ALGONA, IOWA, December 1, 1890.

HON. A. C. TUPPER:

Dear Sir: I am not ready to report yet on the Extractor. We have another machine which is a great improvement on the one we had when you were here; but it is still not perfect. Their newest machine is not out yet.

Yours truly,

J. WALLACE & Co.

State Dairy Commissioner

OF THE

TO THE

GOVERNOR OF THE STATE OF IOWA

FOR THE YEAR 1891.

PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

DES MOINES: G. H. RAGSDALE, STATE PRINTER. 1891.

REPORT.

To His Excellency, Hon. Horace Boies, Governor of Iowa:

In conformity with the requirements of chapter 52, of the laws of the Twenty-first General Assembly, and amended by chapter 98 of the laws of the Twenty-second General Assembly, I have the

honor to submit the fifth annual report of this office.

At the date of our last report there were no wholesale or retail licenses of oleomargarine in force in the State. There had been one retail license taken out for the winter of 1889 and 1890. In our fourth annual report we acknowledge the courtesy of the Internal Revenue Collectors at Dubuque and Burlington (whereby they agreed to notify our office whenever sales of oleomargarine should be made within their jurisdiction), by which means we would be able to trace it to its destination, and ascertain whether the party receiving it is complying with our State law, which requires that every package or parcel sold in the State shall be branded, giving the name of the article and also the name and place of business of the manufacturer, and if purchased by hotel, restaurant or boarding house, it must be accompanied by a placard in English of such article, printed in plain Roman type.

The manufacturers and wholesale dealers in oleomargarine send a report at the end of each month to the government in which the names, addresses and amount of oleomargarine bought from them is reported to the General Internal Revenue Office. The general office sends the names of the purchasers of oleomargarine to the

Collectors of Internal Revenue in each district.

With the co-operation of the Federal Officers assured, the Commissioner felt that any infraction of the law would be easily discovered and quickly punished. The reports from the general office to the collectors were delayed two or three months, according to the collectors' statements; hence the following letter was written:

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HON. HENRY SWEENEY, M. C., Washington, D. C .:

DEAR SIR:-The law or the rulings of the Internal Revenue Department of the Government compel the manufacturers of oleomargarine to furnish a monthly statement to the department at Washington, of the amount of bogus goods sold by them during the month, also the name, address and amount each customer bought. By this means this offlice is advised of restaurants, boarding houses and hotels that are using the stuff. The law of Iowa is, that it can be used by the above parties provided a large placard in Roman type is displayed so publicly that each boarder can see it. Hence the importance of the manufacturers' returns being quickly transmitted to the Revenue Officers of Iowa.

Will you call on the Internal Revenue Commissioner and see if arrangements can be made to forward the names and addresses of all parties buying imitation goods in Iowa? If this can be done it will be a great service to the dairy people of Iowa, for these returns have been coming in very slowly A. C. TUPPER, of late.

(Signed)

Iowa State Dairy Commissioner.

In reply we received the following letter from Commissioner Mason, of Washington, D. C .:

TREASURY DEPARTMENT, OFFICE OF INTERNAL REVENUE, Washington, D. C., February 19, '91.

A. C. Tupper, Esq., Dairy Commissioner, Des Moines, Iowa:

SIR:-Your letter of the 10th instant to Hon. J. H. Sweeney, asking to be furnished with names and addresses of parties in Iowa purchasing oleomargarine from manufacturers and wholesale dealers as reported to this office, has been referred to me.

In reply you are informed that it is not practicable to comply with your request. The reports made by the manufacturers and dealers are required only for the purpose of facilitating the collection of the revenue, and to furnish the public with transcripts of them would not be just and proper, as it would expose their private business to the public and competitors, which is not contemplated by the laws requiring them to make stated returns and reports. Neither is it proper for the Collectors of Internal Revenue in the several districts to give access to the records in their offices relating to the sale of oleomargarine to any parties except Internal Revenue Officers. The alphabetical list of special tax payers kept in the Collectors' office is open to examination by the public, but the reports and returns of the product manufactured and the sales made by manufacturers and dealers are not subject to examination except for strictly official purposes by the officers of Respectfully yours, the Government. JOHN MASON, Commissioner.

(Signed)

As the oleomargarine law of the State of Iowa was enacted for the same purpose as the National Oleomargarine Law, to force oleomar-

garine to be sold for what it is, and not for butter, the Commissioner could see no reason why the Federal and State authorities could not work in unison, and the public be greatly benefitted thereby. Hence he was very much chagrined and disappointed upon receiving Commissioner Mason's refusal to co-operate with this office. Both the State and Federal laws designed that the utmost publicity should be given to the business of selling oleomargarine, and we think the Collector was clearly in error in his delicacy in exposing the private business of the oleomargarine venders. Secrecy is and always has been the main dependence of the successful sale of imitation butter.

February 3, 1891, I called at the office of the Deputy of Internal Revenue, at Sioux City. He reported no oleomargarine licenses taken out in his district, which comprises the northern half of the State, but claimed that H. W. Woodward's restaurant was serving it. The same day I visited the restaurant and called for a cup of tea and bread and butter. What purported to be butter was oleomargarine without any unpleasant taste or smell, an article well calculated to deceive the customers of a first-class restaurant. It differed from butter in its being almost tasteless. I did a sample of it up in a paper napkin and took it with me. The clerk in charge, when I accused him of selling oleomargarine, claimed that they were not selling it, but were serving it to their guests. There were no placards with the word oleomargarine written in large Roman type displayed in any part of the restaurant, The sample was so good an imitation that it was sent to Prof. Patrick, of Ames Agricultural College for analysis. Prof. Patrick returned a sworn statement that the sample was oleomargarine, that there was no butter in it.

February 26th I entered complaint against H. W. Woodward, for unlawfully serving oleomargarine to his guests, before Justice George Gepsom. Mr. Woodward plead guilty and was fined \$10.00 and costs; \$5.50 were taxed up for analyzing the sample sent to Prof. Patrick, and paid to the authorities at Ames College. The entire costs were \$10.35. This is the first case where a party was prosecuted to a conviction under the oleomargarine laws of the State.

At Sioux City I saw Collector Loban, of Dubuque, who reported that there were no licenses issued in his district, and but one applied for. April 5th I received information from a produce commission man in Davenport that a party there was selling oleomargarine without branding it. We instructed the commission man to buy a large sample of it and forward it to Prof. Patrick for analysis, which he did. I arrived in Davenport April 7th, and accompanied a boy to the store of Ed Plath (the firm reported by the commission man). The boy called for butter, which was given him, done up in a wooden butter dish and wrapped in brown paper. Upon examination it was found to be eleomargarine. The word eleomargarine was branded on the bottom of the dish in small, indistinct letters. The first package that was sent to Prof. Patrick had no brand on it. The eleomargarine tub was not in sight, and the customers were unable to determine its contents by the stamp on its side. The eleomargarine was simply being sold as butter. We entered complaint against him before Justice Bleik Peters, for improperly branding and not informing his customers that the goods was eleomargarine. He plead guilty and was fined \$50.00 and costs, which were \$8.50; \$6.00 of the costs were sent to the authorities at Ames for the analysis of the sample forwarded to Prof. Patrick.

The same day I entered complaint against Robeson & Sons before F. D. Eagle, Justice of the Peace, for selling oleomargarine without a statement clearly printed in the English language accompanying the package. He plead guilty and was fined \$50.00 and costs. He shipped his remaining oleomargerine back to Kansas City, the place from which he obtained it and quit the business.

On the same complaint F. W. Haller was prosecuted to conviction before Justice Wm. Glassnier. He was fined \$50.00 and costs. F. H. Bartemeyer was prosecuted to conviction under Wm. Glassnier, and fined the same. Each of these persons were selling under United States Retail Licenses, and were very strenuous in their assertions that the Revenue Officers had informed them that it was not necessary to brand the word oleomargarine upon the package going into the hands of the customer. I visited the Deputy Internal Revenue Collector at Davenport, and asked for the names of those having taken out retail oleomargarine licenses in the city. This information he claimed they had no right to give. When asked the question, Are there more than four? replied, "That is all there are."

The probabilities are that some of the restaurants had been serving it to their guests, but the Commissioner failed to find any of the spurious goods upon the tables of the restaurants that he visited. Fred Heinz, the County Attorney, took charge of the prosecutions, and through his energetic and prompt business methods but half a day was consumed on all four cases.

The quality of the oleomargarine sold in Davenport was such as torequire no chemical analysis or microscopic inspection to tell what it was. It looked like butter and there the resemblance ceased. Each sample was largely composed of cotton seed oil, and had the strong pungent taste of the oil. If the customer had known it to be oleomargarine, and had tasted a fair quantity, it would have nauseated him.

April 10th I called at Frank Buder's meat market in Burlington. While I was there a lady came in and called for butter. Mr. Buder showed her a print taken from a properly stamped tub of oleomargarine setting in the window. (The Government Stamp was partially concealed, as the tub was lying on its side). She asked, "Is it good butter?" and he replied, "Good of its kind." The lady tasted of the first sample and said, "It is not salt enough." She liked the sample out of the second tub he showed her better. She ordered two pounds, paid for it, and left the store without being informed of the character of the goods. I followed her and introduced myself, took her name and address, and inquired what she bought of Mr. Buder. She said, "It is Butter." I told her it was oleomargarine. She said she did not know it, as she called for butter, and did not like oleomargarine, and wished to take it back. I asked her to take it home, as I should want her for a witness in case of a contest over the sale.

A commission man sent a boy to the same place with instructions to buy a pound of butter. The boy called for butter as directed, and Mr. B. said nothing about its being oleomargarine. The package had Mr. Buder's name on it in Roman letters, and the oleomargarine stamp on it, but so dim as to be almost illegible.

Mr. Buder at first consented to pay his fine and plead guilty in that he did not tell the customer that it was oleomargarine he was selling. He then decided to consult his lawyer, who advised him to contest the case.

We then entered complaint against him before Justice Hinkley. Mr. B. plead not guilty, and took a change of venue to E. J. Edmons, plead guilty, but the Justice withheld the sentence for one week, when a fine of \$50.00 and costs was imposed. An appeal was then taken to the District Court by the defendant, and we have been unable as yet to bring the case to trial.

April 13th I entered complaint against George H. Merchendorf, of Council Bluffs, before C. A. Hammer, Justice of the Peace, and John P. Organ, County Attorney, for selling oleomargarine for butter and not branding the package received by the customer. He plead guilty and was fined \$50.00 and costs. Entered complaint against Ed-Russell, proprietor of the Model Restaurant, before Justice Hammer, for serving oleomargarine to his guests without placarding his restaurant with the word oleomargarine in large letters as required by law. He plead guilty and was fined \$10.00 and costs. Entered complaint against Henry Yapp, proprietor of the Council Bluffs Restaurant, before Justice Hammer on the same charge. He plead guilty

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and was fined \$10.00 and costs. O. O. St. John, proprietor of a small hotel, was convicted on the same charge and plead guilty and was fined \$10.00 and costs.

The same day I visited H. H. Fensler, of Missouri Valley, and called for butter. Mr. Fensler said, "we have no butter but have oleomargarine" in a voice that could be heard from one end of the store to the other. The Commissioner bought a pound of the oleomargarine. Mr. Fensler did it up in brown wrapping paper without branding it. When taken before the Justice of the Peace Mr. Fensler claimed that he had written instructions from the Internal Revenue Collector at Burlington, in answer to a letter he had written asking for instructions for the proper handling of oleomargarine in order that he might comply with the United States law.

He then produced the following letter:

Burlington, Iowa, February 11, 1891.

H. H. FENSLER, Missouri Valley, Iowa:

DEAR SIR:—A package of oleomargarine sold by you as a retail dealer in the product, should be stamped. Not by you, but by the manufacturers. The only restriction placed on retail dealers in oleomargarine is the limitation as to the amount of sales. They must sell in quantities less than ten pounds at any one time.

Respectfully,

(Signed.)

Louis Weinstein, Collector.

All the parties that had been fined thus far, that were holding United States licenses, had strenuously insisted that the Revenue Officers had fold them that branding the package with the word oleomargarine was unnecessary. The provisions of the Federal law were so plain that the Commissioner deemed this to be merely an excuse, and if that one had not been made some other one would have been. Ignorance of the law was deemed no excuse by the Commissioner.

The following are the provisions of the Federal law:

SEC. 6. That all oleomargarine shall be packed by the manufacturer thereof in firkins, tubs, or other wooden packages not used before for that purpose, each containing not less than ten pounds, and marked, stamped, and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe; and all sales made by manufacturers of oleomargarine, and wholesale dealers in oleomargarine shall be in original stamped packages. Retail dealers in oleomargarine must sell only from original stamped packages, in quantities not exceeding ten pounds, and shall pack the oleomargarine sold by them in suitable wooden or paper packages, which shall be marked and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury,

shall prescribe. Every person who knowingly sells or offers for sale, or delivers or offers to deliver, any oleomargarine in any other form than in the new wooden or paper packages as above described, or who packs in any package any oleomargarine in any manner contrary to law, or who falsely brands any package or affixes a stamp on any package denoting a less amount of tax than that required by law, shall be fined for each offense not more than \$1,000, and be imprisoned not more than two years.

In regulations respecting oleomargarine adopted by the commissioner of internal revenue, I find the following statement within: "As the retail dealer is required to sell from original packages and cannot as a retail dealer sell in such packages, he is compelled to make up his own package. New wooden or paper packages similar to those usually employed in selling butter or lard at retail may be used. * * * Each retail wooden or paper package must have the name and address of the dealer printed or branded thereon, in letters not less than one-fourth of an inch square, the word oleomargarine and the quantity of pounds contained therein written or printed thereon as follows:

POUND OLEOMARGARINE.

The word "oleomargarine" and the quantity in pounds "which are required to be printed or branded on retail wooden or paper packages in letters not less than one-fourth of an inch square must be so plain as to be distinctly visible to the purchaser at the time of the sale to him."

The provisions of the law are so plain that the construction placed upon it by Mr. Weinstein is clearly erroneous. Where there has been an honest belief on the part of the violaters that a compliance with the Iowa ruling of Mr. Weinstein was also a compliance with the Iowa statute their prosecution has seemed a hardship, and if the commissioner had believed that the Hon. Mr. Weinstein had made such a ruling as appeared by his letter to Mr. Fensler he would have been embarrassed to a great extent and might not have been able to prosecute to conviction those violators of the law holding federal licenses.

The effect of Mr. Weinstein's ruling has been to throw down to a great extent, the barriers which the law designed to erect between the two products, butter and oleomargarine, and relegate honest butter to the rear. The federal law was designed by the originators to make it impossible for a customer to buy oleomargarine without knowing what he was buying. This ruling enables dealers to place their license stamp in an obscure part of their store and to place their oleomargarine tub in a butter box or refrigerator out of sight of the customer, and when butter is called for, to do up oleomargarine and sell it for

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butter. The customer sees no mark on the package, the tub with its stamp is out of sight and the license hung up where no notice is taken of it. The innocent purchaser will pay butter prices for a cheap commodity and eat oleomargarine without knowing it. Secrecy and darkness have ever been the cover under which this nefarious business has been transacted.

All licenses expired May 1st. They were taken out mostly from one to three months and cost \$4.00 per month. The last Congress changed the time of the license, ending from May 1st to July 1st, as butter will be so cheap in May and June that oleomargarine will not sell. When a retail oleomargarine license is bought it has to run to the end of the year. The license ending July 1st will increase the cost \$8.00, for which the purchaser receives no benefit. The object of the change was to increase the cost to those buying the licenses.

We entered no complaint against Mr. Fensler, but took the case under advisement. He had complied with the Iowa statute in stating that his goods was oleomargarine and not butter. He had used due diligence in seeking information from a proper source, and had lived up to the knowledge he had obtained, and had clear proof of honest intentions. The case was referred first to State Senator Clyde, of Osage, who decided that under the circumstances no jury could be found that would convict, as did Judge Sherwin. In the absence of the Attorney-General the case was referred to your Excellency, with like decision as rendered in the above. We then dropped the case.

April 14th I visited the store of D. L. Berry of Cedar Rapids, who held a retail oleomargarine license. Upon the opening of the store in the morning I had a boy call for butter. The butter box being open I looked its contents over and discovered that it held nothing but butter. Giving the boy a signal he called for oleomargarine, saying "the butter does not suit." They claimed that they had none, and in looking the store over I could discover none. Then I called on the proprietor of a large store near, who made the claim that no oleomargarine was sold in the city, and was not aware that Mr. Berry had held a license since February 3d. When made aware of the fact he said, "that explains why that firm have been retailing butter so cheap for the last two months." As I could find no trace of eleomargarine being sold by this firm I dropped the case. Mr. Berry had sold oleomargarine, putting it in shallow butter dishes, branding the dishes on the under side, then wrapping them up in brown paper, without the brand on the paper. He claimed that he always notified the customers of what they were buying.

Information came to the Office that Mr. Jacobson, a contractor on the Winona and Southwestern Railroad, camping near the Little Cedar Postoffice, was feeding oleomargarine to his boarders. On the 18th of April I visited the camp and learned that oleomargarine had been served at two meals, and that the tub had been ordered from Chicago through a firm in Osage, which had no license for selling it. (The merchant had discovered that he had no right to handle the goods without a license, and had driven out and secured the remainder of the tub). Mr. Jacobson hired all his men by the month, did not board any one for a compensation, hence, under the law he was not running a boarding house. I consulted Senator Clyde with regard to the law bearing on this case. His ruling was that you could not call Jacobson's camp a boarding house any more than you could claim a farmer to be running a boarding house who boards the men he hires by the month. The matter was dropped.

April 22d we entered complaint against Marsh & Matt, of Boone, before R. F. Dale, Justice of the Peace, for selling oleomargarine as butter, and not branding the customer's package. In the absence of the County Attorney the Commissioner prosecuted the case. They plead guilty and were fined \$50.00 and costs. They made the claim that the Revenue Officers had informed them that branding the customer's package was unnecessary, claiming to have a letter from Mr. Loban to that effect. After searching they failed to produce any such letter, and I was loath to believe that two collectors would make the same mistake.

The different samples of oleomargarine examined by the Commissioner were of second grade, worth about twelve cents per pound in the market, but they usually retailed at twenty-five cents per pound. Owing to the scarcity of grain and the high price of corn the usual grain rations had been withheld from the cow and caused the flow of milk to run low. Western extra creamery butter was selling at thirty-five cents per pound in the New York market through the months of March and April. Dairy butter retailing at thirty cents per pound, which was seven cents higher than Western Extras were for the corresponding months of the year previous, and fully ten cents per pound higher than the corresponding dairy butter. The extreme prices supplemented by the loose rulings of the Internal Revenue people made the opportunity that the oleomargarine people were quick to take advantage of, and for the first time in the history of the State, since our oleomargarine Laws have been supplemented by our Federal Laws has the sale of oleomargarine amounted to anything in the State of Iowa.

After consulting leading creamery men of the State, Mr. Weinstein's letter and the Federal law relating to the sale of oleomargarine

was published in the Creamery Journal, of Waterloo, Iowa, a nonpartisan trade paper. Some good friend of the dairy interests forwarded the article to the Hon. John Mason, Commissioner of Internal Revenue, Washington, D. C., from whom we received the following letter:

TREASURY DEPARTMENT, OFFICE OF THE COMMISSIONER OF INTERNAL REVENUE, WASHINGTON, D. C., May 12, 1891.

A. C. Tupper, Esq., State Dairy Commissioner, Osage, Iowa:

SIR:-Some one has sent me a copy of the Creamery Journal of May 1st, with a marked article written by you in regard to the enforcement of the

oleomargarine laws in Iowa. Referring to your statement that the internal revenue laws and regulations governing the sale of oleomargarine are not enforced in Iowa, I have to inform you that I have called the attention of Collector Weinstein to the letter purporting to have been written by him, a copy of which is printed in your article, and corrected his instructions to dealers in regard to the marking and branding of retail packages. The regulations on that subject, as quoted by you, are correct, and the Collector has been directed to see that they are strictly conformed to by the dealers in his district.

It is my intention to see that the laws and regulations imposing a tax upon oleomargarine and providing for its collection are faithfully and impartially enforced in all parts of the country, and I am glad to have my attention at any time called to any evasions of the law. Respectfully yours,

JOHN MASON, Commissioner. (Signed)

We did not think we were asking any great favor of the Internal Revenue officers when we arranged with them to forward us by letter the names of those taking out retail oleomargarine licenses, as the records of the collector's office are open to inspection by the public. We did not expect any infractions of the State law by the holders of the retail licenses, but did expect to watch the hotels, restaurants and boarding houses in the vicinity of a merchant holding a license. When in Burlington April 12th, after five holders of United States licenses had been arrested, Mr. Weinstein gave us a list of the holders of oleomargarine licenses in the South half of the State as follows:

NAME.	LOCATION.	WHEN ISSUED.
	Burlington	November 3, 1890.
Danner H. Is	- I de la constant de	INIGECH 10, 1001.
Mayobondorf, treo. D.	Country	April 6, 1501.
Diath Ed		IMATCH 21, 100A
Amborn Robert A	Fort Madison	February 11, 1891.
Throm, Henry.	Ottumwa	March 17, 1891.

He also gave us a short list of hotels and restaurants that had bought goods from the manufacturers.

The Dubuque office issued a license February 3d. The party was fined April 22d, and we were never notified that the license was issued.

We are indebted to produce commission men and grocers for the pointers that led to the detection of the different violators of the oleomargarine law, and to whom the sincere thanks of this office are extended. We ask the friends of honest dairy products to notify us if any parties are guilty of violating the oleomargarine laws of the state and with their assistance and hearty co-operation, the oleomargarine traffic can be confined to its legitimate sphere. If parties take out licenses our friends should see that the package received by the customer is properly branded. Often where a rubber stamp is used the firm name is in large letters, but the word oleomargarine in letters so small as not to comply with the state law. In pressing the rubber stamp on the pad, a heavy impression is made by the name of the firm, and little or no ink is on the word oleomargarine, resulting in the name of the firm showing in large plain letters while the word oleomargarine is so dim as to be hardly readible. The innocent purchaser does not read it, but thinks it an advertisement of the firm. The name is often stamped on a corner of the paper and folded in out of sight, or if the word is stamped on the butter dish it is placed on the bottom out of sight, unless the dish is held up over one's head. These are some of the tricks by which oleomargarine dealers try to evade the law and avoid publishing the fact that they are selling oleomargarine. Like dodges can be used in placarding the dining-rooms and restaurants and hotels. The Commissioner found that public sentiment was almost unanimously in his favor in enforcing the law, and he was aided not only by the officers of the law but by a host of good people in every town or city

September 19th we received a sample of butter from Waterloo which was claimed to be adulterated. It was taken from a twenty pound tub that was brought in at a very high temperature, so much so that melted butter was spilled on the sidewalk. The microscope showed that it was genuine butter, the unnatural look being caused by the melting of the butter.

September 15th we received a letter from a butter maker in a co-operative creamery in Marshall county, containing a clipping from the American Creamery Journal, which we publish as follows:

For the quarter ending July 4th, the Minerva Valley Creamery Company gathered 65,971.7 gauges of cream, which tested 65,618.4 pounds, an average test of 99.9 per cent. Butter sold, 72,093.9, which was shipped to Boston, at

western extra prices. Total receipts of the creamery, less freight and commission, \$12,842.05. Paid patrons \$10,895.47. Expenses, \$2,147.05. During the months of June and July 57,363.2 inches of cream were gathered. This tested 57,092.9 pounds, and sold 62,624 pounds of butter. Patrons have not been paid less than 144 cents this season, and that only for six weeks. The last week in July patrons were paid 16 cents. Patrons number two hundred and fifty. Seventy-eight dollars is paid each week for gathering cream, and \$34.54 for labor and secretary at the creamery.

By these figures one can see that the amount of butter sold was very largely in excess of the test inches paid for, being 6,475.5 pounds more. The butter-maker made the claim that the Minerva Valley Creamery must have a larger gathering pail than the one specified by the laws of the State, or they were using neutral oils and making adulterated butter. On September 24th the Commissioner visited the creamery. The secretary showed him through the plant. He examined every nook and corner of the building, and could find no trace of neutral lard or oleomargarine oil, nor any apparatus for melting it in order to incorporate it with the butter.

The butter-maker in the creamery stated, "that the test was made by throwing away all fractions. If the test measured ninety-nine, he would call it ninety, and in addition to taking the fractional tenths for the benefit of the creamery, he took very strong measure." There was no effort at concealment, as the management of the creamery published the overrun from time to time in the newspapers. The patrons of this creamery were inclined to brag over the patrons of other creameries, claiming to receive from two to three cents more per inch than the patrons of any other creamery in the county, notwithstanding the price of an inch of cream was augmented by an overrun of ten per cent. If twenty cents an inch was paid for cream, the overrun of ten per cent made up two cents of it. Without the overrun, their tickets would have been eighteen cents, but the number of inches would have been increased ten per cent. Perhaps no injustice is done the patrons of a creamery, and yet it is almost impossible for a butter-maker to manipulate the test to churn out an overrun without doing so. He is apt to take a greater percentage from those having a small test than from those having a large one. Any buttermaker can manipulate the test by carefully keeping track of the amount of butter he should have by test, and what he churns over day by day, so that they will exactly correspond, or if he wishes for an overrun, he can have it. An overrun generally creates the impression that the management are doing better by their patrons than the facts warrant. It often leads to deception, and causes dissatisfaction among the patrons of neighboring creameries. It is concealed from the

patrons, but when discovered the management is apt to be changed, as the farmers of Iowa do not bank on false appearances.

There were no retail licenses for the sale of oleomargarine in force in Iowa up to October 31, 1891.

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EXAMINATION OF BUTTER.

An extensive examination of the butter offered for sale in Burlington, Davenport, Council Bluffs and other cities of southern Iowa revealed the fact that a very large proportion of it was scarcely fit for table use.

The different samples in one refrigerator would reveal all the defects of poor butter. The most common was the rancid butter, caused by its not having been properly washed. Other samples showed that the cream had been held so long before churning that it had become bitter and blue, while still other samples showed that the milk had been set in the vegetable cellar, as traces of onions, cabbages, turnips and the general smell of the cellar could be detected by those who are not experts in the butter business. We will not enumerate defects further, only to say that it required a great search to find a sample of good table butter. Examinations took place in the worst time of the year, just between hay and grass, and the dealers said that the good butter had been quickly disposed of, leaving only the poor on hand. They also claimed that it had been impossible to procure sufficient good butter to supply their customers. Most of those holding retail oleomargarine licenses made the same claim, and hence they had to supply the demand by supplementing oleomargarine. People that use good butter could not be imposed on if oleomargarine were sold them for butter. They might not recognize the goods, but would return it to the merchant as unfit for table use.

If one should judge of the dairy education by the sample of butter examined in Southern Iowa, he would be forced to admit it to be at a low ebb, and very deficient. Many of the merchants seemed to be no better posted with regard to handling the butter than were the makers of it, as good and bad were alike put in common in the butter box or refrigerator, and in a short time the best and worst had nearly the same flavor.

It would be well if the creamery people in the dairy sections of the State would introduce and persistently work up a trade in the towns and cities in sections of the State where there are few creameries. This would educate the people in the use of fine butter. The farmers that enter largely into dairying, and make fine sweet butter, do not sell their butter with the common line of goods. They contract it at remunerative prices, and deliver it fresh from the churn to their regular customers. One of the great drawbacks in starting creameries near the large cities is the limited supply of milk.

If this office had in its employ some teachers of the art of butter making, such as are in the employ of the New York Dairy Commissioner, they could be utilized to great advantage by the farmers in sections of the State where little is known of dairying. The people of neighborhoods could be gathered into the school, and the correct process of handling the milk, ripening the cream, churning, washing and packing the butter, be taught in the shape of object lessons, and all matters pertaining to the art explained. Where this has been done in the State of New York it has produced the best results, and was worth to the community where the schools were held many times more value than they cost the State. Iowa makes more pounds of fine creamery butter than any other State in the Union. She also makes a great many million pounds of butter that is sold off the farm which, if properly made, would be worth almost as much again in value as it now brings, thus entailing a loss of hundreds of thousands of dollars to these farmers.

The dairy people claimed prior to the passage of the Federal and State oleomargarine law that with the sale of oleomargarine properly restricted there would be a good supply of fine butter at reasonable prices. Iowa dairymen took the lead in advocating the oleomargarine laws, Federal and State, hence, are under more obligations to spread proper knowledge that the butter supply of Iowa may be of good quality.

The idea of the originators of oleomargarine was to substitute cheap ingredients in the composition of imitation butter. At first a large proportion of their goods was composed of butter; gradually this proportion was lessened and lessened until no butter was used in the manufacture of oleomargarine. At first only leaf tallow and leaf lard were used, these being the choicest of the animal fats. This cheapening process has gone on with the aid of chemicals to such an extent that goods imitating butter as far as it appears to the eye is concerned are made out of almost any kind of grease. Cotton seed oil was found in all the many samples examined by the Commissioner, save one. This was the only sample that would deceive the taste of an ordinary individual. Some of our creameries and many of our dairy people would do well in imitating the extreme care the oleomargarine manufacturers take in

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pleasing the eye. The tubs are kept scrupulously clean. The oleomargarine is put up in round prints. These prints are stamped, surmounted with a sheaf of wheat, then wrapped in cheese cloth. The outside of the sepulchre is dressed and garnished but the inside we will leave to your own imagination. Common oleomargarine, as is manufactured to-day. can only be sold to those whose palates have been degraded by the use of butter of a poor quality. The dairy interest, to protect itself from imitation goods, should educate the makers of butter, and the handlers of it. too, that only fine goods can find their way into the market. Where this is done and the national and State oleomargarine laws enforced so that oleomargarine is sold for what it is, and the word oleomargarine stamped upon the customer's package, it is impossible for one to buy oleomargarine without knowing it. Then, upon tasting the goods the pungent flavor of cotton seed oil, that no chemicals neutralize, would almost turn one's stomach, and the consumption of oleomargarine will grow less and less until discontinued altogether.

IOWA CROPS.

The crops for 1890 were very uneven. A drouth set in the latter part of May and lasted through June, extending from the Atlantic Ocean to the Rocky Mountains, but was broken in northeastern Iowa by showers of sufficient extent to do much good to the crops. The dry weather shortened up the corn crop and made a light yield of grain. The crop failure was so general that the prices of corn, oats, barley, hay, and all kinds of feed became very high. Corn was sold from 45 to 60 cents per bushel on the farms. Hay got to be very scarce, and in the spring sold as high as \$18.00 per ton in the cities of Iowa. The corn crop was the poorest in the south half of the State. In the northeastern part, in which the creamery business is mostly done, the farmers were fortunate in having a good crop for the year.

The cows went into winter quarters in only fair shape. Feed was so high it was largely withheld from them, and many dairies allowed them to dry up. The price of butter ranged at about 27 cents for Western Extras through the early winter months, and many dairymen claimed it did not pay to feed the cows, with butter at that price. This cause diminished the output to such an extent that in February Western Extras sold at 35 cents per pound. The cows as a general rule came on to pasture in poor condition, many being so thin as to be of little use for the production of milk this season. The winter was mild, the grass started quickly after warm weather came, and having no backsets it soon made feed, but dry weather setting in in May retarded its growth. The pastures were good in June, but did not hold up well in July.

The hay crop is an average one this year in Iowa. It came in in prime condition. Oats, barley and rye have yielded more bushels per acre than for many years. The hot summer weather in September has made an immense crop of hard corn all over the State, with the exception of a small per cent on the bottom lands. Now the price of butter is higher than the price of corn, and we shall expect the cows to receive the usual amount of grain, and that the supply of milk will be kept up better than last winter. Those who persisted in feeding grain last season made a good profit, notwithstanding the high price of grain.

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THE INSPECTION OF CREAMERIES AND CHEESE FACTORIES.

The duties of this office are to prevent the sale of imitation butter and cheese, contra to law, and to watch that only pure milk or cream is used in the manufacture of butter and cheese.

In the pursuance of his duties the Commissioner may gain all the information he can that will be of benefit or interest to the creamery people, if in so doing he incur no additional expense to the State.

The Commissioner has, since his last report, visited many creameries and cheese factories in all sections of the State, and obtained much information regarding the dairy industry of the State from the proprietors, managers and butter-makers of these various creameries and factories. These gentlemen claim that owing to the scarcity and high price of grain and corn last winter, the usual grain rations were largely withheld from the cows and consequently a large portion of them did not come out in good order in the spring. During the months of November and December many of their patrons sold their cows for whatever price they would bring. Bran \$17.00 per ton, oats 50 cents per bushel, and corn from 40 cents to 60 cents per bushel, had a tendency to lesson the grain rations, for from the first of November to the middle of February butter ranged from 25 cents to 28 cents per pound, too low a price to be profitable compared with the high price of feed. Then during the months of March, April and May the price of butter was extremely high, ranging from 35 cents to 37 cents per pound and remaining up to over 30 cents well into May. This price was unprecedented for this time of year and the farmers commenced feeding grain plentifully, but too late to overcome the back-set the cows had had from their winter's fast. Many of them had become so poor that they could not recuperate during the season of 1891.

A proportion of our dairy farmers, and it is quite a large one too, make no difference with the cow's rations what the price of grain is believing that to be the only correct and profitable way to run a dairy. The farmers that held to this principle have had a rich reward this

season, as the extremely high prices in the spring were followed by a summer market that was from 4 cents to 6 cents higher than the corresponding months of the season of 1890, and now 30 cents and over rounds out their profits.

The make of butter and cheese for this season, in Iowa, is smaller than a year ago, although a good many creameries have been built in different counties in the State that heretofore have done but little in

the creamery business.

The northeastern portion of the State, where the creamery industry is the strongest, had good crops in 1890 of grain and corn, which are followed by an unusually large crop in 1891 all over the State. For two consecutive years the farmers in the old creamery districts have been able to sell flax at very remunerative prices—of from \$13.00 to \$20.00 per acre; barley at as much or more, while corn and oats and all other grains have brought from \$12.00 to \$18.00 per acre. While this prosperity is very desirable and has long been prayed for, it does not help the dairy interests, because quite a large per cent of the farmers are becoming tired of the constant and irksome task of milking, and are reducing their dairies to small size or are selling off their cows, retaining only enough to supply their own wants. They are unwilling to milk when they can make plenty of money in following other branches of farming than dairying.

There seems to be a tendency to get back to the old fashioned farming, which was raising grain, flax and seeds, and selling them off of the farm. All agricultural authorities and writers agree that the flax crop is the most exhaustive on the fertility of the soil of any erop grown, many claiming that the price of a good crop of flax is lost to the farmer because the three succeeding crops will be enough poorer in quantity to balance the amount received for the crop; it is immaterial what crop is planted. The large and unprecedented crops of flax the last two years raised in the dairy districts of Iowa are largely due to the land having been brought up to a high state of fertility by dairy farming. The very success of flax and grain raising during the past two years only prove the uncertainty of grain raising as a business. Good crops of grain in 1890 were raised in a small part of some of the States of the Union. The failure owing to drouth was widespread, extending from the Atlantic Ocean to the Rocky Mountains. While the crops of 1891 are large in all parts of the United States, the failure of crops in Europe is worse than it has been for fifty years. The high prices our farmers have received the last two years have been caused by heavy failures of grain crops of this country or Europe. This proves the uncertainty of depending upon grain raising as a business, and should be a warning to the farmers

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that are tiring of dairy farming and are thinking of going out of the business. The farmers should look this matter over carefully, even though milking is irksome, they should consider the success that has attended their efforts in the past. The fact that they receive the cash twice a month enables them to purchase their family supplies without asking credit. Besides this, dairy farming has brought their farming lands up to a high state of fertility; has given the old dairy districts better houses and barns, and greater prosperity than is enjoyed by the farmers in sections of the State that have no creameries.

The Dairy Commissioner would arge strenuously that the farmers stick to the dairy business; that they weed out their poor cows, keeping only those that will pay their board bill and a profit beside; that they give their cows better care, and that they shall be more particular in their mode of handling their milk or raising the cream; delivering only to the factories that which is in the best condition. By so doing the quality of creamery butter will be improved and its price enhanced. Many of the gathered cream plants have been replaced by large and commodius separator creameries in the older sections of the State. Many new creameries have been built in the last season. These new creameries show great improvement in their construction; more attention has been given to making them convenient and labor saving. The gravity or side hill plan is oftener used than formerly; more pains is taken in making the building warm and the temperature less variable from one season to another. The new creameries are properly ventilated and drained. A large amount of new capital has been placed in dairy plants this season. Too many creameries have been built in localities where they were not needed; thus creating an undue amount of competition and adding largely to the expense of manufacturing the butter at the creamery and for gathering the milk or cream.

At many creameries rules and regulations were well enforced in regard to the condition of the milk and cream received at the factory prior to the building of new creameries in their vicinity. Milk or cream in poor condition was refused, and milk often sent back to the patrons. Since the advent of so much competition all rules have been abrogated. Milk or cream is now taken and no questions asked, for patrons are independent. If one creamery does not take their milk another one will, and pay little or no attention to its quality. This condition of things has a tendency to deteriorate the quality of Iowa creamery butter. The price of butter the past season has had such an upward tendency, goods of fine quality being so scarce, that larger quantities of our creamery butter has passed muster and has sold in the market as "Western Extras," or at prices even better than that grade, than would otherwise have sold on a market where the tendency would be downward.

The Commissioner has never found two co-operative creameries that co-operate with each other, unless it be to ship goods together in the same car. Usually a feeling of rivalry exists, and too often unscrupulous means are used to subvert and get the advantage of each other in the way of patronage. Aside from this undue anxiety to have and to do a large business, many of the co-operatives are under good management and do a successful business. Some of the creameries that started this season in the newer portions of the State have done a nice business; have had a large patronage and are looking to the future with great expectations. Others of them have had to contend with a small milk supply and large expense for manufacturing the butter and are somewhat discouraged. The great encouraging factor of the whole business is the price of butter. It has been, it is, and will continue for some time to come to be higher than it has been for years.

The management of creameries are slowly finding out that it is economy to employ only the most competent help that can be obtained. Many butter makers that have run a creamery on the gathered cream plan have been put in charge of separator creameries for the first time this season. Too many of them have no ear for sound, and do not know when the separator is not running at proper speed. It is not every butter maker that has a separator properly run. From one-fourth to one-half pound of butter to the one hundred pounds of skim milk is left in the milk and the result is poor dividends. I know of butter makers that are keeping their jobs because they are working for \$10.00 per month less than the market value for a good man. They allow one-half pound of butter fat to be retained in the one hundred pounds of milk, and cannot tell by sound when the separator is doing its work correctly. Such men are worse than nothing, better give them a pension and get the right man to do the work at high wages.

If for no other reason than to test the skim milk, the management of a creamery should have a milk tester, even if they have no idea of eventually buying on the relative value plan. When our dairy school at Ames Agricultural College is under headway, it should teach its students to detect by earthe proper sound a separator makes when skimming all the cream from the milk. The trouble is that there are too many butter makers that have learned the trade in an imperfect way; many of them have only worked one season in a creamery as a second man, before taking full charge of the work. If these poor butter makers will attend the dairy school for three months it will pay them, and do a vast amount of good to the dairy industry. Butter makers are too

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much isolated. They have no opportunity to visit other creameries and observe modes and methods, and exchange experiences with other butter makers. In this respect the trade varies from most other trades, and for this reason the dairy school is of vital importance to the dairy people of Iowa. Some of our best butter makers will attend its first term, which will be ably conducted by competent and experienced men. The building is large and spacious, and is a model of convenience. Every thing necessary to carry on practical experiments will be there.

In every important branch of manufacturing industry, with scarcely an exception, in the United States, organization is pefected for the betterment of the trade and the improvement of the quality of the goods. In our dairy industry the reverse is true. Nothing has been done, except in a few instances, to promote the general welfare of the trade and better the quality of the product. Not only does strong opposition exist, but too often a spirit of jealousy and rivalry between different factories allows the patrons to furnish milk or cream in poor condition. One factory taking patrons from another and asking no questions. It is high time for the managers of our dairy factories to take an advance step and co-operate with each other; forming county creamery associations for the improvement of the dairy interests in their own county. It is a great task to educate all patrons of creameries or cheese factories to supply only milk or cream in good condition. It must be in good condition that the quality of the goods made at the factories shall always be up to high standard. The patrons should be invited to attend township meetings and farmers' institutes. The dairy association of each county should make it a rule that any patron dropped because they would not furnish good milk or cream, should not be allowed to sell milk or cream to any factory in the county until they had repented in "sack-cloth and ashes," and solemnly promised to comply with the rules as laid down by the management of the creamery that dropped them.

CHEESE.

No complaints have been received in this office with regard to the quality of the cheese manufactured in the State. All that the Commissioner has examined has been uniformly good, and our make is reported by the wholesale trade to be very fine this season.

No cases of cheese poisoning have been reported at the office.

The prices have been high and remunerative to the patrons. Over twenty new factories have been built, while some old ones have gone out of the business. There are one hundred and eleven in operation in the State at the present writing.

We wrote letters to all those that are listed as operating cheese factories, asking them to send us the total number of pounds of cheese manufactured by them for the year just ending, this being the only way we could obtain the total amount made in each county and the make of the State. So many of them failed to reply that our statistics are too incomplete for publication.

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TESTING MILK.

The Iowa State Dairy Laws class all Dairy Products, whether butter or cheese, as imitation goods, unless made from pure milk or cream. No foreign substance is allowed to be used in the manufacture of these products, with the exception of rennet and a harmless coloring matter. This necessitates the Dairy Commissioner's Office having sufficient apparatus for testing the purity of milk used in their manufacture.

Section 4042 of the Code reads as follows:

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 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 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.

This law is stringent, explicit, and has severe penalties attached. Unfortunately its enforcement is not the duty of the Dairy Commissioner. The States that have a Dairy Commission make it the duty of that office to test the milk supply of the cities. This office must test the milk that is sent to it by the manufacturers of butter and cheese, but can only test the milk as sold by the milkmen of the cities to their customers, by not incurring additional expense to the State.

In the fourth annual report of this office the similarity between the analysis of cow's milk and mother's milk is shown; also, the bad effect of skimming or adulterating milk upon the health of infants. The population of our cities is increasing steadily every year, and more and more infants are coming into the world dependent on the

milk as sold by the milkmen, for their daily food, and it is absolutely necessary the milk supply be pure and free from adulteration.

We also published tables showing the milk tests for butter fat taken from the milkmen of the cities of Cedar Rapids, Burlington, Dubuque, Davenport and Des Moines. The first test made in each of these cities showed a greater per cent of samples below standard (three and one-half pounds of butter to one hundred pounds of milk) than the test from the last samples taken. After the milk had been gathered two or three times from the milkmen no test was below standard. In fact, the milk was better in quality than is bought at the separator creameries.

We ascertained that at an expenditure of \$3.50 twelve samples of milk can be gathered from the milkmen in these cities and sent to us by express. This office will test them, using some improved test, as Patrick's or Babcock's, and in this way the supply of milk in the cities containing over ten thousand inhabitants can be kept as pure and as perfect as when drawn from the cow. For the gathering of the samples tested last year the Commissioner paid the bills out of his own pocket.

After we had demonstrated the fact that the cost of this work would be small, we wrote letters to the mayors of the cities of Council Bluffs, Sioux City, Cedar Rapids, Davenport, Burlington, Dubuque and Des Moines, asking them to present this matter of testing the milk in their city before their councils and to advise them to take up the work of gathering the samples and expressing them to us. We were to test them and return the results to them for publication in the papers.

The mayor of Burlington favored the plan but reported that they had no funds for the work. Cedar Rapids and Council Bluffs made no reply. The Commissioner accompanied one of the police force in Des Moines and instructed him how to gather the samples, showing him how to obtain an average sample from the can of milk. Twelve samples were obtained from as many milkmen in an hour and a half and tested in this office. Once, and only once, did this officer gather samples and send them to us afterwards. Davenport bought a set of test tubes and the Board of Health gathered samples from time to time, and have kept the milk supply all straight. Dubuque did the same. Sioux City, through its Board of Health, gathered samples often and sent to our office. The Commissioner instructed their agent in gathering the samples. We have tested milk for Des Moines, Davenport and Sioux City since our last report and also for the creamery people who have sent us samples.

In no place has the milk supply been tested as often as once a week. For some reason the matter has been allowed to drop in most of the cities, and the dishonest milkman is allowed an opportunity to get in his work of selling skim milk, regardless of the harm he may be doing the infants whose lives he may endanger.

The Dairy Commissioner is appointed by the Governor, and is independent of the political influence that seems to prevent anything being done by the authorities of any of our cities. To prevent the sale of poor milk, the Dairy Commissioner's office ought by law to enforce Section 4042 of the Code of Iowa.

At an expense not to exceed \$2,500.00, the milk as sold by the milkmen in all the cities of over ten thousand inhabitants can be kept pure. Three-fourths of the milkmen are honest—at least that is the experience of this office—and are glad to have the milk tested. There is no other way in which a small expenditure of State funds can do as much good as for the Legislature to make it the duty of this office to take care of the milk supply of the cities of Iowa. It is simply inhuman not to do so.

The manufacturers of butter and cheese seem to be unanimous in the opinion that the law-making power of Iowa should make it the duty of the Dairy Commissioner to enforce Section 4042 of the Code, and that the Dairy Commissioner or his deputies should have the power to prevent and punish the patrons of creameries who bring in milk and sell it, or deliver it to the factories to be made up into butter and cheese, that is diluted with water or in any way adulterated, or milk from which any cream has been taken, or shall keep back any of the milk known as "strippings," etc., because the management of the factories, if they should undertake to enforce the law, would be embarrassed by the influence of the violators of the law and their friends to such an extent that the business of the factory would be broken up.

THE HANDLING OF MILK ON THE RELA-TIVE VALUE PLAN.

Notwithstanding that three simple milk tests had been invented at the date of our last report, only eighty-five creameries report that they have introduced one of them into their creameries, and are buying milk on the relative value plan. Those that have given this method of buying milk a fair trial are satisfied with the result, for the quality of the milk brought to them has been greatly improved.

How the management of any creamery will continue paying the same price for milk yielding three pounds of butter to the one hundred pounds of milk as milk yielding five pounds of butter to the same amount of milk is beyond the comprehension of the Commission; or why the patrons selling good milk will put up with the inequality and injustice of receiving no higher price for their goods than those who are selling a very poor quality, we can not understand.

If the management of a creamery will commence testing milk by the Patrick or Babcock test, either of which are correct, without giving notice to their patrons, and place their names with the result of the test on a bulletin board for a couple of weeks they will find a great improvement in the quality of the milk without causing trouble. The honest people are far in excess of those that skim their milk a little. The dishonest one will have to succumb to what is right, just and equitable between man and man.

I hoped one year ago that the test would be generally in use at the date of this report, and must confess that I am disappointed in the result.

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HINTS TO THOSE BUILDING NEW CREAM-ERIES.

This office deemed it necessary to publish the following advice to those contemplating the erection of new creameries. It was published in the *Homestead* March 13, 1891. The warning did good in many instances, and my experience since in visiting the creameries in different parts of the State has only verified and intensified what I then wrote. Hence we publish the warning:

The creamery district of Iowa is largely confined to the northeastern section of the State, and is one of the most prosperous districts in the State. This prosperity is largely attributed to the butter production.

Recently many new co-operative creameries and farmers' stock companies have been formed in sections of the State that have hitherto paid little or no attention to the creamery business. These companies mean to build and equip creameries this spring and as so many mistakes have occurred in the past and are liable to occur in the future, this office feels called upon to point out some of the most grevious ones.

If the farmers of a neighborhood contemplate starting a co-operative creamery, they should find out first, how many cows are at a convenient distance from the place where the creamery is to be built; and second, how many men will pledge themselves to furnish milk or cream. Unless the crops have been a failure or disasters of various kinds have made the community willing to do almost anything to better their conditions, a majority will not be willing to stand the irksome confinement necessary to the care of a dairy. If they are dependent for their milk supply on cows accustomed to having their calves run with them, they will be disappointed. Such cows cannot be broken to milk, they will kick often and lively, smashing your pail and patience with the same foot. Now send out a committee of your most conservative and best business men to the nearest county that has a large and prosperous creamery business established. There they will find co-operative creameries whose management will gladly post them in regard to the business, and will usually point out to them the mistakes their company made at the start, and advise them how to avoid like trouble. Direct your committee to take plenty of time and visit the patrons of the creamery, learning all they can from them of the care of the cows and of the milk. They will discover that the creamery business is one of infinite detail, and that the least neglect to either cows or milk will work injury to the quality of the butter. Write to this office and we will send you our report containing a list of the creameries doing business in each county. We would advise your committee to visit a county containing at least a dozen creameries, for so large a number will insure a successful business.

This office will gladly furnish any other information in our power. Many creameries that have been failures would never have been built if at the outset the company had sent out a committee to inquire into the business. These men would have discovered such vast differences in the circumstances and surroundings of the county visited and their own, that they would have advised against the enterprise, or, at least, the creamery would have been built on a much smaller scale and would have been worth the outlay when built.

The following is the usual way of starting a co-operative or stock company creamery: Shortly after the farmers have held their first meeting, one or more agents of dairy supply houses come into the neighborhood. These men are well posted in the creamery business, and give many glowing examples of success. They talk of the advantages to be derived from the business, and dwell on the prosperity of the farmers that live in dairy counties. They extol the co-operative idea, and denounce trusts and individual creamery men. They often invite the committee to visit Elgin, Illinois, with them. The farmers look upon these men as philauthropists and feel very grateful to them for the interest they manifest in their welfare.

These men are not sent out to educate the farmer, but to build and equip a creamery for him. They will furnish him with everything necessary to his creamery at the largest possible price. They are very careful to mention no circumstance that would dampen the ardor or discourage the company from building. No creamery, means no sales. Not long ago I attended a farmers' institute in a county that had just built its first creamery. The cost of the creamery was nearly \$7,000.00. It has two De Laval separators, a twelve horse power boiler, a cheap ten horse boiler and a cheese apparatus. It could be duplicated for one half the money, or at most \$4,000.00. The building is sided with third class lumber, which when objected to read in the specifications as "C stock." In fact, the plans and specifications had never been read before signing. There are plenty of cows within reach of the creamery, but many of the farmers had allowed the calves to run with them the year previous and now they cannot milk them. The farmers were made to believe that they would receive seventy-five cents per one hundred pounds for milk. The first shipment netted the twenty-three cents per one hundred pounds and there had been nothing taken out for the interest on the investment either. Four thousand pounds of milk per day was the maximum amount received at the time of my visit. Cream was being gathered twice a week, and both butter and cream showed that the milk was receiving very poor care. The farmers lack both tanks and windmills, two very essential things in the proper handling of the milk. These facts I learned from reliable parties after attending the institute. The stockholders realize that they have paid one hundred per cent more for their outfit than it is worth, but as they did not read the contract they think the dairy supply men were moderate, as they might have taken their money and have given them even less than they did. While this is a very aggravating case, it is by no means the only one.

as hundreds of creameries have been built at exorbitant prices for the farmers in the last five years. It was only two or three months ago that a combination on dairy supplies was abrogated and the pool broken. Now if farmers contemplating building this spring will keep away from the dairy supply people, and examine into the business in prosperous dairy counties, finding out exactly what they want, they can then contract with the supply men and secure their outfit at a price that is some where near right.

A. C. TUPPER.

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DES MOINES, IOWA.

FINANCIAL STATEMENT.

Commissioner's salary	\$ 1,500.00
Clerk's salary	
Contingent expenses	
C. L. Dahlberg, typewriter and cabinet	117.00
James W. Queen, microscope and fixtures	30.00
Postage	85.03
A C. Ross, stationery	17.25
Telegraph service	5.40
Expressage	6.00
Laboratory supplies	17.33
Total	3 2,864.53
Amount of appropriation made for the Dairy Commission	8 20,000.00
*Balance undrawn from the State treasury November 1, 1890	
1891	2,864.53
Balance undrawn from the State treasury November 1, 1891	4,993,07

^{*}In our last report the balance undrawn from the State treasury November 1, 1890, should have read "\$7,657.60" in place of "\$7,667.60."

LIST OF CREAMERIES AND CHEESE FAC-TORIES.

Allow this office to thank those dairymen who so generously responded to our letters of inquiry relative to the creameries and cheese factories of their county, giving us so much valuable information regarding them.

We would urge the dairymen throughout the State to keep this office informed in regard to your work or any changes that may take place in the dairy industry of your county. Let us know when old creameries or cheese factories are discontinued and when new ones are built.

The following is a complete list of the creameries and cheese factories in each county of the State:

CREAMERIES.

ADAIR COUNTY.

Adair—Adair Creamery, H. F. Pierce, Secretary, fontanelle—Fontanelle Creamery, E. & C. D. Newbury, Hebron—Hebron Creamery, A. R. Haskell & Company.

ADAMS COUNTY.

Corning-Corning Creamery, McLane & Anderson.

ALLAMAKEE COUNTY.

Lansing—Lansing Creamery, Nielander & Company.
Lycurgus—Chrystal Spring Creamery, W. W. & G. L. Hubbell.
Postville—Postville Farmers' Co-operative Creamery, T. M. 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, W. W. & G. L. Hubbell.
Volney—Farmers' Co-operative Creamery Company.

AUDUBON COUNTY.

Audubon—Audubon Valley Creamery, Fisher Brothers & Company.

Exira—Exira Creamery, Fisher Brothers & Company.

Exira—Exira Creamery, Louis E. Born, Secretary.

Hamlin-West Hamlin Separator Creamery Company, A. A. Stone, Sec'y. Kimballton-Danish Western Creamery Company.

Ross-Fest Brothers.

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Sharon Township-West Sharon Creamery, Exira.

BENTON COUNTY.

Belle Plaine-Hilton Brothers & Company.

Blairstown-J. R. Morin Company.

Garrison-Vinton Creamery Company. A. M. Rowe, Manager, Vinton.

*Gillespie-M. L. Newton.

Mount Auborn-Vinton Cleamery Company, A. M. Rowe, Mgr., Vinton,

Norway-J. R. Morin Company, Cedar Rapids.

*Shellsburg — Vinton Creamery Company, A. M. Rowe, Manager, Vinton.

Van Horn-J. R. Morin Company, Cedar Rapids.

Vinton-Vinton Creamery Company, A. M. Rowe, Manager.

BLACK HAWK COUNTY.

Bennington Township—Engelking's Creamery, J. H. Engelking, Waterloo, Canfield—Canfield Creamery Company.

Cedar Falls -C. J. Refshange.

Dewar-Pleasant Valley Dairy Association, W. F. Garrett, Secretary.

Dunkerton-Farmer's Creamery Company, C. B. Kleckner, Secretary,

Eagle Center-Eagle Center Dairy Association, H. R. Eighmy, Secretary, Edwards-William Widdle.

Hudson-Rock Creek Creamery.

Hudson-Hud-on Creamery, Samuel Wilson, Secretary.

Jubilee-George Orth.

La Porte City-West Lawn Creamery, M. L. Newton.

Lincoln Township—Red Bird Creamery No. 1 Company, Albert Vittum, Secretary, Reinbeck.

Waterloo-Farmers' Co-operative Creamery Association, A. Seyland, Secretary.

Waterloo-Louie Diekmann.

BOONE COUNTY.

Boone—Boone Creamery, A. M. Chamberlain, Manager. Boone—Fountain Creamery, A. M. Chamberlain, Manager. Luther—Luther Creamery, A. M. Chamberlain, Manager. Pilot Mound—Pilot Mound Creamery Company, O. W. Cline, Secretary.

BREMER COUNTY.

Bremer-Bremer Creamery Company, Henry Kaiser, Secretary. Buck Creek-Little Valley Creamery, C. H. Brooks, Secretary. Frederica-Douglass Center Creamery. Frederica-Gardner, Murphy & Co.

^{*}Skim Stations.

Grove Hill-Maple Grove Creamery.

Horton-B. P. Scott.

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Janesville-Fred Diercks.

Key-Golden Key Creamery, O. E. Mayerhoff.

Knittel-Maxfield Creamery, Henry Theis.

Klinger-Klinger Creamery, Fred Diekmann.

Maxfield-Maxfield Creamery, O. E. Meyerhoff.

Maxfield-Artesian Creamery.

Minkler-Oran Creamery Company.

Plainfield-Lafayette Creamery, J. F. Powers.

Roxie-Western Douglass Creamery.

Seigel-Seigel Creamery, C. Hoppenworth, Secretary.

Sumner-Red Clover Creamery Company.

Sumper-Excelsior Creamery Company, J. Dawson, Secretary.

Sumner-Gardner, Murphy & Company.

Tripoli-Perfect Creamery, Carl Ducker.

Tripoli-William Barry.

Tripoli-J. H. Hesse.

Tripoli-Fremont Creamery.

Tripoli-Crane Creek Creamery.

Waverly-Washington Creamery, John Brandenburg, Secretary.

Waverly-Lafayette Creamery, H. K. Barney.

BUCHANAN COUNTY.

Aurora-Aurora Farmers' Creamery Company, B. B. Warren, Secretary.

Brandon-John Kline.

Fairbank-Fairbank Farmers' Creamery Company.

Hazleton-Hazleton Farmers' Creamery Company, E. J. Short, Secretary.

Independence-Independence Creamery, Weins & Shillinglaw.

Independence-Charles Brooks.

Jesup-Jesup Creamery Company, James Dalton, Secretary.

Lamont-Lamont Creamery Company, J. F. Trezona, Secretary.

Littleton-Littleton Creamery Company.

Maynard-Crown Creamery Company, James Lewis, Secretary.

Maynard-Harlan Creamery Company, A. F. Crawford, Secretary.

Middlefield-Middlefield Creamery, Hazelrigg Brothers.

Newtonville-Newtonville Creamery, W. W. Wilde.

Otterville-Otterville Creamery Company, Charles Sheriden, Secretary.

Quasqueton-Quasqueton Co-operative Creamery, A. F. Burrhus, Secre-

tary.

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

Shady Grove-Kenny Brothers.

Winthrop-Winthrop Creamery Company, J. F. Kinney, Secretary.

Stanley-Stanley Farmers' Creamery Association, S. C. Irvine, Secretary.

BUENA VISTA COUNTY.

Alta-

Newell-Newell Creamery Company.

Storm Lake-A. M. Cleveland.

Storm Lake-W. Foster & Company.

BUTLER COUNTY.

Allison-Farmers' Advance Creamery Company, E. W. Kester, Secretary.

Aplington-Spring Hill Creamery, Marckley & Dockwell.

Aredale-Aredale Creamery, Lewis Forthum, Secretary.

Bristow-Clover Lawn Creamery, A. Haven, Secretary.

Butler Center-Nickel Plate Creamery.

Butler Township-Rose Hill Creamery.

Clarkesville-Oak Grove Creamery Association, E. D. Wilcox, Manager.

Clarkesville-Pleasant Valley Creamery.

Clutterville-Clutterville Co-operative Society, A. B. Watson, Secretary.

Coster-Rosedale Co-operative Creamery.

Dumont-Dumont Farmers' Dairy Association.

Finchford-Finchford Co-operative Creamery.

Greene-Cold Water Co-operative Creamery Company.

New Hartford-A. M. Du Bois.

Parkersburg-Smith & Powers.

Parkersburg-Star Creamery, Palmer Brothers & Company.

Shell Rock-E. Town & Company.

Shell Rock-J. Waite.

Shell Rock-Star Company, L. H. Mead, Secretary.

CALHOUN COUNTY.

Farnhamville-Shotwell & Davis.

Manson-Hillman Brothers.

Rockwell City-Rockwell City Creamery, Jack & Lewis.

Twin Lakes-Twin Lakes Creamery.

CARROLL COUNTY.

Buda-C. W. Adams, Carroll.

Glidden-Glidden Creamery, A. J. Heaton.

Maple River-C. W. Adams, Carroll.

Mount Carmel-Mount Carmel Creamery, Boardman Brothers & Company, Odebolt.

Roselle-Rose Valley Creamery, C. Kohorst.

CASS COUNTY.

Anita-Anita Creamery Company.

Atlantic-Atlantic Creamery, Peter Landmesser.

Atlantic-Atlantic Creamery, A. C. Burton.

Cumberland-F. G. Huntley.

CEDAR COUNTY.

Clarence-Cedar Creamery, H. L. Dean. .

Clarence-Clarence Creamery, H. J. Clarence.

Bennett-Farmer's Home Creamery Association.

Lowden-Golden Star Creamery.

Lowden-Lowden Creamery.

Lowden-Golden Creamery.

Springdale-Cold Spring Creamery, L. Pilkington.

Stanwood—Stanwood Creamery, F. M. Manley, Tipton—Cedar Creamery, H. L. Dean.

CERRO GORDO COUNTY.

Clear Lake—Clear Lake Dairymen's Association, John Dawson, manager • Clear Lake—Van Auken & Willis.

Mason City—Mason City Creamery Company.

Meservey—Meservey Creamery.

Plymouth—Plymouth Creamery Company.

Portland—Portland Creamery.

Rockwell—Rockwell Co-operative Creamery.

Swaledale—Swaledale Creamery.

Thornton—Thornton Creamery.

CHEROKEE COUNTY.

Cleghorn—Robiuson Brothers.

Larrabee—Larrabee Creamery Company, E. D. Peck.

Marcus—Marcus Creamery, Barnes Brothers.

Quimby—Quimby Creamery Company, A. J. Shaul, Secretary.

CHICKASAW COUNTY.

Alta Vista-Alta Vista Creamery. Bassett-Bassett Creamery, S. E. Allen & Sons. Boyd-Boyd Creamery, I. W. Edson, Secretary. Devon-Devon Creamery. Fredericksburg-F. Shurtle & Co. Fredericksburg-Fredericksburg Butter Factory, I. W. Edson, secretary. Iconia-Boston & Decorah Creamery Company. Jacksonville-Jacksonville Creamery, F. B. Sewell, secretary. Jericho-Jericho Co operative Creamery Company, T. H. Wells. Lawler-Lawler Creamery Company, J. J. McCarthey. Little Turkey-Little Turkey Creamery Association, A. Jones. North Washington-Boston & Decorah Creamery Company. New Hampton-Boston & Decorah Creamery Company. Nashua-Pleasant Grove Creamery, P. N. Powers. Nashua-Greenwood Star Creamery, W. I. Moody. Nashua-Richland Creamery, C. A. Moody. Republic-Republic Farmers' Creamery Company. Riverton Township-S. S. Waterbury, Nashua. Washington-Alta Vista Farmers' Association, William Vick, secretary. Williamstown-John W. Kotchoff.

CLARKE COUNTY.

Murray—Murray Creamery.
Osceola—Osceola Creamery, John W. Hall & Co.

CLAY COUNTY.

Dickens-Sioux Valley Creamery Company, J. H. Walsh.
Gillett's Grove-Sioux Valley Creamery Company, J. H. Walsh.

Spencer-J. O. Varney. Yankee-Willow Creek Creamery.

CLAYTON COUNTY.

STATE DAIRY COMMISSIONER.

Casco Creek-J. W. Lowe, Volga City. Communica-Communica Creamery Association. East Elkport-C. Schnipf. Edgewood-Farmers' Creamery Company, H. E. James, secretary. Edgewood-Honey Creek Creamery, H. F. Beyer. Elkader-Iowa Creamery, A. N. Toutsch. Elkader-Elgin-Farmersburg-Farmersburg Creamery. Garnavillo-Garnavillo Farmer's Company. Garnavillo-G. W. Kennedy, Guttenburg. Giard-Giard Creamery, J. D. Bickel. Luano-Spring Brook Creamery. Luano-Farmer's Creamery Company. Monona-Union Creamery Company. Osborne-James Burns. Saint Olaf-Embretson & Larson. Strawberry Point-Strawberry Point Creamery Company, K. W. Kingsley, Secretary. Strawberry Point-Maxom & Atwood.

Strawberry Point—Maxom & Atwood. Strawberry Point—A. O. Kingsley. Volga City—J. W. Lowe.

CLINTON COUNTY.

Calamus—Mueller & Wendell.
Clinton—
Delmar—G. E. Graft & Company.
Elwood—G. E. Graft & Company.
Goose Lake—Heymen & Von Oven.
Pleasant Valley—Heymen & Von Oven.
Quigley—
Teeds Grove—C. G. Forest & Son.
Welton—Welton Creamery, R. M. Hinkley.
Wheatland—Welding & Company.
Wheatland—A. Fuller.
Wheatland—Cedar Creamery, H. L. Dean, Tipton.

CRAWFORD COUNTY.

Denison—Denison Creamery Company, D. L. Boynton, Secretary. Manilla—Manilla Creamery Association.

DALLAS COUNTY.

Dexter-Lyon Creamery. C. H. Lyon. Perry-Red Star Creamery.

DAVIS COUNTY.

Bloomfield-Bloomfield Creamery, W. H. Davis. Pulaski-Pulaski Creamery, J. J. Miller.

DECATUR COUNTY.

Leon-T. R. Mooney.

DELAWARE COUNTY.

Adams-Henderson's Creamery, James Henderson, Ehler.

Adams-Washington Creamery Company, F. P. Ryan & Henley, Ehler.

Bremen-Bear Grove Creamery Company, F. N. Klostermann, New Vienna.

Bremen-Petersburg Creamery, Joseph Shearbring, Petersburg.

Coffins Grove-B. W. Kenyon & Company, two creameries, B. W. Kenyon,

Colony-Coleburg Co-operative Creamery Company, Robert Curry, Colesburg.

Delaware Township - Manchester Co-operative Creamery Company, Joseph Hutchinson, 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, Earlville.

Delhi-Silver Spring Creamery, F. L. Beal.

Elk-Greeley Creamery Company, William Burbridge, Greeley.

Hazel Green-Hazel Green Creamery, F. B. Dickey.

Hazel Green-Almira Creamery, A. E. Anderson, Almira.

Hazel Green-Richardson Creamery, A. Richardson.

Hazel Green-Willow Grove Creamery, G. Abbey, Abbeyville.

Hazel Green-Maple Grove Creamery, D. Magirl, Ryan.

Honey Creek-Honey Creek Creamery, Henry Beyer, Edgewood.

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-Hall & Son's Creamery, Monticillo.

Oneida-Linwood Creamery, Russell & Martin, Earlville.

Oneida-Earlville Creamery, Bush & Klaus, Earlville.

Prairie-Barryville Creamery Company, Charles Barry, Barryville.

Richland-Dundee Creamery, Tyson Brothers, Dundee.

South Fork-Silver Spring Creamery, McConnell & 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, Monticello, Manager.

Union-Uniontown Creamery, G. File.

DES MOINES COUNTY.

Burlington-Burlington Creamery, E. P. Dunham.

DICKINSON COUNTY.

Milford-J. J. Nysteun & Company. Spirit Lake-Spirit Lake Creamery, C. C. Dykins.

DUBUQUE COUNTY.

Bernard-Bernard Creamery, W. C. Aitchison.

Balltown-Northwestern Creamery.

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Bankston-Woodland Creamery, Michael Ferring.

Cascade-Chrystal Falls Creamery, Dehner & Kay.

Cascade-Hazel Creamery, W. C. Aitchison.

Dyersville-A. Lineback & Company, two Creameries.

Farley-A. C. Walker & Company.

Farley-Farmers' Co-operative Creamery.

Farley-John's Creek Creamery, Vibber & Heald.

Farley-Pleasant View Creamery, Vibber & Heald.

Gilmore-Chrystal Springs Creamery, Dehner & Kay, Cascade.

Luxemburg-Ungs Brothers' Creamery, Ungs Brothers.

New Vienna-Bear Grove Creamery Company.

New Vienna-Hawkeye Creamery, Kerper & Naber.

Peosta-Chrystal Springs Creamery, Debner & Kay, Cascade.

Peosta-Gilt Edge Creamery.

Worthington-Spring Valley Creamery.

Worthington-Worthington Creamery.

Worthington-Vibber & Heald.

EMMETT COUNTY.

Estherville-J. W. Wilson. Swan Lake-M. A. Denning.

FAYETTE COUNTY.

Alpha-Bethel Creamery, Ace Webster, Waucoma.

Brush Creek-Brush Creek Creamery Company.

Clermont-Clermont Creamery Company.

*Elgin-Union Creamery Company.

Fayette-Fayette Creamery Company.

Hawkeye-Hawkeye Creamery Company.

Hawkeye-W. R. Rogers.

Maynard-Harlan Creamery Company, A. F. Crawford.

Maynard-Crown Creamery Company.

Oelwein-Jefferson Farmer's Creamery Company.

Oelwein-Oelwein Creamery Company.

Oran Township-Oran Creamery Company, E. E. Shippy, Minkler.

Randalia-Fairview Creamery Company.

Randalia-Randalia Creamery Company.

Richfield-Richfield Creamery Company, F. Pleggenkuhle.

Richfield-Farmer's Creamery.

Stanley-

St. Lucas-St. Lucas Creamery, Ace Webster, Waucoma.

^{*}Skim station.

Wadena-

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Waucoma-Waucoma Creamery, Ace Webster.

Westgate-Westgate Creamery Company, S. A. Sylvester, Secretary.

Westgate-Corbleys Grove Creamery Company.

West Union-Union Creamery Company.

West Union-The Farmer's Creamery.

FLOYD COUNTY.

Charles City-Fussell & Priest.

Floyd-Floyd Co-operative Creamery Association, D. Wilbur, manager.

Marble Rock—Marble Rock Co-operative Dairy Association, E. A. Rasengrans, Secretary.

Marble Rock-Marble Rock Creamery Company.

Niles-Niles Creamery Association, J. C. Daly, Secretary, Charles City.

Nora Springs-Cottage Grove Dairy Association.

Powersville-Pleasant Grove Creamery, P. H. Powers.

Riverton Township-S. S. Waterbury, Nashua.

Rockford-Rockford Creamery Company, W. C. Waumsley.

Rudd-Charles A. Howard.

Ulster-Ulster Creamery Company, Thompson & Herrod.

Ulster-A. P. Mott.

FRANKLIN COUNTY.

Faulkner—Farmers' Co-operative Creamery Company, J. W. French, Secretary.

Geneva-Geneva Creamery, I. W. Meyers, Hampton.

Hampton-Hampton Creamery, I. W. Meyers.

Latimer-Rusmussen & Jacobson.

Sheffield-Sheffield Creamery.

GREENE COUNTY.

Churdan-Churdan Creamery, S. C. Hoyt.

Dana-W. L. Addy.

Dana-Renner Brothers.

Jefferson-Jefferson Creamery.

Paton-Paton Creamery, G. E. White.

Rippey-W. O. Dauchy.

Scranton City-H. J. Worsley.

GRUNDY COUNTY.

Beaman-Hilton Brothers & Co.

Beaman-Beaver Creamery, J. H. Sperry, Grundy Center.

Colfax Township-Colfax Creamery, J. H. Sperry, Grundy Center.

Colfax Township-Colfax Creamery, W. S. Carrington & Co., Grundy Center.

Conrad Grove-Farmers' Co-operative Creamery Company, J. P. Gal-braith.

Dairyville—Dairyville Creamery, N. Blom.

Fairfield Township-F. Wells, New Hartford.

Fredsville-Danish Creamery, J. & T. Slifsgard, Fredsville.

Grant Township-Grant Township Creamery, J. & T. Slifsgard, Fredsville.

Grundy Center-National Creamery, W. S. Carrington & Co.

Grundy Center-Grundy Center Creamery, J. H. Sperry.

Lincoln-M. E. Hunter.

Morrison-Morrison Creamery, J. & T. Slifsgard.

Wellsburg-Wellsburg Creamery.

GUTHRIE COUNTY.

Guthrie Center-Farmers' Butter and Cheese Association.

Panora-

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Stuart-Stuart Creamery Company.

Stuart-Farmers' Creamery Company.

HAMILTON COUNTY.

Blairsburgh-

Ellsworth-

Jewell-Jewell Co-operative Creamery, E. Nelson.

Kamrar-Gold Nugget Creamery, D. C. Bailey, Secretary.

Mackey Grove-

Poplar Grove-W. H. Dygert.

Randall-Randall Creamery Company.

Stanhope-Iverson Brothers.

Stratford -Stratford Creamery, J. M. Daniels & Son.

Webster City-R. G. Clark.

Williams-R. G. Clark, Webster City.

HANCOCK COUNTY.

Britt-Farmers' Co-operative Creamery, C. R. Cady, Secretary.

Britt-S. E. Allen & Sons.

Corwith-S. E. Allen & Sons.

Garner-S. E. Allen & Sons.

Goodell-Goodell Creamery, C. S. Farman.

Klemme-Klemme Creamery Company, Alex Kirkwood.

Russell—Russell Co-operative Butter & Cheese Association, Cal C. Force, Secretary.

HARDIN COUNTY.

Ackley-Martin Brothers.

Alden-Alaska Creamery, Harris & Company.

Hubbard-B. S. Harrison.

Hughes-Buckingham & Fallett.

Lawn Hill-Lawn Hill Creamery Company, George R. Strayer & Com-

Lawn Hill-B. S. Harrison.

Owasa-Buckingham & Fallett.

Radeliffe-Crawford & Hill.

Robertson-Belle of the West Creamery, J. C. Wilkinson, Secretary.

Whitten-Whitten Creamery Company, George M. Carr, Secretary.

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HARRISON COUNTY.

California Junction— Dulap—B. F. Roberts. Persia— Woodbine—

HENRY COUNTY.

New London—New London Butter and Cheese Factory, William Lee, Sec'y. Sweedesburgh—W. M. Tolander. Winfield—Winfield Creamery, Eicher Brothers.

HOWARD COUNTY.

Bonair—Farmers' Creamery Association, T. S. Johnson, Secretary.
Chester—Chester Creamery Association, Ed Capper, Secretary.
Cresco—Boston & Decorah Creamery Company.
Cresco—Cresco Creamery, Platt & O'Malley.
Cresco—Merchants' Creamery.
Elma—Boston & Decorah Creamery Company.
Kendallville—Kendallville Creamery.
Lime Springs—Boston & Decorah Creamery Company.
Lourdes—Boston & Decorah Creamery Company.
Prolivin—Farmers' Creamery Association.

HUMBOLDT COUNTY.

Bode—Bode Creamery Association, T. A. Rossing, President. Dakotah—Baker, Savage & Company. Humboldt— Livermore—Livermore Creamery, J. Small.

IOWA COUNTY.

Genoa Bluff—Genoa Bluff Creamery, George R. Howard.
Homestead—D. Sunderland.
La Dora—D. D. Case.
La Dora—R. M. Switzer.
Marengo—E. S. McDonald.
Marengo—Peterson & Schneider Brothers.
North English—S. P. Chiles.
Williamsburgh—Mathews Brothers.

JACKSON COUNTY.

Andrew—Lily Creamery, King & McComb.

Bellevue—Chrystal Spring Creamery, Eli Cole, Sr.

Heron Lake—W. H. Kessler.

La Motte—La Motte Creamery, Eli Cole, Sr.

La Motte—Sterling Creamery, C. R. Fuller.

Miles—Haymen & Von Oven.

Miles—Forest Brothers.

Preston—J. W. Merrill, Monticello.

Sabula—

Spragueville—Heymen & Von Oven, Miles.

Spring Brook—Spring Brook Creamery, C. M. Kegler.

JASPER COUNTY.

Baxter-

Kellogg-Farmers' Co-operative Dairy Association, Townsend Murphy, Manager.

Kellogg-Kellogg Creamery Company.

Metz-Golden Leaf Creamery.

Newton-The Malaka Creamery.

Prairie City-Farmers' Co-operative Dairy Association.

JEFFERSON COUNTY.

Batavia-Batavia Creamery, C. O. Mohler.

JOHNSON COUNTY.

Iowa City—Johnson County Creamery, W. G. Brooke. Lone Tree—Lone Tree Creamery. Oxford— Solon—Cedar Creamery, H. L. Dean, Tipton.

JONES COUNTY.

Amber—Amber Creamery, W. H. Sanford. Anamosa—J. R. Morin Company, Cedar Rapids. Anamosa—I. S. Condit.

Argand-Kehoe & Hogan.

Brookside—J. R. Morin Company, Cedar Rapids. Butterfield--Crystal Falls Creamery, Dehner & Kay.

Cascade-J. L. Baden.

Cascade-J. Hosch.

Hale-Mills & Inglass.

Highland-J. R. Morin Company, Cedar Rapids.

Hopkinton-Hogan & Company.

Jackson-J. R. Morin Company, Cedar Rapids.

Martelle-J. R. Morin Company, Cedar Rapids.

Monticello-D. M. Hall & Sons, four creameries.

Monticello-J. M. Hofacre.

Monticello-G. W. & G. L. Lovell.

Monticello-J. W. Merrill.

Monticello—Diamond Creamery Company, D. Pond, manager; thirteen creameries.

Olin-Olin Creamery, Lamb Brothers.

Onslow-S. L. Gilbert.

Scotch Grove-Rose Creameries, C. M. Hanna; two creameries.

West Cass-Franklin Creamery, A. L. Corey, Waubeek.

Wyoming—Diamond Creamery Company, D. Pond, manager, Monticello; eight creameries.

KEOKUK COUNTY.

Keota-Keota Creamery, S. E. Reisman.

Keswick-

Martinsburgh-Prairie Mound Creamery, W. T. Miles.

Richland-Richland Creamery, Eicher Brothers.

Sigourney-Sigourney Creamery Company.

KOSSUTH COUNTY.

Algona-Algona Creamery Company, J. B. Hofins, Secretary.

Algona-Algona Creamery, Boardman Brothers, Nevada.

Bancroft-Bancroft Creamery, Chubb & Streater.

Bancroft-Bancroft Co-operative Creamery Company.

Buffalo Fork - Buffalo Fork Co-operative Creamery Company, T. A. Butterfield, Secretary.

Burt - Burt Co-operative Creamery Company, S. Nicholson, Secretary.

Fenton-Fenton Co-operative Creamery Company, J. M. Moore, Secre-

Fenton-Lotts Creek Co-operative Creamery Company, F. L. Ranney,

Hobart-Hobart Co-operative Creamery Company, T. A. Butterfield, Sec-

Portland-Burt Co-operative Creamery Company, S. Nicholson, Secretary.

Wesley-Lawson & Oleson Brothers.

Whittemore-Boardman Brothers, Nevada.

Whittemore—Whittemore Co-operative Creamery Company, J. L. Cotton, Secretary.

LEE COUNTY.

Fort Madison-Fort Madison Creamery, Thomas G. Currier.

Houghton-J. Hough & Company.

Mount Clara-Mount Clara Butter and Cheese Company, W. J. R. Beck, President.

Sawyer-

West Point-West Point Creamery, H. Stoddard, Secretary.

West Point-William Schulte.

LINN COUNTY.

Buffalo Township-Cold Spring Creamery, A. L. Covey, Waubeek.

Broadway-Broadway Creamery, Frank B. Dickey.

Cedar Rapids - Wistura Creamery, J. R. Morin Company.

Cedar Rapids - Scotch Grove Creamery, J. R. Morin Company.

Cedar Rapids-Woodward & Company, two creameries.

Center Point-I. R. Gitchell.

Central City-Central City Creamery, P. G. Henderson.

Central City-Meinhert & Company.

Coggan-Coggan Creamery Company.

Coggan-Farmer's Creamery Company.

Coggan-Brazelton & Sons.

Elmont-Elmont Creamery, S. B. Mills.

Lafayette-I. N. Nietert.

Lisbon-Tireman & Sons.

Jackson Township-Valley Farm Creamery, P. G. Henderson, Central City.

Jackson Township-Deep Spring Creamery, P. G. Henderson, Central City.

Marion-Eureka Creamery, W. W. Gray, two creameries.

Prairieburgh-Oak Leaf Creamery, Brazelton & Beatty.

Prairieburgh—Farmers' Creamery Company.
Robins—Eureka Creamery, R. E. Gould, Manager.
Springville—R. Miller, two creameries.
Springville—Irwin Paul.
Trentham—S. Nietert.
Troy Mills—Bruce & Harvey.
Walker—Highland Creamery Company.
Walker—Walker Creamery, H. J. Nietert.
Wanbeek—Waubeek Creamery, A. L. Covey.
Viola—Irwin Paul.
Waubeek—Crown Creamery, J. G. Fox.

LOUISA COUNTY.

Letts-Letts Creamery, H. H. Hildebrand & Son. Fredonia-Fredonia Co-operative Creamery. Wapello--Wapello Creamery Company.

LUCAS COUNTY.

Russell—Russell Creamery. Chariton—Chariton Creamery.

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LYON COUNTY.

Inwood—Inwood Creamery, Wenig & Barthell.

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

Manager.

MADISON COUNTY.

Winterset-B. Tucker & Company.

MAHASKA COUNTY.

Fremont—Fremont Creamery, William Miles.
Indianapolis—Indianapolis Creamery, D. A. Baker,
Oskaloosa—Oskaloosa Creamery, Powers & Loring,
New Sharon—Cold Spring Creamery, Vickers & Crawford.

MARION COUNTY.

Knoxville-Bosquet & Rhynsburger.
Pella-Bosquet & Rhynsburger.
Prairie City-Bosquet & Rhynsburger.

MARSHALL COUNTY.

Clemons—Minerva Valley Creamery Association, S. M. Gause, Secretary. Gilman—C. B. Smith.

Haverhill-C. W. Sibley & Co., Meyer Brothers.

*Lamoille-C. W. Sibley & Company.

Marshalltown-Sibley Separator Creamery, C. W. Sibley & Company.

Rhodes-A. Rhodes.

Saint Anthony-C. W. Sibley & Company.

*State Center-State Center Creamery Association.

*Van Cleve-C. W. Sibley & Company.

^{*}Skim stations.

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Emerson-Blue Grass Creamery Company, A. W. Culver, Secretary. Malvern-Malvern Creamery, R. F. Norton.

MITCHELL COUNTY.

Bailey-Lawn Spring Creamery-T. J. Wheeler. Brownville-Brownville Co-operative Creamery, James McCarty, Secre-

Little Cedar-Little Cedar Creamery Company.

Mona-Frank Penny & Company.

Orchard-Spring Creek Company, J. C. Lee, Secretary.

Osage-Osage Co-operative Creamery Association, D. C. Rogers, Secre-

Osage-Cedar Valley Creamery, Tupper Brothers.

Rock Creek-Rock Creek Creamery Company, Otto Müller, Secretary, Osage.

Riceville-J. S. Potter.

Stacyville-Farmer's Co-operative Creamery Company, Jacob Decker,

Saint Ansgar-The Farmer's Co-operative of Saint Ansgar, H. S. Hang, Secretary.

MONONA COUNTY.

Blencoe-Round Grove Creamery, J. D. Yeomans.

MONTGOMERY COUNTY.

Villisca-Villisca Creamery, J. B. Rose, Secretary.

MUSCATINE COUNTY.

Atalissa-Penn Avenue Creamery, Jacob Long, President. Sweetland-Nickel Plate Creamery, George W. Kelly. Wilton Junction-Nickel Plate Creamery, George W. Kelly. Wilton Junction--Lily Lake Creamery, S. G. Kelly. West Liberty-Cedar Valley Creamery Company, L. Pickering, Secretary. West Liberty-Lone Star Creamery, H. H. Hildebrand.

OSCEOLA COUNTY.

Sibley-Clover Lawn Creamery.

PAGE COUNTY.

Blanchard-Blanchard Butter & Cheese Company, A. Stanton. Clarinda-Clarinda Creamery, J. S. Chiles.

PALO ALTO COUNTY.

Ayrshire-Ayrshire Creamery. Curlew-Curlew Creamery, F. D. Lacey, Secretary. Cylinder-Cylinder Creamery. Emmetsburg-Wallace Creamery.

Fairfield-Fairview Creamery. Fairwill-Fairwill Creamery, C. H. Bleckwenn, Secretary. Graettinger-Lost Island Creamery, Ole Oleson, Secretary. Osgood-Walnut Creamery. Ruthven-Highland Creamery, C. W. Larson. Ruthven-Ruthven Creamery.

PLYMOUTH COUNTY.

Akron-Kingsley-H. C. Tripp, Secretary. Remsen-Remsen Creamery, M. Beck.

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POCAHONTAS COUNTY.

Gilmore City-Gilmore City Creamery Association. Laurens-Rolf-

POLK COUNTY

Bondurant-M. F. McClung. Washington Township-Frank W. Hill, Secretary.

POTTAWATTAMIE COUNTY.

Avoca-Avoca Creamery, R. Frost. Oakland-Oakland Creamery.

POWESHIEK COUNTY.

Brooklyn-Brooklyn Creamery, E. O. Spencer. Chester Center-Chester Center Creamery, C. B. Smith. Deep River-Deep River Creamery, Hatter & Baird. Grinnell-Grinnell Creamery, Pierce & Mattison. Montezuma-Vickers & Crawford.

RINGGOLD COUNTY.

Mount Ayr-Mount Ayr Creamery Company. Tingley-Tingley Creamery Company. Redding-Redding Creamery Company, O. H. Edwards, Secretary.

SAC COUNTY.

Auburn-Auburn Creamery, Boardman Brothers & Company. Carnaroon-Carnaroon Creamery, Boardman Brothers & Company. Carnaroon-Carnaroon Butter Company, Robert McBeth. Carnaroon-Pattee & Early, two creameries. Cedar-"C" Creamery, A. D. Peck. Coon Valley-Elwood & Pettis. Early-Armstrong & Pattee. Early-Delaware Center-C. N. Searle, Early. Lake View-Lake View Creamery, Donahue & Ahern.

Mount Carmel-Mount Carmel Creamery, Boardman Brothers & Company.

Odebolt-Crichton & Wright.

Rose Valley-

Rose Valley-E. G. Fuhlendorf, Odebolt.

Sac City-Pearl Creamery, A. D. Peck.

Schaller-

Spring Valley-Spring Valley Creamery, Donahue & Ahern.

Wall Lake-Wall Lake Creamery, Donahue & Ahern.

SCOTT COUNTY.

Big Rock-Cedar Creamery, H. L. Dean, Tipton.

SHELBY COUNTY.

Elkhorn—The Danish Centrifugal Creamery Company, H. Henrickson, Secretary.

Harlan-Harlan Creamery, O. F. Graves, Secretary.

SIOUX COUNTY.

Alton-W. Strong. Sioux Center-

STORY COUNTY.

Cambridge-Boardman Brothers, Nevada.

Colo-Gates & Reed, two creameries.

Elwell-Highland Creamery.

Maxwell-Maxwell Farmers' Co-operative Creamery Company, J. R.

Wood, Secretary.

Maxwell-Keystone Creamery, Frank W. Hill.

Milford Township-James Saurs, Nevada.

Smaysville-Pleasant Valley Creamery, William Smay.

Story City-Boardman Brothers, Nevada.

Slater-Ole Oleson.

TAMA COUNTY.

Berlin-Berlin Creamery Company.

Dysart-A. M. Rowe, Vinton.

Gladbrook-Hilton Brothers & Company.

Mooreville -- A. M. Rowe, Vinton.

Tama-Hilton Brothers & Company.

Traer-A. M. Rowe, Vinton.

TAYLOR COUNTY.

Bedford-Bedford Butter & Cheese Association.

Blockton-Blockton Butter & Cheese Company, M. C. Brown, Secretary.

Clearfield-Clearfield Creamery Company, O. S. Carson, Secretary.

Lenox-M. C. Brown.

Redding-F. Cook.

UNION COUNTY.

Afton Creamery Company.

VAN BUREN COUNTY.

Birmington-Birmington Butter & Cheese Manufacturing Company, W.

H. Coulter, manager.

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Farmington-Farmington Butter & Cheese Manufacturing Company, D. C. Pleasants, manager.

WAPELLO COUNTY.

Chillicothe-Chillicothe Creamery.

Eddyville-J. L. McGlother.

Ottumwa-Baker Brothers.

WARREN COUNTY.

Indianola-Indianola Creamery, B. S. Schermerhorn, Des Moines.

Indianola-Samuel L. McClure.

Milo-Milo Dairy Association.

WASHINGTON COUNTY.

Brighton-Brighton Creamery, Ricksher & Emry.

Kalona-

Noble-Oak Ridge Creamery, Benjamin Eicher.

Riverside-Nichola Brothers.

Washington-Washington Creamery, Hise Brothers.

Wellman-Dayton Creamery, C. O. Nichols.

WAYNE COUNTY.

Allerton-Allerton Creamery, H. W. Johnson, manager.

Humeston-Wayne County Creamery, E. M. Haldeman.

Promise City-Hawkeye Creamery.

Burnside-Burnside Creamery Company, Abram Olson, Secretary,

Callender-

Dayton-Daniels' Creamery, J. M. Daniels & Son.

Dayton-Dayton Creamery, J. B. Baxter.

Fort Dodge-Fort Dodge Butter & Cheese Association.

Gowrie-Gowrie Creamery, F. S. Davis.

WINNEBAGO COUNTY.

Forest City-S. E. Allen & Sons.

Lake Mills-W. & W. Creamery.

Leland-Winnebago Creamery.

Lincoln Township-

Norman-Norman Creamery.

WINNESHIEK COUNTY.

Burr Oak-Silver Creek Creamery.

Calmar-Calmar Creamery.

Castalia-Ossian Creamery Company.

Decorah-William Beard & Sons.

Decorah-Glenwood Creamery, Johnson & Bakke.

Frankville-William Beard & Sons.

Fort Atkinson-William Beard & Sons.

Hesper-H. Cleveland.

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Highlandville-J. H. Miller.

Kendallville-A. A. Herbert.

Locust-Kjorne Creamery.

Nordness-Ossian Creamery Company.

Ossian-Ossian Creamery Company.

Postville-Union Creamery Company.

Ridgeway-William Beard & Sons.

Spillville-Ossian Creamery Company.

Washington Prairie-Ossian Creamery Company.

Washington Prairie—Prairie Farm Creamery, W. W. & G. L. Hubbell, Waukon.

WOODBURY COUNTY.

Sioux City-Haley & Chase.

WORTH COUNTY.

Fertile-Fertile Co-operative Association.

Grafton-Martin McNamara.

Kensett-Kensett Creamery Company, C. D. Bunce, President.

Manley-Manley Co-operative Creamery, W. H. Mildrim.

Northwood-Northwood Dairy Association.

Northwood-Farmers' Butter & Cheese Association, I. N. Bolton, Sec'y.

WRIGHT COUNTY.

Belmont-S. E. Allen & Sons.

Clarion-Clarion Creamery, J. D. Denison.

Clarion-Farmer's Home Creamery, G. W. Wheeler.

Dows-Dows Creamery.

Eagle Grove-Eagle Grove Creamery.

Norway-Norway Creamery.

Woolstock-Woolstock Creamery.

CHEESE FACTORIES.

ADAMS COUNTY.

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

APPANOOSE COUNTY.

Iconium-Iconium Cheese Factory, George Mann, manager.

Moravia-Moravia Cheese Company, W. A. Eastlock, manager.

Moravia-L. Williams.

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Moulton-Dickson & Guile.

Walnut City-Alvin Miller.

AUDUBON COUNTY.

Audubon-William Bennett.

Oakfield-Oakfield Cheese Factory.

BENTON COUNTY.

Atkins—Highland Cheese Factory, Shaver & Olmsted Cheese Company, Cedar Rapids.

Garrison-Excelsior Cheese Factory.

Newhall-Model Factory, Shaver & Olmsted Cheese Company, Cedar

Shellsburg-Tip-top Cheese Factory.

BLACK HAWK COUNTY.

Waterloo-The Fowler Company.

BOONE COUNTY.

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

BREMER COUNTY.

Janesville-The Fowler Company.

CEDAR COUNTY.

West Branch—Quaker Factory, Shaver & Olmsted Cheese Company, Cedar Rapids. Williamstown-John H. Kotchoff.

CLAY COUNTY.

Lone Pine-O. B. Ross.

CRAWFORD COUNTY.

Buck Grove-S. M. Thew.

DAVIS COUNTY.

West Grove—Samuel Blumer.
Pulaski—Kensinger's Cheese Factory, P. Kensinger.

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-William Lattner, Worthington.

FLOYD COUNTY.

Charles City-Elm Spring Cheese Factory, White, Triggs & Company.

FRANKLIN COUNTY.

Morgan-Badger & Hill's Factory, A. A. Bangs, Dows.

GREENE COUNTY.

Dana—Excelsior Factory, William Davenport. Grand Junction—J. C. Harker. Grand Junction—Cooper, Newall & Company.

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, W. A. Caraway. Ellis—Ellis Cheese Manufacturing Company, W. 1. Clark. HENRY COUNTY.

New London-Newton Butter & Cheese Factory.

IOWA COUNTY.

Green Center-Green Center Cheese Manufacturing Company, J. H. Yoder, Secretary.

La Dora-D. D. Case.

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JASPER COUNTY.

Baxter-E. S. Allen. Newton-N. W. Lewis.

JOHNSON COUNTY.

Frank Pierce—Iowa Factory, Peter Kettles, Secretary.

Iowa City-Sharon Cheese Company.

Morse—Shamrock Factory, Shaver & Olmsted Cheese Company, Cedar Rapids.

Sharon Center-Sharon Center Cheese Factory.

JONES COUNTY,

Bowen-T. W. Little.

Monticello-Diamond Creamery Company.

Onslow-J. A. Griswold.

Onslow-S. L. Gilbert.

KEOKUK COUNTY.

Tallyrand-Tallyrand Cheese Company, M. L. Done.

Webster-Webster Cheese Company, G. S. Morgan, Secretary.

Webster-M. D. Johnson.

LEE COUNTY.

Denmark—Thomas G. Currier, Fort Madison, Sawyer—Sawyer Butter & Cheese Company.

LINN COUNTY.

Springville—Uncle Sam Factory, Shaver & Olmsted Cheese Factory, Cedar Rapids.

LUCAS COUNTY.

Russell-Russell Co-operative Cheese & Butter Factory.

MAHASKA COUNTY.

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

MARSHALL COUNTY.

Vancleve-George Yarham.

MONROE COUNTY.

Albia—Bluff Creek Factory, J. K. Watson.

Albia—Albia Factory, H. W. Watson.

Albia—Pleasant Township Factory, H. W. Watson.

Albia-Urbana Factory, H. W. Watson.

Albia-Union Center Factory, H. W. Watson.

Albia-Mantua Factory, H. W. Watson.

Albia-Monroe Factory, W. A. Rowles.

Albia-Hilton Factory, W. A. Rowles.

Albia-Salem Factory, L. Lewis.

Albia-M. J. & E. Watson.

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Franklin Township-Frank Hamilton, Moravia.

Lovilla-Shirwin, Stark & Company.

MONTGOMERY COUNTY.

Red Oak-Lincoln Cheese Company, E. T. Evans, Manager.

PAGE COUNTY.

College Springs-Badger & Mills. Blanchard-Blanchard Butter & Cheese Company, Austin Stanton Northboro-William T. Hatfield. Shenandoah-Newt Tompkins.

PLYMOUTH COUNTY.

Kingsley-D. A. Oltman.

POWESHIEK COUNTY.

Chester Center-C. B. Smith. Grinnell-J. E. Neeley.

RINGGOLD COUNTY.

Mount Ayr-John Blaner. Tingley-Fram's Factory, Jacob Fram. Tingley-Bosworth & Ruffnier.

SIOUX COUNTY.

Alton-Alton Cheese Factory, William Strouks.

TAMA COUNTY.

Elberton-Elberton Factory, Shaver & Olmsted Cheese Company, Cedar

Toledo-Evergreen Cheese Factory.

TAYLOR COUNTY.

Bedford-Taylor County Butter & Cheese Association. Blockton-Blockton Butter & Cheese Company, M. C. Brown, Secretary Conway-George Dean. Lenox-Orchard Hill Cheese Factory, J. B. Hewitt.

UNION COUNTY.

Crown Hill. Lorimor-William Groesbeck. Lorimor-S. W. Groesbeck.

VAN BUREN COUNTY.

Farmington-Farmington Butter & Cheese Company. Milton-Volney Nagle. Milton-Woodard & Cooley.

WARREN COUNTY.

Indianola-J. D. McCoy. Medora-Stacy Brothers.

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WASHINGTON COUNTY.

Clay-Clay Cheese Company, O. Meacham, Secretary. Dublin-Dublin Cheese Company, M. L. Done. Nira-Nira Cheese Company. Winchester-Winchester Cheese Company, A. G. Leet.

WAYNE COUNTY.

Clio-Clio Co-operative Cheese Manufacturing Company, D. M. Bruner. Lineville-Lineville Cheese Factory, Matthew DeHaan.

WINNEBAGO COUNTY.

Grant Township.

WORTH COUNTY:

Northwood-Northwood Farmer's Butter & Cheese Association.

WRIGHT COUNTY.

Dows-George C. Jameson & Sons. Clarion-George C. Jameson & Sons.

The Dairy Commissioner considered it an important matter to ascertain the amount of butter shipped from the State of Iowa during the year ending September 30, 1891. The value of dairy products ought to be known, that the people of the State may comprehend their magnitude and be aware of the vast importance of the dairy industry, which is constantly menaced by the sale of oleomargarine in other States.

The manufacturers of oleomargarine are constantly on the watch for an opportunity to repeal or eliminate a part of the National Butterine Law.

The Dairy Commissioner, through correspondence and personal interviews, secured the consent of all the railroad companies doing business in the State, to furnish the desired information.

We sent out the following request:

To the General Traffic Managers of Railroad Companies:

The Iowa State Dairy Commissioner's office would respectfully request that your office issue orders to each of your station agents in Iowa, to ascertain the full amount of butter in gross pounds, shipped by them out of the

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State of Iowa from October 1, 1890, to October 1, 1891, and that this information be sent to the general office.

We further request that this information be furnished the Iowa State Dairy Commissioner's office with a pledge, on our part, to consider the same private, except in ascertaining how much butter was shipped out of the State.

We wish this information for the following reasons:

First. It is the only way in which we can gain accurate statistics of the butter shipments of the State, the statements furnished by the different creameries not always being correct, and from some of them we do not receive reports.

Second. We have no other way of ascertaining the amount of butter shipped out of the State not made by creameries. The information we seek will be very valuable, as it affords the only accurate statistics of the butter production of the State, and would establish a basis from which future supplies can be closely estimated.

Very respectfully,

A. C. TUPPER, Iowa State Dairy Commissioner.

The railroad people, through their traffic managers, made no objections to furnishing the information, although it entailed a very large expenditure of time on the part of the station agents, most of whom at this time are crowded with work. Their willingness to comply with our request proves that the railroad people are friendly to our people and are willing to accommodate them even though it costs them time and money.

The Dairy Commissioner's office tenders heartfelt thanks in behalf of the people of the great dairy industry of the State, to the management of the different railroads doing business in Iowa; we also return thanks to the different station agents for the assistance they rendered this office in doing the work.

BUTTER SHIPMENTS.

The following is the amount of butter, in gross pounds, shipped out of the State, from stations of railroads doing business in Iowa, for each county in the State, for the year ending September 30, 1891:

COUNTY.	Number of creameries.	Amou't of but-
Adams	8	124,072
Adams	1	178,728
	9	1,041,075
	0	187,401
Daniel Designation of the Control of	7	294,057
Black Hawk	9	777,815
	14	2,201,885
Boone	4	105,680
BremerBucaanan	26	2,468,720
Buena Vista	19	2,008,740
Buena Vista Butler	4	627,795
Butler	19	2,455,510
Carroll	4	1,058,495
Carroll	5	615,329
Cass	4	885,482
Cerro Gordo.	9	1,167,984
Cerro Gordo.	9	1,281,860
Cherokee	4	289,106
Chickasaw	20	2,118,658
Clarke	2	514,784
Clayton	4	468,870
Clayton	21	2,702,671
Wall to the state of the state	12	854,061
Crawford	0	362,669
	2 2	1,020,868
Davis	2	21,110
Decatur	ĩ	188,648
	35	2,852,244
Des Moines	11	811,300
	2	224,814
· · · · · · · · · · · · · · · · · · ·		2,207,350
	2	155,030
		8,163,270
	1000000	
Franklin	5	1,117,855
	0	909,172
	7	10,208
Grundy		474,958
Application of the second seco	.14t	1,789,465

Note.—Counties that ship to large establishments in the cities, as Burlington. Ottumwa or Chariton, are entitled to a division of the butter received at such points.

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No. OF CREAMERIES, ETC.-CONTINUED.

COUNTY.	Number of creameries.	Amou't of but- ter shipped.
Guthrie	4	37,499
Hamilton	11	2,193,550
Hancock	7	296,380
Hardin	10	1,074,277
Henry	4 3	42,336
Howard	10	70,808 1,567,474
Humboldt	4	295,810
Ida	0	28,818
Iowa	8	873,083
Jackson	11	2,034,641
Jasper	6	874,328
Jefferson	1	316,452
Jones.	4	280,675
Jones Keokuk	46	2,906,637
Kossuth.	14	924,002 1,265,154
Lee	6	664,000
Linn,	32	2,938,029
Louisa	3	279,489
Lucas	2	204,534
Lyon	2	141,260
Madison	1	231,980
Mahaska	4	302,080
Marion	3	1,708,868
Marshall	9	856,112
Mills	2	40,406
Monona	1	1,973,936 20,273
Montgomery	1	369,849
Monroe	0	71,064
Muscatine	6	704,504
O'Brien	0	366,010
Osceola	1	82,360
Page	2	487,133
Palo Alto	10	453,920
Pigmouth	3	175,500
Pocahontas	3 2	273,220
Pottawattamie	2	334,390 182,244
Poweshiek	5	476,282
Ringgold	8	52,301
Sac	19	863,215
Scott	1	104,450
Shelby	2	64,802
Sioux	2	64,115
Story	10	1,411,891
Tama	6	786,890
Taylor Union	5	109,267
	1	340,357
Van Buren	2	65,770

No. OF CREAMERIES, ETC.-CONTINUED.

COUNTY.	Number of creameries.	Amou't of but- ter shipped.
Warren	3	257,375
Washington	6	870,770
Wayne	3	335,020
Webster	- 6	700,819
Winnebago	5	987,000
Winneshiek	18	2,542,479
Woodbury	1	699,398
Worth	6	810,760
Wright	7	775,999
Total	705	81,774,661

Total gross shipments of butter billed out of the State for the year ending September 30, 1890, not including that shipped on the Chicago & Northwestern R. R., 73,666,677 pounds.

By adding this year's shipments of the Chicago & Northwestern to the shipments of 1890, we would have had a total last year of 84,828,328 pounds.

Total gross shipments of butter billed out of the State for the year ending September 30, 1891, 81,774,661 pounds.

Total shipment of butter billed out of the State for the year ending September 30, 1891, less 16 per cent tare, 68,690,715 pounds.

The best authorities estimate the home consumption of butter to be fifty pounds per capita, or 100,000,000 pounds, to this add 68,690,715 and we have as the total make of the State, 168,690,715 pounds.

Estimating 168,690,715 pounds of butter at 20 cents per pound gives \$33,738,143 as the value of the butter industry of Iowa.

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CHAPTER LIL

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 purposes 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 purposes 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 17, 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 other State institutions.

SEC. 13. It shall be the duty of the State Dairy Commissioner to secure, so far as 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 subpænas 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

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

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

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.