

SEVENTH ANNUAL REPORT

OF THE

# State Dairy Commissioner

TO THE

GOVERNOR OF THE STATE OF IOWA,

FOR THE YEAR 1893.

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

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1893.

## REPORT.

*To His Excellency, HORACE BOIES, Governor of Iowa:*

In conformity with the requirements of chapter 53, of the laws of the Twenty-first General Assembly, and amended by chapter 98 of the laws of the Twenty-second General Assembly, and to show the workings of chapter 50, of the laws of the Twenty-fourth General Assembly, I have the honor to submit the seventh annual report of this office.

The following is a list of those holding oleomargarine licenses, giving the location of the holder:

Armour Packing Company.....	Davenport
Armour Packing Company.....	Des Moines
Achter, Archolas.....	Muscatine
Albecht, N.....	Davenport
Ankerson & Herck.....	Davenport
Brown, Eli.....	Council Bluffs
Bitzer, M. H.....	Muscatine
Bender & Tuttle.....	Des Moines
Brasted & Prentice.....	Anamosa
Bartineyer, F. H. & Son.....	Davenport
Chase Bros.....	Des Moines
Collins Grocery Co.....	Ottumwa
Cunningham, T. A.....	Marion
Campbell & Bowman.....	Washington
Eagal, M. J. & Co.....	Davenport
Ebersole, Chas.....	Des Moines
East End Supply Co.....	Ottumwa
Erwin, R. J. & Co.....	Oskaloosa
Eckhardt Bros.....	Davenport
Franchere, Gabriel.....	Cedar Rapids
Faris, J. S.....	Davenport
Frickle, Chas.....	Davenport
Glote Tea Co.....	Ottumwa
Gould, Dan.....	Burlington
Grefe, Al.....	Des Moines
Grefe & Umfrid.....	Des Moines
Goos Bros.....	Davenport



Generd, L. R. & Co.	Oskaloosa
Hafmann, Wm.	Des Moines
Hale, Wm. L.	Clinton
Halm Bros	Ottumwa
Johnson & Hopkins	Des Moines
Johnson Bros.	Des Moines
Kuble, L.	Des Moines
Kelty, T. A.	Cedar Rapids
Kamp & Wooford	Pleasant Plain
Kerker, G. W.	Davenport
Lovack, Jno. J. Jr.	Iowa City
Leedham Bros.	Lyons
Littler, C. S.	Des Moines
Larson, Cris	Council Bluffs
McKee Bros.	Des Moines
Metzger & Randelett	Council Bluffs
Mey, Jno J.	Des Moines
Mullen & Co.	Iowa City
McPherrin, J. M.	Des Moines
Mershon Bros.	Des Moines
Narriley & Walsmith	Keokuk
Persch, C.	Des Moines
Paulsen, P. J.	Davenport
Pace, J. M.	Council Bluffs
Parkhurst, M. R.	Davenport
Peterson, T. S.	Clinton
Perley & Anderson	Des Moines
Perkins, W. H.	Youngstown
Risley, J. P.	Davenport
Sinclair, F. M. & Co.	Marion
Sinclair, F. M. & Co.	Cedar Rapids
Sinclair, F. M. & Co.	Cedar Rapids
Spencer, G. M.	Des Moines
Simpson & Beatty	Fairfield
Scott, G. M.	Fairfield
Steinbecker, Dehn & Lain	Burlington
Strohl, T.	Davenport
Stout Bros.	Des Moines
Tri-City Package & Produce Company	Davenport
Tri-City Package & Produce Company	Davenport
Tri-City Package & Produce Company	Davenport
Throne, Henry	Ottumwa
Van Buskirk, C. B.	Ottumwa
Miley, W. B.	Davenport
Zolten, J.	Council Bluffs
Black, C. E.	Fort Dodge
Thompson, Josiah	Cedar Falls
Deal & Trumball	Sioux City
Springar, Wm.	Marshalltown

Hatten, Wm. M.	Waterloo
Andrews & Hoyt	Marshalltown
Norman, A.	Marshalltown
Runyan, G. H.	Dubuque

The internal revenue officers have not exercised themselves to any great extent in enforcing the requirements of the Federal law, which law makes it the duty of each licensed retail dealer to brand the outside wrapper of the customer's package with the word "Oleomargarine." In some of the states when a dealer takes out a retail license, the department send him the regulations governing the sale of oleomargarine under internal revenue laws, with a request that they be read and complied with. In this state this has never been done. In most cases where I have visited licensed dealers I have found a great deal of ignorance. If the Federal oleomargarine laws were rigidly enforced, as they could and should be, for the internal revenue officers at Burlington and Dubuque employ eight or ten deputies; a number surely sufficient to attend to the work properly, our office would have no occasion to look after licensed dealers, for in complying with the Federal law they would comply with the Iowa law.

November 9, 1892, I called at the business place of Geo. D. Carson, a butcher in East Des Moines, and a licensed dealer in oleomargarine, and bought one pound of oleomargarine. He failed to inform me that the goods was imitation, and wrapped it up in oiled tissue paper, enclosing that in a brown paper wrapper. The word "Oleomargarine" and his name and street were stamped on the inside next the butter, in letters one-fourth the size required by the Federal law and in ink nearly the color of the oleomargarine. The outside wrapper had no printed matter on it. I brought the package out and showed it to L. D. Carpenter, my Des Moines agent, who was with me. He found no printed words on the paper for the color of the ink so closely resembled the color of the oleomargarine as to be imperceptible. The brand should have been printed in Roman letters one-fourth inch square and in ink in strong contrast to the color of the paper on which it is printed. Mr. Carson charged twenty cents per pound for the oleomargarine. Good, sweet dairy butter could have been bought in the city for twenty-two cents, and creamery butter was retailing at twenty-five cents. This oleomargarine would not have cost over eleven cents per pound, and would not have retailed at over fifteen cents, if it had been sold for what it is and not for butter. Through false pretense he was making at least five cents per pound on all that he sold, and he claimed that he was selling a large quantity.

I sent for Mr. Carson to come to W. A. Spurrier's office. Mr. Spurrier, the county attorney, read him the Federal and State laws,



and I produced the package, showing him how he had violated the law. He agreed to plead guilty. The State was to recommend the minimum fine of fifty dollars. Before doing so, however, he wanted to consult with Thomas Cheshire, the lawyer for the Kansas City Armour Co., from which he claimed to have bought the goods. He said that he had followed out their directions in selling the oleomargarine and that they ought to pay the fine. Mr. Cheshire came to the office and admitted that Mr. Carson had technically violated the law, and that if we insisted he would pay the fine, "which was greatly in excess of an adequate punishment for the offense." I informed Mr. Cheshire that in my judgment Mr. Carson had been making a great deal of money in concealing the fact that he was selling oleomargarine in place of butter, and that I would insist that he plead guilty and pay the fine. This Mr. Cheshire said that he would do. A certain constable filed the same information before Justice of the Peace English as I should have done. Mr. Carpenter and I were subpoenaed as witnesses and appeared at the court on the day and at the hour specified. I asked Mr. Cheshire what he meant by having a constable file the information that I should have done? His reply was, "A man is entitled to a trial in his own township." I then asked, "Is that all the reason for this?" He replied, "It is the main reason." I then told him that the State was perfectly willing that Mr. Carson should have a trial in his own township, providing, it was a trial before Justice English, who has the reputation of being an honest man. Mr. Cheshire said, "A man is entitled to a trial by jury." I thought that a constable who was accommodating enough to file the information that I should have filed would be equally as accommodating in selecting a jury that would favor Mr. Carson. We were willing to testify, but told him that if the case went adverse to the State, that this trial would not be the last, as Mr. Carson had violated the United States laws, where the minimum fine is \$250, and that the evidence beyond any question would convict him and that the Federal grand jury would bring an indictment against him to that effect. Mr. Cheshire made a proposition to Mr. Carson to try the case before a justice of the peace on the West Side. The county attorney, upon hearing this said, "You had better take your chances before the worst jury that can be packed in Des Moines than to try the case before that man." The case was dismissed before Justice English's court. The package of oleomargarine enclosed in its original wrappings was placed in the vault of the county attorney's office. Mr. Parish, assistant county attorney and partner of Mr. Spurrier, said that it would not inconvenience them to have it there and that it would be forthcoming in May when the grand jury met.

On May 10, 1893, I appeared before the grand jury and testified to the facts relating to the Carson case. The foreman of the jury asked to see the package. I informed him that I had sent for it. After waiting a few minutes I went to the county attorney's office, where I found Mr. Parish, who unlocked the vault and we made a thorough search for the package. It could not be found. The third partner was in Tennessee. He had inquired what the package was, and had been informed by Mr. Parish that it belonged to the Dairy Commissioner and was for evidence to be used before the grand jury in May. He did not disturb it at that time, as Mr. Parish had seen it since. This was the only explanation that Mr. Spurrier or Mr. Parish made. The vault had two sets of steel doors. The valuables of the firm were kept there, and no one outside the office force could have access to it. The next day I again appeared before the grand jury and explained the circumstances connected with the loss of the package, and gave the foreman the names of Messrs. Carpenter, Spurrier, Parish and Wright, all of whom had seen the package and examined the brand. The brand could be seen only by taking the paper off the oleomargarine. The assistant prosecuting attorney claimed that this was merely a technical violation of the law. The grand jury thought otherwise and indicted Mr. Carson, his trial to come off in October. On account of failure to subpoena the principal witness, who was in Chicago at the time, the trial was again postponed until the May term. The oleomargarine people in the case pursued their usual course of trickery, chicanery and secrecy and trying to buy their way through.

On November 9th I filed information against a restaurant keeper in East Des Moines for serving oleomargarine to his guests without properly placarding his restaurant. He plead guilty and was fined five dollars and costs.

On November 9th I filed information against D. W. Kooker, East Des Moines, a restaurant keeper, for serving oleomargarine to his guests without placarding his dining room. He plead "not guilty," and took a change of venue. He had the trial set for 2 o'clock in the afternoon, because the restaurant was one open all night, and he was the night man and slept in the forenoon. The trial was postponed at two different times and set at 2 p. m. It was again postponed, and the State appeared at 2 p. m., only to be informed by the justice of the peace that the case had been tried at 10 a. m., and had gone by default, as the State did not appear. The justice replied to the question, "Why did you not notify the county attorney, who had appeared in the case, of the change in time; his office was but one block away?" "I had no one to send." I had always noticed two or three constables or bailiffs there whenever I had been there.



Our agent, Dr. John J. Millar, of Sioux City, filed information against I. W. Reel for selling oleomargarine without giving proper notice to the customer by informing him that the goods purchased was oleomargarine and not butter. He was fined fifty dollars and costs. Two months later the same man was fined one hundred dollars and costs for the same offense, which was remitted on his promise to quit the business, which he did.

During the winter and spring I frequently visited and ate at the restaurants in Des Moines. I invariably found them serving butter, or, if using oleomargarine, their dining rooms were placarded. Yet, I have no doubt that at certain times some of the hotels and restaurants succeed in serving it without giving proper notice. The licensed dealers brand their goods according to law as far as I could learn.

November 30th I visited all the hotels, boarding houses and restaurants in Davenport. I filed information against P. W. Beckworth for not placarding his restaurant when feeding oleomargarine to his guests. He plead guilty, and the fine and costs amounted to four dollars. I visited all the hotels, restaurants and boarding houses in Cedar Rapids, and found them using butter, with the exception of one, whom we filed information against. He plead guilty, and was fined one dollar and costs—three dollars. Found licensed dealers complying with the law. Our agent, Mr. Brown, watched them all winter, and forced the hotels and boarding houses to comply with the law. Our agents have rendered great assistance in enforcing the oleomargarine laws on the hotels, boarding houses and restaurants, as well as the retail dealers. It is gratuitous on their part, and I take this occasion to thank them for it in the name of the dairy people of the State.

I visited Council Bluffs several times and found all the hotels and restaurants complying with the law. Our agent keeps watch of them. Have visited Burlington a number of times and examined restaurants and hotels. Mr. Edger keeps a watch for them. Clinton and Ottumwa have also been carefully looked after. Commission men who handle butter, could find no one violating our law. I visited Dubuque several times and ate at the restaurants and hotels and could find nothing out of the way.

October 6th, Mrs. C. H. Hitchcock of Des Moines, brought to the office a sample of alleged butter which she had bought at Mr. Waers' grocery store. We sent it to Prof. Patrick who made a chemical analysis and reported it to be oleomargarine. Mrs. Hitchcock had called for four pounds of dairy butter and had selected it from a tub. She paid for it and told the clerk that she would call for it on her way home. Upon investigation I found that Mr. Waers had never

handled any oleomargarine except in bricks, and as Mrs Hitchcock had tub butter, the spurious goods had been palmed off on him by designing people without his knowledge. If they sold her oleomargarine they did not do so knowingly. The firm, and the two clerks under oath verified the above statement. I examined their oleomargarine bills and came to the conclusion that they were innocent of any intent to defraud their customers. Their stamp complied with the law; the ink was in strong contrast with the paper used. I was sure that their defense would hold good before any impartial jury. The firm paid for the chemical analysis. I considered Mrs. Hitchcock's trouble worth five dollars, which they paid, and also sent her four pounds of good butter in place of the spurious goods first sent.

November 25th, I filed information with Justice Lottridge against a boarding house keeper at Osage Iowa, for serving oleomargarine to his guests without placarding his dining room. He plead guilty and was fined five dollars and costs.



## METHODS OF DEVELOPING THE DAIRY INDUSTRY OF IOWA.

In response to careful inquiries made on my visits to the creameries, and with conversations held with the dairymen in the old dairy counties, I learn that a great many herds have been reduced. Not from the reason that large dairies are not profitable, but because many of the farmers have become independent in their circumstances. Other branches of farming have paid well, especially in the years of 1890 and 1891. Our reports for three years called attention to the fact that many dairymen were inclined to go back to grain raising and flax culture, and that if they did so they would surely miss it. The reasons given for quitting dairying were, that dairying is too confining, that cows have to be milked twice a day the year round, that the work is irksome and tedious, that they had merely done it to get a start, and having accomplished their purpose it is not necessary for them to milk much more. This course has been practiced to such an extent among the independent farmers of the old dairy districts that some of the creameries are not receiving over two-thirds the milk that they did formerly. On the other hand, the young farmers who are starting out for themselves, whose farms are not entirely free from debt, have increased the number of their cows, paying strict attention to the selection of them, and are now depending on the cow and the pig to pay off the mortgage on the farm.

The output of butter from these old dairy districts is not increasing, in reality it is barely holding its own. In the winters of 1892 and 1893 the prices of butter were very high. It averaged above thirty cents until in May. Grain and hay were plenty and cheap, and the profits in the business of dairying were never better. The grass this year came late, but it made such rapid growth that there was an abundance of feed. A severe drought commenced early in July, and extended all over the dairy districts of the northwest. It was especially severe in the counties bordering on the Mississippi river in Illinois and Wisconsin. It continued for nearly one hundred days

in those two states. Through central and western Iowa there were scattering showers the last of September. The grass in the pastures was so luxuriant that it held out much longer than if the drought had started when it was in but ordinary condition. Fall rains were so late that the drought has materially lessened the butter production this year over last. The thrifty dairymen all over the State were feeding grain and hay to their cows in August. It is fortunate that we had an immense hay crop, which was secured in fine condition. Added to plenty of hay is an immense corn crop. These two great crops will enable the farmers to take care of the cows in good shape in spite of the drought.

The price of butter through June ranged from one to one and one-half cents higher than last year, notwithstanding the hard times and financial panic. Butter reached thirty cents for western extras in September and is bound to command a high price during the winter.

The question is asked frequently, why dairying does not spread all over the State to as great an extent as it has done in the twenty-four counties in the northeastern part. The whole State is well adapted to dairying. It is conceded that the farmers in the dairy districts are more prosperous, have better houses and barns, and that their bank accounts are larger than those in the other parts of the State.

In almost every county in Iowa there have been creameries erected, and attempts made to induce the farmers to engage in dairying. In many instances, where the farmers have made the venture, the result has been a failure; not because the county was not well adapted to dairying, but because the expense of manufacturing the product was so great that the patrons of the creamery were not paid for the work of milking.

Years ago, when the creamery business was first started in Delaware county, butter had been bought on its merits on their markets for some time. The gilt edge quality brought two or three times as much as the poorest and was packed in tubs by itself. This process spread to adjoining counties, and a class of private dairymen were educated to make fine butter, and in order to do this they learned to take proper care of their milk. Thus these pioneer butter buyers, many of whom came from the dairy districts of the east, where butter was bought on its merits, educated our people to the extent that creameries were a possibility. The difference between gilt edge and poor butter was an object lesson which appealed to their understanding through their pockets. How to make butter that would bring the highest price was the problem. Its proper solution meant dollars and cents to the farmer. Many of them succeeded in making fine butter. This so encouraged them that they increased the size of



their dairies until they were able to furnish milk enough to warrant John Stuart, of Manchester, in starting the first creamery in the State. The milk was drawn to the creamery twice a day and was there set in large square cans surrounded with ice water. Milk was not received unless brought in in good condition. All milk was handled in the same manner; the cream was raised at the same temperature, and the butter made from it was uniform in color, texture and flavor. At once this butter commanded for itself the first place and price in the markets of the country. Within a few years this kind of creamery gradually spread over Delaware and the adjoining counties. The square cans soon gave way to the shot gun cans. Before long the farmers generally adopted the deep setting plan of raising the cream, then churning it and sending it to market without coloring, salting or working it. From this process came the idea of gathering the cream and sending it to the creamery to be made into butter. The whole milk creameries had been four or five years spreading in as many counties. The gathered cream system was found to be a great improvement over making the fresh butter and selling it to the dealer. This system spread rapidly over northeastern Iowa. The creamery plant cost but a small amount of money, somewhere from one to two thousand dollars. The cream could be gathered much cheaper, as it weighed only about one-fifth as much as the full milk. During June milk was plenty and a small amount of help could make from five hundred to two thousand pounds of butter per day.

This rapidly extending business found the patrons of the creameries wholly uneducated in the care of their cows and the proper handling of milk. One creamery often gathered cream in a territory twenty-five miles long by fifteen miles wide. In the hot weather much of the cream came in in poor condition. It was gathered in twenty-gallon tin cans, and could not possibly be kept at a proper temperature until it reached the creamery. These large tin cans were superseded by wooden tanks. These tanks were constructed with dead air space and lined with heavy tin plate. The first one ever sent out for cream brought it in to the creamery at a temperature of sixty degrees. The cream in the twenty-gallon tin can came in the same day at a temperature of seventy-five degrees. The first wooden tank was sent out by the Osage creamery. It was made out of seven-eighths flooring, double, with no air spaces. The dairy supply people improved it by putting in the dead air spaces and then patented it. In three years after the first wooden tank was sent out, these tanks were in general use, and the result was that milk arrived at the creamery in much better condition. When the gathered cream creamery

first started it was thought to gather the cream every day, in order that the product be of first-class quality. Much of the goods graded as western creamery extras, and the great bulk of the butter was uniform in color and texture, and had a fine flavor. Gradually, to save expense, the cream was gathered every other day, and in many instances but twice a week. The quality of the goods necessarily deteriorated, and this it was that made the dissatisfaction among those interested, and opened the way for the introduction of separator creameries.

When the separator creameries were first introduced it was found that the farmers could bring the milk to the creamery once a day, in place of having to deliver it twice a day as they had been required to do in the full milk creameries. This meant a great saving of labor. It was also found that by this process one hundred pounds of milk produced more butter than it did by the temperature plan of deep setting. The skim milk, however, was of much less value for raising calves than the other, for it came from the separator at about eighty degrees temperature and was usually sour when fed. The grain and keeping qualities of this separator butter were not as good as the butter made by the full milk creameries. But the great saving in labor and the fact that the milk treated in this way produced a little more butter, decided the question in favor of the separator creamery which shortly superseded the full milk creamery.

Many of the gathered cream creameries were old and too small for the business, their drainage was defective, the ventilation had always been a minus quality; the buttermilk and cream had leaked through the floor on to the ground where it had decayed, causing more or less stench; the butter made in them was "off-grade" and they were in danger of losing their patrons. Every dairy paper in the land was advocating the separator "as the only right way of handling milk."

Gradually the separator creamery took the place of the gathered cream creamery and the gathering of cream gave place to the hauling of milk. The patrons were well pleased with the change and were satisfied with the enormous additional expense that the manufacture of their butter cost them.

The dairy supply people have succeeded in introducing this system in many localities that never had a creamery before. They usually start a co-operative joint stock company. These creameries as a rule cost from five to seven thousand dollars. In many of the communities there would be no milk on about two-thirds of the farms. The expense of bringing in a load there would be about three times that of Fayette or the old creamery counties. They could not obtain milk enough to keep the help employed at the creamery, busy half their



time. The expense of getting the milk and the manufacture of the butter was equal to half what they received for the butter when they sold it. This necessitated the company paying a low price for milk. The patrons of a creamery in the western part of the State had been led to believe before they went into the undertaking that they would get one dollar per hundred weight for their milk. When they received their first ticket, they found that in place of one dollar it called for thirty cents, and nothing set aside for the interest on the investment of seven thousand dollars. This kind of an operation has been repeated over and over again in all the new dairy districts of Iowa, Kansas, Nebraska and the Dakotas, and has usually resulted in the farmer becoming discouraged and his quitting milking. The consequences of such management is that the creamery is closed with the unanimous verdict that the creamery business in their county is a failure.

It seems strange to me that the dairy supply men and the dairy papers, that they remunerate so handsomely for advertising, are so short sighted as to advocate the separator system for pioneer creameries. If any one of the dairy supply companies will look over their books, and see the vast amount of goods they are selling in the counties that are making two million pounds of butter per year, counties where the dairy interest was started by the gathered cream system, and its milk supply built up by that system, until separators could be successfully run, and compare their profits in one such county with those of a county where they started the first creamery at a cost of seven thousand dollars, half of which was clear profit, they will arrive at the conclusion that there is more money in selling goods to a business that runs constantly, than in making just one grab.

The dairy supply men, by introducing separator creameries into the new dairy districts of the west, in the way that they have, have done more to retard the dairy industry than have the oleomargarine men.

Now let us look at the gathered cream system when run at its best, and where it is run at its best the separator creamery is not superseding it. In the month of June there are many gathered cream creameries run by both the co-operative and the individual ownerships that are able to pay for enough cream to make a pound of butter, within four cents of the price of western extras in New York. This butter sells in New York for western extras' prices, and as often brings one-half cent more per pound as do the separator goods.

These high prices are accounted for by the fact that the farmers have learned how to handle the milk. They set it as soon as it is

drawn from the cow, in cold water; if the windmill is not running they pump the water around it. They have learned that the big cream check and the small test go together, and that the shot gun can be kept clean easier than any other. This can is always at home and can be cleaned at the good wife's convenience, whereas, the eighty pound can comes home from the separator creamery full of warm milk, too heavy for her to handle, and is consequently often left unwashed until just before milking time. This gives no chance for the can to stand in the sun and become properly aired.

When milk is set at a proper temperature, there is but small loss of butter in the skim milk, and what little there is makes the poorest quality of butter, for the globules are so small that the butter has the appearance of salve.

The patrons of the gathered cream creameries, when run at their best, receive as much money as do the patrons of the separator creameries, when run at their best. A gathered cream plant costing one thousand dollars will be capable of manufacturing as much butter as a separator creamery costing five thousand dollars. One man will make as much butter in a gathered cream creamery as three men will in a separator creamery. In the gathered cream creamery the coal and oil bills will be but one-third as large. Cream weighs one-fifth as much as milk, and is gathered in many creameries for from three-fourths to one cent per inch.

The gathered cream creamery has been the pioneer creamery that has introduced and made possible the dairy business in Iowa. It is still the only system by which we can hope to introduce the business successfully into counties that have never done dairying, or have started a separator creamery and failed in it.

Starting the separator creamery, at big prices in new territory, introduces the wrong system and is one of the chief factors in answering the question, "Why the dairy industry does not spread all over the State."

The dairy people of Iowa are under obligations to furnish to the United States their full quota of gilt edge butter and at a reasonable price. This they promised to do if Congress would place a stamp on every package containing oleomargarine. This Congress did. When butter sells at over thirty cents per pound in the great butter markets of the world, then it is that the oleomargarine men get in their work and furnish millions of pounds of their product to the people who cannot afford to buy the genuine butter.

This season has demonstrated to the patrons of the creamery that this business, above all others, is furnishing a sure and remunerative



income, the price of butter being higher this year than last, while wheat, oats, barley, flour, cattle, horses and seeds are bringing but a fair price. The panic has no effect on the dairy industry. The cow and the pig are the mainstay of the farmer in the dairy districts and he can snap his fingers at hard times as long as he sticks to them. There will be more cows milked in the old dairy districts in the future than there has been in the last two or three years.

If there is a neighborhood in northeastern or southeastern Iowa that contemplates building a creamery that will send a committee to Osage, Iowa, where I reside, I will show them the gathered cream system where it works at its best, and will impart to them information and advice, which, if followed, will result in their being able to start a creamery that will live and thrive and do them good, and will be a plan that will be followed by others.

## THE INSPECTION OF CREAMERIES.

During the last year I have visited about one hundred creameries, and have examined the milk supply in most of them. I have found no milk in as poor a condition as that I examined last year. On account of the sameness of examinations made I think it better to give merely a summary of the lessons I drew from my work than to publish the details.

In some of the creameries visited I found all of the milk in perfect condition; in others I did not send back more than one per cent, but in a few I sent back as much as ten per cent. The milk sent back was, invariably, in a can so dirty that you could scrape the filth off from the seam along the side. In a number of instances I set the dirtiest cans aside and sent for the owners to come to the creamery and explain why they were sending milk to a creamery in that shape. Upon their arrival I showed them the filth, reprimanded them severely and threatened to fine them if the offense occurred again.

A good, clean, pure milk supply for the creameries depends largely on the ability of the milk hauler to educate his patrons in keeping the cans clean and in having the milk properly strained. I invariably found, on examining a perfect load of milk, that the hauler took a keen interest in the condition of his milk, and watched that it was all right all of the time. On the other hand, if I sent back a large portion of the milk, I found that the hauler apparently did not know much about the contents of the load, or he deemed it advisable to say nothing to the patrons regarding its condition.

I found that the milk delivered to creameries that have their weigh vat in the receiving room, and a man in charge to look after it, is in a better condition than that brought to the creamery which has its weigh vat inside the building, thus necessitating the milk being poured in from the outside. The butter maker has no chance to inspect it, and it requires eternal vigilance to have all the milk delivered in proper condition.

In the large dairy counties there is a tendency to consolidate the patronage of three or four small creameries into one company and



build a large creamery that will occupy the entire territory. It is claimed that the large company can do the business with much less expense to the patrons than the several small companies could do it.

At Strawberry Point, Clayton county, I visited one of these creameries. It is doing the largest business of any that I saw. It is a co-operative plant, well managed, built with an idea to convenience, drainage and ventilation. Milk is not brought to it farther than seven or eight miles. The business is done on a large scale and at a much smaller expense than it was in the small creameries. Early in the spring the management were troubled to such an extent with sour milk being brought to them that they selected an inspector whose duty it was to examine every can of milk before it was turned into the weigh vat. He sent home all the sour milk. Milk generally sours first in dirty cans. Their patrons were so well educated that when I was there I only sent back eight cans of milk out of thirty-three thousand pounds. I told the manager that the reason that he sent for me was to show me the best milk supply that came to any creamery in the State.

Many of the managers of creameries have had the new dairy law published in their county newspaper. They tell me that in this way the law has done much good and helped to improve the quality of the butter.

The State does not furnish deputies to inspect the milk supply of the creameries and cheese factories, and I can inspect but a small proportion of them. I have deputed Mr. Cummins, of Waverly, and our agent, Mr. Brown, of Cedar Rapids, to do this work, provided their expenses are paid by the men employing them. Mr. Brown has visited creameries at Whittemore, Ely, Scotch Grove, Waubeek, Viola, Anamosa, Elberon, New Hall, Atkins, Ryan, Lafayette and Bennett. He gave the patrons instruction in handling the milk and in the necessity of keeping all the utensils clean. A number of the patrons were fined for selling milk which did not test up to legal standard, and much good was done the creameries visited.

### THE NEW DAIRY LAW.

The new dairy law went into effect July 4, 1892. In section 4 of this law the dairy commissioner is authorized to appoint agents in cities of the first class, whose duty it shall be to collect samples of milk as sold in the cities from the dealers and forward them to the dairy commissioner's office in Des Moines. Experience soon demonstrated that satisfactory tests could not be made here, because the milk was so long in reaching us that a fair sample could not always be obtained. This necessitated the purchase of Babcock testers in three or four of the cities. When the agents tested the milk at home the dealers could see it done, and it gave much better satisfaction than when tested in the Des Moines office. On this account I have purchased testers for all the cities. Have but recently bought them for Ottumwa and Muscatine. A dealer in the latter city complained that his milk did not test as well here as at home. Sometimes the samples were churned by the time they arrived, and I could not get one that would do the dealer justice.

The law did not contemplate the agents testing the milk, and made no provision for paying them for so doing. The three dollars allowed by the State as a compensation for gathering samples of milk is utterly inadequate. They should be paid five dollars, and the three hundred and thirty tests we are now allowed to have made, should be increased to five hundred.

The good people of these cities have taken a great interest in this work and have given the law not only their moral support, but have aided me materially in obtaining good men to act as agents. The agents' pay being so small, I have had to leave the matter of handling the milk supply largely to them, allowing them to use their own judgment as to the time of testing and the prosecution of the violators of the law. If they deemed prosecutions necessary I have been called to attend to them, with the exception of Cedar Rapids and Sioux City; in those cities the agents have attended to them. I have had to bear in mind all the time that I must spend as little money as possible, for twelve hundred and fifty dollars per year is all we have. Notwithstanding these hindrances the milk has steadily improved, and the



law is worth many times to the people the pittance it costs the State. I think that there will be no hesitancy in the next legislature in voting the amount of money that is necessary to take care of the milk supply.

The new law was an experiment. I had no record or precedents established, except some preliminary work I had done at my own expense, but it has worked better than the most sanguine could have expected.

I would suggest that to the penalty for violating Sec. 1 of the law "Be fined not less than twenty-five nor more than one hundred dollars, and be liable in double the amount of damages to the person or persons on whom said fraud shall be committed" should be added the words, "or confined in the county jail until such fine is worked out." Irresponsible milkmen in some instances have failed to pay their fines.

Experience has demonstrated that the standard of three per cent butter fat is low enough.

In Des Moines sixty-six permits were taken out. During the year four hundred and ninety-five samples of milk were tested. Of these sixteen tested below the lawful standard of three per cent butter fat to the one hundred pounds of milk. The violators of the law were: Des Moines Dairy Company, three samples; A. W. Harding, H. S. Clark, S. Leon, two each; Inman's Dairy, J. H. Jordan, L. D. Bartlet, M. H. Miller and L. Dippel, one each. The Des Moines Dairy Company were running six wagons and a depot, and A. W. Harding two wagons and a depot. These men bought most of the milk that they sold. Often the dealers brought milk to the office to have it tested and if the per cent was not high they stopped patronizing the farmer who supplied them. The dealers have worked in unison with the office with good results. The four hundred and ninety-five tests averaged 3.67 per cent butter fat. No prosecutions have been made. L. D. Carpenter is the agent.

In Cedar Rapids forty-three permits were taken out. During the year our agent, F. M. Brown, has made four hundred and seventy-one tests, nineteen of which were below standard. Of these J. D. Leiper & Barnes, Robb Bros., J. W. Hawkins, F. Wendler, Homan & Springer have paid twenty-five dollars fines each. This money was turned into the school fund. Mr. Stoner, the farmer who sold milk to Robb Bros., settled with them by paying the fifty dollars and costs. J. R. Hall was fined twenty-five dollars and costs in the justice court but he appealed to the district court and his case is not yet settled. All fines have been paid. The Cedar Rapids officers make them pay the money. The agent there keeps a strict watch and is making the law effective. The

average per cent of butter fat in the four hundred and seventy-one samples was 3.70.

In Clinton twenty-two permits were taken out. Sylvester K. Lowell is our agent. He is successor to his brother, Arthur, deceased. One hundred and seventy-five tests were made, fifteen of which fell below standard. Those who violated the law were: Nels Johnson, three samples; C. Peterson, two; B. L. Nickelsen, R. Claussen, M. Paulsen, M. E. Miller, J. Bach, M. Quinlan, H. Nicholaisen, Andrew Johnson, W. G. Harring, O. L. Boynton and Detlef Gertsen, one each. The average per cent of the tests made was 3.60.

In Dubuque I was unfortunate in my selection of an agent. The city owned a Babcock test which I borrowed for his use. I took care to instruct him thoroughly in selecting his samples and in testing them by the Babcock tester. He appeared to be a bright and capable man, but he did not succeed in testing the milk and concealed the fact from me. Upon looking over his work last spring I discovered that three-fourths of the samples of milk, reported by him as tested, contained 3.40 per cent of butter fat, occasionally one would be 3.20 or 3.50. These figures aroused my suspicions. I went to Dubuque and gathered eighteen samples of milk and tested them. One sample tested 3.00, one 3.20, and the remainder went from 3.50 to 4.20. The machine had not been used for a long time. We had to use kerosene oil to cut the rust out of the journals so that it would run at all. Nearly all the acid was on hand that had been sent him. In the face of this evidence he owned up to having guessed at some of the tests. The palliating circumstances are that the man is poor and was afraid that he could not learn to run the tester and knew that if he failed to run it he would not be continued as agent. Dr. J. W. Fowler was appointed his successor May 6. Notwithstanding that the first agent merely guessed at the test and his work in one sense did not amount to anything, it had a salutary effect, as the test that I made showed, as these tests were a great improvement on those I first made when the agent was appointed. From the time of his appointment in May Dr. Fowler has made forty-eight tests, seven of which were below 3 per cent butter fat. Those selling milk which tested low were: J. H. Jecklin, two samples; H. Myer, two; Peter Seemon, two, and Thomas Farrell, one. The average per cent of the milk tested was 3.07.

In Sioux City forty-three permits were taken out. Our agent, Dr. John J. Millar, made three hundred and seventy-two tests, eight of which were below standard. Those selling milk which tested below three per cent of butter fat were: John Krumann, three samples; Kemper Bros., J. M. Nichols, L. Krumann, R. Osborn, and C. Johnson, one each. In the case of R. Osborn he was fined one hundred



dollars and costs. The reason for fining him so heavily was that he was accused before this test was made by Dr. Millar of selling milk that caused sickness in a family. He never paid his fine. The average per cent of the three hundred and seventy-two tests made is 3.78.

In Council Bluffs eighteen permits were taken out. R. Fleming is the agent. Four hundred and thirteen tests were made, forty-one of which were below the legal standard. Council Bluffs is the most difficult city in the State to keep the milk supply up to a high standard, as Omaha, a city of five times its size, is right across the river from it, and there they do nothing toward keeping the milk pure. Those selling milk which tested below the legal standard were: Geo. Sherrer, twelve samples; P. Leonard, six; Chas. Green, five; N. Lewis, five; Fred Peterson, four; J. F. Hunt, three; Ellsworth & Co., two; E. Easdale, two; H. H. Martin, E. P. Chapman, and F. O. Millard, one each. Mr. Fleming filed information against Geo. Sherrer, before Justice of the Peace Field, for selling unwholesome and skimmed milk. The trial, at the request of the defendant, was postponed two days. A change of venue to Justice of the Peace Fox was granted. A friend of the defendant was made a special constable, and he selected a jury, every one of which were friendly to the defendant. The attorney for the State objected to the jury, and demanded that the regular constable should select a jury. The objection was sustained by the court. The defendant waived a jury trial, and the case was tried before Justice Fox. The defense was that on the same day that the State claimed that the milk was below standard that he had tested it with a lactometer and that it contained four per cent of butter fat. Three samples of milk, taken on different days from Mr. Sherrer, were run through the Babcock test in open court and tested 2.20, 2.50 and 2.90; also a test was made from an average sample of the milk given by all the cows, and it tested 3.80. The cows were milked in my presence, and the milk was thoroughly mixed. The case was decided in favor of the State, and a fine of twenty-five dollars and costs imposed. The case was bitterly contested by one of the most able lawyers in the city. On July 4th Mr. Fleming filed information against a milk dealer, who plead guilty and was fined twenty-five dollars and costs. The milk has steadily improved since that time.

In Ottumwa there were twelve permits taken out. N. L. Arrison is the agent. Ninety-five tests were made, eight of which fell below standard. Those selling milk which tested below standard are, W. H. Kreps, J. F. Bizer, E. R. French, two samples each; S. J. Parker, and Phillips & Rupe, one each. The average per cent of the tests made was 3.60.

In Burlington twenty-eight permits were taken out. E. S. Edger is the agent. He has made five hundred and seventeen tests, thirty-three of which were below legal standard. Those selling low standard milk are, E. J. Swords, four samples; E. J. Tennity, three; E. Hacker, three; H. C. Bowman, L. C. Pearson, A. Santi, A. J. Perry, O. G. VanWinkle, F. Lichtenburg, two each; C. Bonar, T. L. Stevens, H. C. Koestner, Joe James, R. Galley, C. G. Earnest, Vogelgesang Bros., F. Duckstein, H. D. Leah, T. L. Rogers, F. Swedenburg, one each. There was a general understanding among the milkmen, with few exceptions, that they would have their milk run about one standard and they formed a combination to defeat the law. This was admitted by some of them. January 20th I visited Burlington and tested twelve samples of milk, four of which tested 3.00, two 3.20 and the remainder was good milk. Such milk I considered had been tampered with. I informed the dairymen that they would have to sell better milk or I would camp with them until they did. I gave the agent written orders, which were published, to prosecute any one whose milk tested below standard, providing his milk had fallen below twice before. Mr. Tennity was the first man. Information was filed before Justice Huneke. The defense was narrowed down to one point, under the rulings of the justice, and that was the provision of the statute which provided, "it is the duty of the agent to ship the samples to Des Moines in such manner as the Dairy Commissioner shall direct." The State claimed that this provision of the statute had nothing to do with the crime and is directory and not mandatory, and is merely put in for the aid and convenience of the Dairy Commissioner, and that there is no provision in the law as to where the test is to be made, or by whom the said test is to be made. To establish the authority of the agent to make the test the State relied on Sec. 8, of the law, which provides, "that the Dairy Commissioner or his agents shall have power or authority to open any can or vessel containing milk which is offered for sale, and may inspect the contents thereof and may take therefrom a sample of milk for analysis," and by further reasoning, that any one could make the test if their competency was shown. The milk taken from the wagon of Mr. Tennity was tested by Edwin S. Edger and his mother. The fact of the competency was fully demonstrated by their making a test in court. The case was decided in favor of the State, and Mr. Tennity was fined twenty-five dollars and costs. Information was filed against three other dealers, two of whom plead guilty and paid their fines of twenty-five dollars and costs. The other dealer could not come to trial at that time on account of serious sickness in his family. The average



per cent of tests made for the year was 3.31, and since the middle of March they have averaged 3.85.

In Keokuk seventeen permits were issued. F. Harshman is the agent. One hundred and forty-three tests were made, ten of which were below standard. Those selling milk which tested below standard were D. Patterson, three samples; J. Hills, C. A. Wright, two, A. Hills, C. N. Raber, W. L. Johnson, one each. The average per cent of the one hundred and forty-three samples is 3.56.

In Davenport fifty-three permits were issued. Dr. A. W. Cantwell is the agent. Four hundred and forty-six tests were made, fourteen of which were below standard. The violators of the law were H. Peterson, C. Hener, J. Hener, E. Plogman, P. Richert, J. Schmidt, H. Willert, J. Tank, H. Mess, J. Severs, H. Bruhn, C. A. Dalzell, H. Koep, A. Moffat, one sample each. The average per cent of the four hundred and forty-six tests was 3.73.

In Muscatine we issued fourteen permits. Emil Kranz is the agent. Seventy-three tests were made, five of which tested below standard. The violators of the law were John Danker, two samples; A. H. Miller, H. R. Bierman, Mittman Bros., one each. The average per cent of the samples tested was 3.85, the highest average in the cities.

The following table gives the number of tests made in the cities since July 1, with the average per cent of butter fat contained in them. Cedar Rapids heads the list with an average test of 3.91 per cent. There the dealers have been dealt with rigorously. Muscatine has the lowest test, 3.47 per cent. No prosecutions have been made there. Des Moines, Clinton and Keokuk make a good showing, and have been educated merely by moral suasion, as no prosecutions have been made in them. The publication of the tests in the daily papers has caused a certain rivalry to exist as to who will sell the best milk. Take it all in all the quality of the milk as shown in the table is twenty per cent higher than it was the first four months of last year, when the law first went into effect. By constant vigilance on the part of our agents the milk supply of the cities of Iowa is far ahead of the milk supply of any city that has kept a record of this kind of work.

Stations.	Tests made.	Av. per cent.
Des Moines.....	228	3.72
Cedar Rapids.....	159	3.91
Clinton.....	136	3.75
Dubuque.....	209	3.55
Council Bluffs.....	166	3.69
Ottumwa.....	42	3.54
Burlington.....	164	3.83
Keokuk.....	150	3.63
Davenport.....	213	3.57
Muscatine.....	57	3.47
Sioux City.....	98	3.57

## CHEESE.

There have been a few new cheese factories built this year but more have been discontinued. The reason that there are not more of them built is that our people prefer raising good calves.

The cheese factories of Iowa depend wholly on home markets and are unable to supply the demand. Large quantities are shipped into the State every year. The owners and proprietors have paid high prices for milk and have received a correspondingly high price for their cheese.

Iowa cheese makers manufacture their cheese for immediate consumption, and do not make them with regard to their keeping qualities. The demand is so urgent that they are not allowed to stay in the curing room as long as they should and are constantly put on the market too green.

May 14th I received a sample of cheese from Fowler Bros., of Waterloo. It was sent back to them from Sioux City, and it was claimed that the cheese from which it was cut had caused the sickness of several persons. I forwarded this to Prof. Patrick for analysis. We publish his letter on the subject, knowing that it will be of great interest to cheese makers.

AMES, IOWA, June 5, 1893.

HON. A. C. TUPPER, *State Dairy Commissioner, Des Moines, Iowa.*

DEAR SIR,—The sample of alleged poisoned cheese received from you on May 15th, with request for analysis, I have submitted to most careful examination for tyrotoxin—the ptomaine discovered in poisonous cheese by Vaughan, in 1843-4—but entirely without success. The quantity of cheese sent me weighed 1½ pounds, after the removal of the rind. It was thoroughly extracted with water, the water extract made alkaline with sodium carbonate and it then extracted in the usual manner with pure ether. The ether, upon spontaneous evaporation, yielded no crystalline residue—nor, indeed, any residue save a very slight one of fat. This residue gave none of the chemical tests for tyrotoxin (save with carbolic and sulphuric acids, mixed, a slight coloration, which may have been due to nitrates or nitrites), nor did it have any ill effect upon a young kitten, to which the greater part was administered.



Repeated trials, with fresh extracts from the cheese, gave similar results. I can only say that tyrotoxin, which is the only organic poison as yet known to occur as a natural product in cheese, was not present in sufficient quantity (if at all) to be detected by known methods, in the sample at my disposal.

In the report of his investigations Vaughan says: "From sixteen kilograms (equals 35.2 pounds) of one cheese I obtained about .5 grams of the poison" (equals  $7\frac{1}{2}$  grains) \* \* \* and "from the same amount of another cheese I obtained only about .1 gram" (equals  $1\frac{1}{2}$  grains). These figures show how small an amount of the poison one may expect to obtain from a cheese really poisonous from presence of tyrotoxin; but small as these amounts are it does seem as though I could have found the poison, even in  $1\frac{1}{2}$  pounds of the cheese, had it really been present in quantity sufficient to make any one sick.

If this cheese has really poisoned any one, there is at least room for the suspicion that other organic poisons besides tyrotoxin may sometimes be present in poisonous cheese.

Respectfully yours,

G. E. PATRICK.

### FINANCIAL STATEMENT.

Commissioner's salary.....	\$ 1,500.00
Clerk's salary.....	900.00
Commissioner's contingent expenses.....	756.68
Postage.....	101.55
Expressage.....	10.45
Telegraph service.....	8.45
Stationery.....	18.25
Attorneys' fees.....	40.00
Analysis of cheese.....	2.00

Total.....\$ 3,337.38

Original appropriation, 1886.....	\$ 20,000.00
Appropriated by General Assembly, 1892.....	3,500.00
Amount expended prior to Nov. 1, 1892.....	18,431.91
Balance unexpended Nov. 1, 1892.....	5,068.09
Amount expended from Nov. 1, 1892 to Nov. 1, 1893.....	3,337.38
Balance on hand.....	1,730.71

### NEW DAIRY LAW APPROPRIATION.

Agents' salaries.....	\$ 816.00
Agents' contingent expenses.....	27.64
Babcock testers.....	105.00
Laboratory supplies.....	42.69
Stationery.....	18.00

Total.....\$ 1,009.33

Amount appropriated, 1892.....	2,500.00
Amount expended from July 1, 1892 to July 1, 1893.....	1,009.33
Balance on hand July 1, 1893.....	1,490.67

### AMOUNT EXPENDED SINCE JULY 1, 1893.

Agents' salaries.....	\$ 285.00
Agents' contingent expenses.....	10.00
Babcock testers.....	31.15
Laboratory supplies.....	14.32

Total.....\$ 340.47



## CREAMERIES.

## ADAIR COUNTY.

Adair—Adair Creamery, George Faga.  
 Fontanelle—E. & C. D. Newbury.  
 Greenfield—J. W. Darby.  
 Hebron—A. R. Haskell & Company.  
 Orient—Orient Co-operative Creamery.

## ADAMS COUNTY.

Corning—Iowa Butter & Cheese Co.  
 Corning—Corning Creamery Company, J. A. Anderson, Secretary.  
 Iveyville—Farmers' Co-operative Creamery.  
 Prescott—Farmers' Co-operative Creamery.

## ALLAMAKEE COUNTY.

Dorchester—Elridge & Twomley.  
 Lansing—Lansing Creamery, Nielander & Company.  
 Ludlow Township—Ludlow Creamery, Oak Leaf Creamery Company, Waukon.  
 Lyncurgus—Chrystal Springs Creamery, Oak Leaf Creamery Company, Waukon.  
 New Albia—Elridge & Twomley.  
 Postville—Postville Farmers' Co-operative Creamery, Ellison Orr, Secretary.  
 Postville—Union Creamery Company.  
 Quandahl—Arctic Spring Creamery, I. D. Johnson.  
 Waterville—Farmers' Co-operative Creamery and Commercial Company.  
 Waukon—Excelsior Creamery.  
 Waukon—Oak Leaf Creamery Company.  
 Volney—Farmers' Co-operative Creamery Company.

## AUDUBON COUNTY.

Audubon—Audubon Creamery, Fisher Bros. and Company.  
 Elkhorn—Farmers' Co-operative Creamery, George James, Secretary.  
 Exira—Exira Creamery, F. F. Wilcox.  
 Gray—Fest Bros.  
 Hamlin—West Hamlin Creamery Company, Martin Ebur, Secretary.  
 Kimballton—Danish Western Creamery Company, Martin Ebur, Secretary.

## BENTON COUNTY.

Belle Plaine—Belle Creamery, L. D. Hilton, Manager.  
 Blairtown—J. R. Morin Company, Cedar Rapids.  
 Garrison—The Vinton Creamery, A. M. Rowe, Manager, Vinton.  
 Gillespie—Skim Station.

Mount Auburn—The Vinton Creamery, A. M. Rowe Manager, Vinton.  
 Norway—Norway Creamery, J. R. Morin Co., Cedar Rapids.  
 Van Horne—Van Horne Creamery, J. R. Morin Co., Cedar Rapids.  
 Vinton—The Vinton Creamery, A. M. Rowe Manager.  
 Urbana—Farmers' Co-operative Creamery Co., T. H. Remer, Secretary.  
 Watkins—E. S. McDonald.

## BLACK HAWK COUNTY.

Bennington Township—Engelking's Creamery, J. H. Engelking, Waterloo.  
 Canfield—Canfield Creamery Company.  
 Cedar Falls—Graft Bros.  
 Dewar—Pleasant Valley Dairy Association, W. F. Garrett, Secretary.  
 Dunkerton—Dunkerton Creamery, Geo. Meyerhoff.  
 Dunkerton—Farmer's Creamery Company.  
 Eagle Center—Eagle Center Dairy Association, Wm. Holland, Secretary.  
 Edwards—Wm. Widdle.  
 Finchford—Union Creamery Company, J. P. Churchill, Secretary.  
 Hudson—Rock Creek Creamery.  
 Hudson—Hudson Creamery Company, Samuel Wilson, Secretary.  
 Jubilee—Farmers' Creamery Company.  
 La Porte City—West Lawn Creamery, M. L. Newton.  
 Lincoln Township—Red Bird Creamery, No. 1, Company, Albert Vittum, Secretary, Reinbeck.  
 Louise—Farmers' Co-operative Creamery Company, F. W. Reisinger, Secretary.  
 Waterloo—Louie Diekmann.  
 Waterloo—Waterloo Cheese and Creamery Company, J. Rainbow Manager.

## BOONE COUNTY.

Boone—Fountain City Creamery, A. M. Chamberlain.  
 Mackey Grove—Mackey Grove Creamery.  
 Pilot Mound—Pilot Mound Creamery Company, O. W. Cline, Secretary.

## BREMER COUNTY.

Bremer—Bremer Creamery Company, Henry Kaiser, Secretary.  
 Buck Creek—Little Valley Creamery of Buck Creek, Charles Glatley, Secretary.  
 Frederica—Douglas Center Creamery, J. R. Gunsalus.  
 Frederica—Frederica Creamery, Charles Golding, Secretary.  
 Grove Hill—Grove Hill Creamery Company, C. Peck, Secretary.  
 Horton—Horton Creamery Stock Company.  
 Janesville—Louis Diekmann.  
 Key—Golden Key Creamery, H. & W. Meyerhoff.  
 Knittel—Maxfield Creamery Company.  
 Klinger—C. F. Diekmann.  
 Maxfield—Maxfield Creamery, O. E. Meyerhoff.  
 Maxfield—Artesian Creamery, Henry Grenning, Secretary.  
 Plainfield—The Cedar Vale Creamery, J. F. Powers.  
 Roxie—Western Douglass Creamery, H. K. Barney, Secretary.  
 Seigel—Seigel Creamery Company.  
 Sumner—Spring Fountain Creamery.  
 Sumner—Red Clover Creamery, D. D. Hatch, Secretary.



Tripoli—Crane Creek Creamery Company.

Tripoli—F. C. Ottrogge.

Tripoli—Fremont Creamery Company.

Wapsie—Wapsie Valley Creamery, George Vanderwalker, Secretary.

Waverly—Washington Creamery Company, John Brandenburg, Secretary.

Waverly—Lafayette Creamery, D. Cornforth, Secretary.

#### BUCHANAN COUNTY.

Aurora—Aurora Farmers' Creamery Association, Frederic Hahn, Secretary.

Brandon—John Kline.

Fairbank—Fairbank Farmers' Creamery Company, W. H. Blunt, Secretary.

Hazleton—Hazleton Farmers' Creamery Company.

Independence—Weins & Shillinglaw.

Independence—Charles Brooks.

Jesup—Jesup Creamery Company, James Dalton, Secretary.

Lamont—Lamont Creamery Association.

Littleton—Littleton Creamery Company, E. B. Barkley, Secretary.

Middlefield—Hazelrigg Bros.

Newtonville—W. W. Wilde.

Otterville—Otterville Creamery Company, C. S. Sheridan, Secretary.

Quasqueton—Quasqueton Co-operative Creamery Company, A. P. Burrhus, Secretary.

Rowley—Rowley Co-operative Creamery, A. F. Bosworth, Secretary.

Rowley—D. A. McLeish.

Stanley—Stanley Co-operative Creamery, S. C. Irvine, Secretary.

Winthrop—Winthrop Co-operative Creamery, E. L. Penny, Secretary.

Winthrop—Hazelrigg Bros.

#### BUENA VISTA COUNTY.

Alta—Maple Valley Creamery, H. C. Hauck.

Alta—Alta Creamery, Clemons and Cornelinsson.

Elkton—Elkton Creamery, George Lauridson.

Marathon—Marathon Creamery.

Newell—Newell Creamery Company.

Storm Lake—Buena Vista Creamery, G. H. Eastman.

#### BUTLER COUNTY.

Allison—Levi Elliott.

Applington—Spring Hill Creamery, Marckley & Dockswell.

Aredale—Aredale Creamery, Forthum & Company.

Bristow—Clover Lawn Creamery, E. M. Haven, Secretary.

Butler Township—Rose Hill Creamery.

Clarksville—Oak Grove Creamery Association, E. D. Wilcox, Secretary.

Clutterville—Clutterville Co-operative Society.

Coster—Hall & Pope.

Greene—Cold Water Co-operative Association, L. O. Crandall, Secretary.

New Hartford—Terpening & Rea.

Parkersburg—Terpening & Rea.

Parkersburg—Monroe Center Creamery Association, G. Lahr, Secretary.

Parkersburg—D. McKeller.

Parkersburg—Star Creamery, Clelland Bros.

Shell Rock—Hawkeye Creamery, E. Town & Son.

Shell Rock—Star Company, Dan Jacolaman, Secretary.

#### CALHOUN COUNTY.

Farchamville—Reene & Smith.

Kissimee—L. E. Gutz.

Manson—Manson Creamery, Godkie & Company.

#### CARROLL COUNTY.

Arcadia—Ed. Rehker.

Breda—C. W. Adams.

Breda—Skim Station, C. W. Adams.

Halbore—A. Holker.

Roselle—Rose Valley Creamery, C. Kohorst.

Wiley—Wiley Creamery Company.

#### CASS COUNTY.

Anita—Anita Creamery Company.

Atlantic—Atlantic Creamery, Peter Landmesser.

Atlantic—C. E. Burton.

Cumberland—E. D. Coats & Company.

Lewis—S. Aldrich.

Marne—Marne Co-operative Creamery.

#### CEDAR COUNTY.

Clarence—Cedar Creamery, H. L. Dean, Tipton.

Clarence—Clarence Creamery, H. J. Clarence.

Bennett—Farmers' Home Creamery Association.

Bennett—Bennett Butter and Cheese Company.

Lowden—Lowden Farmers' Creamery Company.

Lowden—Union Creamery Company.

Lowden—Henrick's Creamery.

Lowden—C. F. Ninty.

Mechanicsville—Mechanicsville Creamery.

Springdale—Hopewell Creamery, C. G. Evis, Manager.

Stanwood—H. L. Dean, Tipton.

Tipton—Cedar Creamery, H. L. Dean.

#### CERRO GORDO COUNTY.

Clear Lake—E. E. Van Auken.

Mason City—S. Kennedy & Son.

Meservey—Meservey Creamery Company.

Portland—Portland Creamery, C. R. Fink.

Plymouth—S. Kennedy & Son.

Rockfalls—J. E. Cochonour.

Rockwell—Rockwell Co-operative Creamery.

Swaledale—Swaledale Co-operative Creamery.

Swaledale—Northern Iowa Creamery Company.

Thornton—Thornton Creamery, Northern Iowa Creamery Company.

#### CHEROKEE COUNTY.

Cleghorn—Robinson Brothers.

Larrabee—Larrabee Creamery, E. D. Peck.

Marcus—Marcus Creamery, Barnes Brothers.



## CHICKASAW COUNTY.

Alta Vista—Alta Vista Creamery Company.  
 Bassett—Bassett Creamery, William Beard & Sons, Decorah.  
 Boyd—Boyd Creamery, I. W. Edson, Secretary.  
 Boyd—F. Shute.  
 Devon—Devon Creamery Company, E. P. Sheffield, Secretary, New Hampton.  
 Elma—William Beard & Sons, Decorah.  
 Fredericksburg—Fredericksburg Butter Company, I. W. Edson, Secretary.  
 Ionia—William Beard & Sons, Decorah.  
 Jerico—Jerico Creamery Association.  
 Lawler—Lawler Co-operative Creamery Company.  
 Little Turkey—Little Turkey Creamery Association.  
 Nashua—The Solicitor's Creamery, W. I. Moody.  
 New Hampton—New Hampton Company, John H. Kolthoff, Williamstown.  
 North Washington—William Beard & Sons, Decorah.  
 Republic—Republic Creamery Company, A. S. Caulkins.  
 Williamstown—John H. Kolthoff.

## CLARKE COUNTY.

Woodburn—Farmers' Butter and Cheese Association, M. T. Mart in, Secretary

## CLAY COUNTY.

Dickens—Rose Bud Co-operative Creamery and Cheese Factory, J. O. Varney, Secretary.  
 Dickens—Sioux Valley Creamery, C. W. Parsons.  
 Everly—Spring Creek Creamery, William Ewolds, Secretary.  
 Gillett—Sioux Valley Creamery.  
 Spencer—Riverton Creamery Company, O. B. Ross, Secretary.  
 Yankee—Willow Creek Creamery.

## CLAYTON COUNTY.

Communica—Communica Creamery Association, Henry Wistrick, Secretary.  
 Edgewood—Farmers' Creamery Company, R. J. Green, Secretary.  
 Edgewood—Honey Creek Creamery, H. F. Beyer.  
 Elkader—Iowa Creamery, A. N. Toutsch.  
 Farmersburg—Farmersburg Creamery Company, Charles Huirsch, Secretary.  
 Garnavillo—G. W. Kennedy, Guttenburg.  
 Garnavillo—Farmers' Creamery Association, E. W. Kregel, Secretary.  
 Girard—Girard Creamery, A. O. Elvidge.  
 Guttenburg—Farmers' Creamery Company.  
 Littleport—John Waddings.  
 Luano—Farmers' Creamery Company.  
 Watson—Farmers' Creamery Company, M. Davis, Secretary.  
 Watson—Farmers' Creamery Company, F. Cook, Secretary.  
 Noble—H. F. Beyer.  
 Osborne—James Burnes.  
 Read—Wilke & J. Gopman, Elkader.  
 Saint Olaf—Larson & Sons.  
 Strawberry Point—Strawberry Point Farmers' Association, H. B. Wheeler, Secretary.  
 Volga City—Farmers' Co-operative Creamery, W. W. Goodrow, Secretary.

## CLINTON COUNTY.

Andover—Graft Bros.  
 Delmar—Graft Bros.  
 De Witt—Farmers' Co-operative Creamery.  
 Elwood—Graft Bros.  
 Goose Lake—A. Von Oven.  
 Low Moor—Eden Valley Creamery Company, W. C. Conover, Secretary.  
 Pleasant Valley—Graft Bros.  
 Quigley—Graft Bros.  
 Teed's Grove—C. G. Forest & Company.  
 Welton—Welton Creamery, R. M. Hinkley.  
 Wheatland—Welding & Company.  
 Wheatland—A. Fuller.  
 Wheatland—Cedar Creamery, H. L. Dean, Tipton.  
 Union Center—Skim Station.

## CRAWFORD COUNTY.

Buck's Grove—Nilsson & Shuler.  
 Denison—Donahue & Aherns, E. S. Plimpton, Manager.  
 Kiron—Henry Kohl.  
 West Side—

## DALLAS COUNTY.

Adel—Greely Bros.  
 Dallas Center—Silver Spring Creamery Company.  
 Dexter—Lyon Creamery, C. H. Lyon.  
 Linden—Shotwell & Davis.  
 Perry—Red Star Creamery, Moody & Son.  
 Woodward—Woodward Creamery Company, A. P. Shrayer.

## DAVIS COUNTY.

Drakeville—Drakeville Co-operative Creamery.  
 Bloomfield—Bloomfield Creamery, W. H. Davis.  
 Floris—Floris Butter and Cheese Factory.  
 Pulaski—Pulaski Creamery, J. J. Miller.

## DECATUR COUNTY.

Van Wert—Van Wert Creamery.

## DELAWARE COUNTY.

Adams—Henderson's Creamery, James Henderson, Ehler.  
 Adams—Washington Creamery Company, F. P. Ryan & Henley, Ehler.  
 Berryville—Co-operative Creamery, Chas. Barry, Secretary.  
 Bremen—Bear Grove Creamery Company, F. N. Klostermann.  
 Bremen—Petersburg Creamery, Joseph Shearbring, Petersburg.  
 Coffin's Grove—B. W. Kenyon, Masonville: two Creameries.  
 Colony—Colesburg Co-operative Creamery Company, Robert Curry, Colesburg.  
 Delaware Township—Manchester Co-operative Creamery Company, N. W. Sabin, Secretary, Manchester.  
 Delaware Township—Spring Branch Creamery Company, L. S. Gates, Manchester.  
 Delaware Township—C. W. Mead's Creamery, C. W. Mead, Manchester.  
 Delhi—Pleasant Valley Creamery, Bush & Klaus, Earlyville.



Delhi—Allison Co-operative Creamery, Mr. Allison.  
 Delhi—Silver Spring Creamery, F. L. Beal.  
 Dundee—Dundee Co-operative Creamery, N. Davis, Secretary.  
 Elk—Greeley Creamery Company, William Burbridge, Greeley.  
 Hazel Green—Hazel Green Co-operative Creamery.  
 Hazel Green—Hazel Green Creamery, F. B. Dickey.  
 Hazel Green—Almira Creamery, A. E. Anderson, Almira.  
 Hazel Green—Hazel Green Co-operative Creamery, J. W. Thompson.  
 Hazel Green—Willow Grove Creamery, G. Abbey, Abbeyville.  
 Hazel Green—Maple Grove Creamery, D. Magirl, Ryan.  
 Honey Creek—Honey Creek Creamery, Heney Beyer, Edgewood.  
 Hopkinton.—Co-operative Creamery Company, E. M. Clapin.  
 Milo—Golden Creamery Company, F. L. Clarke, two creameries, Golden.  
 North Fork—Russell & Martin, Earlville.  
 Oneida—Almoral Creamery, Frank Carpenter, Almoral.  
 Oneida—Oneida Creamery Company, Bush & Klaus, Earlville.  
 Oneida—A. O. Kingsley, Strawberry Point.  
 Onedia—Linwood Creamery, Russell & Martin, Earlville.  
 Onedia—Earlville Creamery, Bush & Klaus, Earlville.  
 Sand Springs—Sand Springs Co-operative Creamery Association, H. Herman, Secretary.

South Fork—Silver Springs Creamery, McConnel & Place, Hopkinton.  
 South Fork—Dunlap Creamery, Robert Dunlap, Hopkinton.  
 South Fork—Keystone Creamery, J. W. Merrill, Monticello.  
 South Fork—Cedar Valley Creamery, John White, Worthington.  
 South Fork—Diamond Creamery Company, two creameries, D. Pond, Manager, Monticello.  
 Springville—Phoenix Creamery.  
 Union—Uniontown Creamery, G. Fife.

## DES MOINES COUNTY.

Burlington—Burlington Creamery, E. P. Dunham.

## DICKINSON COUNTY.

Milford—Milford Creamery, J. J. Nysteen & Company.  
 Spirit Lake—Spirit Lake Creamery, C. C. Dykins.

## DUBUQUE COUNTY.

Balltown—Northwestern Creamery.  
 Bankston—Woodland Creamery, Michael Ferring.  
 Cascade—Crystal Falls Creamery, Dehner & Kay.  
 Cascade—Hazel Creamery, W. C. Aitchinson.  
 Cascade—Cascade Co-operative Creamery.  
 Dyersville—Golden Star Creamery Company.  
 Epworth—Epworth Co-operative Creamery Company, D. Durham, Secretary.  
 Farley—A. C. Walker & Company.  
 Farley—Farmers' Co-operative Creamery, B. McKeever, Secretary.  
 Farley—Johns Creek Creamery, Vibber & Heald.  
 Filmore—Crystal Falls Creamery, Dehner & Kay, Cascade.  
 Filmore—J. J. L. Breitback.  
 Luxemburg—Globe Creamery Company, M. Linck, Secretary.

New Vienna—Bear Grove Creamery Company, B. Willingborg, Manager.  
 New Vienna—Hickory Valley Creamery Company.  
 Peosta—Crystal Falls Creamery Company, Dehner & Kay, Cascade.  
 Worthington—Spring Valley Creamery.  
 Worthington—Worthington Creamery.  
 Worthington—Vibber & Heald.

## EMMET COUNTY.

Armstrong—Armstrong Co-operative Creamery Company, G. W. Canon, Secretary.  
 Swan Lake—M. A. Denning.  
 Wallingford—Wallingford Creamery.

## FAYETTE COUNTY.

Alpha—Alpha Creamery, J. B. Hathaway.  
 Alpha—Bethel Creamery, Ace Webster, Waucoma.  
 Brush Creek—Brush Creek Creamery Company.  
 Clermont—Clermont Valley Creamery Company.  
 Elgin—Union Creamery Company.  
 Fayette—Fayette Creamery Company, J. L. Paine, Secretary.  
 Hawkeye—W. R. Rogers.  
 Maynard—Crown Creamery Company, J. C. Lewis, Secretary.  
 Maynard—Harlan Creamery Company, A. F. Crawford, Secretary.  
 Oelwein—Jefferson Farmers' Creamery Company, E. E. Gay, Secretary.  
 Oelwein—Farmers' Creamery Company, E. Day, Secretary.  
 Oran Township—Oran Creamery Company, E. E. Shippy, Secretary, Minkler.  
 Randalia—Fairview Creamery Company.  
 Randalia—Randalia Creamery Company.  
 Richfield—Farmers' Creamery.  
 Stanley—Stanley Creamery.  
 St. Lucas—St. Lucas Creamery, Ace Webster, Waucoma.  
 Wadena—Steamboat Mound Creamery, James Leahy.  
 Wadena—Farmers' Co-operative Creamery.  
 Waucoma—Waucoma Creamery, Ace Webster.  
 Westgate—Westgate Creamery Company, S. A. Sylvester, Secretary.  
 Westgate—Corbley's Grove Creamery Company.  
 West Union—Union Creamery Company.  
 West Union—The Farmers' Creamery.

## FLOYD COUNTY.

Charles City—Miles Creamery Association, H. V. Fussell, Manager.  
 Floyd—Floyd County Co-operative Creamery Association, D. Wilber, Secretary.  
 Marble Rock—Marble Rock Co-operative Dairy Association, E. A. Rasenkrans.  
 Marble Rock—Marble Rock Creamery Company.  
 Niles—Niles Creamery Association, J. J. Day, Secretary, Charles City.  
 Nora Springs—Cottage Grove Dairy Association.  
 Powersville—Pleasant Grove Creamery, P. H. Powers.  
 Rockford—Rockford Creamery Company.  
 Ulster—A. P. Mott & Company.



## FRANKLIN COUNTY.

Burdette—Harris & Company.  
 Chapin—Chapin Creamery, L. Fortham.  
 Faulkner—Faulkner Creamery, G. F. Burkle.  
 Geneva—Geneva Creamery, I. W. Myers, Hampton.  
 Hampton—I. W. Myers.  
 Latimer—I. W. Myers, Hampton.  
 Latimer—Lion Creamery, Chris. Rasmussen.  
 Reeve—Mr. McKellar.  
 Sheffield—Sheffield Creamery, Mr. Du Bois.

## FREMONT COUNTY.

Randolph—Randolph Creamery and Cheese Factory.  
 Riverton—Riverton Creamery Company.

## GREENE COUNTY.

Churdan—Churdan Creamery, S. C. Hoyt.  
 Dana—W. L. Addy.  
 Dana—Dana Creamery.  
 Jefferson—Jefferson Creamery, Dunham & Son.  
 Paton—Paton Creamery, G. E. White.  
 Rippey—Rippey Co-operative Creamery.  
 Scranton—Adams & Applegate.

## GRUNDY COUNTY.

Beaman—Beaman Creamery.  
 Beaver Township—D. C. Shuler, Grundy Center.  
 Colfax Township—Colfax Creamery, Nilsson & Shuler, Grundy Center.  
 Colfax Township—J. H. Sperry, Grundy Center.  
 Conrad Grove—Farmers' Co-operative Creamery Company, C. M. Deal, Secretary.  
 Clive—J. H. Sperry & Company, Grundy Center.  
 Dairyville—Dairyville Creamery.  
 Fairfield Township—F. Wells, New Hartford.  
 Fredsville—Fredsville Co-operative Creamery.  
 Grant Township—Grant Township Co-operative Creamery.  
 Grundy Center—J. H. Sperry.  
 Holland—Holland Creamery.  
 Lincoln—Lincoln Spring Creamery.  
 Morrison—Morrison Creamery, J. & T. Slifsgard.  
 Pleasant Valley Township—Nilsson & Shuler, Grundy Center.  
 Reinbeck—Reinbeck Butter and Cheese Association.  
 Wellsburg—Martin & Faust.

## GUTHRIE COUNTY.

Bagley—Bagley Creamery Company.  
 Bear Grove—Bear Grove Creamery Company.  
 Guthrie Center—Farmers' Butter and Cheese Association.  
 Panora—Panora Creamery.  
 Stuart—Stuart Creamery Company, John Ball, Secretary.  
 Yale—Yale Creamery Company, C. L. Dieke, Secretary.

## HAMILTON COUNTY.

Blairsburg—J. E. Redding.  
 Brushy—R. G. Clark & Company.  
 Ellsworth—Ellsworth Creamery Company, Simon Sogard, Secretary.  
 Ellsworth—Lincoln Creamery, Holden Thompson, Secretary.  
 Jewell—Jewell Creamery Company, C. E. Faceton, Secretary.  
 Kamrar—Gold Nugget Creamery, D. C. Bailey, Secretary.  
 Poplar Grove—W. H. Dygart.  
 Randall—Randall Creamery Company.  
 Stanhope—Iverson Bros.  
 Stratford—Stratford Creamery, J. M. Daniels & Son.  
 Webster City—R. G. Clark & Company.  
 Williams—R. G. Clark & Company.

## HANCOCK COUNTY.

Britt—Chrystal Creamery, A. W. Lana, President.  
 Britt—Farmers' Co-operative Creamery, C. R. Cady, Secretary.  
 Britt—Northern Iowa Creamery Company.  
 Chrystal Township—Chrystal Creamery Company.  
 Corwith—Northern Iowa Creamery Company.  
 Ellington—Northern Iowa Creamery Company.  
 Ellington—E. E. Van Auken.  
 Garner—Northern Iowa Creamery Company.  
 Goodell—Goodell Creamery, Northern Iowa Creamery Company.  
 Klemme—Klemme Creamery Company, Alex Kirkwood, Secretary.  
 Russell—Russell Co-operative Butter and Cheese Association, Cal C. Force, Secretary.

## HARDIN COUNTY.

Ackley—Martin Bros.  
 Alden—Alaska Creamery, Harris & Co.  
 Alden—Buckeye Co-operative Creamery Company.  
 Cleves—Sperry & Woolright.  
 Hubbard—B. S. Harrison.  
 Hughes—Gray & Wackman.  
 Lawn Hill—G. B. Strayer.  
 Radcliffe—Lincoln Creamery.  
 Radcliffe—Crawford & Hill.  
 Robertson—John Windeseer.  
 Steamboat Rock—Gray & Wackman.  
 Whitten—Whitten Creamery Company, Geo. N. Carr, Secretary.  
 Union—E. E. Van Auken.

## HARRISON COUNTY.

California—California Creamery, G. W. Hawkins.  
 Woodbine—Woodbine Creamery Co.

## HENRY COUNTY.

New London—New London Creamery Company, H. Allen, Secretary.  
 Winfield—Winfield Creamery, Nugen Bros.



## HOWARD COUNTY.

Bonair—Farmers' Creamery Association, T. S. Johnson, Secretary.  
 Chester—Chester Creamery Association, Ed Capper, Secretary.  
 Cresco—Cresco Creamery Company.  
 Cresco—New Oregon Creamery Company, W. R. Mitchell, Secretary.  
 Cresco—Merchants' Creamery.  
 Elma—Boston & Decorah Creamery Company.  
 Lime Springs—Boston & Decorah Creamery Company.  
 Lourdes—Boston & Decorah Creamery Company.  
 Lourdes—Farmers' Creamery Company.  
 Protivin—Farmers' Creamery Association, S. J. Luke, Secretary.

## HUMBOLDT COUNTY.

Bode—Bode Creamery Association, T. O. Hanson, Secretary.  
 Humboldt—Humboldt Butter and Cheese Association, Sidney Taft, Secretary.  
 Renwick—John Wallace, Algona.  
 Thor—Thor Co-operative Creamery Company, Lewis Olson, Secretary.

## IDA COUNTY.

Ida Grove—Ida Grove Creamery, Hubbard & Saunders.  
 Battle Creek—Lee Glenn.

## IOWA COUNTY.

Genoa Bluff—Genoa Bluff Creamery, George R. Howard.  
 Guernsey—Guernsey Creamery.  
 Homestead—D. Sanderfield.  
 Marengo—Peterson & Leader.  
 Millersburgh—Millersburgh Co-operative Creamery.  
 North English—T. H. McGoon.  
 Parnell—Parnell Co-operative Creamery.  
 Williamsburgh—J. M. Mathews.

## JACKSON COUNTY.

Andrew—Andrew Creamery Company, A. E. McComb, Manager.  
 Bellevue—Crystal Spring Creamery, W. E. Hughey.  
 La Motte—Butler & Neimans.  
 La Motte—Hoffman & Kettler.  
 La Motte—G. W. Wilson.  
 Miles—Pioneer Creamery, O. W. Heynen.  
 Miles—Clover Leaf Creamery, Forest Brothers.  
 Monmouth—Monmouth Co-operative Creamery.  
 Preston—J. W. Merrill, Monticello.  
 Spragueville—Spragueville Creamery, A. von Oven.  
 Spring Brook—Spring Brook Creamery, Chris. Kegler.

## JASPER COUNTY.

Baxter—Harris & Company, W. H. Graham, Manager.  
 Colfax—Colfax Creamery Company.  
 Ira—Harris & Company, W. H. Graham, Manager.  
 Kellogg—Farmers' Dairy Association, T. Murphy, Secretary.  
 Lynnville—Lynnville Butter and Cheese Association.

Metz—Metz Creamery, Stoops & Chase.  
 Newton—The Malaka Creamery, H. D. Parsons.  
 Prairie City—Bousquet & Rhynsbarger.  
 Reasner—Farmers' Co-operative Creamery, Louie Shultz, Secretary.

## JEFFERSON COUNTY.

Fairfield—Fairfield Creamery, John McLane.  
 Germanville—Germanville Creamery Company.  
 Locust Grove—Locust Grove Butter and Cheese Company.  
 Packwood—Packwood Butter and Cheese Association.

## JOHNSON COUNTY.

Iowa City—W. G. Brooks & Son.  
 Lone Tree—Lone Tree Creamery Company, J. M. Carl, Manager.

## JONES COUNTY.

Amber—Amber Creamery, W. H. Sanford.  
 Anamosa—J. R. Morin Company, Cedar Rapids.  
 Anamosa—Anamosa Creamery, I. S. Condit.  
 Anamosa—Dougherty & Kern.  
 Brookside—J. R. Morin Company, Cedar Rapids.  
 Butterfield—Crystal Falls Creamery, Dehner & Kay.  
 Cascade—J. Hosch.  
 Hale—Mills & Inglass.  
 Highland—J. R. Morin Company, Cedar Rapids.  
 Martelle—J. R. Morin Company, Cedar Rapids.  
 Monticello—Diamond Creamery Company; three creameries, five skim houses  
 D. Pond, Manager; two creameries in Linn county.  
 Olin—Hazel Green Creamery, P. G. James, Secretary.  
 Olin—Olin Creamery, Lamb Bros.  
 Olin—Lersen Creamery, A. J. Lersen.  
 Onslow—S. L. Gilbert.  
 Scotch Grove—Rose Creameries, C. M. Hanna; two creameries,  
 West Cass—Franklin Creamery, A. L. Cory, Waubeek.  
 Wyoming—Diamond Creamery Company; one creamery, five skim houses; D.  
 Pond, Manager, Monticello.

## KEOKUK COUNTY.

Delta—Delta Butter & Cheese Manufacturing Company, W. W. Chandler  
 Secretary.  
 Hedrick—Hedrick Creamery Company.  
 Keota—Farmers' Creamery Company, W. W. Carpenter, Secretary.  
 Keswick—Keswick Creamery.  
 Martinsburg—Prairie Mound Creamery.  
 Martinsburg—Martinsburg Creamery.  
 Ollie—Ollie Creamery.  
 Richland—Richland Creamery.  
 Sigourney—Sigourney Creamery Company.  
 What Cheer—What Cheer Creamery, Baker & Funk.

## KOSSUTH COUNTY.

Algona—Algona Co-operative Creamery Company, Myron Schenck, Secretary.  
 Algona—Boardman Brothers & Company.



Bancroft—Bancroft Co-operative Creamery Company, J. Hackl, Secretary.  
 Buffalo Fork—Buffalo Fork Co-operative Creamery Company, J. Cassey, Secretary.

Burt—Burt Co-operative Creamery Company, George S. Angus, Secretary.  
 Fenton—Fenton Co-operative Creamery Company, G. W. Newell, Secretary.  
 Hobart—Hobart Co-operative Creamery Company, C. Rickard, Secretary.  
 Lotts Creek—Lotts Creek Co-operative Creamery Company, Mr. Ranney, Secretary.

Seneca—Seneca Co-operative Creamery Company, W. W. Alcorn, Secretary, Armstrong.

Wesley—C. A. Olsen & Company.

West Bend—Garfield Co-operative Creamery Company, R. W. Berrinhouse, Secretary.

Whittimore—Whittimore Co-operative Creamery Company, J. S. Cotton, Secretary.

Whittimore—

#### LEE COUNTY.

Ft Madison—Ft Madison Creamery, Thomas G. Currier.

West Point—West Point Creamery, C. W. Stoddard.

West Point—William Schulte.

#### LINN COUNTY.

Cedar Rapids—H. N. Woodward & Son.

Central City—P. G. Henderson, two creameries.

Central City—Minehart & Company.

Central City—Minehart & Cook.

Center Point—J. R. Gitchell.

Coggan—Coggan Creamery Company.

Coggan—North Side Creamery Company.

Coggan—Deep Spring Creamery.

Coggan—Farmers' Creamery Company.

Elmont—S. B. Mills.

Ely—J. R. Morin Company, Cedar Rapids.

Fairfax—J. R. Morin Company, Cedar Rapids.

La Fayette—La Fayette Creamery Company.

Lisbon—W. S. Furnas Creamery Company.

Marion—I. H. Shaver Cheese Company Cedar Rapids.

Mt. Vernon—H. L. Dean, Tipton.

Prairiesburg—Beatty Bros.

Robins—Eureka Creamery Company, two creameries, W. R. Gould, Manager.

Springville—Irwin Paul, two creameries.

Springville—Rudolph Miller, two creameries.

Springville—J. H. Shaver & Company.

Scotch Grove—J. R. Morin Company, Cedar Rapids.

Toddville—Monroe Creamery Company.

Troy Mills—Highland Creamery Company.

Troy Mills—Bruce & Harvey.

Waubeek—A. L. Cory, three creameries.

Waubeek—J. G. Fox.

Walker—H. J. Nietert.

Western—J. R. Morin Company, Cedar Rapids.

#### LOUISA COUNTY.

Letts—H. H. Hilderbrand & Son.

Fredonia—Fredonia Co-operative Creamery Company.

Wapello—Wapello Creamery.

#### LUCAS COUNTY.

Derby—Derby Butter & Cheese Manufacturing Company, J. J. George, Secretary.

Russell—Russell Co-operative Butter & Cheese Company, W. J. Marshall Secretary.

#### LYON COUNTY.

Inwood—Inwood Creamery, Wenig & Barthell.

Rock Rapids—Rock Rapids Butter & Cheese Association, T. C. Puckett, Manager.

#### MADISON COUNTY.

Pitzer—Pitzer Creamery Company, R. C. Speer, Secretary.

Maxburg—Maxburg Co-operative Creamery.

Winterset—George B. Cooper.

#### MAHASKA COUNTY.

Barnes City—Barnes City Gold Medal Co-operative Creamery, E. L. Emery, Secretary.

Fremont—Fremont Creamery, William Miles.

New Sharon—Cold Spring Creamery.

Union Mills—Union Mills Butter Company.

#### MARION COUNTY.

Dallas—Dallas Co-operative Creamery Company, E. M. Lamos, Secretary.

Durham—Farmers' Butter & Cheese Manufacturing Company.

Knoxville—Bousquet & Rhynsburger.

Pella—Bousquet & Rhynsburger.

Prairie City—Bousquet & Rhynsburger.

#### MARSHALL COUNTY.

Clemons—Minerva Valley Creamery Company, S. M. Gause, Secretary.

Gilman—C. B. Smith.

Haverhill—Meyer Brothers.

Haverhill—Columbia Creamery Company.

Laurel—Harris & Company.

LeGrande—Farmers' Co-operative Creamery.

Liscomb—Farmers' Co-operative Creamery.

Rhodes—A. Rhodes.

State Center—State Center Farmers' Creamery Association, E. R. Wyatt, Secretary.

#### MILLS COUNTY.

Emerson—Emerson Creamery Company—M. Tolander, Secretary.

Malvern Creamery, R. F. Norton.

#### MITCHELL COUNTY.

Carpenter—Kennedy & Sons.

Bailey—Lawn Spring Creamery, T. J. Wheeler.

Little Cedar—Little Cedar Creamery Company.

McIntire—McIntire Co-operative Creamery.



Mona—Frank Penny & Company.  
 New Haven—New Haven Co-operative Creamery.  
 Orchard—Spring Creek Creamery Company, I. Crawford Secretary.  
 Osage—Osage Co-operative Creamery Company, A. Bartle, Secretary.  
 Rock Creek—Rock Creek Creamery Company, William Rogers, Secretary.  
 Riceville—Farmers' Co-operative Creamery Company.  
 Saint Ansgar—The Farmers' Co-operative of Saint Ansgar, J. F. Dermody, Secretary.

Stacyville—Stacyville Creamery.

#### MONONA COUNTY.

Blencoe—Warren Peake.  
 Blencoe—T. T. Loomis.  
 Onawa—Round Grove Creamery.

#### MONTGOMERY COUNTY.

Elliot—Elliot Butter and Cheese Company.  
 Stanton—Stanton Creamery.  
 Villisca—Villisca Creamery.

#### MUSCATINE COUNTY.

Atalissa—Penn Avenue Creamery, Jacob Long.  
 Muscatine—Muscatine Butter and Cheese Company.  
 West Liberty—Cedar Valley Creamery Company, Pickering & Kelly.  
 West Liberty—Lone Star Creamery, H. H. Hildebrand & Son.  
 Wilton Junction—Nickel Plate Creamery, George W. Kelley.  
 Wilton Junction—Lily Lake Creamery, S. G. Kelly.

#### O'BRIEN COUNTY.

Hartley—Hartley Creamery Company.  
 Paulina—Caledonia Creamery, William G. harts, Manager.  
 Sibley—Northwestern Creamery.  
 Sutherland—D. M. Sheldon.  
 Sanborn—Sanborn Creamery Company.

#### OSCEOLA COUNTY.

Ocheyedan—Farmers' Co-operative Butter & Cheese Company, W. E. Ely, Secretary.  
 Sibley—Clover Grove Creamery, Henry Bremmer.

#### PAGE COUNTY.

Blanchard—Blanchard Butter & Cheese Company, F. O. Winchell, Secretary.  
 Clarinda—Clarinda Creamery, Chiles Bros.  
 Coin—Coin Creamery, H. D. Switzer, Butter Maker.

#### PALO ALTO COUNTY.

Ayrshire—Ayrshire Creamery.  
 Curlew—Curlew Creamery.  
 Crippen—Crippen Creamery Company, M. Joint, Secretary.  
 Cylinder—Cylinder Butter & Cheese Association, W. Davison, Secretary.  
 Cylinder—Fairview Creamery.  
 Emmetsburg—Nevada Creamery Company, George Downs, Secretary.  
 Emmetsburg—Maple Leaf Creamery.

Fairwill—Fairwill Creamery, Fred Wagener, Secretary.  
 Graettinger—Lost Island Creamery Company, Lars Christianson, Secretary.  
 Graettinger—Graettinger Creamery.  
 Independence Township—Maple Leaf Creamery Company.  
 Mallard—Mallard Creamery Company.  
 Mallard—Mallard Butter & Cheese Association.  
 Osgood—Osgood Creamery Company, C. S. Wells, Secretary.  
 Ruthven—Highland Butter Association, Thomas Brennan, Secretary.  
 West Bend—West Bend Creamery, Gilbert Wright.

#### PLYMOUTH COUNTY.

Kingsley—Kingsley Creamery Company.  
 Remsen—Remsen Creamery Company, M. Beck, Secretary.

#### POCAHONTAS COUNTY.

Gilmore City—Gilmore City Creamery Association.  
 Laurens—Laurens Creamery.  
 Fonda—W. D. Beswick.

#### POLK COUNTY.

Bondurant—Bondurant Creamery, M. F. McClung.  
 Grimes—Grimes Butter & Cheese Association.

#### POTTAWATTAMIE COUNTY.

Avoca—Avoca Creamery, B. Frost.  
 Hancock—Hancock Co-operative Creamery.  
 Oakland—Oakland Creamery.

#### POWESHIEK COUNTY.

Brooklyn—Brooklyn Creamery, E. O. Spencer.  
 Chester Center—Chester Center Creamery, E. K. Smith.  
 Deep River—Deep River Creamery, Hatter & Baird.  
 Grinnell—Grinnell Creamery, Mattison & Smith.  
 Guernsey—Guernsey Creamery Company, J. W. Rose, Secretary.  
 Hartwick—Hartwick Diamond Butter Factory.  
 Malcom—E. O. Spencer, Brooklyn.  
 Montezuma—H. Baughman.

#### RINGGOLD COUNTY.

Benton—Benton Creamery Company.  
 Kellerton—Kellerton Creamery Company, Frank Smith, Secretary.  
 Knowlton—Maple Leaf Creamery.  
 Mount Ayr—Iowa Farm Creamery.  
 Redding—T. C. Galloway.  
 Tingley—Tingley Co-operative Creamery.

#### SAC COUNTY.

Auburn—Auburn Creamery, Boardman Bros. & Company, Nevada.  
 Carnavon—Carnavon Butter Company, W. A. Seamon, butter maker.  
 Carnavon—Carnavon Creamery, Boardman Bros. & Company, Nevada.  
 Earley—G. Pattee & Bro.  
 Earley—Delaware Center Creamery Company, Clarke N. Searle, Secretary.  
 Earley—Champion Hill Creamery & Cheese Association.  
 Lake View—Lake View Creamery, Donahue & Ahern; two creameries.



Odebolt—G. Fuhlendorf.  
 Odebolt—Chricton & Wright.  
 Odebolt—F. Fleck.  
 Sac City—Neubring Bros., two creameries.  
 Sac City—Elwood & Pettis.  
 Sac City—Brazee & McClure.  
 Shaller—Eureka Creamery.  
 Wall Lake—Donahue & Ahern.

## SCOTT COUNTY.

Amity—Amity Butter & Cheese Factory.  
 Buffalo—Buffalo Creamery Company.  
 Dixon—Dixon Creamery Company.  
 Donahue—Donahue Farmers' Butter Company.  
 Elridge—Farmers' Butter & Cheese Company  
 Elridge—Hugo Kuhl.  
 White Sulphur—White Sulphur Creamery Company, J. E. Dutcher, Manager

## SHELBY COUNTY.

Elkhorn—The Danish Centrifugal Creamery Company.  
 Harlan—Harlan Creamery Association, O. F. Graves Secretary.

## SIOUX COUNTY.

Alton—W. Strouks.  
 Hawarden—Sioux Valley Creamery Company, R. Miller, Secretary.  
 Hull—Hull Creamery.  
 Ireton—C. H. Vanderhamm.  
 Sioux Center—Sioux Valley Creamery Company.

## STORY COUNTY.

Ames—Iowa Agricultural Creamery.  
 Ames—Milford Farmers' Creamery Company.  
 Cambridge—Boardman Brothers & Company, Nevada.  
 Colo—Gates & Reed.  
 Gilbert Station—Gilbert Station Creamery Company.  
 Maxwell—Maxwell Creamery Company, Frank W. Hill, Secretary.  
 McCallsburg—McCallsburg Co-operative Creamery.  
 Roland—Roland Creamery, Boardman Brothers & Company, Nevada.  
 Roland—Roland Co-operative Creamery.  
 Slater—Slater Butter & Cheese Association.  
 Smayville—William Smay.  
 Story City—Swensen & Thorson.  
 Zearing—Zearing Creamery, J. C. Hoyt.

## TAMA COUNTY.

Dinsdale—Dinsdale Creamery.  
 Dysart—Vinton Creamery Company, A. M. Rowe, Manager, Vinton.  
 Garwin—Garwin Co-operative Creamery.  
 Gladbrook—Hilton Brothers & Company.  
 Mooreville—Vinton Creamery Company, A. M. Rowe, Manager, Vinton.  
 Montour—Sibley & unningham.  
 Tama—Hilton Brothers & Company, Gladbrook.  
 Traer—Waite & Curtis.  
 Waltham—Waltham Creamery, Samuel Seigal.

## TAYLOR COUNTY.

Bedford—Bedford Butter & Cheese Association.  
 Blockton—Blockton Butter & Cheese Association, M. C. Brown, Secretary.  
 Clearfield—Clearfield Creamery Company, O. S. Carson, Secretary.  
 Conway—Conway Creamery Company, E. A. Lake, Secretary.  
 Guss—Guss Creamery.  
 Lenox—Lenox Creamery, Phil Godwin.  
 New Market—New Market Creamery Company, P. S. Jackson, President.

## UNION COUNTY.

Afton—Afton Creamery Company.  
 Lorimore—Lorimore Creamery Association, Ira Burkheimer, Secretary.  
 Talmage—Talmage Co-operative Creamery Company, J. W. Beebe, Secretary.

## VAN BUREN COUNTY.

Birmingham—Birmingham Butter & Cheese Company, Porter Pleasants, Secretary.  
 Farmington—Farmington Butter & Cheese Company, H. G. Kelly, Superintendent.

## WAPELLO COUNTY.

Dudley—Dudley Creamery & Milling Association.

## WARREN COUNTY.

Indianola—Indianola Creamery, B. S. Schermerhon, Des Moines.  
 Lacombe—Lacombe Co-operative Dairy Association.  
 Prole—Prole Cheese & Butter Association.

## WASHINGTON COUNTY.

Brighton Creamery, T. L. Emery & Son.  
 Crawfordsville—Crawfordsville Co-operative Creamery.  
 Crawfordsville—S. M. Brown.  
 Kalona—F. C. Thomas.  
 Nira—S. S. Stoner & Brother.  
 Noble—Oak Ridge Creamery, Benjamin Eicher.  
 Riverside—Riverside Creamery, Nicola & Son.  
 Washington—Washington Creamery.  
 Wellman—Wellman Creamery, C. O. Nichols & Son.

## WAYNE COUNTY.

Allerton—Allerton Creamery, I. N. Haldeman.  
 Humeston—Wayne County Creamery, E. Haldeman.  
 Seymour—Seymour Creamery.

## WEBSTER COUNTY.

Badger—Badger Creamery.  
 Burnside—Burnside Creamery Company, Abram Olson.  
 Callender—Callender Butter & Cheese Association, B. Larson.  
 Dayton—Daniels Creamery, J. M. Daniels & Son.  
 Duncombe—Palmer & Clausen.  
 Fort Dodge—Fort Dodge Butter & Cheese Association.  
 Gowrie—Gowrie Creamery, F. S. Davis, Manager.  
 Vincent—Vincent Creamery, P. J. Hansen.



## WINNEBAGO COUNTY.

Buffalo Center—Northern Iowa Creamery Company.  
 Forest City—Northern Iowa Creamery Company.  
 Lake Mills—Lake Mills Co-operative Creamery.  
 Lincoln—Northern Iowa Creamery Company.  
 Mount Valley—Northern Iowa Creamery Company.  
 Leland—Northern Iowa Creamery Company.  
 Norman—Norman Creamery.

## WINNEBAGO COUNTY.

Burr Oak—Silver Creek Creamery.  
 Calmar—Calmar Creamery.  
 Castalia—Ossian Creamery Company.  
 Decorah—Wm. Beard & Sons.  
 Decorah—Glenwood Creamery, Johnson & Beard.  
 Festina—Ossian Creamery Company.  
 Frankville—Wm. Beard & Sons.  
 Hesper—Anchor Creamery, H. F. Cleveland.  
 Highlandville—J. H. Miller.  
 Kendallville—Boe Bros. & Company.  
 Kendallville—Kendallville Creamery.  
 Locust—Kjome Creamery.  
 Nordness—Ossian Creamery Company.  
 Ossian—Ossian Creamery Company.  
 Ridgeway—Wm. Beard & Sons.  
 Spillville—Spillville Creamery Company.  
 Washington Prairie—E. G. Opdahl.  
 Washington Prairie—W. W. & G. L. Hubbell.

## WORTH COUNTY.

Fertile—Fertile Co-operative Association.  
 Kensett—Kensett Creamery Company.  
 Manley—Manley Co-operative Creamery, D. E. McKercher, Secretary.  
 Northwood—Northwood Dairy Association.  
 Northwood—Farmers' Butter and Cheese Association.

## WRIGHT COUNTY.

Belmond—Northern Iowa Creamery Company.  
 Clarion—Clarion Creamery, J. D. Denison.  
 Clarion—Farmers' Home Creamery, Northern Iowa Creamery Company.  
 Dows—Dows Creamery.  
 Eagle Grove—Eagle Grove Creamery.  
 Goldfield—Goldfield Creamery Company.  
 Norway—Norway Creamery.  
 Woolstock—Fountain Separator Creamery.  
 Woolstock—Woolstock Butter and Cheese Association.

## CHEESE FACTORIES.

## ADAMS COUNTY.

East Nodaway—Nodaway Joint Stock Company.  
 Corning—Corning Cheese Factory.

## APPANOOSE COUNTY.

Centerville—M. Edwards.  
 Iconium—Iconium Cheese Factory, George Mann, Manager.  
 Moravia—Moravia Cheese Company, W. A. Eastlock, Secretary.  
 Moravia—S. Pense.  
 Moulton—Dickson & Guile.

## AUDUBON COUNTY.

Brayton—L. A. Cummings.

## BENTON COUNTY.

Atkins—Atkins Highland Cheese Factory, I. H. Shaver Cheese Company.  
 Cedar Rapids.  
 Garrison—Excelsior Cheese Factory.  
 Newhall—Model Cheese Factory, G. M. Olmsted, Cedar Rapids.  
 Shellsburg—Tipton Cheese Factory.

## BLACK HAWK COUNTY.

Raymond—The Fowler Company.  
 Waterloo—The Fowler Company.

## BOONE COUNTY.

Grant Township—Grant Township Butter and Cheese Association.  
 Madrid—A. M. Chamberlain.

## BREMER COUNTY.

Janesville—The Fowler Company.

## BUCHANAN COUNTY.

Quasqueton—W. D. Boies.  
 Quasqueton—Boies & Anderson.

## CEDAR COUNTY.

West Branch—Quaker Factory, I. H. Shaver Cheese Company, Cedar Rapids.  
 Plato—Hillside Cheese Factory, Hawley & Vetter.

## CHICKASAW COUNTY.

Williamstown—John H. Kolthoff.



## CLAYTON COUNTY.

Luano—R. M. Fonda.

## CRAWFORD COUNTY.

Buck Grove—S. M. Thew.

## DAVIS COUNTY.

Pulaski—Kensinger's Cheese Factory, P. Kensinger.  
Troy—Hod Tisdale.

## DECATUR COUNTY.

Garden Grove—George M. Pence.  
Leon—Chastian & Chastian.  
Weldon—George M. Pence, Garden Grove.

## DELAWARE COUNTY.

Sand Spring—Charles Crocker.  
South Fork Township—Wm. Lutner, Worthington.

## FAYETTE COUNTY.

Elgin—Fred Shuppach.

## FLOYD COUNTY.

Charles City—Elm Spring Cheese Factory, White &amp; Company.

## FRANKLIN COUNTY.

Morgan—Badger &amp; Hill's Factory, A. A. Bangs, Manager, Dows.

## GREENE COUNTY.

Dana—Excelsior Factory, Wm. Davenport.  
Grand Junction—Renner Bros.  
Hardin Township—John C. Harker, Grand Junction.

## GRUNDY COUNTY.

Grant Township—L. C. Vanderlip, Cedar Falls.  
Reinbeck—The Fowler Company, Waterloo.

## GUTHRIE COUNTY.

Casey—John Ross.  
Grant Township—D. Y. Cowden, Adair.  
Herndon—Chadsey & Smith.

## HANCOCK COUNTY.

Britt—Britt Cheese Factory.

## HARDIN COUNTY.

Cottage—Cottage Cheese Factory, C. Ryan.  
Ellis—Ellis Cheese Manufacturing Company, W. I. Clark, Secretary.  
Owasa—P. Ransom.

## HENRY COUNTY.

Newton—Newton Butter &amp; Cheese Factory.

## IOWA COUNTY.

Green Center—Green Center Cheese Manufacturing Company, J. H. Yoder  
Secretary.  
Ladora—D. D. Case.

## JASPER COUNTY.

Baxter—E. S. Allen.

## JOHNSON COUNTY.

Frank Pierce—Washington Cheese & Butter Company, Peter Kettles, Secretary,  
Iowa City—Sharon Cheese Company, J. J. Marnor, Secretary.  
Morse—Shamrock Factory, I. H. Shaver Cheese Company, Cedar Rapids.

## JONES COUNTY.

Bowen—T. W. Little.  
Monticello—Diamond Creamery Company.  
Onslow—J. A. Griswold.  
Onslow—S. L. Gilbert.

## KEOKUK COUNTY.

Talleyrand—Talleyrand Cheese Company.  
Webster—Webster Cheese Company, C. S. Morgan, Secretary.

## LEE COUNTY.

Denmark—Thomas G. Currier, Ft. Madison.

## LINN COUNTY.

Springville—Uncle Sam Factory, I. H. Shaver Cheese Company, Cedar Rapids.

## MAHASKA COUNTY.

Bussey—Maple Grove Factory, A. J. Jones.

## MONROE COUNTY.

Albia—Albia Factory, H. W. Watson.  
Albia—Pleasant Township Factory, H. W. Watson.  
Albia—Monroe Factory, Rowles Brothers.  
Albia—Hilton Factory, Rowles Brothers.  
Albia—Mantua Factory, J. M. M. Roberts.  
Albia—Watson Factory, Rowles Brothers.  
Albia—P. E. Enix.  
Albia—Amos Smith.  
Albia—Bluff Creek Factory, J. K. Watson.  
Albia—Urbana Factory, Snow & Mounts.  
Albia—Union Center Factory, H. W. Watson.  
Albia—Salem Factory, L. Lewis.  
Albia—Parry Factory, L. J. Parry.  
Albia—John Q. Tate.  
Franklin Township—Frank Hamilton, Moravia.  
Lovilla—Lovilla Factory, Sherwin & Stark.  
Moravia—Union Cheese Company, Miller & Stoops.  
Moravia—Star Cheese Company, T. E. Parry.

## MONTGOMERY COUNTY.

Red Oak—Lincoln Cheese Factory, E. T. Evans, Manager.

## PAGE COUNTY.

College Springs—E. F. Badger.  
Northboro—William T. Hatfield.



## POWESHIEK COUNTY.

Grinnell—J. E. Neely.

## RINGGOLD COUNTY.

Mount Ayr—Liberty Co-operative Cheese Company.

Tingley—Fram's Factory, Jacob Fram.

Tingley—Joseph Ruffnier.

## SIOUX COUNTY.

Alton—Alton Cheese Factory, William Strouke.

## TAMA COUNTY.

Elberton—Elberton Factory, I. H. Shaver Cheese Company, Cedar Rapids.

## TAYLOR COUNTY.

Conway—George Dean.

Lenox—Orchard Hill Cheese Factory, J. B. Hewitt.

## UNION COUNTY.

Lorimor—William Groesbeck.

Lorimor—S. W. Groesbeck.

## VAN BUREN COUNTY.

Cantril—Charles Dye.

Milton—Volney Nagle.

Milton—Woodard &amp; Cooley.

## WAPELLO COUNTY.

Eddyville—Pleasant Township Cheese Factory.

Ottumwa—South Ottumwa Cheese Company, N. S. Poling, Secretary.

## WASHINGTON COUNTY.

Clay—Clay Cheese Company, O. Meacham, Secretary.

Dublin—Dublin Cheese Company, M. L. Done.

Winchester—Winchester Cheese Company, A. G. Leet.

## WAYNE COUNTY.

Clio—Clio Co-operative Cheese Manufacturing Company, D. H. Bruner Secretary.

Corydon—Corydon Cheese Factory, E. G. Cross.

Lineville—Lineville Cheese Factory.

Promise City—G. Avery.

## WINNEBAGO COUNTY.

Mount Valley—Mount Valley Cheese Company, E. Luenburg.

## WORTH COUNTY.

Northwood—Northwood Farmers' Butter and Cheese Association.

## WRIGHT COUNTY.

Dows—George C. Jamison &amp; Sons.

Dows—A. A. Bangs.

Galt—B. C. Robinson.

The following is the amount of butter, in gross pounds, shipped out of the State, from stations on railroads doing business in Iowa, for each county in the State, for the year ending September 30, 1893:

COUNTY.	No. of Creameries.	LBS.	COUNTY.	No. of Creameries.	LBS.
Adair.....	5	173,809	Jones.....	32	2,709,083
Adams.....	4	255,390	Keokuk.....	10	548,089
Allamakee.....	12	1,287,700	Kossuth.....	13	696,810
Appanoose.....	0	19,240	Lee.....	3	530,245
Audubon.....	6	221,090	Linn.....	37	2,434,487
Benton.....	10	409,225	Louisa.....	3	138,046
Black Hawk.....	18	1,972,246	*Lucas.....	12	150,645
Boone.....	3	141,396	Lyon.....	12	82,665
Bremer.....	23	2,337,139	Madison.....	3	140,465
Buchanan.....	18	2,850,970	Mahaska.....	4	485,723
Buena Vista.....	6	823,128	Marion.....	5	224,665
Butler.....	16	2,073,237	Marshall.....	9	606,774
Calhoun.....	3	384,838	Mills.....	2	18,930
Carroll.....	6	525,478	*Mitchell.....	12	2,109,661
Cass.....	6	301,010	Monona.....	3	2,180
Cedar.....	12	679,790	Montgomery.....	3	361,165
Cerro Gordo.....	10	537,465	Monroe.....	0	72,100
Cherokee.....	3	210,864	Muscatine.....	6	545,570
Chickasaw.....	16	1,989,245	O'Brien.....	5	405,829
Clarke.....	1	75,945	Osceola.....	2	78,500
Clay.....	6	103,950	Page.....	3	329,589
Clayton.....	19	2,833,065	Palo Alto.....	16	753,709
Clinton.....	14	909,982	Plymouth.....	2	221,295
Crawford.....	4	91,011	Pocahontas.....	3	317,114
Dallas.....	6	888,823	*Polk.....	2	185,545
Davis.....	4	69,509	Pottawattamie.....	3	62,383
Decatur.....	1	68,250	Poweshiek.....	8	652,008
Delaware.....	41	2,749,698	Ringgold.....	6	103,720
Des Moines.....	1	159,822	Sac.....	17	853,677
Dickinson.....	1	104,410	Scott.....	7	125,487
Dubuque.....	19	1,588,630	Shelby.....	2	24,370
Emmett.....	3	202,890	Sioux.....	5	2,710
Fayette.....	24	2,865,465	Story.....	13	1,378,035
Floyd.....	9	864,710	Tama.....	9	504,905
Franklin.....	9	546,792	Taylor.....	7	126,832
Fremont.....	2	3,730	Union.....	3	288,957
Greene.....	7	511,029	Van Buren.....	2	43,145
Grundy.....	17	894,940	*Wapello.....	1	1,082,127
Guthrie.....	6	74,495	Warren.....	3	17,410
Hamilton.....	12	1,392,170	Washington.....	9	510,767
Hancock.....	11	321,525	Wayne.....	3	259,769
Hardin.....	13	1,068,625	Webster.....	8	489,577
Harrison.....	2	23,801	Winnebago.....	7	609,650
Henry.....	2	59,892	Winneshiek.....	18	1,894,865
Boward.....	10	1,483,479	*Woodbury.....	0	211,503
Humboldt.....	4	219,642	Worth.....	5	720,065
Ida.....	2	55,895	Wright.....	9	709,410
Iowa.....	9	633,383	Total.....	790	62,758,837
Jackson.....	11	985,021			
Jasper.....	9	549,460			
Jefferson.....	4	200,127			
Johnson.....	2	582,750			

\* Counties that have butter shipped in from outside points



Total gross shipments of butter billed out of the State for the year ending September 30, 1893, 62,758,867 pounds.

Total gross shipments of butter billed out of the State for the year ending September 30, 1893, less 16 per cent tare, 52,717,448 pounds.

The best authorities estimate the home consumption of butter to be fifty pounds per capita, 100,000,000 pounds; to this add 52,717,448 pounds and we have the total make of the State 152,717,448 pounds.

Estimating 152,717,448 pounds of butter at 22 cents per pound gives \$33,597,838.56, as the value of the butter industry of Iowa.

NOTE.—In the report of the butter shipments, the shipments over the Rock Island road are estimated, and are based upon the report of this road for last year with the same per cent of reduction in the amount as is shown by the reports of the other roads in the State.

## CHAPTER LII.

### PREVENT DECEPTION IN MANUFACTURE AND SALE OF IMITATIONS OF BUTTER AND CHEESE, AND CREATE DAIRY COMMISSIONER.

#### AN ACT to Prevent Deception in the Manufacture and Sale of Imitation Butter and Cheese.

*Be it enacted by the General Assembly of the State of Iowa:*

SECTION 1. That for the purpose of this act, every article, substance or compound, other than that produced from pure milk, or cream from the same, made in the semblance of butter, and designed to be used as a substitute for butter made from pure milk or cream from the same, is hereby declared to be imitation butter, and that for the purpose of this act, every article, substance or compound other than that produced from pure milk or cream from the same, made in the semblance of cheese, and designed to be used as a substitute for cheese made from pure milk or cream from the same, is hereby declared to be imitation cheese; provided that the use of salt, rennet and harmless coloring matter for coloring the product of pure milk or cream, shall not be construed to render such product an imitation.

SEC. 2. Each person who manufactures imitation butter or imitation cheese shall mark by branding, stamping and stencilling upon the top and sides of each tub, firkin, box or other package in which such articles shall be kept, and in which it shall be removed from the place where it is produced, in a clear and durable manner, in the English language, the name of the contents thereof as herein designated, in printed letters in plain Roman type, each of which shall not be less than one inch in length by one-half of an inch in width. Every person who by himself or another violates the provisions of this section, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not to exceed two hundred and fifty dollars, or by imprisonment in the county jail not to exceed sixty days.

SEC. 3. No person by himself or another shall knowingly ship, consign or forward by any common carrier whether public or private any imitation butter or imitation cheese, unless the same be marked as provided by section two of this act; and no carrier shall knowingly receive for the purpose of forwarding or transporting any imitation butter or imitation cheese, unless it shall be marked as hereinbefore provided, consigned and by the carrier receipted for by its name as designated by this act; provided that this act shall not apply to any goods in transit between foreign States and across the State of Iowa.



SEC. 4. No person shall knowingly have in his possession or under his control any imitation butter or imitation cheese unless the tub, firkin, box or other package containing the same be clearly and durably marked, as provided by section two of this act; provided that this section shall not be deemed to apply to persons who have the same in their possession for the actual consumption of themselves or family.

SEC. 5. No person by himself or another shall knowingly sell or offer for sale imitation butter or imitation cheese under the name of or under the pretense that the same is pure butter or pure cheese; and no person by himself or another shall knowingly sell any imitation butter or imitation cheese, unless he shall have informed the purchaser distinctly at the time of the sale that the same is imitation butter or imitation cheese, as the case may be, and shall have delivered to the purchaser at the time of the sale a statement clearly printed in the English language, which shall refer to the articles sold, and which shall contain in prominent and plain Roman type the name of the article sold, as fixed by this act, and shall give the name and place of business of the maker.

SEC. 6. No keeper of a hotel, boarding house, restaurant or other public place of entertainment shall knowingly place before any patron for use as food any imitation butter or imitation cheese, unless the same be accompanied by a placard containing the name in English of such article, as fixed by this act, printed in plain Roman type. Each violation of this section shall be deemed a misdemeanor.

SEC. 7. No action can be maintained on account of any sale or other contract made in violation of or with intent to violate this act by or through any person who was knowingly a party to such wrongful sale or other contract.

SEC. 8. Every person having possession or control of any imitation butter or imitation cheese which is not marked as required by the provisions of this act, shall be presumed to have known during the time of such possession or control the true character and name as fixed by this act of such imitation product.

SEC. 9. Whoever shall efface, erase, cancel or remove any mark provided for by this act, with intent to mislead, deceive, or to violate any of the provisions of this act, shall be deemed guilty of a misdemeanor.

SEC. 10. Whoever shall violate any of the provisions of the third, fourth and fifth sections of this act shall, for the first offense, be punished by a fine of not less than fifty dollars nor more than one hundred dollars, or by imprisonment not exceeding thirty days, and for each subsequent offense shall be punished by a fine of not less than two hundred and fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than six months, or by both such fine and imprisonment, in the discretion of the court.

SEC. 11. The Governor shall, on or before the first day of April of each even-numbered year, appoint an officer, who shall be known as the Iowa State Dairy Commissioner, who shall have practical experience in the manufacture of dairy products, and who shall hold his office for the term of two years from the first day of May following his appointment, or until his successor is appointed and qualified. Said Commissioner shall give an official bond conditioned for the faithful performance of the duties of his office in the

sum of ten thousand dollars, with sureties to be approved by the Governor. He may be removed from office by the Governor, with the approval of the Executive Council, for neglect or violation of duty. Any vacancy shall be filled by the appointment of the Governor, and with the advice and consent of the Executive Council.

SEC. 12. The State Dairy Commissioner shall receive a salary of fifteen hundred dollars per annum, payable monthly, and the expenses necessarily incurred in the proper discharge of the duties of his office; provided, that a complete itemized statement of all expenses shall be kept by the Commissioner, and by him filed with the Auditor of State after having been duly verified by him before receiving the same. He shall be furnished a room in the agricultural department of the capitol at Des Moines, in which he shall keep his office and all correspondence, documents, records and property of the State pertaining thereto, all of which shall be turned over to his successor in office. He may, if it is found to be necessary, employ a clerk whose salary shall not exceed the sum of fifty dollars per month. Said salaries and expenses to be paid from the appropriation provided for in section seventeen of this act. The Commissioner provided for by this act shall hold no other official position under the laws of Iowa, or a professorship in any of the State institutions.

SEC. 13. It shall be the duty of the State Dairy Commissioner to secure, so far possible, the enforcement of this act. He shall collect, arrange and present in annual reports to the Governor, on or before the first of November of each year, a detailed statement of all matters relating to the purposes of this act, which he shall deem of public importance, including the receipts and disbursements of this office. Such report shall be published with the report of the State Agricultural Society.

SEC. 14. The State Dairy Commissioner shall have power in all cases where he shall deem it important for the discharge of the duties of his office, to administer oaths, to issue subpoenas for witnesses and to examine them under oath, and to enforce their attendance to the same extent and in the same manner as a justice of the peace may now do, and such witnesses shall be paid by the Commissioner the same fees now allowed witnesses in justices' courts.

SEC. 15. Whoever shall have possession or control of any imitation butter or imitation cheese contrary to the provisions of this act shall be construed to have possession of property with intent to use it as a means of committing a public offense within the meaning of chapter 50 of title 25 of the Code; provided, that it shall be the duty of the officer who serves a search warrant issued for imitation butter or imitation cheese, to deliver to the State Dairy Commissioner, or to any person by such Commissioner authorized in writing to receive the same, a perfect sample of each article seized by virtue of such warrant, for the purpose of having the same analyzed, and forthwith to return to the person from whom it was taken, the remainder of each article seized as aforesaid. If any sample be found to be imitation butter or imitation cheese, it shall be returned to and retained by the magistrate as and for the purpose contemplated by section 4648 of the Code, but if any sample be found not to be imitation butter or imitation cheese, it shall be returned forthwith to the person from whom it was taken.

SEC. 16. It shall be the duty of the court in each action for the violation



of this act to tax as cost in the cause the actual and necessary expense of analyzing the alleged imitation butter or imitation cheese, which shall be in controversy in such proceedings, provided that the amounts so taxed shall not exceed the sum of twenty-five dollars. It shall be the duty of the district or county attorney, upon the application of the Dairy Commissioner, to attend to the prosecution, in the name of the State, of any suit brought for the violation of any of the provisions of this act within his district; and in case of conviction he shall receive twenty-five per cent of the fines collected, which shall be in addition to any salary he may receive, to be taxed as costs in the case.

SEC. 17. That the unexpended portion of the appropriation provided for by section 17 of the 52d chapter of the twenty-first General Assembly, is hereby appropriated for the next biennial period, or so much thereof as may be necessary for the proper carrying out of the purposes of the act; but not more than one-half of said unexpended balance shall be drawn from the State Treasury prior to the 1st day of May, 1889. The amount hereby appropriated shall be expended only under the direction and with the approval of the Executive Council. And all salaries, fees, costs and expenses of every kind incurred in the carrying out of this law shall be drawn from the sum so appropriated.

SEC. 18. Chapter 39 of the acts of the Eighteenth General Assembly of Iowa, and all acts and parts of acts in conflict with this act, are hereby repealed.

SEC. 19. This act being deemed of immediate importance, shall take effect and be in force from and after its publication in the Iowa State Register and Iowa Homestead, newspapers published in Des Moines, Iowa.

Approved March 27, 1886.

Amendments approved March 28, 1888.

Law pertaining to milk, as enacted by the Thirteenth General Assembly, and found in the Code of Iowa, chapter 156, section 4042.

#### ADULTERATED MILK, CHEESE OR BUTTER.

SEC. 4042. If any person knowingly sell to another, or knowingly deliver or bring to another to be manufactured, to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings," with intent to defraud, or shall knowingly sell the milk, the product of a diseased animal or animals, or shall knowingly use any poisonous or deleterious material in the manufacture of cheese or butter, he shall, upon conviction thereof, be fined in any sum not less than twenty-five dollars nor more than one hundred dollars, or be liable in double the amount of damages to the person or persons, firm, association or corporation upon whom such fraud shall be committed.

#### NEW DAIRY LAW.

AN ACT to repeal section 4042 of the Code of 1873, and provide a substitute therefor, and to enlarge the duties and powers of the State Dairy Commissioner, and to provide an appropriation therefor.

*Be it enacted by the General Assembly of the State of Iowa:*

SECTION 1. That section 4042 of the Code of 1873 is hereby repealed and the following is enacted in lieu thereof: If any person shall sell or exchange, or expose for sale or exchange, deliver or bring to another for domestic use or to be converted into any product of human food whatsoever, any unclean, impure, unhealthy, adulterated, unwholesome or skimmed milk, or milk from which has been held back what is commonly known as strippings, or milk taken from an animal having disease, sickness, ulcers, abscesses or running sore, or was taken from an animal fifteen days before, or less than five days after parturition, shall, upon conviction thereof, be fined not less than twenty-five dollars (\$25.00) nor more than one hundred dollars (\$100.00), and be liable in double the amount of damages to the person or persons upon whom such fraud shall be committed. Provided, that the provisions of this act shall not apply to skimmed milk where it is sold as such.

SEC. 2. For the purposes of this act milk which is proved by any reliable method of test or analysis, to contain less than three pounds of butter fat to the one hundred pounds of milk, shall be regarded as skimmed or partially skimmed milk.

SEC. 3. It is hereby made the duty of the Dairy Commissioner to enforce the provisions of the foregoing sections.

SEC. 4. The State Dairy Commissioner is hereby authorized to appoint agents in every city having over ten thousand inhabitants in the State of Iowa, who are to collect the samples of milk as sold in such cities, and it shall be their duty to forward such samples to the office of the Commissioner in Des Moines in such manner as he shall direct. The compensation of such agents at any one time shall not be more than three dollars (\$3.00) for collecting and delivering the same to the express companies.

SEC. 5. The number of times samples are collected in each city of more than ten thousand inhabitants shall not exceed an average of thirty times during any one year.

SEC. 6. The State Dairy Commissioner, if it shall be found necessary, may increase the clerk hire of his office twenty-five dollars (\$25.00) per month.



SEC. 7. Every milk dealer who runs a milk wagon, milk depot, or sells milk from a store in the cities that have over ten thousand inhabitants, in the State of Iowa, shall obtain a permit from the State Dairy Commissioner's office, for which he shall pay the sum of one dollar (\$1.00) annually. The Commissioner shall keep a book in which shall be registered the name, location and number of each dealer in milk, and a record of each analysis. Whoever violates the provisions of this section, upon conviction thereof, shall be fined not less than ten dollars (\$10.00) nor more than twenty-five dollars (\$25.00).

SEC. 8. The Dairy Commissioner or his agents shall have power and authority to open any can or vessel containing milk which is offered for sale, and may inspect the contents thereof and may take therefrom samples of milk for analysis.

SEC. 9. That there is hereby appropriated out of any money in the State Treasury not otherwise appropriated, the sum of twenty-five hundred dollars, or so much as may be necessary for the purpose of carrying out the provisions of this act.

#### REGULATION PASSED BY THE STATE BOARD OF HEALTH.

The attention of all who handle milk is directed to the following regulation made by the State Board of Health, and which is binding upon all the people. It is known that very few substances absorb the germs of contagious diseases so quickly as milk. The purpose of this regulation is to prevent the spread of such diseases through this media. It is supplemental to the statute which prohibits the sale of impure milk.

When Asiatic Cholera, Small Pox, Diphtheria, Scarlet Fever (Scarlatina, Scarlet Rash), Typhoid Fever, Typhus Fever, Membranous Croup, Measles, or any other contagious disease exists in any house or dwelling place of a dealer in, or seller of milk, he shall discontinue, and cease to give or sell, or distribute milk to any person, or to creameries or butter factories, or in anywise handle such milk, until a permit is granted therefor by the mayor (or clerk), countersigned by the health officer. And no person who attends cows, and the milking, or who has the care of milk vessels or the sale or distribution of milk shall be permitted to enter any premises or place wherein exists any of the diseases named herein, nor have any communication, direct or indirect, with any person who resides in, or is an occupant of, such infected place; nor shall any milk or butter be given away, sold or distributed from such infected place.

# TENTH BIENNIAL REPORT OF THE FISH COMMISSION

OF THE  
STATE OF IOWA,

1892-3.

T. J. GRIGGS, Commissioner.

DES MOINES:  
G. H. RAGSDALE, STATE PRINTER.  
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