco	Ed Casper	Saratoga
Welman Produce Co.	Elma	J. P. Wiesdas	Elma	Earl Kelly	Elma
Yeoman & Fosse	Cresco	T. C. Yeoman & Fosse	Cresco	T. C. Yeoman	Cresco
Humboldt County—					
Bode Creamery & Produce Co.	Bode	H. C. Olson	Bode	Iver Thurnen	Bode
Humboldt Creamery Co.	Humboldt	W. F. Priebe	Chicago	F. C. Koenig	Humboldt
Thor Creamery Co.	Thor	J. E. Lonning	Thor	B. E. Lonning	Thor
Wauonta Creamery Co.	Ottosen	C. O. Lomen	Ottosen	L. J. Brennen	Ottosen
Iowa County—					
Marengo Creamery	Marengo	Ady & Sullivan	Marengo	H. W. McCoy	Marengo
E. E. Montgomery Creamery	Williamsburg	E. E. Montgomery	Williamsburg	M. Greenfield	Couray
Iowa Valley Dairy & Creamery	Marengo	O. W. Gode	Marengo	H. A. Mols	Marengo
Victor Creamery	Victor	H. F. Lenocker	Victor	H. F. Lenocker	Victor

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Proprietor, Secretary or Manager	Proprietor, Secretary or Manager	P. O. address of Manager	Name of Battermaker	P. O. address of Battermaker
Jackson County—						
Andrew Co-operative Creamery Co.	Andrew	J. H. Madhaff	Andrew	Andrew	C. O. Von Rhein	Andrew
Bellevue Co-operative Creamery Co.	Bellevue	H. B. Ferguson	Bellevue	Bellevue	C. W. Rouse	Bellevue
Farmers Union Co-operative Creamery Co.	Mapleokita	Geo. H. Brink	Mapleokita	Mapleokita	R. C. Thompson	Mapleokita
Farmers Union Co-operative Creamery Co.	Mapleokita	W. J. Preston	Mapleokita	Mapleokita	A. P. King	Mapleokita
Farmers Union Co-operative Creamery Co.	Mapleokita	W. J. Preston	Mapleokita	Mapleokita	A. J. Spohn	Mapleokita
Preston Creamery Association	Preston	Max Ehler	Preston	Preston	Geo. P. Byrne	St. Donatus
St. Donatus Creamery	St. Donatus	J. L. Henry	St. Donatus	St. Donatus	Ed Reinbaum	Preston
Stratbrook Creamery Co.	Preston	A. J. Nevin	Lamotte	Lamotte	John M. Hoffman	Lamotte
Stratbrook Creamery	Lamotte	Hoffman Creamery Co.	Lamotte	Lamotte		
Jasper County—						
Dairyland Dairy Co.	Newton	Gay M. Lambert	Newton	Newton	H. Lee Stauffer	Newton
Jefferson County—						
Lander-Averson Company	Fairfield	R. O. Linder	Fairfield	Fairfield	R. O. Linder	Fairfield
Iowa City Produce Co.—						
Iowa City Produce Co.	Iowa City	A. J. Feany	Iowa City	Iowa City	Frank Francisco	Iowa City
Iowa County—						
Amber Creamery Co.	Amber	B. O. Dady	Amber	Amber	A. Reilly	Amber
Ammon Farmers Creamery Co.	Ammon	Orthon Brown	Ammon	Ammon	Ulrich Traker	Ammon
Farmers Creamery Co.	Center Junction	Grace Mand	Center Junction	Center Junction	Harry Johnson	Center Junction
Farmers Mutual Creamery Co.	Langworthy	W. J. Olmson	Langworthy	Langworthy	J. M. Woodlett	Langworthy
Farmers Mutual Creamery Co.	Monticello	C. W. Brazelton	Monticello	Monticello	Fred Lehman	Monticello
Kankakee County—						
C. E. Brown	What Cheer	C. E. Brown	What Cheer	What Cheer	Wm. Williams	What Cheer
Leo, M. Griffin Creamery Co.	Sigourney	H. E. Gould	Sigourney	Sigourney	Shirley Scott	Sigourney
E. S. Rossman Creamery Co.	What Cheer	S. E. Rossman	What Cheer	What Cheer	Russ Morris	What Cheer
Kossuth County—						
Aluma Co-operative Creamery Co.	Aluma	M. P. Christmann	Aluma	Aluma	M. F. Christmann	Aluma
Baconrft Co-operative Creamery Co.	Baconrft	Frank E. Faugman	Baconrft	Baconrft	H. E. Thies	Baconrft
Bert Co-operative Creamery Co.	Bert	M. E. Warner	Bert	Bert	Paul Macaulay	Bert
Farmers Co-operative Creamery Co.	Hoboken	A. H. Crickshank	Hoboken	Hoboken	L. C. Strand	Hoboken
Farmers Co-operative Creamery Co.	Fenton	C. F. C. Lange	Fenton	Fenton	F. Wagner	Fenton
Gaylord Creamery Co.	Lakota	G. F. Smith	Lakota	Lakota	H. W. Herdow	Lakota
Gaylord Creamery Co.	Ledyard	P. Wessman	Ledyard	Ledyard	H. M. Dyer	Ledyard
Ledyard Co-operative Creamery Association	Ledyard		Ledyard	Ledyard		Ledyard
Le Sueur County—						
Le Sueur Co-operative Creamery Co.	Iowa Rock	H. J. Christensen	Iowa Rock	Iowa Rock	Walter Shick	Iowa Rock
Latta Co-operative Creamery Co.	Iowa Rock	Orin Wickhamland	Iowa Rock	Iowa Rock	Walter Shick	Iowa Rock
Thiloka Co-operative Creamery Co.	Thiloka	J. C. Norville	Thiloka	Thiloka	John Rowley	Thiloka
Svea City Co-operative Creamery Co.	Svea City	S. V. Carter	Svea City	Svea City	S. O. Rovison	Svea City
Whittemore Farmers Creamery	Whittemore	M. W. Fiedel	Whittemore	Whittemore	Albert Feager	Whittemore
Lee County—						
Fort Madison Creamery Co.	Fort Madison	B. K. Peiser	Fort Madison	Fort Madison	Priza Lamphale	Fort Madison
Smith & Company	Kevok	C. A. Pascoe	Chicago	Chicago	Robt. Merrick	Kevok
Linn County—						
Blue Co-operative Creamery Company	Center Rapids	G. T. Guthrie	Center Rapids	Center Rapids	J. Thomas	Center Rapids
Central City Creamery Co.	Central City	O. E. Crane	Central City	Central City	Edna R. George	Central City
Linn County Farmers Mutual Creamery Association	Central City	M. L. Ware	Osgon	Osgon	L. C. Popshagen	Osgon
Saltatory Butter Store	Center Rapids	Palmer & Gray	Center Rapids	Center Rapids	Lee Dunlap	Center Rapids
Springville Creamery Co.	Springville	Earl George	Springville	Springville	Wm. Stine	Springville
Valley Farm Creamery	Walker City	H. E. Henderson	Walker City	Walker City	Wm. Stine	Walker
Walker Co-operative Creamery Co.	Walker	Thos. W. Hawkinson	Walker	Walker		Walker
Louis County—						
Douglas Ice Cream Company	Chariton	Lloyd Paulk	Chariton	Chariton	Roy Adams	Chariton
Lyon County—						
Farmers Creamery Company	Irwood	L. B. Holland	Irwood	Irwood	Lea Jensen	Irwood
George Creamery Company	Geotze	C. A. Rasmussen	Geotze	Geotze	C. A. Rasmussen	Geotze
Rock Rapids Creamery Co.	Rock Rapids	W. J. Parshak	Rock Rapids	Rock Rapids	A. E. Robertson	Rock Rapids
Madison County—						
Winterset Creamery	Winterset	F. D. Sculler	Winterset	Winterset	F. D. Sculler	Winterset
Malaska County—						
Gapperi Creamery Company	Oskaloosa	M. Gapperi	Oskaloosa	Oskaloosa	M. Gapperi	Oskaloosa
Leve's Creamery Company	Oskaloosa	J. C. Leve	Oskaloosa	Oskaloosa	Chas. Leve	Oskaloosa
Leve's Creamery Company	Oskaloosa	John C. Leve	Oskaloosa	Oskaloosa	Chas. Leve	Oskaloosa
Producers Co-operative Dairy Association	Oskaloosa	Frank Clark	Oskaloosa	Oskaloosa	Henry Martin	Oskaloosa
Marion County—						
Knoxville Creamery	Knoxville	W. H. Anderson	Knoxville	Knoxville	W. H. Anderson	Knoxville
Pella Creamery	Pella	Ben Krys	Pella	Pella	C. F. Lentley	Pella
Marshall County—						
Jackson Dairy Company	Marshalltown	F. E. Jackson	Marshalltown	Marshalltown	Frank Higgins	Marshalltown
Minerva Valley Co-operative Creamery Association	Clamson	Thos. Hahala	Clamson	Clamson	W. P. Hugson	Clamson
Nelson Butter & Ice Cream Co.	Marshalltown	N. C. Nielsen	Marshalltown	Marshalltown	P. J. Christensen	Marshalltown
State Center Farmers Creamery Association	State Center	Chas. Jensen	State Center	State Center	Chas. Jensen	State Center

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Proprietor, Secretary or Manager	Name of Proprietor, Secretary or Manager	P. O. address of Proprietor, Secretary or Manager	Name of Bottlemaker	P. O. address of Bottlemaker
Mills County— Glenwood Creamery Co. Malvern Cold Storage Co.	Glenwood, Malvern.	J. W. McKnight, L. W. Bochar.	J. W. McKnight, L. W. Bochar.	Glenwood, Malvern.	C. M. Gray, Adon Irshad.	Glenwood, Malvern.
Mitchell County— Little Cedar Creamery Co. New Hope Creamery Co. Osage Co-operative Creamery Association. St. Angelo Creamery. Ellettsville Creamery. Rock Creek Creamery Association. Stacyville Creamery Co.	Little Cedar, Osage, Stacyville, Ellettsville, Osage, Stacyville.	Hans Larson, Julius Brunner, John Tiedel, W. A. Tullison, H. K. Elward, W. A. Schranitz.	Hans Larson, Julius Brunner, John Tiedel, W. A. Tullison, H. K. Elward, W. A. Schranitz.	Little Cedar, Osage, Stacyville.	Hans Larson, G. Brun Larson, H. R. Bollis, W. A. Fritz, M. J. Mickelson, K. Durbin.	Little Cedar, Osage, R. 4, Stacyville, Ellettsville, Osage, Stacyville.
Monroe County— M. H. Kruger Creamery Company.	Albia.	M. H. Kruger.	M. H. Kruger.	Albia.	F. C. Burlingame.	Albia.
Montgomery County— Lee Blue Cream & Bidding Co. Tyler Bros.	Red Oak, Villena.	Lee Blue, E. F. Tyler.	Lee Blue, E. F. Tyler.	Red Oak, Villena.	W. F. Conley, H. W. Webb.	Red Oak, Villena.
Muscatine County— West Liberty Co-operative Creamery.	West Liberty.	Emmett Buchman.	Emmett Buchman.	West Liberty.	W. H. Sampson.	West Liberty.
O'Brien County— Hartley Creamery Co. Sheldon Co-operative Creamery. Sutherland Creamery Co.	Hartley, Sutherland.	C. B. Jensen, Geo. Berthare, Alolph Christensen.	C. B. Jensen, Geo. Berthare, Alolph Christensen.	Hartley, Sheldon, Sutherland.	C. B. Jensen, L. E. Woodlawn, Chas. W. Green.	Hartley, Sheldon, Sutherland.
Osceola County— Auburn Creamery Co. Johannes Producers Co.	Auburn, Sibbey.	Evert den Herder, J. F. Johannes.	Evert den Herder, J. F. Johannes.	Auburn, Sibbey.	Paul Muller, C. M. Nichols.	Auburn, Sibbey.
Pike County— Swift & Company.	Charinda.	J. A. Pascock.	J. A. Pascock.	Chicago.	Elmer Gustafson.	Charinda.
Palo Alto County— Emmettsburg Creamery Co. Farmers Co-operative Creamery. Farmers Co-operative Creamery. Farmers Creamery Company.	Emmettsburg, Ruthven, Gratiot.	L. Stuchiner, L. Stuchiner, Vanderreile, M. P. Junker, Jergen Anderson.	L. Stuchiner, L. Stuchiner, Vanderreile, M. P. Junker, Jergen Anderson.	Emmettsburg, Emmetsburg, Ruthven, Gratiot.	W. A. Thayer, W. A. Thayer, M. P. Junker, Harry Hanson.	Emmettsburg, Emmetsburg, Ruthven, Gratiot.

Leit Island— Mallard Creamery. Silver Lake Creamery Company. West Bend Co-operative Creamery Co.	Gratiot, Mallard, Ayres, West Bend.	A. P. Anderson, C. L. Cammick, C. G. Nelson, A. L. Fye.	A. P. Anderson, C. L. Cammick, C. G. Nelson, A. L. Fye.	Gratiot, Mallard, Ayres, West Bend.	A. P. Anderson, Eud. Blum, W. W. Johnson, G. W. Debbis.	Gratiot, Mallard, Ayres, West Bend.
Pocahontas County— Laurens Co-operative Creamery Co. Palmer Creamery Company. Pocahontas Creamery.	Laurens, Palmer, Pocahontas.	R. V. Neville, Ed Johnson, Gust Wehler.	R. V. Neville, Ed Johnson, Gust Wehler.	Laurens, Palmer, Pocahontas.	F. W. Johnson, Otto Spain, Gust Wehler.	Laurens, Palmer, Pocahontas.
Polk County— Boatmen Creamery Company. Des Moines Creamery Company. Harding Cream Company. Swift & Company.	Des Moines, Des Moines, Des Moines.	F. C. Wright, J. F. Dawson, J. M. Harding, C. A. Pascock.	F. C. Wright, J. F. Dawson, J. M. Harding, C. A. Pascock.	Des Moines, Des Moines, Omaha, Nebr., Chicago, Ill.	S. R. Pemberton, L. S. Perry, Loyal Trachten, J. A. Ahrig.	Des Moines, Des Moines, Des Moines, Des Moines.
Pottawatomie County— Hard Creamery Company.	Council Bluffs.	Fred E. Hird.	Fred E. Hird.	Council Bluffs.	G. S. Superman.	Council Bluffs.
Poweshock County— Brooklyn Creamery Co. Maplehurst Dairy Company.	Brooklyn, Grinnell.	G. H. Guthrie, E. G. Squires.	G. H. Guthrie, E. G. Squires.	Brooklyn, Grinnell.	G. H. Guthrie, Harry E. Crowder.	Brooklyn, Grinnell.
Sas County— See City Creamery Co.	See City.	H. F. Lange.	H. F. Lange.	See City.	A. G. Redman.	See City.
Scott County— Bell Creamery Company. Pine-City Creamery Company. Tri-City Butter Company.	Davenport, Davenport, Davenport.	M. V. Jones, E. E. Amos, P. J. Lyngbohn.	M. V. Jones, E. E. Amos, P. J. Lyngbohn.	Davenport, Galatsburg, Ill., Davenport.	Frank Thell, Louis Hammann, A. C. Norokow.	Davenport, Moline, Ill., Davenport.
Shelby County— Rock Valley Creamery Company. West Hamilton Creamery Co.	Harlan, Harlan, Elk Horn.	John Hammann, O. G. Buford, C. W. Boyson.	John Hammann, O. G. Buford, C. W. Boyson.	Harlan, Harlan, Exra.	Carl W. Anderson, E. W. Jensen, Carl Lygze.	Harlan, Harlan, Elk Horn.
Sioux County— Alton Creamery Company. Farmers Co-operative Creamery Co. Farmers Mutual Co-operative Association. Farmers Mutual Co-operative Creamery. Farmers Mutual Creamery Co. Hawdon Creamery. Rock Valley Creamery Co.	Alton, Paulin, Hall, Orange City, Sioux City, Hopson, Rock Valley.	Mueller & James, I. C. H. Yarta, J. W. Smit, Frank Nettobom, A. Yunker, John Houtal, E. Ely.	Mueller & James, I. C. H. Yarta, J. W. Smit, Frank Nettobom, A. Yunker, John Houtal, E. Ely.	Alton, George, Etell, Orange City, Sioux City, Hopson, Rock Valley.	J. P. Mueller, Henry J. Wargowsky, A. M. Hein, F. J. Havens, F. J. Sibley, G. W. Reinowder, E. Ely.	Alton, Paulin, Hall, Orange City, Sioux Center, Hopson, Rock Valley.
Story County— Dairy Department Iowa State College.	Ames.	M. Mortenson.	M. Mortenson.	Ames.	F. C. Huse.	Ames.

CREAMERY LIST—Continued

NAME OF CREAMERY	Located at or near	Proprietor, Secretary or Manager	Proprietor, Secretary or Manager	Name of Buttermaker	P. O. address of Buttermaker
Farmers Co-operative Creamery Co.	Slater	J. H. Wald	Slater	C. Clark	Slater
Huxley-Barnes Co-operative Creamery Co.	Huxley	S. M. Wald	Huxley	A. Jensen	Huxley
Noranda Creamery Co.	Noranda	A. Contri & C. H. Case	Noranda	H. Larson	Noranda
Robald Farmers Creamery Co.	Robald	C. E. Rod	Robald	J. H. Larson	Robald
Story City Farmers Creamery Co.	Story City	Martin C. Hanson	Story City	J. M. Gerten	Story City
Zearing Creamery Company	Zearing	C. P. Bean	Zearing	Carl M. Peterson	Zearing
Tama County—					
Garwin Creamery	Garwin	Dale Sheldon	Garwin	Dale Sheldon	Garwin
J. H. Neil Creamery Co.	Tama	J. H. Neil	Tama	Chris Christensen	Tama
Trast Creamery Company	Trast	Nelson Bess	Trast	L. Nielsen	Trast
Wayne County—					
Bedford Creamery Company	Bedford	Frank Drumming	Bedford	Leslie Klapp	Bedford
Union County—					
Alton Creamery Company	Alton	Y. O. Williams	Alton	Y. O. Williams	Alton
Boynton Creamery Company	Creston	J. I. Boyd	Creston	C. E. Linn	Creston
Swift & Company	Creston	Ray Peterson	Creston	Harry McMillan	Creston
Wapello County—					
F. G. Buxton Creamery Co.	Ottumwa	F. G. Buxton	Ottumwa	P. N. Keltner	Ottumwa
S. G. Brinton Creamery Co.	Ottumwa	E. A. Erickson	Ottumwa	C. J. Bartlett	Ottumwa
Yorkshire Creamery Company	Ottumwa	E. N. Morell	Ottumwa	Jens Jensen	Ottumwa
Washington County—					
Brighton Creamery Company	Brighton	Neal G. Whisler	Brighton	Neal G. Whisler	Brighton
Frederic Creamery Company	Washington	W. S. Reister	Washington	Harold J. Hays	Washington
Wayne County—					
Jac. L. Humphrey, Jr.	Humeston	J. L. Humphrey	Humeston	M. W. Risky	Humeston
Wilder County—					
Fort Dodge Creamery Company	Fort Dodge	A. B. Saylor	Fort Dodge	B. Jensen	Fort Dodge
Gold Butte Creamery Company	Fort Dodge	S. E. Magnum	Fort Dodge	Chris Sorenson	Fort Dodge
Governor Co-operative Creamery	Governor	F. E. Magnum	Governor	Chris Sorenson	Governor
Winnebago County—					
Buffalo City Co-operative Creamery Association	Buffalo Center	E. B. Brulman	Buffalo Center	H. P. Engen	Buffalo Center
Forest City Co-operative Creamery Association	Forest City	J. E. Rind	Forest City	Sam Kristensen	Forest City
Wright County—					
Lake Mills Creamery Company	Lake Mills	Olaf T. Grew	Lake Mills	Carl Howland	Lake Mills
Lehland Co-operative Creamery Co.	Lehland	O. Michelson	Lehland	W. M. Tweten	Lehland
Lincoln Co-operative Creamery Co.	Bake	A. A. Sheldon	Bake	L. K. Bjork	Bake
Scarville Creamery Association	Scarville	J. T. Hermonson	Scarville	Jens Jensen	Scarville
Union Co-operative Creamery Association	Union	Albert C. Engblomson	Union	Thomas	Union
Vale Creamery Association	Scarville	Albert C. Engblomson	Scarville	Gay Howland	Scarville
Winnebago County—					
Burr Oak Farmers Co-operative Creamery Co.	Burr Oak	A. C. Erickson	Burr Oak	Floyd Ferris	Burr Oak
Calumet Creamery Company	Decorah	N. O. Bardsickson	Decorah	W. M. Tweten	Decorah
Central Creamery Company	Decorah	J. B. Knicker	Decorah	S. O. Bardsickson	Decorah
Fostina Co-operative Creamery Co.	Fostina	Geo. Haberman	Fostina	Phillip Lauson	Fostina
Haberman Creamery	Fort Adkinson	Bids & Alro	Fort Adkinson	Geo. Haberman	Fort Adkinson
Highlandville Creamery Co.	Highlandville	W. O. Rue	Highlandville	P. J. Bids	Highlandville
Knosh Creamery Company	Highway	N. O. Faldut	Highway	Jenn Quality	Highway
Northwood Creamery Co.	Northwood	H. P. Nicholson	Northwood	D. O. O. Hauge	Northwood
Pleasant Co-operative Creamery	Decorah	H. P. Nicholson	Decorah	E. C. Landverk	Decorah
Silver Springs Creamery Company	Ossian	H. P. Nicholson	Ossian	O. O. O. Hauge	Ossian
Woodbury County—					
Blue Valley Co-operative Creamery Co.	Sioux City	G. T. Guthrie	Sioux City	C. L. Smith	Sioux City
Fairmont Creamery Co.	Sioux City	L. E. Hartz	Sioux City	John Radem	Sioux City
Hardford Produce Company	Sioux City	J. H. Whittemore	Sioux City	M. O. Whitlock	Sioux City
Worth County—					
Farmers Dairier & Cheese Association	Northwood	Olava Knutson	Northwood	Lonis H. Brack	Northwood
Farmers Co-operative Creamery Co.	Northwood	O. F. Sten	Northwood	K. C. Swadlow	Northwood
Farmers Creamery	Grafton	E. M. Glase	Grafton	P. Pershali	Grafton
Farmers Creamery Company	Kennett	Bilmon Garber	Kennett	Joel Gilbertson	Kennett
Farmers Creamery	Mainly	G. J. Mueller	Mainly	Ed Andrusen	Mainly
Fertile Co-operative Dairy Co.	Hartile	Evo Lauson	Hartile	J. A. Johnson	Hartile
Harland Creamery Co.	Harland	E. E. Brown	Harland	S. O. Dahlin	Harland
John Creamery Company	Joice	L. L. Skulte	Joice	Oliver Kvabk	Joice
Wright County—					
Champion Creamery Co.	Champion	M. Anderson	Champion	C. W. Jensen	Champion
Co-operative Creamery	Balmored	G. F. Eider	Balmored	C. R. Jensen	Balmored
Farmers Co-operative Creamery	Dows	H. J. Iversen	Dows	A. O. Larson	Dows
Goldfield Co-operative Creamery	Goldfield	John Roberts	Goldfield	John Roberts	Goldfield

*Central dairies plant.

c Co-operative

s Stock

i Individual

p Partnership

CONDENSED MILK LIST

Name of factory	Location	Name of Proprietor	Address of Proprietor	Name of Cheesemaker	Address of Cheesemaker
Allamakee County—					
Forest Milk Cheese Factory.....c	Postville	F. I. Clark, Secretary	Postville	E. E. Austin	Postville
Lincoln Cheese Factory.....c	Dorchester	T. J. Fitzgerald, Mgr.	Dorchester	Otto Stomhart	Dorchester
Volney Farmers Cheese Factory.....s	Monona, R2	Mrs. Dell Rose, Sec.	Monona, R2	R. Gerber	Monona, R2
Humboldt County—					
Pioneer Cheese Factory.....i	Renwick	W. F. Keller, Prop.	Renwick	W. F. Keller	Renwick
Storey County—					
Nevada Cheese, Ice Cream, Butter Co.....p	Nevada	A. Contri & C. H. Chase	Nevada	S. Palmieri	Nevada

*Closed temporarily. i Individual.

CHEESE FACTORY LIST

Name of factory	Location	Name of Proprietor	Address of Proprietor
Carnation Milk Products Company.....	Waverly	Paul R. McIfee, Secretary	220 S. State Street, Chicago, Ill.
Perry Milk Products Company.....	Perry	H. M. Pattee, President	Perry, Iowa

STATE OF IOWA
1922REPORT OF THE
State Mine InspectorsFOR THE
Biennial Period Ending December 31, 1921

INSPECTORS

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R. T. RHYS, Ottumwa, Iowa
EDWARD SWEENEY, Des Moines, Iowa
L. E. STAMM, Secretary, Des Moines, IowaPublished by
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