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# NINETEENTH ANNUAL REPORT

OF THE

## STATE DAIRY COMMISSIONER

TO THE

GOVERNOR OF THE STATE OF IOWA

FOR THE YEAR 1905

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H. R. WRIGHT

STATE DAIRY COMMISSIONER

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY

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DES MOINES:  
BERNARD MURPHY, STATE PRINTER  
1906

LETTER OF TRANSMITTAL.

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*To His Excellency, ALBERT B. CUMMINS, Governor of Iowa:*

SIR—In compliance with the law, I have the honor to submit herewith the Nineteenth Annual Report of the Dairy Commissioner.

Very Respectfully,

H. R. WRIGHT,  
Dairy Commissioner.

DES MOINES, November 15, 1905.

EXPENSE OF OFFICE OF DAIRY COMMISSIONER FOR THE  
YEAR ENDING NOVEMBER, 1, 1905.

Dairy Commissioner's salary.....	\$ 1,500.00	
Dairy commissioner's expense.....	521.44	\$ 2,011.44
Deputy Dairy commissioner's salary.....	\$ 1,200.00	
Deputy Dairy commissioner's expense.....	208.15	\$ 1,408.15
Assistant Dairy commissioner's salary (P. H. Kieffer).....	\$ 1,200.00	
Assistant Dairy commissioner's expense (P. H. Kieffer).....	1,072.97	2,172.97
Assistant Dairy commissioner's salary (W. S. Smarzo).....	\$ 1,200.00	
Assistant Dairy commissioner's expense (W. S. Smarzo).....	1,191.45	\$ 2,391.45

EXPENSE OF MILK INSPECTION IN FOURTEEN CITIES

Milk Agents' Fees.....	\$ 1,839.00	
Milk Agents' expense.....	129.68	
Milk Agents' special work.....	3.00	\$ 1,971.68

OFFICE EXPENSES.

Legal expenses.....	\$ 140.00	
Analyses.....	117.00	
Atlas.....	25.00	
Star Engraving Co.,.....	14.00	
Rubber Stamps.....	1.50	
Cream Albumenoid.....	1.25	
Oleo samples.....	3.69	302.44
Express, freight and cartage.....		42.19
Telegraph and Telephone.....		21.94
		\$ 10,427.26
*Less salaries.....		5,100.00
		\$ 5,327.26
Less rebates on mileage.....		400.23
Total expenditures from appropriations.....	\$ 4,927.03	
Average monthly expenses.....	\$ 410.58	

\* Salaries are not paid from the specific appropriation. The amount appropriated for the biennial period extending from April 1, 1904, to July 1, 1906, 27 months, was \$12,325, of which has been expended in 19 months, \$7,812.40



## DAIRY COMMISSIONER'S REPORT.

### CONDITIONS OF THE DAIRY INDUSTRY.

This report shows a larger amount of creamery butter made in the State than ever before reported for any year since such reports have been made. Over 82,000,000 pounds of creamery made butter are shown to have been manufactured in this State for the year ending July 1, 1905, and the make of butter since that period has been phenomenal in amount. Not only is the amount of butter very high, but the price obtained for it is higher than the average price for any year since 1893. At the average price for the twelve months ending July 1, 1905, the New York value of the creamery butter made in this state was in excess of \$20,000,000, nearly \$5,000,000 more than the value for the next preceding twelve months.

Since 1900, the number of creameries in this State has been steadily decreasing, so that now we have 655 creameries and skim stations, whereas in 1900 the list showed 994. It must be understood, however, that there has not at any time been any corresponding decrease in the dairy business of the State, or the amount or value of the butter made. There have been, before this year, considerable decreases in the amount of butter made, but the causes of the decrease have been easily pointed out. A critical comparison of the amounts of butter made in the different counties and different parts of the State, will show that there has been a considerable increase in the last year in the northern and northeastern part of the state—usually designated the dairy districts; but the largest amount of increase of creamery made butter has been in the southern half of the State. This part of the State, with the exception of a few counties, has never been known as a dairy section at all, and until the introduction of the hand separator and the practice of shipping cream to large central churning stations, the dairy business of the southern half of the State was very small. It never amounted to enough in a locality, so that creamery building was successful, except, of course, in a few instances; but the establishment of the central plants



and the shipping of cream by rail made possible the practice of the dairy business by an individual without any particular co-operation on the part of his neighbors. For this reason, there are dozens of localities south of the center of the State where the dairy business has trebled and quadrupled in the last eighteen months, to the very great advantage of the farmers in those counties. Without the centralizing plants and the railway facilities for cream shipping, this dairy business would not exist at all for the reason that the profits in farm-made butter are very small indeed, as compared with those of creamery-made butter. Twenty of these larger plants make a total of 17,627,000 pounds of butter,—twenty per cent of the total for the State. There can be no doubt that the principle of centralization of the creamery industry has been of very great value to the farmers of the southern and western parts of the State, where previously no creamery facilities were within their reach; and equally without doubt, the buttermaking industry of those parts of the State will, for a considerable time, at any rate, be controlled by the central plants; and, except in a few localities where the successful local creameries are now operated, the farmer will be compelled to choose between giving up the practice of dairying altogether and the shipping of his cream to the best market for butter fat within his reach.

It does not follow, however, that the centralization plan is the best either for the farmer or the industry as a whole. It is now, as suggested, the only plan available in many localities, and is very valuable for that reason. But there are plenty of places in the State where successful creameries of another kind are already established, and where also the central creameries have their purchasing agents for cream. There are several facts which ought to be recognized in regard to the centralization of cream for butter making. One of them is the question of expense of the plan. Under the head of "Iowa Manufactures, Dairy Products Second," following, some figures bearing on this subject are given and will repay some study. Under the almost universal practice now, the cream shipping creamery pays its local agent one cent a pound for butter fat purchased and the freight on the butter fat is about one cent a pound for butter fat in addition. So that the farmer has to pay about two cents a pound to get his butter fat to the creamery after he has taken it to the shipping station. That is to say the larger plant is handicapped at the start by two cents of expense more than attaches to the creamery that receives its cream direct from the wagon of the patron.

The cream shipping has another failing necessarily unavoidable, in that in many cases the cream purchased is a long time on the road, in hot weather, amid not too good surroundings, after having been purchased, tested and shipped by an agent, who, in the very great majority of cases, has had little or no experience in handling cream. This inevitably results in lowering the value of the cream for butter making purposes, and makes it impossible for even the best of buttermakers to make out of it butter that will bring the highest price, a loss which is, of course, visited upon the producer of the cream.

That the centralization plan is increasingly expensive, is shown by the fact that the net prices paid by them to the farmers at present is less than it was a year ago. At that time this office secured from the central plants themselves statements of the prices they had paid for butter fat for the first ten months of 1904. A comparison with New York prices for butter showed that their net prices for delivery to the creamery was from one-half to one and a quarter cents under New York prices. In order to compare with the present system, it is necessary to remember that for the first ten months of 1904 the centralizer operated upon the play of buying cream from the individual shipper and that the shipper paid the freight directly, so that his net return was from one and a half to two and a quarter cents under New York. During the past summer, under the agency system, ruling prices have been always two cents under New York, nearly always three cents under New York, and sometimes four cents under the market. Of course, a general statement of this kind does not include the prices that have been paid by certain centralizing plants in localities where competition required a very high price in order to get any business, because in some cases prices above New York have been paid for butter fat and the accusation has been freely made that this was for the purpose, and with the effect of closing up the local creamery.

For a good many years the dairy commissioner and the professors of dairying at the college and a very large number of other persons interested in making the most out of the dairy business of the State have used every effort to induce farmers to take better care of their milk and cream to the end that better butter might be made to be sold for a higher price. Progress in the proper direction has always been entirely too slow to satisfy the dairy enthusiast. With the advent of the hand separator, it was discovered that the quality of cream delivered was much below the quality of milk delivered, and that the quality of butter made was actually deteriorating, and with the beginning of the cream



shipping system the quality of cream has still further deteriorated, for the reason, as already pointed out, that the cream does not reach the buttermaker as soon as it did under other systems, and hence the greater the deterioration. Competition between the central plants and the local plants has been so strong that in only a few localities is any kind of cream rejected. Hence, the farmer, instead of having an inducement for producing high-class cream, is actually encouraged by the situation to careless practices in the handling of his product. It is not practicable for the local creamery to reject his cream, because then he can ship it to the central plants. Up to the present, the cream has nearly all been paid for at the same price, regardless of its quality of cleanliness or wholesomeness. Practically the only grading of cream, as now practiced, is based on the percentage of butter fat, a less price being paid for low testing cream. If it were practicable for a creamery to receive all cream not unfit for the making of human food, and then make two grades of it, to be kept separate in the creamery and made into two lots of butter and sold and the butter fat paid for at its real value, then the farmer would have no cause to complain at all and would have an inducement of a cent and a half to two cents a pound for producing a better quality of cream. Not only would this be true with the man who now produces second grade stuff, but the same facts would be an inducement to the man who is now producing good cream, because, under the present system, he gets no more for the good cream which he produces at considerable extra expense and labor than does the other man, whose cream is bad.

Experience has shown, however, that such a plan would not probably be followed, except in a few cases. Then there is the further question of what legal enactments and measures would be of value in bringing about the desired result. The statute, at the present, provides a penalty for the sale of unwholesome cream, a statute that was enacted to cover the sale of sweet cream for immediate consumption, and which, of course, would be applicable in cases where unwholesome cream is sold or delivered to a creamery. The enforcement of this statute by the dairy commissioner is not at all practicable on account of the great number of sales of cream to be inspected, and for the further reason that, under the present situation, a partial enforcement, such as could be secured, would only serve as an irritation in view of the fact that so many of the creameries are willing and anxious to accept cream in any condition whatever. If now, an addition to this statute is secured, making it an offense of like character to purchase or receive unwholesome cream for buttermaking purposes, such a statute

would not only be practical, but would, to a large extent, enforce itself. The buttermaker, or creamery manager, would not take chances against a law which would cause him to suffer a fine of \$25 or \$100 and he would make the law an excuse for rejecting the unwholesome cream. Such a law as suggested, followed by any reasonable attempt at enforcement, would very greatly increase the quality of the butter made in the State, would protect the public from being imposed upon by butter made from unwholesome cream, and would add to the profits of the dairy farmers a very considerable amount.

#### WHAT THE FARMER SHOULD RECEIVE FOR HIS BUTTER FAT.

It is true that creameries vary greatly in size, efficiency of management and quality of butter made, but in the creameries of moderate size, making 160,000 to 175,000 pounds of butter it is easy to make the butter for a cent and a half a pound from the time the milk or cream comes into the factory until the butter goes into the car. If the buttermaker can make a twenty per cent overrun, as he ought to be able to do, then for every pound of butter fat for which he must pay he will have 1.2 pounds of butter which on a 20-cent market will sell for 24 cents, not taking account of the premium. The expense will be

Factory expense.....	1.5 cents
Freight .....	1.5 cents
Commission, 5 per cent.....	1.22 cents
<hr/>	
Total.....	4.22 cents

That is to say if he sells at the market he will lack .22 cents of being able to pay New York prices for butter fat. If he sells at a cent a pound premium he will have .78 cents a pound profits after paying New York price for butter fat. If the market is 25 cents a pound he will sell his 1.2 pounds of butter for 30 cents, and the expense will be the same except for commission which will be 1.5, making the total expense 4.5 cents, so that at this price, without premiums, he can pay all expenses of buttermaker's salary, expense of operation, freights and commissions and have money left. And in this day of universal premiums of at least a cent a pound, and prices above 20 cents the year around it is not too much to say that a good creamery should pay New York prices for butter fat—that the farmer is entitled to get, for butter fat delivered at the creamery, at least New York prices. Of course, if the creamery hires the cream collected and hauled to the creamery, or if the cream has to be handled by an agent or transported by freight



the cost of such collection must be borne by the farmer. Aside from such expense, if the farmer does not receive New York prices for his butter fat it is because of one of the following reasons:

1. The butter may not be as well sold as it should be. This is the manager's fault and can be easily remedied.
2. The overrun may not be as much as 20 per cent. If not this is the fault of the buttermaker and can be easily remedied.
3. The creamery may be so small that the butter is made at an expense of two or two and a half or three cents a pound. This can only be remedied by increasing the business, and if this is not possible the creamery is thereby handicapped in its competition with the larger creameries of whatever kind.
4. The cream and milk delivered at the creamery may be so poor that the best of buttermakers cannot make high selling butter out of it. This is the fault of the farmer who produces it and the buttermaker or manager who receives it and the loss is almost altogether visited upon the patron. This fault can only be removed by joint action of the buttermaker and the patron.

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### OVERRUN.

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Under present conditions of sharp and varied competition among creameries it is necessary to the successful operation of a creamery to make the most possible butter out of a given quantity of fat—to get the largest possible legitimate overrun. In the larger creameries a good deal of attention is given to this matter because it is closely connected with the question of profits. In the small creameries comparatively little attention is given to the matter except in a few instances. Our creameries average about 120,000 pounds of butter per year. The usual overrun used to be stated universally as one-sixth or about 16 per cent. When the month's work and payment were figured up and the overrun of butter over butter fat was computed, and deviation from a 16 per cent overrun, whether it was more or less than this amount, was invariably charged to inaccuracy in testing. While the fact was recognized that the amount of water and salt and casein in butter were variable quantities, it was scarcely suspected that skill in butter making could change any of these except, of course, the salt

which might be added in almost any amount. The Dairy Department at Ames, by a series of experiments and investigations showed that not only could a skillful buttermaker make his overrun almost anything he desired, but that certain buttermakers in successful creameries were already doing it; that a 16 per cent overrun could easily and legitimately be increased to 20 per cent or even 25 per cent overrun. That is, the skillful buttermaker can make butter having in it only 80 per cent of butter fat just as easily and as certainly as he can make butter containing 86 per cent of butter fat. In the one case he would have a 25 per cent overrun and in the other he would have the usual overrun of about 16 per cent. And the butter containing but 80 per cent of butter fat serves the purpose of the consumer, meets all the requirements of any market for flavor or body or qualities of any kind, violates no law either state or national and traverses no regulations of any kind or character. And yet with all these effects so perfectly understood, so often put in print and so thoroughly discussed, very few buttermakers know what their overrun is except from the books of the creamery at the end of the month, and very few creamery managers seem to care whether their buttermaker makes a proper overrun or not, he gets no more nor no less wages on account of his skill or lack of it in this particular. In a few cases the assistant dairy commissioners have found buttermakers claiming that they were getting habitually 20 or 22 per cent overrun, when tests of their butter showed but 12 or 14 per cent.

The average creamery makes about 120,000 pounds of butter a year, not counting in this the centralizing plants. At the average price for last year this butter sells for nearly \$30,000. A difference of only five per cent in the over run would amount to more than \$110 a month for this average creamery, nearly twice the buttermaker's salary. If his butter was so poor in quality as to lose this sum he would be promptly and properly discharged, but there is many a creamery in this state whose income could be easily increased in this particular an amount equal to that here mentioned by a proper increase in the overrun. The larger central plants, with which the smaller plants compete do get this large overrun and competition makes it necessary that the smaller ones who meet this competition shall get as good an overrun as their larger competitors or go out of business because of lack of ability to meet the competition. A difference of only 5 per cent in the over run makes, at last year's prices a cent and a quarter on the pound of butter fat, a difference of that much in the price the creamery can pay the farmer for his butter fat, three-quarters of a million of dollars for the creamery patrons of the state.

Too many creamery managers and buttermakers rely upon their computations at the end of the testing period in computing the overrun. A much better way is to find the overrun directly from the butter by analysis or other test. In such a method there can be no mistakes arising from improper or careless testing. It is in fact one method of determining whether the testing has been accurate or not. One of the central plants of this state regularly employs a chemist to analyze its butter so that proper steps may be taken to increase or decrease the overrun to the proper and legitimate proportion. Other central plants do something similar, so that they know every day from the butter itself just what its contents are and how much of the whole is butter fat and what percentage of overrun. This department in the report of last year, illustrated and explained apparatus designed in this office, for use with the Babcock test, to determine accurately the butter fat content of butter from which the overrun can be computed and the water content may be estimated with considerable accuracy. It is in use in only a few creameries of the State but is quite satisfactory and is the only apparatus in use in our creameries for the purpose. A chemical analysis in the hands of a competent chemist is the only way to get an absolutely accurate estimate of the constituents of a sample of butter, but of course the expense prohibits the smaller creameries from making use of such a system. But approximate results are sufficient in every day work and extremely valuable to the creamery operator.

The question of overrun is of the greatest importance from the standpoint of values and should receive more attention at the hands of the buttermakers and creamery operators.

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#### PREMIUMS ON BUTTER.

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During the last ten years there has grown up the practice of paying a creamery more than the published and established official price in all of the markets. A half a cent premium used to be the cause of great pride on the part of the buttermakers whose butter sold for that premium. Now a full cent premium is almost universal, a cent and a half is common, and a cent and three-quarters or even two cents above the market is not by any means unknown. Seconds and firsts sell at the published price of extras and above, and the real extras nearly

or quite two cents above the market. Nearly every creamery visited by the assistant dairy commissioners receives a premium, and only those making the very poorest quality confess to receiving less than extra price. So much is this that it is entirely safe to conclude that there is something vitally wrong at the creamery that does not receive a good premium over the market.

On the other hand this practice of premiums makes it possible for swindlers to induce shipments of butter under promise of high premiums. Nearly every year some creamery manager is induced to ship to some unknown firm by reason of excessive premiums offered, and later is compelled to mourn the loss of the butter so shipped. Reliable commission houses easily show their responsibility by their ratings in the commercial agencies or by unquestionable bank references and it is only the incautious manager than can be deceived by the swindler.



## IOWA MANUFACTURES, DAIRY PRODUCTS SECOND.

The following table shows the relative importance of the manufacture of dairy products. The figures are from the United States Census department. The first three here given are the three chief manufactures of the State without regard to other classification. The five classes are selected from a table showing ten chief manufactures of Iowa.

## FIVE CHIEF MANUFACTURING INTERESTS OF IOWA—FOOD PRODUCTS

	Number of Establishments	Capital	Salaried Officials		Wage earners	Average Value	Value of Product	Miscellaneous Expense	Average Value
			No.	Salaries					
Slaughtering and Meat Packing, wholesale.....	1905 19	\$ 7,297,359	284	\$298,856.00	3,087	\$1,323,408	\$20,074,070	\$709,738	\$20,074,070
Butter, Cheese and Condensed milk.....	1905 27	6,351,353	193	197,376.00	2,887	1,208,167	25,085,044	441,696	25,085,044
Flour and Grist Mill Products.....	1905 657	3,038,059	806	142,779.00	1,180	695,207	15,134,027	393,497	15,134,027
Food Preparations.....	1905 907	3,459,017	413	81,425.00	1,133	588,633	153,990	322,960	153,990
Canning and Preserving Fruits and vegetables.....	1905 309	5,216,059	173	135,007.00	770	399,108	12,099,493	244,306	12,099,493
	1900 309	4,946,914	172	135,006.00	942	424,007	11,012,608	251,650	11,012,608
	1900 21	5,169,086	76	98,985.00	977	337,242	6,934,734	4,697,846	6,934,734
	1900 18	2,840,021	83	69,970.00	734	256,031	2,770,804	226,144	2,770,804
	1905 40	1,785,493	82	68,585.00	1,163	292,512	154,744	63,185	154,744
	1900 26	1,027,221	46	27,305.00	699	184,710	1,339,168		1,339,168

## STATE DAIRY COMMISSIONER.

These figures note the decrease in number of butter, cheese and condensed milk factories from 1900 to 1905 from 907 factories to 657, with a decrease of capital employed of \$420,318. This sum is not nearly the loss of capital employed, because the changes in the creamery business have closed up many more than the apparent difference of 250 plants. That is, some of the present 657 are new plants and so more than 250 of the 907 have been closed. The average value of capital in 1900 was \$3,813, at which valuation, the capital invested in the 250 plants would amount to \$952,222. The fact that the new creameries now built are larger and have each more capital than was the case five years ago makes the apparent loss of capital appear as first stated. The real subtraction has been far in excess of the \$952,222, just as the real number of closed creameries exceeds 250. Probably 350 different creameries have been closed in the years 1900 to 1905 and a million dollars has been lost in unsalable buildings and machinery.

Notwithstanding the decrease in the number of plants, the number of "salaried officials" has been nearly doubled and the amount paid for salaries has increased in like proportion. The number of wage earners employed is practically the same. That is, notwithstanding the fact that the 657 plants now do nearly the same business as the 907 did in 1900 the number of wage earners has not been changed. But they receive more than \$100,000 more in wages than formerly. A comparison of the other items in the column of wages will show that there has been no corresponding increases of wages in other industries.

"Miscellaneous expenses" is an interesting item. It is evidently too small to include the hauling or other transportation of milk or cream, or freight or commission. The number given is too small to include tubs, and probably does not include such certain and uniform expenses as salt, color and coal, insurance or repairs or expenditures to replace wornout machinery. All of these items, with very small variations are proportioned to the amount of business, and if anything they should be smaller in 1905 than in 1900. Miscellaneous expenses must include various small items not classified above, and doubtless consists largely of the expense of running the business, of securing new patrons, or working up patronage at a distance from the creamery, perhaps of percentage of buyers of cream and their expenses. At any rate, in 1900 Iowa's 907 creameries each had \$169 miscellaneous expenses and they did a business averaging \$17,476. In 1905 we have 657 creameries



each with miscellaneous expenses of \$560 and they do an average business of \$23,071. The average "miscellaneous expenses" have increased more than 140 per cent.

Stated in another way, the 907 creameries did, in 1900, business amounting to \$15,846,077 with a total expense for salaries, wages, and miscellaneous of \$824,068. In 1905, the 657 creameries did a business amounting to \$15,138,027, nearly three-quarters of a million less than in 1900, at an expense for salaries, wages and miscellaneous of \$1,207,543.

The producer of the butter is vitally interested in changes in cost of manufacture for it affects the price he can get for his product. He now pays nearly \$400,000 more to have the state's butter manufactured than he did in 1900.

In the above analysis of the figures, the cheese and condensed milk factories are ignored, for the reason that their combined product is only about a third of a million of dollars and is practically the same now that it was in 1900; if there has been any change, the values are less now than formerly so that any changes in the aggregates must be fully charged to butter factories.

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### THE "WATER SEPARATOR."

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One of the causes of thin and poor cream is the so-called water "separator." Those factories that make any distinction between the different lots of cream offered them pay two cents less a pound for butter fat in "hand-skimmed or water separator" cream, for the reason that it is likely to be 24 hours older than hand separator cream, and so of poorer quality; and also is usually of low per cent and hence the freights on it are greater in proportion to its value in butter fat. Not only does the farmer get less price for his cream raised by the "water" method but he loses very much butter fat in the skimmed milk left by the method. If his water "separator" is of the dilution kind he also spoils his skimmed milk for feeding purposes by diluting it more than 50 per cent.

No deep setting system has yet been devised that is superior in results, either in quality of cream produced or closeness of skimming to the well-known submerged cans of the Cooley system. The Cooley

system went out of date twenty years ago because the power separator at the creamery would get out of the milk enough more butter fat than the Cooley system to pay the charge of ten or twelve cents a hundred pounds for hauling the milk and show a profit besides. Yet in the last two years hundreds of farmers have bought water "separators," inferior to the kinds discarded a score of years since.

The water dilution system is a kind of perennial humbug inflicted periodically upon the agricultural public for the exclusive and personal benefits of their makers and salesmen. The Iowa Dairy Commissioner's Report of 1899 denounces the dilution "separator" as a humbug and quotes from agricultural experiment stations as far back as 1890 to substantiate the statements made. The use of this system is wasteful in the extreme.

The farmer who will partition off one end of his stock tank, put a cover over it to exclude sun and dust, and arrange so that the water from his windmill runs through this part of the tank, has an ideal place to set his milk for hand skimming or to keep his milk or cream for delivery to the creamery. If he skims his milk by this plan he must be content to lose from one-sixth to one-fifth of the butter fat and to take a low price for the butter fat he sells.

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### CHANGES IN DAIRY LAWS.

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In order to prevent the spread of tuberculosis by means of the skimmed milk sent back to the farms by the creameries it is suggested that a law be enacted requiring creameries to heat the skimmed milk to 180 degrees before returning it to the farmers. Pasteurization of the skimmed milk would doubtless result in a smaller amount of tuberculosis among the hogs and calves that consume the skimmed milk. It can be effected at the creameries at very slight cost and a law of this kind would only make compulsory a practice that is already followed by a large number of the milk receiving creameries of the State.

The statutes referring to adulteration of milk and cream were enacted in the present form a number of years ago. Since their enactment not only has the sale of cream to creameries increased to an extraordinary extent but the sale of sweet cream for immediate consumption is increasing very rapidly. The statutes should be amended in such a way as to make certain that the restrictions in regard to sale of adulter-



ated milk apply also and in the same manner to sales of adulterated cream.

The same statutes provide for the punishment of one who sells "unwholesome" milk or cream. There seems to be no law providing penalties for receiving or buying such cream for butter making purposes. That is to say the man who sells "unwholesome" cream may be fined twenty-five to one hundred dollars for his offense, but there is no way to punish the person who buys the cream, makes it into butter and puts this product on the market.

This state has a very strong statute requiring that the apparatus used in the Babcock test shall be efficient and accurate, and under this statute this department has induced the use of scales for weighing the cream samples for testing by general notice of intention to make prosecutions if the cream was not so weighed for testing. But under this statute it is impossible to control manipulation of the test. Accusations and complaints of both lowering the test and raising it are not only common but increasingly so. Lowering of the test might be reached under the general statutes of the State in regard to cheating but some specific statute is needed to cover manipulations of the test in the other direction. Manipulating the test has for its object the deception of the seller of the product tested whether the test is raised or lowered and the laws should provide punishment for the offense.

The shippers of cream complain that not only are their cans used for other purposes than carrying of cream but that they have considerable losses of cans. Other states where milk and cream are largely shipped by rail have laws covering both situations. In Iowa the shipping of milk and cream has developed in the last two or three years and no specific laws are found on the statute books sufficient to meet the present conditions. The situations complained of are sufficiently serious to warrant new laws covering them.

## ASSISTANT DAIRY COMMISSIONERS.

The demands for expert advice and assistance among the creameries are more than this office can meet with the force at command. A growing interest in scientific management of creameries and advanced and improved methods of butter making require instruction that the buttermaker can scarcely secure otherwise than at his own creamery while carrying on his work. Hence the work of the assistant commissioners at the creameries has been productive of much improvement of methods and quality of butter made and hence of profits to the factory. Four hundred and fifty-six visits have been made by them to creameries in fifteen months to November 1, 1905. A very few creameries have been found in unsanitary conditions and the management has been given the choice between a thorough renovation of the plant or facing a criminal charge in court. The number of creameries to be visited is so great in proportion to the number of inspectors that it is difficult to make sure that the suggestions are carried out but usually the directions to clean up are followed very promptly.

A good deal of unclean cream and milk has been rejected at the creameries under that section of the statute which forbids the delivery to a creamery of "unwholesome milk or cream." No prosecutions have been brought under this statute for the reason that the delivery of unfit milk and cream is an offense to which the receiver is often a party just as much as the one who delivers. The law would reach only the one who deliveries the unfit material.

The chief service of the assistants among the creameries is in the direction of inducing the adoption and practice of improved methods of butter making. More than half the creameries of the state are co-operative creameries, and are under the management of men whose knowledge of butter making is extremely limited. It often happens that the buttermaker is not able to induce the management to allow him proper appliances for use in carrying out plans and methods that are now considered essential to best results. Under such circumstances the efforts of the assistants are of service in pointing out what are the successful methods and appliances indispensable to them.



## INSPECTION OF MILK.

The inspection of milk offered for sale in the fourteen cities of the State having ten thousand population or more is confined to inspection to determine the butter fat contents and to determine whether preservatives have been added. It is not possible with the force and money at the service of this department to make inspection of the sanitary conditions of the cows from which the milk is produced nor the conditions in which they are kept. Such an inspection would be valuable.

The inspection that is made shows that comparatively little milk or cream low in percentage of butter fat is sold. The watering and skimming of milk is not practiced to any alarming extent. The fact that watering or skimming to the point that would make a profit worth while shows at once in the quality makes it poor policy to practice this form of adulteration, and the milkman who expects to remain in the business, and whose reputation is therefore a part of his stock in trade, finds that he cannot afford to do other than sell good milk. The use of preservatives is not so certain to be detected or to be the source of complaint by the patrons. In a good many cases the patron seems to think the milk ought to keep without ice for several days after delivery and complains if it does not, so that the dealer is constantly importuned to furnish milk with superior keeping qualities and of course the easy and cheap method to secure this result is to use a chemical preservative. Formaldehyde is the favorite preservative in use among milkmen for the reason that it is a liquid, easily used, and is cheap, and then it is advertised too under attractive trade names with the assurance that no chemist can detect its presence in the milk. The successful prosecutions maintained by this office is quite conclusive of this claim.

There is a growing tendency among milkmen to have good wagons, to sell their milk in bottles, and to get a higher price than formerly. The cities of Des Moines and Cedar Rapids now have pasteurized milk plants, and each year natural causes have brought about better conditions among milk dealers..

The growth of the city milk inspection in this State is indicated by the following table showing the number of permits for milk dealers issued in the years from 1895 to 1905. The years end in every case on the 4th of July:

1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
491	566	620	574	676	714	784	821	783	780	827

The milk inspection carried on under the direction of this department affects about one-seventh of the population of the State, as will be seen by the following table:

Cities	Population	Inspectors
Burlington.....	23,201	Dr. W. C. Hummell
Cedar Rapids.....	25,656	Dr. J. W. Griffith
Clinton.....	22,698	P. S. Bannister
Council Bluffs.....	25,802	H. A. Lennox
Davenport.....	35,254	H. J. High
Des Moines.....	62,139	Ray Johnson
Dubuque.....	36,297	Dr. Charles Palen
Fort Dodge.....	12,162	D. C. Benjamin
Keokuk.....	14,441	A. A. Bland
Marshalltown.....	11,644	Dr. E. M. Singleton
Muscatine.....	14,073	Dr. John Tille
Ottumwa.....	18,197	E. B. Hill
Sioux City.....	33,111	J. E. Huffman
Waterloo.....	12,580	Theo. Peek
Total.....	347,355	

Complaints have been made to this office of the quality of milk sold in several of the smaller cities and towns of the State and some investigations have been made but no alarming conditions have been found to exist.

## FARMERS' INSTITUTE MEETINGS.

For several years this department has furnished speakers for farmers' institute meetings and similar occasions. A large number of creameries have been induced to organize meetings of their patrons for the purpose of discussing their interests and the dairy business as affecting their immediate localities. During the past twelve months this office has given assistance at nearly seventy such meetings. The professor of dairying at the State College at Ames and his assistants, the president of the state dairy association, and several other gentlemen not so directly connected with the dairy business have also rendered good service to the dairymen of the State in the same manner.

For a good many years the reports of this office have suggested that more attention be given to such meetings as here mentioned,



and have pointed out the good results likely to follow for the dairy business. In this state about all the dairy industry centers about the creameries. No other business of any kind could have been so permanent and successful under such adverse conditions, with so little thought and attention given to it. It is easy to believe that study and discussion and combined effort would bring from the business larger and more profitable returns. The meetings held have been quite popular for the reason that changing conditions of agriculture have compelled the attention of the farmer to dairying, to the better methods of dairying, so that there is a real demand for information as to how greater profits may be obtained from the business.

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#### AVERAGE WAGES OF BUTTER MAKERS.

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Reports of monthly wages paid 468 buttermakers of the State show an average of \$62 per month. Wages run as high as \$150 per month. Very few creameries now operate less than full time and no doubt the average amount received yearly by the buttermakers of the state is fully \$725 to \$750, a total for the State of \$400,000.

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#### CHEESE FACTORIES AND THEIR PRODUCT.

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The cheese factories of the State now number twenty-nine and reports have been received from twenty-five of these. Only five of these make as much as 100,000 pounds of cheese, and but one makes as much as 200,000 pounds. The total amount of cheese made is 1,575,646 pounds and practically all of it is sold and consumed in the State. It is an anomalous situation that the greatest dairy state in the west must import all but a small part of the cheese consumed, but the fact remains that the farmers of this State have never taken kindly to the cheese making and cheese factories are only possible under exceptionally favorable conditions.

#### TWELVE MONTHS' SCORING.

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The value of butter depends largely upon its quality, or technically speaking, the score. The estimate put upon it by the butter judge very often points out the defects in the manner and methods of manufacture and how to remedy them. Beginning with March this department has held at Mason City each month a scoring of butter to which the buttermakers of the State were urged to send their butter for scoring and criticism. The number of entries has varied from 58 to 115. Not only is the butter scored and full criticism made and sent to the buttermaker, but the assistant commissioners have personally visited the creameries from which the entries have come with a view of improving conditions and methods. The results obtained have been gratifying and valuable, but might be much more so if a larger number of the creameries could be induced to participate. The work of the assistant commissioners has been much more intelligently directed by reason of the knowledge gained of the butter made in the creameries. By this means they have been able to spend their time among those creameries where the possibilities of improvement were the most obvious, and have not wasted any time with those that are already successful to the highest degree.

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#### QUALITY OF CREAM AND BUTTER.

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The quality of milk and cream and its relation to the quality of butter to be made from the same and the price to be obtained for the finished product are of such obvious relation and importance that continual efforts are made to improve the quality, not only by adoption of better methods of manufacture, but by improving the quality of the material from which the butter is to be made. Three-fifths of the butter made in our creameries is made from cream skimmed on the farm. Since the adoption of the hand separator the quality of cream delivered at the creameries has very materially lowered. At the suggestion of numerous creamery operators the dairy commissioner early in the year sent out a card, of which a copy follows, with a suggestion that the same be reprinted for distribution among the patrons, a suggestion that was followed by a large number of creameries.



## GOOD BUTTER

CAN BE MADE ONLY FROM CLEAN, SWEET CREAM.

The following suggestions are made in the hope that they will assist in securing better grades of cream from creamery patrons and so reduce present losses to the farmer resulting from low quality cream and butter:

The farm separator must be washed after each time it is used.

Wash the separator and other dairy utensils with a BRUSH and plenty of washing powder. Rinse with hot water. Don't use a cloth.

Skim a cream of 30 to 35 per cent test.

Immediately after separation cool the cream to the lowest possible temperature, 50 degrees or lower.

Never mix warm cream with cold cream. Before mixing, cool the freshly separated cream to the same temperature as that of the cream to which it is added.

Always keep cream cans in cold water, summer and winter.

Don't cover the cans till the cream is cooled. Then keep them closed.

Don't allow cream to freeze. It lessens its value and may interfere with accurate testing.

Deliver cream as often as possible, daily in summer and every other day in winter.

Persuade your creamery to adopt and enforce rules for the handling of cream.

Des Moines, Iowa, Feb. 10, 1905.

## OLEOMARGARINE.

If the oleomargarine question were no greater elsewhere than it is in Iowa it would call for no comment whatever or attention from any dairymen, but unfortunately it is a persistent evil in those parts of the country where its sale is made possible conditions there existing. There has never been any great demand or sale of oleomargarine in our State because the conditions were not such as to make the sale of it profitable. In addition to this fact this State has the best oleomargarine statute in the United States, a statute forbidding the sale of oleomargarine "having a yellow color." As set forth in last year's report the decision of our supreme court in the case of the State of Iowa against the Armour Packing Co. had the effect of putting out of business nearly all the dealers in the so-called uncolored product, which nevertheless had a slight "yellow color." The fact must not be lost sight of that under the present United States laws, a license permitting the sale of "uncolored" oleomargarine costs the dealer but \$6 and as he usually takes out the license late in the fall or early winter he actually only pays \$4 or \$4.50 for the balance of the year ending June 30th. The license fee is so small that large numbers are induced to

try the business, and if there were a real *bona fide* demand for oleomargarine the figures given below would show an increased production instead of the reverse. The fact is that there is slight demand for oleomargarine and when it is sold for exactly what it is the consumption is relatively small. Since all oleomargarine pays a tax the figures given below are absolutely accurate and come from the Internal Revenue office. The production and sale of oleomargarine for the last six years has been as follows:

## UNDER THE NEW LAW.

1905 .....	49,880,982
1904 .....	48,071,480
1903 .....	71,804,102

## UNDER THE OLD LAW.

1902 .....	126,316,472
1901 .....	104,943,856
1900 .....	107,045,028

The oleomargarine business, so far as its manufacture is concerned, unlike the dairy business is in the hands of a very few men, mostly the great meat packers and their immediate friends. They will not easily give up a business of such great profit and they will without the slightest doubt, in the immediate future as they have in the past, use every means that self-interest can devise or unlimited money can secure to weaken or even to repeal the law. They have powerful friends in high places. If the dairymen are too fully satisfied with the victory that has been won for pure butter and honest dealing they will wake up some day and discover that they have deceived themselves. Self-interest still requires that we be on guard. The National Dairy Union and its officials are doing everything in their power to prevent possible steps in the direction of undoing the work that has been accomplished and those interested in dairying everywhere should assist this organization in this work.

## RENOVATED BUTTER.

## LIST OF RENOVATED BUTTER FACTORIES.

County	Location	Firm Name	Postoffice Address
1 Calhoun .....	Rockwell City .....	Andrew Wood Co. ....	Rockwell City
2 Clayton .....	McGregor .....	The J. D. Bickel Produce Co.	McGregor
3 Des Moines .....	Burlington .....	Iowa Grain and Produce Co.	Burlington
4 Lee .....	Keokuk .....	Iowa Pure Butter Co. ....	Keokuk
5 Polk .....	Des Moines .....	E. M. Ellingson & Co. ....	Des Moines
6 Polk .....	Des Moines .....	Schermerhorn-Shotwell Co.	Des Moines
7 Polk .....	Des Moines .....	McRae Bros. ....	Des Moines
8 Wayne .....	Humeston .....	James L. Humphrey, Jr. ....	Humeston
9 Woodbury .....	Sioux City .....	N. R. Hathaway .....	Sioux City



The above list of renovated butter factories shows a decrease of three from the list of last year's report. The stock from which the number of pounds given below is made is collected from all parts of the middle west. There are more renovating factories in Iowa than in all the rest of the country west of the Mississippi river. There is a tendency to concentrate the business in the hands of a few men and a few factories.

Renovated Butter	Year ending July 1, 1900—reports from nine factories	Year ending July 1, 1901—reports from thirteen factories	Year ending July 1, 1902—reports from twelve factories	Year ending July 1, 1903—reports from nine factories
Pounds of Renovated butter made.....	4,330,288	9,100,450	8,827,543	10,317,484
Average per factory.....	503,376	707,188	735,628	1,146,389
Sold for consumption in Iowa.....	961,333	2,168,376	908,626	1,306,304
Shipped outside the State.....	3,368,955	7,932,074	8,918,917	9,011,180

SHOWING AVERAGE MONTHLY PRICE OF FANCY WESTERN CREAMERY BUTTER IN NEW YORK MARKET.

Month	Twelve months ending Nov. 1, 1896.	Twelve months ending Nov. 1, 1897.	Twelve months ending Nov. 1, 1898.	Twelve months ending Nov. 1, 1899.	Twelve months ending Nov. 1, 1900.	Twelve months ending Nov. 1, 1901.	Twelve months ending Nov. 1, 1902.	Twelve months ending Nov. 1, 1903.	Twelve months ending Nov. 1, 1904.	Twelve months ending Nov. 1, 1905.
November.....	\$ .2320	\$ .2112	\$ .2325	\$ .2337	\$ .2300	\$ .2467	\$ .2412	\$ .2650	\$ .2317	\$ .2481
December.....	.2350	.2250	.2295	.2160	.2720	.2340	.2310	.2320	.2433	.2688
January.....	.2296	.1900	.2040	.1975	.2050	.2262	.2425	.2762	.2270	.2910
February.....	.2000	.2050	.2042	.2100	.2300	.2250	.2662	.2600	.2317	.2218
March.....	.2185	.1900	.1927	.2075	.2550	.2212	.2940	.2960	.2432	.2907
April.....	.1650	.1800	.1980	.1902	.1980	.2000	.2625	.2725	.2284	.3005
May.....	.1572	.1330	.1580	.1700	.2012	.1904	.2275	.2200	.2012	.2371
June.....	.1550	.1500	.1687	.1881	.1950	.1925	.2194	.2160	.1803	.2449
July.....	.1505	.1500	.1667	.1835	.1960	.1990	.2121	.2012	.1767	.2656
August.....	.1571	.1675	.1800	.2038	.2100	.2050	.1900	.1940	.1793	.2111
September.....	.1600	.1900	.2025	.2202	.2150	.2110	.2170	.2074	.1947	.2068
October.....	.1850	.2250	.2235	.2400	.2190	.2200	.2382	.2400	.2095	.2184
Average per lb. for each year.....	\$ .1882	\$ .1885	\$ .1971	\$ .2065	\$ .2278	\$ .2165	\$ .2416	\$ .2417	\$ .2140	\$ .2487

On account of "premiums" now almost universally received by the makers of firsts and extras, amounting to from one-half a cent to two cents more than the published market prices, the real price received by the creameries is probably a full cent a pound more than the above averages computed from the official daily prices of butter for the last twelve months.

BUTTER PRODUCTION OF THE STATE FOR SIX YEARS.

	1900	1901	1902	1903	1904	1905
Average pounds of butter per creamery.....	104,918	105,401	104,132	97,770*	112,084	118,000
Total pounds of butter for all creameries.....	84,965,062	82,706,944	77,885,090	64,563,070	70,000,000	827,075,88

\*In 1904 figures for average the amount made in nine centralizing creameries is not included, but the aggregate is included in the total.

in 1905 figures for average the amount of butter made in 20 centralizing plants is not included but the aggregate is included in the total.

PROSECUTIONS.

Fourteen persons have been convicted and fined for the sale of adulterated milk during the past year. In each case except one the fine imposed was \$25 and costs; the defendant in the one case having been fined \$100 and costs. These cases were brought in the following cities: Ottumwa, 2; Council Bluffs, 3; Davenport, 6; Sioux City, 3.

Besides the above mentioned prosecutions there are now pending in justice court in Council Bluffs one case for the sale of adulterated milk and one case for the sale of adulterated cream.

In a case brought against a Des Moines dairyman, he was convicted before a local justice and fined \$100 and upon appeal to the district court was discharged, as not guilty, by the jury.

In all of these cases the offense consisted in selling milk containing formaldehyde.

Prosecutions of this kind are hampered by the fact that it is not easy to get the services of a competent chemist.

In the city of Davenport the association of physicians selected one of their number, who made a very large number of analyses of milk, and upon his findings the six cases mentioned above were brought. Five of these cases were brought at one time and the accused persons plead guilty, with the explanation that they had not added anything to the milk directly, but had used a liquid preparation for the purpose of disinfecting their cans after washing and suggested that the formaldehyde found by the chemist got into the milk in that fashion. For this reason the justice assessed the minimum fine of \$25, with a severe



warning for future good behavior. Inside of a month one of the same parties was again arrested and tried and found guilty of selling milk containing formaldehyde, at which time a fine of \$100 was assessed.

TABLE NO. 1  
COMPARISONS.

	1897	1898	1899	1900	1901	1902	1903	1904	1905
Total No. of creameries and skim stations.....	891	954	967	994	960	919	792	691	655
OWNERSHIP.									
Individual.....	504	516	501	524	497	377	306	242	206
Co-operative.....	349	349	349	364	360	276	350	335	316
Stock company.....	27	82	116	165	102	165	135	113	132
State property.....	1	1	1	1	1	1	1	1	1
PLAN OF OPERATION									
Separator.....		842	832	772	748	538	293	193	
Gathered cream.....		71	85	98	105	119	85	106	
Combined plant.....		60	56	96	65	135	243	262	
* Exclusive hand separator.....							70	94	
BASIS OF RECEIVING MILK OR CREAM.									
By the test.....		849	896	890	882	748	672	651	
By weight or measure.....		110	98	70	57	44	19	4	
CREAMERY CHANGES.									
Number of new creameries.....	133	90	65	87	35	34	25	10	49
Number of new skim stations.....	43	36	34	18	22	16	9	9	1
Number of plants closed.....	65	53	79	79	87	160	120	74	

\*Before 1904 hand separator creameries were included as gathered cream plants  
In 1905 twenty-seven skim stations closed; in 1904 forty-four skim stations closed.

TABLE NO. 1.  
NUMBER OF CREAMERIES AND CHANGES.

Counties.	No. of creameries	No. skim stations	No. of creameries closed	No. of skim stations closed.	New Plants
Tor State.....	568	87	47	27	40
Adair.....	2	1	1		
Adams.....	1				
Allamakee.....					
Appanoose.....					
Audubon.....	9				
Benton.....	5				
Black Hawk.....	17				
Boone.....	2				
Brewer.....	21	5	1	1	1
Buchanan.....	5				
Buena Vista.....	5				
Butler.....	19	2		1	3
Calhoun.....	8	1			
Carroll.....	2				
Cass.....	2				
Cedar.....	4	1	1	2	
Cerro Gordo.....	6		1		1
Cherokee.....	4				
Chickasaw.....	15	5			3
Clarke.....	6				
Clay.....	6				
Clayton.....	13	3			3
Clinton.....	7	4			3
Crawford.....	1		1		
Dallas.....	4				
Davis.....	1	1		4	
Decatur.....	1	4			1
Delaware.....	24	1		1	
Des Moines.....	5				
Dickinson.....	5				1
Dubuque.....	24		1		3
Emmett.....	8				
Fayette.....	20				
Floyd.....	5				2
Franklin.....	6	1	2		
Fremont.....	2				
Greene.....	2				
Grundy.....	7				
Guthrie.....	10				
Hamilton.....	4	3	1		
Hancock.....	7				
Hardin.....	10	2			1
Harrison.....	1				
Henry.....	1				
Howard.....	8	1			
Humboldt.....	11	1	1		1
Ida.....	2				
Iowa.....	7	2			
Jackson.....	14	4			2
Jasper.....	3				
Jefferson.....	3	1	1		1
Johnson.....	1				
Jones.....	15	10			2
Keokuk.....	3	1			1
Kossuth.....	21				
Lee.....	1				
Linn.....	16	3	3		1
Louis.....	2				
Lucas.....	1				
Lyon.....	2				
Madison.....	2				
Mahaska.....	2				
Marion.....	1	1			1
Marshall.....	5				1
Mills.....	1				
Mitchell.....	9	2	1		



TABLE NO. 1—(CONTINUED.)

Counties	No. of creameries	No. of skin stations	No. of creameries closed	No. skin stations closed	New Plants
Monona	1				
Monroe	1				
Montgomery					
Muscatine	1				
O'Brien	1				1
Oceola	1				
Pago	1				
Palo Alto	14			1	
Plymouth	1				
Pocahontas	1	1	1		
Polk	1	1	1		
Pontiac	1				
Pottawattamie	1				
Poweshiek	1	1	1		1
Ringgold	1				
Sac	1				
Scott	1				
Shelby	1				
Sioux	1				2
Story	1				
Tama	1				
Taylor	1				1
Union	1		1		
Van Buren	1				
Vernon	1				
Warren	1				
Washington	1				
Wayne	1				
Webster	1				
Winnebago	1				
Winneshiek	1				
Woodbury	1				
Worth	1				
Wright	1				
The State	368	87	47	27	40

It is impossible to estimate the total number of creamery patrons and total number of cows with any accuracy, for the reason that the larger plants report a very large number of patrons in proportion to the amount of butter that they make. This no doubt arises from the fact that their patronage is shifting and their lists in the course of a year will carry twice as many names as their actual number of patrons on the average. Thus, some names would appear on the lists of other creameries and hence, in a complete report, would be counted twice. There is no way to estimate what proportion of duplications of this kind occur.

Neither is it easy to estimate the number of cows, because the centralizers have no means of knowing how many cows their patrons have, and there is no way to estimate how many cows it takes to make the enormous quantities of butter there is made in these plants.

There are, perhaps, 85,000 creamery patrons and 600,000 cows tributary to the 368 creameries of the State of Iowa.

TABLE NO. 2.

TABLE SHOWING NUMBER OF PATRONS, COWS, CREAMERIES USING COMMERCIAL STARTER AND ACID TEST, CREAMERIES THAT PASTEURIZE THE SKIMMED MILK AND CREAMERIES THAT USE A SKIMMED MILK WEIGHER.

Counties	No. of creameries reporting	No. of patrons reported	No. of creameries using commercial starter	No. of cows reported	No. of creameries pasteurizing skimmed milk	No. of creameries using skinned milk weigher
The State	483	82,031	355	307,368	238	215
Adair	4	788	2	2,320	3	2
Adams	1	100	1	1,353	1	1
Allamakee	1	1,504	1	1,300	1	1
Audubon	8	1,054	8	9,136	6	5
Benton	3	356	1	840	1	1
Black Hawk	16	2,074	12	11,410	9	10
Boone	2	186	1	600	1	1
Bremser	20	1,494	14	10,996	9	10
Buchanan	1	1,499	1	4,499	1	1
Buena Vista	3	817	3	2,823	1	1
Butler	17	2,014	9	6,208	5	5
Calhoun	5	1,583	3	2,715	2	3
Carroll	6	1,276	4	1,487	4	3
Cass	3	180	2	1,250	1	1
Cedar	4	412	4	3,405	1	1
Cerro Gordo	4	1,342	3	2,240	1	1
Cherokee	3	298	3	1,800	1	1
Chickasaw	15	4,675	9	10,490	4	6
Clay	5	573	3	3,550	2	4
Clayton	14	3,177	11	21,000	7	7
Clinton	2	111	2	945	1	1
Crawford	1	1,500				
Dallas	3	407	1	950	2	1
Davis						
Delaware	24	2,055	21	25,387	19	18
Dickinson	8	624	4	2,675	3	3
Dubuque	26	2,305	13	11,800	7	8
Emmet	6	364	6	3,481	1	4
Fayette	20	2,548	15	20,584	9	10
Floyd	3	1,193	3	4,846	2	2
Franklin	5	1,700	5	6,830	2	2
Fremont						
Greene						
Grundy	6	784	5	6,475	5	5
Guthrie	9	1,431	7	6,996	7	5
Hamilton	4	686	4	5,335	3	4
Hancock	7	882	2	9,155	2	3
Hardin	10	1,314	1	8,228	5	6
Harrison	1	75	1	450	1	1
Henry						
Howard	8	1,180	6	7,459	1	3
Humboldt	9	839	7	5,865	4	5
Ia	2	233	2	1,700	1	1
Iowa	7	780	6	4,079	4	3
Jackson	0	1,046	6	4,028	5	5
Jasper	2	179	1	800	1	1
Jefferson	1	80	1	700	1	1
Johnson						
Jones	13	1,802	6	6,945	5	6



TABLE NO. 2—CONTINUED.

Counties.	No. of creameries reporting.	No. of patrons reported.	No. of creameries reporting number of cows.	No. of cows reported.	No. of creameries using commercial starter.	No. of creameries using test for acidity of cream.	No. of creameries that pasteurize skimmed milk.	Using skimmed milk whey.
Keokuk	21	624	17	12,272	8	4	13	15
Kossuth								
Lee	12	1,519	8	6,010	8	8	5	7
Linn								
Louisia								
Lucas	2	300	2	1,800	1	1		1
Lyon								
Madison								
Mahaska	1	400	1	1,900	1			
Marion								
Marshall								
Mills	9	1,928	7	11,981	1	4	1	
Mitchell	1	67	1	500			1	
Monona	1	85	1	605				
Monroe								
Montgomery	1	135	1	600				
Muscataine								
O'Brien	5	920	3	3,840	2	4	1	2
Osceola	2	595	1	1,500	1	1		
Page								
Palo Alto	14	1,203	14	10,540	7	4	7	12
Plymouth	3	286	2	1,754	1	1		2
Pocahontas	2	259				1		1
Polk	5	6,114	1	400	4	3	3	1
Pottawattamie	3	702	1	650	4	3	2	
Poweshiek					3	2		
Ringgold								
Sac	8	785	6	4,290		1		
Scott								
Shelby	8	810	6	3,698	2		1	
Sioux	5	1,172	6	10,578	3	3		
Story	7	1,014	6	5,925	2	3	4	5
Tama	2	192	2	1,454	2	2	2	
Taylor	2	1,180			1	1		
Union								
Van Buren								
Wapello	1	70	1	500	1	1	2	1
Warren	1	54						
Washington								
Wayne								
Webster	2	713	1	400	1	1		
Winnebago	8	1,124	6	7,697	3	5	6	5
Winnebago	13	2,867	9	17,418	1			
Winnebago	2	7,000	1	3,000	2	2		
Woodbury	8	809	8	5,530	5	5	5	2
Wright	4	683	2	3,300		1		
The State	483	82,031	355	367,368	228	218	195	206

## HAND SEPARATORS.

The total number of hand separators given in the foregoing table is doubtless too large, for the reason that the number of patrons, and likewise, the number of hand separators used, as reported from the centralizing plants evidently carry a good many duplications, because of the shifting character of the patronage of the various centralizing plants, and for that reason the number 49,130 hand separators reported is perhaps five to seven thousand too large. The fact remains, however, that fully one-half the butter of the State is made from cream skimmed by hand separators. Not only the twenty centralizing plants of the State, but seventy-one others, receive practically nothing but hand separator cream, and a total of seventy-six plants are receiving cream shipped by rail. The managers of certain of the smaller creameries have been enterprising enough to get into territory other than their own and induce the shipment of cream to them, rather than to the larger centralizers, a plan which every creamery ought to follow if it has easy access to a territory not already covered by a local creamery.

TABLE No. 3.

Counties.	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No. receiving cream by rail.
The State	368	49130	94	76
Adair	3	422		1
Adams	1	95		
Allamakee	7	1026	1	
Audubon	5	500	1	
Benton	3	320	3	1
Black Hawk	10	895	1	1
Boone	2	10		
Bremner	1	12		
Buchanan	6	194	1	
Buena Vista	5	723	3	
Butler	9	107	1	1
Calhoun	5	920	1	1
Carroll	6	2198	3	8
Cass	2	117	1	
Cedar	4	76		1
Cerro Gordo	4	1125	1	1
Cherokee	3	187	3	2
Chicasaw	11	941		3
Clay	5	221	2	3
Clayton	13	2121	4	3
Clinton	1	7		3
Crawford	1	1500	1	1
Davis				



TABLE NO. 3—CONTINUED.

Counties	No. of creameries reporting hand separators.	Hand separators reported.	No. of exclusive hand separator creameries.	No receiving cream by rail.
Dallas	4	328	2	2
Decatur	10	893	2	1
Deleware	4	285	6	1
Dickinson	12	1432	1	2
Dubuque	5	143	1	1
Emmet	7	490	2	1
Fayette	4	518		2
Floyd	5	643		1
Franklin	1	6	1	1
Fremont	5	127	1	
Greene	10	496		
Grundy	4	187		1
Guthrie	7	680	4	2
Hamilton	6	416		
Hancock	1	20		
Hardin	5	264		
Harrison	8	850		
Henry	2	230	2	
Howard	5	161		
Humboldt	8	770	2	1
Ida	2	82		
Iowa	11	30	1	
Jackson	12	545		1
Jasper				
Jefferson				
Johnson				
Jones				
Keokuk	18	551		
Kossuth				
Lee			1	1
Linn	10	823	2	3
Louisa				
Lucas				
Lucas	2	225		
Lyon				
Madison				1
Mahaska				1
Marion	1	150		1
Marshall				
Mills	7	324	1	
Mitchell	1	45		
Monona	1	45		1
Monroe				
Montgomery	1	35		
Muscataine	5	700	1	2
O'Brien	2	495	1	1
Osceola	1	1900	1	1
Page	8	119		
Palo Alto	2	167	1	
Plymouth	3	230	3	1
Pocahontas	5	6,013	4	4
Polk	3	440	1	2
Pottawattamie	1	250		
Poweshiek				
Ringgold	7	437	2	
Sac	1	60	1	1
Scott	5	440	5	1
Shelby	6	1,776	5	2
Sioux	4	118		
Story				

TABLE NO. 3—CONTINUED.

Tama	2	152	1	1
Taylor	2	1,240	2	2
Union	1	750	1	1
Van Buren				
Wapello	1	3		1
Warren	1	2		
Washington				
Wayne			1	1
Webster	1	600	1	1
Winnebago	5	183	1	
Winnebago	13	959	1	2
Woodbury	2	6,800	2	2
Worth	6	291		
Wright	4	554	2	1
The State	368	49,130	91	76

FOR THE YEAR ENDING JULY 1, 1905.

506 creameries make	75,345,028 pounds
20 centralizing creameries included make,	17,627,108 pounds
486 creameries, not centralizers, make	57,717,920 pounds
an average of 118,000 pounds for the local creameries of the state.	
On this average, the 548 creameries, other than the twenty centralizers mentioned above, make..	
20 centralizers of the state make	65,080,480 pounds
	17,627,108 pounds
Total creamery butter made in the state, 568 plants, which is the largest amount of creamery made butter ever reported.	82,707,588 pounds
The average price of butter for the twelve months in which the above amount of butter was made was 24.28 cents, New York Extras.	
At this value the 82,707,588 pounds of butter had an aggregate value of.....	
	\$20,081,000
For the next preceding twelve months the creameries of the state made 70,000,000 pounds of butter and the average price was 21.83, and the aggregate value was.....	
	15,281,000
Increase in value.....	\$4,800,000



The table herewith shows that from 736,373,890 pounds of milk and 141,369,998 pounds of cream, 75,345,028 pounds of butter have been made. It takes approximately 23 pounds of milk, or a little more than 3 pounds of cream to make a pound of butter. On this basis the pounds of milk given would make approximately 30,000,000 pounds of butter and the pounds of cream given would make 45,000,000 pounds of butter. From these figures, it is seen that three-fifths of the butter of the State is made from gathered cream, largely, of course, hand separator cream.

TABLE NO. 4.

TABLE SHOWING NUMBER OF POUNDS OF MILK RECEIVED, NUMBER OF POUNDS OF CREAM RECEIVED, POUNDS OF BUTTER MADE, POUNDS SOLD TO PATRONS IN IOWA AND SHIPPED OUTSIDE THE STATE, SO FAR AS REPORTED BY THE CREAMERIES.

Counties.	Number Reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the state.
THE STATE.....	506	736,373,890	141,369,998	75,345,028	3,282,422	3,239,609	68,812,997
Adair.....	5	4,374,000	1,450,000	678,835	21,858	11,432	645,545
Adams.....	2	1,720,000	137,803	105,881	1,910	9,750	94,221
Allamakee.....	7	1,929,000	4,453,520	1,361,102	19,268	36,415	1,305,419
Appanoose.....	8	17,468,261	1,298,671	1,291,211	81,824	8,040	1,201,337
Audubon.....	3	1,242,000	342,060	4,400	153,949	311,767	1,781,768
Benton.....	15	31,000,401	3,080,280	2,227,483	10,172	11,300	158,614
Black Hawk.....	2	3,934,214	19,677	180,086	2,399,736	204,974	2,070,343
Boone.....	21	55,858,344	519,809	1,619,467	156,224	26,209	1,437,034
Bremer.....	8	32,366,131	519,809	1,619,467	156,224	26,209	1,437,034
Buchanan.....	5	1,852,611	1,854,221	697,900	23,342	7,711	666,847
Buena Vista.....	5	1,852,611	1,854,221	697,900	23,342	7,711	666,847
Butler.....	17	39,873,101	651,000	1,693,679	152,294	58,489	1,682,796
Calhoun.....	4	1,600,963	1,622,554	728,044	4,542	12,561	711,001
Carroll.....	7	4,823,587	3,309,746	1,525,501	9,905	2,276	1,313,620
Cass.....	2	803,025	205,621	128,966	378	6,957	129,621
Cedar.....	4	1,869,000	544,500	215,410	5,933	48,477	168,000
Cerro Gordo.....	4	1,000,000	2,637,600	855,200	29,600	13,750	811,850
Cherokee.....	3	780,000	474,300	193,400	1,800	900	171,400
Chickasaw.....	15	32,762,800	4,366,910	2,596,190	158,751	44,335	2,593,104
Clarke.....	6	7,743,000	944,400	633,300	39,720	2,904	600,676
Clay.....	14	15,627,800	7,488,635	2,698,516	61,760	35,813	2,601,943
Clayton.....	7	7,593,500	153,040	353,550	10,025	17,657	325,868
Crawford.....	1	3,000,000	1,000,000	1,000,000			1,000,000
Dallas.....	4	2,587,537	664,858	349,857	15,155	30,980	303,723
Davis.....							
Decatur.....	24	55,123,197	2,551,431	3,982,920	262,979	133,581	3,586,860
Des Moines.....	5	2,996,860	663,611	380,290	19,910	9,250	331,136
Dickinson.....	21	26,558,486	4,577,412	2,328,314	95,451	169,960	2,062,903
Dubuque.....	7	6,139,000	569,055	480,860	31,310	2,000	397,540
Emmet.....							

TABLE NO. 4—CONTINUED.

Counties.	Number Reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the state.
Fayette.....	20	51,954,710	2,077,318	2,855,428	226,755	2,548	2,626,125
Floyd.....	5	4,104,300	1,083,900	35,635	34,000		1,014,265
Franklin.....	6	6,888,100	1,173,800	841,250	20,600	21,200	799,450
Fremont.....							
Greene.....	6	15,595,600	780,800	929,260	75,920	4,250	849,090
Grundy.....	10	11,366,400	1,752,300	1,015,600	30,860	50,680	934,160
Guthrie.....	4	12,563,000	787,500	727,840	81,100	1,400	645,340
Hamilton.....	7	4,159,000	2,124,600	796,410	20,625	900	773,885
Hancock.....	10	27,273,573	27,206	53,000	2,900	5,100	45,500
Hardin.....	1	1,028,000					
Harrison.....	8	5,804,660	1,505,244	790,386	42,200	7,138	741,048
Henry.....	10	8,882,800	1,064,400	656,785	41,070	6,500	609,215
Howard.....	2		585,800	205,000	4,250	6,000	196,750
Humboldt.....	7	12,977,900	280,120	680,180	64,150	122,700	493,330
Ida.....	13	12,460,050	2,628,850	1,388,090	27,100	45,600	1,315,390
Iowa.....	2	2,976,600	169,000	179,315	11,085	1,820	166,410
Jackson.....	2	1,352,213	219,360	115,190	4,340	15,000	95,850
Jasper.....	1		80,000	27,000		20,220	6,880
Jefferson.....	13	37,568,249	1,824,332	2,231,160	102,658	94,837	2,033,665
Johnson.....							
Jones.....	21	31,235,586	1,961,055	1,868,650	145,343	27,465	1,695,843
Keokuk.....							
Kossuth.....	13	17,239,490	2,529,475	1,460,812	46,857	178,310	1,235,646
Lee.....	2	770,700	803,280	871,970	3,835	1,725	869,410
Linn.....							
Louisa.....	1		380,000	94,000		10,000	84,000
Lucas.....	1		401,000	126,800	5,700	22,500	98,600
Lyon.....	9	471,700	4,527,020	1,318,045	49,062	217,070	1,051,913
Madison.....	1		130,540	40,000	400	75	39,525
Mahaska.....	1	1,235,480	109,800	86,140	6,300	16,250	63,590
Marion.....	1		282,640	62,800	300	36,700	24,800
Marshall.....	5	3,204,718	2,342,760	761,882	19,451	11,300	731,131
Mills.....	2	630,000	887,150	415,720	4,600		411,720
Mitchell.....	1		3000,000	1,000,000		100,000	900,000
Monona.....	14	30,295,643	783,684	1,480,744	158,482	43,185	1,249,067
Monroe.....	3	3,485,700	416,240	203,000	16,250	870	275,880
Montgomery.....	3	275,000	651,450	235,180	3,360	1,140	230,680
Muscatine.....	5	2,854,000	5,866,842	2,067,483	5,225	558,900	1,503,358
O'Brien.....	5	6,466,465	1,880,810	1,277,110	600	20,000	1,250,511
Osceola.....	3	2,566,465	1,064,810	365,610			365,610
Page.....							
Palo Alto.....	8	2,769,795	1,766,598	657,663	22,275	670	634,718
Plymouth.....	1		150,000	40,500	1,000	12,500	27,000
Pocahontas.....	8	4,977,185	1,222,802	650,469	30,735	4,346	615,383
Polk.....	6		2,963,230	1,150,299	13,235	1,790	1,144,274
Pottawattamie.....	7	13,815,880	684,785	766,010	138,690	30,900	597,330
Poweshiek.....	4	3,201,615	451,740	277,900	1,140	7,100	269,660
Ringgold.....	2		4,500,000	1,160,670	2,500	7,200	1,150,970
Sac.....							
Scott.....							
Shelby.....							
Sioux.....							
Story.....							
Tama.....							
Taylor.....							



TABLE NO. 4—CONTINUED.

Counties.	Number Reporting.	Pounds of milk received.	Pounds of cream received.	Pounds of Butter Made, and Market for Same.			
				Pounds of butter made.	Pounds sold to patrons.	Pounds sold in Iowa.	Pounds shipped out of the State.
Union.....	1		2,250,000	750,000		50,000	700,000
Van Buren.....							
Wapello.....	2	760,000	760,900	290,580	3,600	34,950	252,030
Warren.....	1	6,426,400	1,387,550	693,031	3,000	3,000	687,031
Washington.....							
Wayne.....							
Webster.....	2	255,110	969,090	314,280	770	17,300	295,210
Winnebago.....	9	20,720,295	745,357	1,141,955	90,773	12,969	1,038,273
Winnebiek.....	13		7,531,772	2,045,697	37,137	15,020	1,992,940
Woodbury.....	2		13,617,650	4,846,920	1,700	200,000	4,645,220
Worth.....	8	11,188,340	1,230,390	669,991	97,475	12,070	560,446
Wright.....	4		1,700,000	622,950	20,145	6,500	496,305
THE STATE.....	506	736,373,800	141,369,908	75,345,028	3,292,422	3,239,600	68,812,997

## DAIRY COMMISSIONER'S REPORT.

## RAILROAD BUTTER SHIPMENTS.

Through the kindness of the freight officials of the various railroads of the state, this office is able to give the following table, showing the number of pounds of butter shipped from each county in the state to points outside the state. The railroads report the gross weight, but the table given herewith shows the net weight, which is found by subtracting sixteen per cent of the gross weight.

COUNTIES SHIPPING MORE THAN 1,000,000 POUNDS, NET, OF BUTTER IN THE YEAR ENDING SEPTEMBER 30, 1905.

1905	Counties,	1904
8,073,201	Woodbury.....	5,878,214
5,827,811	Polk.....	3,271,425
3,149,763	Clayton.....	2,693,436
2,795,237	Bremer.....	2,109,607
2,561,853	Dubuque.....	2,276,778
2,474,109	Delaware.....	2,212,238
2,404,823	Lee.....	2,603,389
2,399,835	Page.....	605,417
2,365,684	Fayette.....	2,022,812
2,286,516	Jones.....	2,850,841
2,146,074	Chickasaw.....	1,022,804
1,954,725	Butler.....	1,579,732
1,929,405	Kossuth.....	1,556,977
1,924,932	Carroll.....	1,272,854
1,919,209	Winneshiek.....	1,622,869
1,823,524	Buchanan.....	1,810,479
1,784,298	Mitchell.....	1,180,633
1,695,892	Linn.....	1,366,290
1,681,811	Hardin.....	1,381,490
1,569,576	Sioux.....	1,008,287
1,543,515	Jackson.....	1,396,736
1,470,030	Hamilton.....	1,158,909
1,393,355	Cerro Gordo.....	820,550
1,338,071	Black Hawk.....	1,086,418
1,331,358	Adair.....	647,744
1,327,367	Audubon.....	899,438
1,301,753	Union.....	488,402
1,298,597	Allamakee.....	1,227,289
1,081,465	Palo Alto.....	1,033,902
1,070,783	Calhoun.....	1,016,375
1,049,955	Howard.....	1,007,961
1,008,893	Grundy.....	619,808
1,003,293	Buena Vista.....	843,702
1,004,439	Crawford.....	805,197
9,950,908	Totals.....	53,573,737

These 14 counties ship 73 per cent. of the 31,351,581 net pounds of butter shipped from State.



TABLE SHOWING TOTAL NET BUTTER SHIPMENTS OF THE STATE FOR THE YEARS 1890 TO 1905 INCLUSIVE, FROM IOWA TO POINTS OUTSIDE THE STATE; ALSO INCREASE OR DECREASE AS COMPARED WITH THE YEAR PRECEDING

Years Ending October 1.	Net pounds of butter shipped.	Increase over pre-ceeding year.	Decrease from pre-ceeding year.
1890	71,255,793		
1891	68,690,716		2,565,080
1892	60,112,931		8,577,785
1893	54,572,902		5,540,029
1894	54,569,417		63,485
1895	66,497,108	11,927,691	
1896	80,063,916	13,566,808	
1897	83,620,681	3,556,765	
1898	75,364,387		8,256,304
1899	76,620,525		744,011
1900	71,719,529		4,900,997
1901	74,883,995	3,164,466	
1902	72,714,584		2,169,411
1903	77,079,794	4,365,210	
1904	75,889,280		1,190,514
1905	91,051,551	15,162,271	

TABLE SHOWING NET POUNDS OF BUTTER SHIPPED OUT OF THE STATE, AS REPORTED BY THE RAILROADS.

Counties.	1904	1905	Increase	Decrease
The State	75,889,280	91,051,551	15,162,271	
Adair	647,744	1,331,358	683,614	
Adams	51,920	84,284		17,668
Allamakee	1,227,289	1,293,597	66,308	
Appanoose	59,807	837		59,450
Audubon	899,438	1,327,957	427,919	
Benton	422,953	457,983	35,030	
Black Hawk	1,086,418	1,338,071	251,653	
Boone	67,501	49,078		18,423
Bremer	2,149,607	2,705,237	655,630	
Buchanan	1,810,479	1,823,524	13,045	
Buena Vista	843,712	1,006,234	162,491	
Butler	1,579,782	1,954,728	374,946	
Calhoun	1,015,375	1,070,783	55,408	
Carroll	1,272,854	1,928,932	656,078	
Cass	72,695	261,247	188,552	
Cedar	874,984	284,171		110,818
Cerro Gordo	820,550	1,393,855	573,305	
Cherokee	181,671	270,089	88,418	
Chickasaw	1,922,904	2,146,074	223,770	
Clarke	9,118	20,756	11,638	
Clay	688,174	678,754		11,420
Clayton	2,693,436	3,149,768	456,332	
Clinton	904,858	655,448		249,405
Crawford	895,137	1,004,439	109,302	
Dallas	899,585	561,107	161,522	
Davis	84	1,024	940	
Decatur	98,075	84,048		14,027
Delaware	2,021,288	2,474,109	452,821	
Des Moines	286,716	824,177	537,461	
Dickinson	545,900	483,315		62,585
Dubuque	2,276,778	2,569,858	293,079	
Emmet	453,128	597,087	143,959	
Fayette	2,022,812	2,385,684	362,872	
Floyd	799,522	723,058		76,464
Franklin	451,735	783,909	332,174	
Fremont	152,498			152,498
Greene	157,657	69,571		94,086
Grundy	619,833	1,008,893	389,060	

TABLE SHOWING NET POUNDS OF BUTTER SHIPPED OUT OF THE STATE, AS REPORTED BY THE RAILROADS.

Counties	1904	1905	Increase	Decrease
Guthrie	840,372	97,488		742,884
Hamilton	1,158,909	1,470,030	311,121	
Hancock	461,899	772,070	310,171	
Hardin	1,381,490	1,681,311	300,821	
Harrison	283,589	39,606		243,993
Henry	53,579	13,009		40,570
Howard	1,007,981	1,049,955	41,974	
Humboldt	727,719	663,453		64,266
Ida	192,767	213,124	20,357	
Iowa	610,641	494,717		115,924
Jackson	1,399,736	1,543,515	143,779	
Jasper	231,000	131,523		99,477
Jefferson	98,103	155,454	57,351	
Johnson	271,771	37,044		234,727
Jones	2,850,641	2,286,316		564,325
Keokuk	118,508	103,278		15,230
Kossuth	1,556,977	1,929,405	372,428	
Lee	2,503,359	2,404,326		99,033
Linn	1,366,299	1,695,892	329,593	
Louis	17,794	17,163		631
Lucas	83,757	101,323	17,566	
Lyon	221,808	348,060	126,252	
Madison	21,584	3,318		18,266
Mahaska	97,255	79,722		17,533
Marion	85,079	212,720	127,641	
Marshall	532,231	465,589		66,642
Mills	8,221	4,801		1,580
Mitchell	1,180,693	1,784,298	603,605	
Monona	61,253	45,567		15,686
Monroe	32,654	47,635	15,019	
Montgomery	66,674	87,591	20,917	
Muscatine	52,914	32,328		20,586
O'Brien	703,279	638,891		64,388
Osceola	399,087	526,754	127,667	
Page	665,417	2,390,885	1,725,468	
Palo Alto	1,039,902	1,084,456	44,554	
Plymouth	489,740	490,197		29,640
Pocahontas	883,729	800,660		83,069
Polk	3,271,495	5,827,811	2,556,316	
Pottawattamie	296,811	541,130	244,319	
Poweshiek	850,174	857,812		492,962
Ringgold				
Sac	568,850	635,397	66,547	
Scott	237,412	235,682		21,760
Shelby	431,094	448,672	17,578	
Sioux	1,603,287	1,869,576	266,289	
Story	894,321	875,894		18,427
Tama	577,121	486,272		90,849
Taylor	823,222	978,588	155,366	
Union	488,402	1,301,753	813,351	
Van Buren	5,560	46,000	40,539	
Wapello	78,918	253,106	174,187	
Warren	218	1,108	890	
Washington	219,222	86,821		132,401
Wayne	808,990	933,923	124,933	
Webster	601,106	592,117		9,989
Winnebago	988,787	969,207		19,580
Winneshek	1,622,880	1,919,209	296,329	
Woodbury	5,878,214	8,078,201	2,199,987	
Worth	769,717	792,845	23,128	
Wright	868,000	582,230		285,770
The State	75,889,280	91,051,551	15,162,271	



# CREAMERY LIST.

In addition to the following 568 creameries and 87 skimming stations there are 1061 purchasing agents reported by 20 central creameries. It is evident that this report is not complete and it is estimated that there are 1250 to 1300 purchasing agents for cream in the State.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator or skimming station.	Method of re-
<b>ADAIR COUNTY</b>								
1	Adair.	Adair Co-op. Creamery Co.	Co-op.	M. L. McManus, Secy.	Adair.	C. E. McIntire.	S. & G. C.	Test
2	Arbor Hill.	Arbor Hill Co-op. Creamery Co.	Co-op.	C. C. Pease, Secy & Mgr.	Stuart.	R. J. Erb.	S. & G. C.	Test
3	Fontanelle.	Blue Grass Creamery Co.	Indiv.	A. L. Stewart & Co.	Fontanelle.	L. R. Stewart.	S. & G. C.	Test
4	Canby.	Blue Grass Creamery Co. (a).	Indiv.	A. L. Stewart & Co.	Fontanelle.	L. R. Stewart.	S. & G. C.	Test
5	Flask.	Blue Grass Creamery Co. (a).	Indiv.	A. L. Stewart & Co.	Fontanelle.	L. R. Stewart.	S. & G. C.	Test
6	Prussia.	Blue Grass Creamery Co. (a).	Indiv.	A. L. Stewart & Co.	Fontanelle.	L. R. Stewart.	S. & G. C.	Test
7	Greenfield.	Blue Grass Creamery Co. (a).	Indiv.	A. L. Stewart & Co.	Fontanelle.	L. R. Stewart.	S. & G. C.	Test
8	Greenfield.	Greenfield Creamery company	Stock.	Jas. F. Laude, Sec. & Mgr.	Greenfield.	F. L. Odell.	Separator	Test
9	Bradgate.	Blue Grass Creamery	Indiv.	A. L. Stewart & Co.	Fontanelle.	R. R. Brown.	S. & G. C.	Test
<b>ADAMS COUNTY</b>								
10	Mt. Etna.	Mt. Etna Farmers Mut. C. C.	Co-op.	A. C. Peterson, Sec.	Mt. Etna.	T. O. Abbott.	Separator	Test
11	Nevinville.	Farmers Mut. Co-op. C. Assn.	Co-op.	E. B. Steele, Sec.	Nevinville.	C. Sorenson.	Separator	Test
<b>ALLAMAKEE COUNTY</b>								
12	Dorchester.	Little Daisy Creamery	Indiv.	Ben W. Schulte, Prop.	Dorchester.	Ben W. Schulte.	G. Cream	Oil Test
13	Lansing.	Calhoun Creamery Co.	Co-op.	P. E. O'Donnell, Sec.	Church.	A. V. Ferris.	G. Cream	Oil Test
14	Postville.	Postville Farmers Co-op. C. C.	Co-op.	P. H. Weisell, Secy	Postville.	Jas. A. Gordon.	Hand Sep.	Oil Test
15	Waterville.	Farmers Co-op. Creamery Co.	Co-op.	Peter & Sorenson.	Waterville.	F. W. Hassel.	G. Cream	Oil Test
16	Waukon.	Ludlow Co-op. Creamery Co.	Co-op.	F. A. Sanderman, Sec.	Waukon.	W. P. Muth.	S. & G. C.	Test
17	Quandahl.	Arctic Spring Creamery	Indiv.	L. D. Johnson, Prop.	Quandahl.	Mikel Bakken.	G. Cream	Oil Test
18	Waukon.	Farmers Waukon Co-op. C. C.	Co-op.	A. L. Witte, Sec.	Waukon.	Jackson Smith.	O. Cream	Test
19	New Albion.	Farmers Creamery Co.	Co-op.	Mr. Thompson, Pres.	New Albion.	E. Rice.	S. & G. C.	Test
<b>AUDUBON COUNTY</b>								
20	Audubon.	Sharon Creamery Co.	Co-op.	Chris E. Moller, Sec.	Audubon R. No. 4.	M. Andersen.	Gath. Cr.	Test
21	Brayton.	Oakfield Twp. Sep. C. Co.	Co-op.	Hans Nyman, Sec.	Brayton.	J. P. Nielson.	Separator	Test
22	Exira.	Audubon Twp. Sep. C. Co.	Co-op.	P. Jensen, Sec.	Exira.	P. Jensen.	Separator	Test
23	Exira.	West Hamlin Sep. Creamery Co.	Co-op.	Peter Sorenson, Sec.	Exira.	Peter Sorenson.	Separator	Test
24	Exira.	Exira Creamery Co.	Co-op.	Chris C. Nelson, Sec.	Exira.	Chris C. Nelson.	S. & G. C.	Test
25	Hamlin.	Blue Grass Sep. Creamery Co.	Co-op.	C. V. Christensen, Sec.	Hamlin.	Fred Hellman.	S. & G. C.	Test
26	Kimballton.	Danish Sep. Creamery Co.	Co-op.	Peter Lukke, Sec.	Audubon R. No. 4.	Peter Thuesen.	Separator	Test
27	Ross.	Ross Creamery Co.	Co-op.	M. W. Stearns, Sec.	Audubon.	R. Jensen.	Hand Sep.	Test
28	Manning.	Liberty Creamery Co.	Co-op.	Geo. Nelson, Sec.	Irwin.	Oscar Jensen.	Gath. Cr.	Test
<b>BENTON COUNTY</b>								
29	Blairstown.	Blairstown Creamery	Indiv.	Charles Hanbold.	Blairstown.	Charles Hanbold.	Hand Sep.	Test
30	Vinton.	The Vinton Creamery	Indiv.	S. Bailey, Prop.	Vinton.	S. Bailey.	S. & G. C.	Test
31	Norway.	Norway Creamery	Indiv.	M. B. Hershey, Prop.	Norway.	M. B. Hershey.	Hand Sep.	Test
32	Van Horne.	Van Horne Creamery	Indiv.	H. O. Dauchy, Prop.	Van Horne.	H. O. Dauchy.	Hand Sep.	Test
33	Urbana.	Urbana Creamery Co.	Indiv.	James Romine, Prop.	Urbana.	James Romine.	S. & G. C.	Test
<b>BLACK HAWK COUNTY</b>								
34	LaPorte City.	LaPorte Creamery Co.	Co-op.	C. B. Gingrich, Sec.	LaPorte City.	M. E. Benson.	Gath. Cr.	Test
35	Waterloo.	Palmer-Hubbard C. Co.	Stock.	C. V. Rosenberger, Sec.	Independence.	E. Lamoree.	Hand Sep.	Test
36	Benson.	Benson Dairy Co.	Co-op.	W. Bozarth, Sec.	Cedar Falls R. 2.	Geo. W. Wardell.	Separator	Test
37	Craft Creek.	Craft Creek Creamery	Indiv.	Wm. Meier, Prop.	Denver, B. No. 1.	Wm. Meier.	Separator	Hund.
38	Dewar.	Great Western Creamery	Co-op.	Wm. Widdel, Sec.	Dewar.	John Tegmeyer.	Separator	Test
39	Dunkerton.	Farmers Creamery Co.	Co-op.	G. S. Kleckner, Sec.	Dunkerton.	O. G. Alexander.	Separator	Test
40	Eagle Center.	Eagle Center Dairy Assn.	Co-op.	D. G. Lichty, Sec.	Waterloo.	W. H. Chapman.	Separator	Test
41	Fairbank.	East Lester Creamery Co.	Co-op.	Ira Finch, Sec.	Fairbank.	C. E. Brant.	Separator	Test
42	Finchford.	Union Creamery Co.	Co-op.	C. A. George, Sec.	Winslow.	L. R. Moon.	Separator	Test
43	Hudson.	Hudson Co-op. Dairy Assn.	Co-op.	C. H. Brandhorst, Sec.	Hudson.	H. C. Koeneke.	Separator	Test
44	Janesville.	Mt. Vernon Creamery Co.	Co-op.	J. E. Rundles, Sec.	Janesville.	A. J. Frees.	S. & G. C.	Test
45	Jubilee.	Jubilee Co-op. Creamery Co.	Co-op.	F. J. Orth, Sec.	Raymond R. No. 1.	Byron Lenin.	Separator	Test
46	Voorhies.	Red Bird Creamery	Co-op.	E. Stevens, Sec.	Voorhies.	W. F. Hammel.	Separator	Test
47	Gilbertville.	Gilbertville Dairy Assn.	Co-op.	J. R. Kascht, Sec.	Gilbertville.	M. E. Envelsen.	Separator	Test
48	Waterloo.	Edwards Creamery	Indiv.	H. O. Moxford, Prop.	Waterloo.	H. O. Moxford.	Separator	Test
49	Waterloo.	Farmers Dairy Assn.	Co-op.	U. S. Blough, Sec.	Waterloo R. No. 2.	R. W. Chadwick.	Separator	Test
50	Cedar Falls.	Black Hawk Creamery	Co-op.	J. Marston, Sec.	Cedar Falls.	A. K. Smith.	S. & G. C.	Test
<b>BOONE COUNTY</b>								
51	Boone.	Dodge Farmers Co-op. Cr. Co.	Co-op.	Jacob Richert, Sec.	Boone R. No. 5.	Ang. Druweher.	Separator	Test
52	Rosendale.	Rosendale Co-op. Creamery Co.	Co-op.	M. P. Peterson, Sec.	Story City.	L. C. Peterson.	Separator	Test



## CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How Operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator or other machinery used in creaming.	Method of receiving milk.
<b>BREMER COUNTY—</b>								
54	Bremer	Bremer Creamery Co.	Co-op.	H. L. Kelley, Sec.	Waverly R. No. 6	Wm. Kallenbach	Separator	Test
55	Bremer	Western Douglas Cr. Co.	Co-op.	Ang. Roppenworth, Sec.	Tripp R. No. 1	C. H. Wedemeyer	Separator	Test
56	Buck Creek	Little Valley Creamery Co.	Co-op.	A. K. Judisch, Sec.	Buck Creek	Fred Willis	Separator	Test
57	Denver	Farlington Creamery Co.	Co-op.	F. Garton, Sec.	Cedar Falls	C. Woodworth	Separator	Test
58	Denver	First Marshall Creamery Co.	Co-op.	J. M. Milus, Sec.	Denver	John Wedemeyer	Separator	Test
59	Frederika	Frederika Creamery Assn.	Co-op.	J. H. McDonald, Sec.	Frederika	Cecil E. Carr	Separator	Test
60	Headlyn	Klinger Creamery	Indiv.	C. H. Rohrsen, Prop.	Klinger	C. H. Rohrsen	Separator	Test
61	Headlyn	Marshall Creamery Co.	Co-op.	J. Strotman, Sec.	Headlyn	F. H. Wehling	Separator	Test
62	Sumner	Climate Creamery Co.	Co-op.	Henry Specht, Sec.	Sumner R. No. 6	Henry Behrens	Separator	Test
63	Sumner	Excelsior Creamery Co.	Co-op.	H. E. Wutke, Sec.	Sumner R. No. 4	C. L. Mills	Separator	Test
64	Sumner	Sumner Creamery Co.	Co-op.	John Dawson, Sec.	Sumner	F. M. Zell	Separator	Test
65	Tripp	Freemont Creamery Co.	Co-op.	d. F. Brown, Sec.	Tripp R. No. 2	Henry Banker	Separator	Test
66	Tripp	Potters-Biding Creamery Co.	Co-op.	H. Willbrandt, Sec.	Tripp R. No. 2	Wm. Ambros	Separator	Hand.
67	Tripp	Tripp Creamery Co.	Co-op.	C. Jahnke, Sec.	Tripp	F. C. Ottogge	Separator	Test
68	Denver	Artisan Creamery Co.	Co-op.	H. Graening, Sec.	Headlyn	E. H. Homan	Separator	Test
69	Waverly	LaFayette Creamery Co.	Co-op.	Emil Walther, Sec.	Waverly R. No. 1	Henry Piegors	Separator	Test
70	Waverly	Washington Creamery	Co-op.	S. M. Lehman, Sec.	Waverly R. No. 2	D. A. Sotterman	Separator	Test
71	Tripp	Siegel Creamery Co.	Co-op.	H. J. Joens, Sec.	Tripp R. No. 1	Wm. Lenias	Separator	Test
72	Fairbanks	Grove Hill Creamery	Co-op.	Frank Kane, Sec.	Fairbank	Frank Daniels	Separator	Test
73	Sumner	Spring Fountain Cr. Co.	Co-op.	Joe Valser, Sec.	Sumner	Fred Sommer	Separator	Hand.
74	Headlyn	Headlyn Creamery Co.	Stock	Rudolph Tiedt, Sec.	Headlyn R. No. 1	Fred Sommer	Separator	Test
<b>BUCHANAN COUNTY—</b>								
75	Aurora	Aurora Creamery	Indiv.	Geo. L. Weeks, Sec. & Prop.	Aurora	C. R. Fichtelner	Separator	Test
76	Brandon	Brandon Creamery	Indiv.	Wm. Evans, Prop.	Brandon	Wm. Evans	Gath. Cr.	Test
<b>BUENA VISTA COUNTY—</b>								
77	Fairbank	Fairbank Farmers Creamery	Co-op.	Jesse Lyon, Sec.	Fairbank	H. Opperman	Separator	Test
78	Hazleton	Hazleton Farmers Creamery Co.	Co-op.	L. Gastenberger, Sec.	Hazleton	E. M. Vargason	S. & G. C.	Test
79	Independence	Palmer-Hubbard Co. (8)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Cr.	Test	Test
80	Jowup	Palmer-Hubbard Co. (9)	Stock	G. V. Rosenberger, Sec.	Independence	Gath. Cr.	Test	Test
81	Lamont	Jowup Creamery Co.	Co-op.	C. L. Bright, Secretary	Jowup	E. A. Howey	S. & G. C.	Test
82	Otterville	Lamont Creamery Co.	Co-op.	J. D. Thompson, Secretary	Lamont	F. W. Stephenson	Separator	Test
83	Stanley	Otterville Creamery Co.	Co-op.	Geo. M. Vincent, Secretary	Otterville	I. S. Hutton	S. & G. C.	Test
84	Stanley	Stanley Creamery	Indiv.	Geo. L. Weeks	Aurora	Arthur Strong	S. & G. C.	Test
85	Winthrop	Palmer-Hubbard Co.	Stock	O. V. Rosenberger, Sec.	Independence	W. H. Plank	Gath. Cr.	Test
86	Quasqueton	Palmer-Hubbard Co. (8)	Stock	H. Brokaw	Independence	Gath. Cr.	Test	Test
87	Middlefield	Palmer-Hubbard Co. (9)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Cr.	Test	Test
88	Newtonville	Palmer-Hubbard Co. (8)	Stock	C. V. Rosenberger, Sec.	Independence	Gath. Cr.	Test	Test
89	Doris	Spring Grove Creamery	Indiv.	A. Campbell, Proprietor	Independence	J. Christiansen	Hand Sep.	Test
<b>BUENA VISTA COUNTY—</b>								
90	Albert City	Fairfield Creamery Co.	Co-op.	O. P. Patterson	Albert City	W. H. Anderson	Hand Sep.	Test
91	Newell	Donn River Co-op. Cr. Co.	Co-op.	E. P. Krause, Secretary	Newell	T. M. Borglum	S. & G. C.	Test
92	Newell	The Newell Creamery Co.	Stock	G. F. Allard, Secretary	Newell	G. F. Allard	Hand Sep.	Test
93	Storm Lake	Grant Creamery Co.	Co-op.	Geo. W. Cole, Secretary	Storm Lake R. No.	Carl Werler	Hand Sep.	Test
94	Alta	Farmers Co-op. Creamery	Co-op.	G. P. Cornelissen	Alta	H. M. Crocker	Gath. Cr.	Test
<b>BUTLER COUNTY—</b>								
95	Aplington	Aplington Co-op. Creamery Co.	Co-op.	R. Meyer, Secretary	Aplington	Chas. Wisbar	Separator	Test
96	Austinville	White Rose Creamery	Indiv.	Sam Patterson	Austinville	Sam Patterson	Separator	Test
97	Allison	Allison Creamery	Indiv.	W. H. Codner, Proprietor	Allison	W. H. Codner	Separator	Test
98	Greene	Cold Water Co-op. Dairy Assn.	Co-op.	James W. Williams, Sec.	Clarksville	Jacob Jacobson	Separator	Test
99	Clarksville	Clarkville Creamery	Stock	H. Brokaw	Clarksville	W. S. Berckow	Separator	Test
100	Dumont	Dumont Creamery	Indiv.	G. H. Gurley, Proprietor	DeKalb, Ill.	G. A. Loomis	S. & G. C.	Test
101	Aplington	Monroe Central Creamery Co.	Stock	Claus Primes, Secretary	Aplington	W. Gilbert	Separator	Test
102	Kesley	Kesley Creamery	Indiv.	Hugh Patterson, Proprietor	Kesley	H. Patterson	Separator	Test
103	New Hartford	Grosvenor Creamery Co.	Co-op.	W. F. Graham, Secretary	New Hartford	W. F. Graham	Separator	Test
104	New Hartford	Beaver Creamery Co.	Co-op.	W. D. Ceperley, Secretary	New Hartford	Peter Larson	Separator	Test
105	Parkersburg	Parkersburg Creamery Co.	Stock	W. S. Mead, Mgr.	Parkersburg	M. W. Ashby	S. & G. C.	Test
106	Minclair	Clarkville Creamery	Stock	W. S. Williams, Sec.	Clarksville	W. S. Williams	S. & G. C.	Test
107	Shell Rock	Shell Rock Creamery Assn.	Stock	M. J. Johnson, Manager	Shell Rock	M. J. Johnson	S. & G. C.	Test
108	Shell Rock	Columbia Creamery	Indiv.	Hall & Olson	Shell Rock	A. Olesen	S. & G. C.	Test
109	Shell Rock	Victory Creamery	Co-op.	A. B. Shadbolt, Secretary	Waverly	A. B. Shadbolt	Hand Sep.	Test
110	Greene	Walton Creamery	Indiv.	A. B. Walker, Proprietor	Shell Rock	A. B. Walker	Separator	Test
111	New Hartford	Northern West Point Crm. Co.	Co-op.	Herman Debus, Secretary	Greene	Separator	Test	Test
112	New Hartford	Albion Creamery Co.	Co-op.	O. F. Courbat, Secretary	New Hartford	O. F. Courbat	Separator	Test
113	Aplington	Rock Grove Creamery Co. (8)	Co-op.	O. Nichols, Secretary	Aplington	Separator	Test	Test
114	Greene	Green Creamery Co.	Co-op.	James W. Williams, Sec.	Greene	S. & G. C.	Test	Test
115	Bristow	Bristow Creamery	Indiv.	James P. Johnson	Bristow	S. & G. C.	Test	Test
<b>CALHOUN COUNTY—</b>								
116	Lytton	Blue Grass Creamery	Indiv.	I. Hillmann, Proprietor	Lytton	Geo. Hillman	Hand Sep.	Test
117	Lake City	Farmers Co-op. Mut. Crm. Co.	Co-op.	C. W. Jewell, Secretary	Lake City	Carl Lissner	Gath. Cr.	Test



CREAMERY LIST—CONTINUED.

Office record number	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker	Separator or gathered cream	Method of receiving milk.
116	Lytton	Williams Co-op Creamery Co.	Co-op.	Henry Krukenberg, Sec.	Fonda	Charley Grant	Separator	Test
117	Manson	Manson Creamery	Indiv.	G. B. Moon, Proprietor	Manson	Charles Moon	S. & G. C.	Test
118	Pomeroy	Pomeroy Creamery	Indiv.	J. E. Lauriasen, Proprietor	Pomeroy	J. E. Lauriasen	S. & G. C.	Test
119	Rockwell City	Andrew Wood Creamery Co.	Stock	L. H. Allen, Secretary	Rockwell City	Henry Helfranc.	Gath. Cr.	Test
CARROL COUNTY—								
120	Arcadia	Golden Star Creamery Co.	Stock	C. Wiebers, Secretary	Arcadia	S. J. Jans	Separator	Test
121	Breda	Viola Mut. Creamery Assn.	Co-op.	Paul Luckow, Secretary	Breda	Joe Koepping	Separator	Test
122	Coon Rapids	Coon Rapids Creamery	Indiv.	H. L. Fest, Proprietor	Coon Rapids	F. F. Lockwood	Hand sep.	Test
123	Lanesboro	Lanesboro Creamery	Indiv.	J. A. Stamen, Proprietor	Carroll	Jno. Stamen	Hand sep.	Test
124	Mt. Carmel	Mt. Carmel Mut. Creamery Co.	Co-op.	M. J. Berger, Secretary	Carroll R. No. 2	E. H. Fleskes	Separator	Test
125	Roselle	Rose Valley Creamery	Indiv.	C. Kohorst, Proprietor	Carroll	C. Kohorst	S. & G. C.	Test
126	Templeton	Templeton Creamery Co.	Co-op.	Geo. Bieri	Templeton	Aug. Thielke	S. & G. C.	Test
127	Manning	Fairmount Creamery Co.	Co-op.	J. H. Rushton, Proprietor	Fairmont, Neb.	O. P. Yant	Hand sep.	Test
128	Breda	Hanford Produce Co. (s)	Stock	Hanford Produce Co.	Sioux City		Gath. Cr.	Test
CASS COUNTY—								
129	Cumberland	Farmers Mut. Co-op Cr'mery Co.	Co-op.	P. Pettinger, Secretary	Cumberland	Albert Heyn	Hand sep.	Test
130	Lyman	Lyman Creamery	Indiv.	Wm. Wohlenhaus, Prop.	Griswold	Wm. Wohlenhaus	S. & G. C.	Test
CEDAR COUNTY—								
131	Bennett	Golden Star Creamery	Indiv.	W. H. Kroeger, Proprietor	Bennett	W. H. Kroeger	Separator	Test
132	Clarence	Union Creamery	Indiv.	E. Huxoll	Lowden	E. Huxoll	S. & G. C.	Test
133	Lowden	Union Creamery (s)	Indiv.	E. Huxoll	Lowden	S. & G. C.	S. & G. C.	Test
134	Lowden	Home Creamery	Indiv.	G. F. Reinking	Lowden	Geo. Reinking	Gath. Cr.	Test
135	West Branch	West Branch Creamery	Indiv.	Eves & Elliott, Props.	West Branch	Lewis Elliott	S. & G. C.	Test
CERRO GORDO COUNTY—								
136	Mason City	J. D. Bickle Produce Co.	Stock	M. V. Bickel, Secretary	Mason City	A. M. Frandsen	Hand sep.	Test
137	Plymouth	Plymouth Creamery Co.	Stock	J. A. Molsberry, Secretary	Plymouth	Roy D. Sweet	Separator	Test
138	Portland	Portland Creamery	Indiv.	C. E. Sweet	Portland	C. E. Sweet	Gath. Cr.	Test
139	Thornton	Sunny Side Creamery	Indiv.	J. O. Mortensen, Proprietor	Thornton	J. C. Mortensen	Gath. Cr.	Test
CHEROKEE COUNTY—								
140	Meservey	Meservey Creamery	Indiv.	M. J. Kerman, Proprietor	Meservey	M. J. Kernan	Gath. Cr.	Test
141	Mason City	E. B. Higley Co.	Stock	Howard D. Reynolds, V. P.	Mason City	C. H. Cleveland	Gath. Cr.	Test
CHICKASAW COUNTY—								
142	Aurelia	Aurelia Creamery	Stock	A. W. C. Todson, Secretary		Alex. McAdam	Hand sep.	Test
143	Marcus	White Rose Creamery	Indiv.	C. E. Austin	Marcus	E. F. Julian	S. & G. C.	Test
144	Cherokee	Cherokee Creamery	Indiv.	Younger Bros.	Cherokee	Thomas Devlin	Hand Sep.	Test
145	Washta	Washta Creamery	Indiv.	James Robertson, Jr.	Washta	Otto Bucher	Hand Sep.	Test
CLAY COUNTY—								
146	Boyd	Boyd Farmers Creamery	Co-op.	J. De Bettignes, Secretary	New Hampton rfd No. 2	Ed Capper	Separator	Test
147	Alta Vista	Alta Vista Farmers Crm. Assn.	Co-op.	J. Westenberger, Secretary	Alta Vista	R. J. White	Separator	Test
148	Devon	Devon Farmers Creamery Assn.	Co-op.	Ed. Capper, Secretary	Devon	Harry Forester	Separator	Test
149	Alta Vista	Deerfield Creamery	Co-op.	J. W. Kane, Secretary	Alta Vista	Jake Eckstein	Separator	Test
150	Fredericksburg	Fredericksburg Butter Factory	Co-op.	C. L. Whitcomb, Secretary	Fredericksburg rfd No. 1	John Finnegan	Separator	Test
151	Ionia	Ionia Farmers Creamery Assn.	Co-op.	H. B. Young, Secretary	Ionia	Fred Zigler	Separator	oil test
152	Jerico	Jerico Creamery Assn.	Co-op.	L. R. Williamson, Sec.	Jerico	H. Nickelson	Gath. Cr.	Test
153	Lawler	Lawler Creamery Assn.	Co-op.	M. J. Connors, Secretary	Lawler	Geo. G. Kolthoff	Separator	Test
154	Little Turkey	Little Turkey Creamery Co.	Stock	H. R. Carpenter, Secretary	Elkader		Separator	Test
155	New Hampton	New Hampton Creamery	Indiv.	James L. Humphrey, Jr.	New Bedford, Mass.	J. W. Cagley	Gath. Cr.	Test
156	New Hampton	New Hampton Creamery (s)	Indiv.	James L. Humphrey, Jr.	New Bedford, Mass.	Chas. Herren	S. & G. C.	Test
157	Fredericksburg	New Hampton Creamery (s)	Indiv.	James L. Humphrey, Jr.	New Bedford, Mass.	Robert Maillie	S. & G. C.	oil test
158	Nashua	Farmers Co-op. Creamery Assn.	Co-op.	S. W. Blinn, Secretary	Nashua		Gath. Cr.	Test
159	Nashua	Nashua Creamery	Indiv.	Chas. Gurlier & Co.	DeKalb, Ill.		Gath. Cr.	Test
160	Nth. Washington	Nth. Washington Crm. Co.	Co-op.	Frank N. Gindorff, Sec.	North Washington		Gath. Cr.	Test
161	Devon	Nth. Washington Crm. Co. (s)	Co-op.	Frank N. Gindorff, Sec.	North Washington		Separator	Test
162	Deerfield	Nth. Washington Crm. Co. (s)	Co-op.	Frank N. Gindorff, Sec.	North Washington		Separator	Test
163	Ionia	Nth. Washington Crm. Co. (s)	Co-op.	Frank N. Gindorff, Sec.	North Washington		Separator	Test
164	Saunder	Saunder Co-op. Creamery Assn.	Co-op.	Wm. Sanderson, Secretary	Lawler, rfd No. 2	G. F. Langquisit	Separator	Test
165	Williamstown	Williamstown Creamery Assn.	Co-op.	H. S. Kerksen, Secretary	Fredericksburg rfd No. 4	S. Binns	Separator	Test
CLAYTON COUNTY—								
166	Dickens	Farmers Co-op. Creamery Co.	Co-op.	Wm. McCurdy, Sec. & Mgr.	Dickens	A. W. Snyder	Separator	oil test
167	Fostoria	Fostoria Creamery Co.	Stock	Frank Riley, Secretary	Fostoria	Frank Riley	S. & G. C.	Test
168	Royal	Royal Creamery Co.	Indiv.	McKay & Sonke, Props.	Ames	E. R. Mitchell	Hand sep.	Test
169	Langdon	Farmers Co-op Creamery Co.	Co-op.	H. R. Beck, Proprietor	Langdon, Box 22	A. B. Olson	Separator	Test
170	Spencer	The Spencer Creamery	Indiv.	J. W. Cory, Proprietor	Spencer	F. L. Repka	S. & G. C.	Test
171	Webb	Webb Creamery	Indiv.	J. A. Reid, Proprietor	Webb	J. A. Reid	Hand sep.	Test
CLAYTON COUNTY								
173	Elkader	Elkader Creamery Co.	Stock	H. R. Carpenter, Secretary	Elkader	H. M. Clough	Gath. Cr.	Test
174	Edgewood	Fidelity Creamery	Indiv.	H. F. Beyer, Proprietor	Edgewood	Ed. J. Whipple	S. & G. C.	Test
175	Elkport	Elkport Creamery	Indiv.	H. F. Beyer, Proprietor	Edgewood	David Smith	Hand sep.	Test
175	Farmersburg	Farmersburg Co-op Creamery	Co-op.	Jno. Jonson	Farmersburg	I. D. Hendershoot	Hand sep.	Test



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
176	Garnaville	Garnaville Farmers Co-op Creamery Co.	Co-op	H. H. Huhlman Secretary.	Garnaville	O. H. Schumacher	Gath. Cr.	Test
177	Luana	Luana Farmers Co-op Crm. Co.	Indiv.	James Humphrey Secretary	Luana	Jas. A. Barker	Gath. Cr.	Test
178	Littleport	Littleport Creamery	Indiv.	H. F. Beyer, Proprietor	Edgewood	Dan Whipple	Separator	Test
179	Communia	Meyer Kling Creamery	Indiv.	J. W. Meyer, Proprietor	Elkport R. No. 1	Peter Killing	S. & G. C.	Test
180	Monona	Monona Creamery Co.	Stock	H. R. Carpenter Secretary	Elkader	G. M. Miller	Hand Sep.	Test
181	Osterdock	Osterdock Creamery Co.	Stock	H. R. Carpenter Secretary	Elkader	A. H. Peacock	Gath. Cr.	Test
182	McGregor	J. D. Bickel Produce Co.	Stock	J. D. Bickel, Manager	McGregor	Geo. Heffron	Gath. Cr.	Test
183	St. Olaf	St. Olaf Co-op. Creamery Co.	Co-op	G. R. Engelhardt, Sec.	St. Olaf R. No. 7	J. B. Frisbie	Gath. Cr.	Test
184	Strawberry Point	Strawberry Point Farm. Crm Co.	Co-op	O. C. Gladwin, Secretary	Strawberry Point	H. J. Evans	Separator	Test
185	Volga City	Pride of the West	Co-op	Barney Olinger, Secretary	Volga City	Watson Shiek	S. & G. C.	Test
186	Watson	Blue Grass Creamery	Co-op	John Geraghty, Secretary	McGregor R. No. 1	F. A. Fict.	Hand Sep.	Test
CLINTON COUNTY—								
187	Delmar Junction	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	W. Gossman	S. & G. C.	Test
188	Elwood	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	F. W. Leinbaugh	S. & G. C.	Test
189	Petersville	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	Carl Euremius	S. & G. C.	Test
190	Teesds Grove	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	A. Anrep	S. & G. C.	Test
191	Wetlon	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	C. B. Berst	S. & G. C.	Test
192	Wheatland	Farmers Co-op. Creamery Co.	Co-op	Emil Lehmann, Secretary	Wheatland	A. E. Banta	Separator	Test
193	Toronto	Farmers Co-op. Creamery Co.	Co-op	Edward Hart, Secretary	Toronto	Wilfred L. Sloan	Separator	Test
194	Lost Nation	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Manager	Monticello	S. & G. C.	S. & G. C.	Test
195	South Grove	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Manager	Monticello	S. & G. C.	S. & G. C.	Test
196	Smithtown	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Manager	Monticello	S. & G. C.	S. & G. C.	Test
197	Browns	Springbrook Creamery (s)	Indiv.	John Newman Co.	Elgin, Ill.	S. & G. C.	S. & G. C.	Test
CRAWFORD COUNTY—								
198	Denison	Fairmont Creamery Co.	Stock	The Fairmont Crm Co Prop.	Fairmont, Neb.	A. F. Durkee	Hand Sep.	Test
DALLAS COUNTY—								
199	Dexter	Farmers Co-op Creamery Assn.	Co-op	James L. Keachie Sec	Dexter	James L. Keachie	S. & G. C.	Test
200	Perry	J. Moody & Sons	Indiv.	J. Moody & Sons	Perry	Olaus Sorensen	S. & G. C.	Test
201	Woodward	Woodward Creamery	Indiv.	H. P. Calonkey, Prop.	Woodward	A. B. Calonkey	S. & G. C.	Test
	Redfield	Smith Produce Co.	Stock	A. E. Smith, Manager	Redfield	S. & G. C.	S. & G. C.	Test
	Blough	Iowa Dairy Co. (s)	Stock	W. H. Hall, Manager	Yale	S. & G. C.	S. & G. C.	Test
DAVIS COUNTY—								
204	Bloomfield	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa	Gath. Cr.	Gath. Cr.	Test
205	Pulaski	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa	Gath. Cr.	Gath. Cr.	Test
206	Drakeville	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa	Gath. Cr.	Gath. Cr.	Test
207	West Grove	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec	Ottumwa	Gath. Cr.	Gath. Cr.	Test
DECATUR COUNTY—								
208	Leroy	Old Colony Creamery (s)	Indiv.	J. L. Humphrey, Jr. Prop.	Humeston	S. & G. C.	S. & G. C.	Test
209	Van Wert	Old Colony Creamery (s)	Indiv.	J. L. Humphrey, Jr. Prop.	Humeston	S. & G. C.	S. & G. C.	Test
210	Lamoni	Old Colony Creamery (s)	Indiv.	J. L. Humphrey, Jr. Prop.	Humeston	S. & G. C.	S. & G. C.	Test
211	Pleasanton	Old Colony Creamery (s)	Indiv.	J. L. Humphrey, Jr. Prop.	Humeston	S. & G. C.	S. & G. C.	Test
212	Leon	Leon Creamery	Indiv.	A. McCartney, & Co.	Leon	A. McCartney	Hand sep.	Test
DELAWARE COUNTY—								
213	Delaware	Central Creamery Co.	Co-op	J. H. White, Sec	Hopkinton R. 22	Anton Neuhaus	Separator	Test
214	Greeley	Greeley Farmers Co-op. Cr. Co.	Co-op	J. C. Mathews	Greeley	W. R. Crabb	Separator	Test
215	Colesburg	Colesburg Creamery Co.	Co-op	Robert A. Gull, Sec	Colesburg	A. L. Landis	S. & G. C.	Test
216	Manchester	Barryville Co-op. Cr. Co.	Co-op	John Duggan Sec	Ryan	E. E. Mittlestadt	Separator	Test
217	Hopkinton	Hopkinton Co-op. Cr. Co.	Co-op	M. L. McGlade, Sec	Hopkinton	John Stevenson	Separator	Test
218	Petersburg	Bear Grove Co-op. Cr. Co.	Co-op	F. H. Klostermann, Sec	Dyersville, R. 22	John B. Domayer	Separator	Test
219	Delaware	Delaware Creamery Co.	Co-op	Johann Yelden, Sec	Delaware	G. O. Miller	Separator	Test
220	Earlville	Earlville Creamery	Indiv.	J. M. Dunn, Prop.	Earlville	Glenn B. Dunn	S. & G. C.	Test
221	Earlville	Gilt Edge Creamery	Indiv.	J. M. Dunn, Prop.	Earlville	J. E. McCaffrey	S. & G. C.	Test
222	Manchester	Manchester Co-op. Cr. Co.	Co-op	James Bishop, Sec	Manchester	C. D. Elder	Separator	Test
223	Manchester	Dairy City Creamery Co.	Indiv.	Morse & Andrews, Props	Manchester	W. K. Pollard	Hand sep.	Test
224	Masonville	Masonville Co-op. Cr. Co.	Co-op	F. S. Harris, Sec	Masonville	John F. Dawson	Separator	Test
225	Almoral	The Almoral Creamery Co.	Stock	F. L. Carpenter, Sec	Almoral	W. C. Dubbs	S. & G. C.	Test
226	Delhi	Silver Spring Creamery Co.	Stock	E. B. Porter, Sec	Delhi	A. H. Bantz	Separator	Test
227	Petersburg	Petersburg Creamery Co.	Co-op	H. H. Scherbring, Sec	Petersburg	Nick Budden	Separator	Test
228	Manchester	Spring Branch Co-op. Cr. Co.	Co-op	W. J. Davis, Sec	Delaware	H. Everts	Separator	Test
229	Thorpe	Farmers Co-op. Cr. Co.	Co-op	M. E. Blair, Sec	Manchester	G. Stunse	Separator	Test
230	Sand Spring	Sand Spring Creamery Co.	Co-op	F. S. Bowen, Sec	Hopkinton	L. A. Pollard	Separator	Test
231	Ryan	Palmer-Hubbard Co.	Stock	C. V. Rosenberger, Sec	Independence	Geo. Emry	S. & G. C.	Test
232	Ryan	Hazel Green Creamery Co.	Stock	W. F. McBride, Sec	Hopkinton	Charles Rohde	Separator	Test
233	Broadway	Palmer-Hubbard Co. (s)	Stock	C. V. Rosenberger, Sec	Independence	Geo. E. Packer	S. & G. C.	Test
234	Ryan	Silver Creek Creamery	Indiv.	Geo. E. Packer, Prop.	Ryan	Geo. E. Packer	S. & G. C.	Test
235	Onelda	Onelda Creamery	Indiv.	F. M. Burbridge, Prop.	Onelda	T. Dickson	Hand sep	Test
236	Dundee	Farmers Co-op. Creamery Co.	Co-op	E. C. Hansen, Sec	Dundee	F. W. Stephenson	Separator	Test
237	Ehler	Ehler Creamery	Indiv.	Nathan Patton, Prop.	Ehler	Lester Pierce	S. & G. C.	Test
DICKINSON COUNTY—								
238	Lake Park	Lake Park Far. Co-op. Crm. Co.	Co-op	J. G. Chrysler, Sec	Lake Park	E. E. Starr	S. & G. C.	Test
239	Milford	Milford Farmers B. & C. Assn.	Co-op	H. H. Shipman, Sec and Mgr	Milford	J. O. Miller	S. & G. C.	Test
240	Spirit Lake	Farmers Co-op. Creamery Assn.	Co-op	A. F. Bergman, Sec	Spirit Lake	Geo. Williams	Hand sep.	Test



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
241	Terrill	Farmers Co-op. Creamery Co.	Co-op.	T. H. Tredten, Sec.	Terrill	Roy A. Burt	S. & G. C.	Test
242	Superior	Superior Creamery Co.	Co-op.	Guy W. Small Sec.	Superior	Mr. Wolfe	Hand sep.	Test
<b>DUBUQUE COUNTY</b>								
248	Balltown	Balltown Co-op Creamery Co.	Co-op.	C. D. Harrington, Secretary	Specht's Ferry R 9	Henry Koehler	S. & G. C.	Test
249	Cascade	Spring Valley Creamery Co.	Co-op.	J. N. Kremer, Secretary	Cascade	Wm. Thompson	Separator	Test
250	Cascade	Cascade Creamery Co.	Co-op.	P. J. Conlin, Secretary	Cascade	C. T. Elliott	Separator	Test
251	Farley	Hickory Valley Creamery Co.	Stock	John Ramm, Secretary	Farley R 17	Frank Ruby	Separator	Test
252	Dyersville	Farmers Golden Star Crm. Co.	Co-op.	J. H. Prier, Secretary	Dyersville R 19	J. B. Feldman	S. & G. C.	Test
253	Dubuque	Dubuque Butter and Milk Co.	Stock	H. H. Hopkins, President	Dubuque	L. H. Flagle	Hand sep.	Test
254	Fillmore	Fillmore Co-op Creamery Co.	Co-op.	Wm. Craft, Secretary	Cascade R 28	John G. Stemmer	Separator	Test
255	Farley	John's Creek Creamery	Indiv.	A. K. Heald & Son, Props.	Farley	John Hogan	Separator	Test
256	Farley	Farley Creamery Co.	Stock	G. W. Cropp, Sec. & Mgr.	Farley	Thos. Landis	S. & G. C.	Test
257	O'Neill	Oak Grove Creamery	Indiv.	Jonathan Paisley, Proprietor	Waupeton	J. W. Farni	S. & G. C.	Test
258	Luxemburg	Globe Creamery Co.	Stock	Joe Friedman, Secretary	N. Buena Vista R 2	Anton Smith	Separator	Test
259	New Vienna	New Vienna Central Crm. Co.	Stock	Henry Fangmann, Secretary	New Vienna R 14	George Landis	Separator	Hund
260	Rickardsville	Farm Creamery Co.	Stock	Jno Fisher, Secretary	Vurango R 35	Peter N. Schmitt	Separator	Test
261	Sherrill	Riverside Creamery Co.	Co-op.	Nic Semmert, Secretary	Dubuque R 1	Nic Semmert	Separator	Test
262	Sherrill	Sherrill Creamery Company	Co-op.	J. C. Boleyn, Secretary	Specht's Ferry R 1	J. Stillmunkes	Separator	Test
263	Worthington	Worthington Creamery	Indiv.	C. Baehler, Proprietor	Worthington	C. Baehler	S. & G. C.	Test
264	Zwingle	Ladd's Creamery	Indiv.	F. G. Ladd, Proprietor	Zwingle	F. T. Thiel	Hand sep.	Test
265	Holy Cross	Holy Cross Creamery Company	Co-op.	Leo Sweeney, Secretary	N. Buena Vista R 1	John P. Crippes	Separator	Test
266	Dubuque	Ellis Bluff Creamery	Indiv.	S. P. Wadley & Son	Dubuque	A. O. Walker	Hand sep.	Test
267	Dubuque	Columbia Creamery	Indiv.	George Warner, Proprietor	Dubuque R. 4	Geo. Werner	S. & G. C.	Test
268	Dubuque	Dubuque Butter & Milk Co.	Stock	H. H. Hopkins, Manager	Oregon, Ill.	O. Howard	Hand sep.	Test
269	Rickardsville	Doetscher Creamery	Indiv.	John Loetscher, Proprietor	Waupeton R 31	John Loetscher	Hand sep.	Test
270	Bernard	Bernard Creamery	Indiv.	M. R. Cross	Bernard	M. R. Cross	S. & G. C.	Test
271	Dubuque	Iowa Dairy Company	Stock	A. M. onzett, Sec. & Treas.	Dubuque	G. L. Coyle	Hand sep	Test
<b>EMMET COUNTY</b>								
272	Armstrong	Farmers Co-op. Creamery Co.	Co-op.	Peter H. Burt, Secretary	Armstrong	Henry Chronholm	S. & G. C.	Test.
273	Estherville	Estherville Creamery Co.	Stock	J. Cronholm, Manager	Estherville	H. W. Sidles	Hand Sep.	Test.
274	Halfa	The Farmers Creamery Co.	Co-op.	P. A. Gaarde, Secretary	Halfa R. F. D. 1	Adolph Weiss	S. & G. C.	Test.
275	Huntington	Huntington Co-op. Creamery Co.	Co-op.	Geo. A. Ports, Secretary	Huntington	Geo. Graham	S. & G. C.	Test.
276	Hoprig	Hoprig Fm's Co-op. Cream'y Co.	Co-op.	John A. Bosold, Secretary	Grettinger R. 2	Julius Jensen	S. & G. C.	Test.
277	Ringstead	Denmark Creamery Co.	Co-op.	H. J. Fink, Secretary	Armstrong	S. & G. C.	Test.	
278	Ringstead	Forsythe Creamery Co.	Co-op.	H. A. Gaarde, Secretary	Armstrong	Ed. Kressin	Separator	Test.
279	Wallingford	Wallingford Creamery Co.	Stock	O. O. Anderson, Secretary	Wallingford	J. C. Jensen	S. & G. C.	Test.
<b>FAYETTE COUNTY</b>								
280	Arlington	Brush Creek Fm's Cream'y Co.	Co-op.	Guy L. Rawson, Secretary	Arlington	L. S. Edwards	Separator	Test.
281	Clermont	Clermont Valley Creamery Co.	Co-op.	F. F. Ferguson, Secretary	Clermont	Amos Erickson	Hand Sep	Test.
282	Elgin	Elgin Farmers Dairy Co.	Co-op.	Melch'r Luchsinger, Sec.	Elgin	Ed. Hanson	Gath. Cr	Test.
283	Fayette	Fayette Creamery	Indiv.	H. F. Beyer	Edgewood	Frank Sherman	S. & G. C.	Test.
284	Hawkeye	Hawkeye Creamery Co.	Co-op.	J. Q. Adams, Secretary	West Union	Chris Russier	Separator	Test.
285	Maynard	Harlan Co-op. Creamery Co.	Co-op.	J. C. Lewis, Secretary	Maynard	O. B. Bracy	Separator	Test.
286	Fairbank	Oran Creamery Co.	Co-op.	F. T. Shelton, Secretary	Fairbank, R. 3	Charles Marks	Separator	Test.
287	Oelwein	Oelwein Farmers Creamery Co.	Co-op.	J. R. Ro's, Secretary	Oelwein	Geo. E. Jensen	Separator	Test.
288	Oelwein	Jefferson Co-op. Creamery Co.	Co-op.	H. H. Meyer, Secretary	Maynard	A. H. Ford	Separator	Test.
289	Randallia	Randallia Creamery Co.	Co-op.	J. E. Holmes, Secretary	Randallia	Robert Wagner	Separator	Test.
290	Sumner	Center Valley Creamery Co.	Stock	A. E. Fridly, Secretary	Sumner, R. F. D.	E. B. Olds	Separator	Hund.
291	St. Lucas	The Farmers Co-op. Creamery	Co-op.	John J. Mihm, Secretary	Ft. Atkinson, R 1	B. H. Kuennen	Separator	Test.
292	Westgate	Westgate Co-op. Creamery Co.	Co-op.	F. S. Coleman, Secretary	Westgate	C. H. Capper	Separator	Test.
293	Wadena	Riverside Creamery	Indiv.	F. J. Schroeder, Proprietor	Wadena	F. J. Schroeder	Hand Sep	Test.
294	West Union	West Union Creamery	Indiv.	Boe & Nelson	Colenor	Gath. Cr.	Test.	
295	Waucoma	Waucoma Farm's Cream'y Co.	Co-op.	Frank W. Clyde, Secretary	Waucoma	P. J. Kolbet	S. & G. C.	Test.
296	Stanley	Farmers M. Co-op. Cr. Assn.	Co-op.	F. A. Sherman, Sec. & Mgr	Stanley	Frank Strong	Separator	Test.
297	Alpha	Alpha Farmers Creamery Co.	Co-op.	F. J. McIntyre, Secretary	Alpha	C. N. Beach	Separator	Test.
298	Sumner	Richfield Creamery Co.	Co-op.	H. O. Schroeder, Secretary	Hawkeye	C. A. Day	Separator	Test.
299	Oelwein	Maple Grove Creamery Co.	Stock	Thomas Sadley, Secretary	Hazelton, R. 2.	Thomas Sadley	Separator	Test.
<b>FLOYD COUNTY</b>								
300	Powersville	Powersville Creamery	Indiv.	Chas. Gurler & Co.	DeKalb, Ill.	W. H. Miller	Gath. Cr.	Oil Test
301	Rockford	Rockford Co-op. Dairy Assn.	Co-op.	E. F. Briggs, Manager	Rockford	J. C. Farnham	Gath. Cr.	Oil Test
302	Charles City	Flood Creek Creamery Co.	Co-op.	M. A. Hirsch, Secretary	Charles City	Henry Binger	Gath. Cr.	In. Test
303	Nilesville	Niles Creamery Co.	Stock	J. J. Brunner, Secretary	Charles City	Frank Brunner	Gath. Cr.	Test.
304	Charles City	Charles City Milk & Cream Co.	Stock	J. J. Brunner, Manager	Charles City	Emil J. Weiss	Gath. Cr.	Test.
<b>FRANKLIN COUNTY</b>								
305	Ackley	Aetna Creamery	Indiv.	Martin & Johnson, Props.	Ackley	Chris Strausburg	Separator	Test.
306	Coulter	Hamilton Co-op. Creamery Co.	Co-op.	Geo. Dohmann, Secretary	Hampton	L. C. Kangensen	Gath. Cr.	Test.
307	Dows	Farmers Co-op. Creamery Co.	Co-op.	C. A. Nicholson, Secretary	Dows, R. 2	Frank L. Larson	Separator	Test.
308	Hampton	Hampton Creamery	Indiv.	G. H. Gurler, Proprietor	DeKalb, Ill.	R. E. Hockey	Gath. Cr.	Test.
309	Iowa Falls	Grant Center Creamery	Stock	J. J. Hensing, Secretary	Iowa Falls, R. 1	W. E. Mittlestadt	Separator	Test.
310	Latimer	Latimer Co-op. Creamery Co.	Co-op.	A. W. Meyer, Secretary	Latimer	A. W. Meyer	Gath. Cr.	Test.
311	Lee Center	Alden Creamery Co. (s)	Co-op.	T. E. Huston, Secretary	Alden	S. & G. C.	Test.	
<b>GREENE COUNTY</b>								
307	Grand Junction	Grand Junction Co-op. Cr. Co.	Co-op.	Daniel Maloney, Secretary	Grand Junction	H. A. Sherk	S. & G. C.	Test.
308	Scranton	Scranton Creamery	Indiv.	Lewis & Anderson, Props.	Scranton	Lewis & Anderson	Hand Sep.	Test.



## CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How Operated	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
<b>GRUNDY COUNTY—</b>								
809	Aplington	Buck Grove Creamery	Co-op.	O. Niehuis, Secretary	Aplington	J. G. Ellinger	Separator	Test.
810	Ackley	Johnson Creamery	Indiv.	Martin & Johnson, Props.	Ackley	Hank Schutzer	Separator	Test.
811	Dike	Dike Co-op. Creamery Co.	Co-op.	E. S. Rou-h, Secretary	Dike	J. P. Christensen	S. & G. C.	Test.
812	Fredsville	Fredsville Co-op. Creamery Co.	Co-op.	Hans Lausen, Secretary	Cedar Falls, R. 8.	A. Kindberg	S. & G. C.	Test.
813	Stout	Beaver Center Creamery Co.	Co-op.	Jacob A. Meyer, Secretary	Stout	T. E. Dilger	S. & G. C.	Test.
814	Reinbeck	Reinbeck Creamery Co.	Co-op.	C. Vittum, Secretary	Reinbeck	P. L. Case	Hand Sep.	Test.
815	Fern	Fern Creamery Co.	Co-op.	W. H. Henning, Secretary	Parkersburg	B. T. Soles	S. & G. C.	Test.
<b>GUTHRIE COUNTY—</b>								
816	Bayard	Bayard Co-op. Creamery Co.	Co-op.	M. J. Hallman, Secretary	Bayard	L. R. Winn	Gath. Cr.	Test.
817	Casey	Casey Creamery Co.	Stock.	H. E. Smith, Secretary	Casey	C. H. Matavers	S. & G. C.	Test.
818	Guthrie Center	Guthrie Center Co-op. Cr. Co.	Co-op.	J. A. McLaughlin, Sec.	Guthrie Center	J. M. Taff	S. & G. C.	Test.
819	Glendon	Glendon Creamery Co.	Co-op.	J. C. Hames, Secretary	Glendon	J. T. Girard	Separator	Test.
820	Menlo	Menlo Creamery Co.	Co-op.	A. C. Curtis, Secretary	Stuart	H. H. Colbert	S. & G. C.	Test.
821	Panora	Panora Creamery	Indiv.	F. F. Wilcox	Panora	F. F. Wilcox	Separator	Test.
822	Stuart	Stuart Co-op Creamery Co.	Co-op.	C. M. Cady, Secretary	Stuart	A. Cochran	S. & G. C.	Test.
823	Yale	Iowa Dairy Co.	Stock.	W. H. Hall, Manager	Yale	D. C. Bathlow	S. & G. C.	Test.
824	Dale City	Dale Co-op. Mut. Cr. Ass'n	Co-op.	R. C. Hummer, Secretary	Redfield	F. E. Howard	Separator	Test.
825	North Branch	North Branch Co-op. Creamery	Co-op.	R. B. Hughes, Secretary	Northbranch	Geo. Just	S. & G. C.	Test.
<b>HAMILTON COUNTY—</b>								
826	Ellsworth	Ellsworth Co-op Crm'y Assn	Co-op.	S. Stenberg, Sec.	Ellsworth	D. W. Mohler	S. & G. C.	Test.
827	Williams	Ellsworth Co-op Crm'y Assn (s)	Co-op.	S. Stenberg, Sec.	Ellsworth		Separator	Test.
828	Radcliffe	Ellsworth Co-op Crm'y Assn (s)	Co-op.	S. Stenberg, Sec.	Ellsworth		S. & G. C.	Test.
829	Jewell	Jewell Creamery	Indiv.	Gronbeck & Morek, Prop's	Jewell	Chris Morek	S. & G. C.	Test.
830	Jewell	Jewell Creamery (s)	Indiv.	Gronbeck & Morek, Prop's	Jewell		S. & G. C.	Test.
831	Randall	The Randall Farmer Crm'y Co	Co-op.	H. N. Miller, Sec.	Randall	H. N. Miller	Separator	Test.
832	Stanhope	Stanhope Creamery	Indiv.	E. C. Brewer, Prop.	Stanhope	W. I. Dilger	Gath. Cr.	Oil-test
<b>HANCOCK COUNTY—</b>								
833	Britt	Britt Co-op Creamery Co.	Co-op.	H. O. Jackson, Sec.	Britt	H. L. McNary	S. & G. C.	Test.
834	Duncan	Britt Co-op Creamery Co (s)	Co-op.	H. O. Jackson, Sec.	Britt		S. & G. C.	Test.
835	Crystal Lake	Crystal Lake Creamery Co.	Co-op.	Martin Larson, Sec.	Crystal Lake	L. A. Nelson	S. & G. C.	Test.
836	Goodell	Goodell Creamery Co.	Co-op.	O. E. Wesenberg, Sec.	Goodell	Guy Thomas	Hand Sep.	Test.
837	Garner	Garner Creamery	Indiv.	H. C. Schultz, Prop.	Garner	H. C. Schultz	Hand Sep.	Test.
838	Garner	Concord Creamery	Co-op.	J. Kiesel, Sec.	Garner	C. R. Conway	S. & G. C.	Test.
839	Kanawha	Kanawha Creamery Co.	Co-op.	F. L. Bush, Sec.	Kanawha	B. O. Brownell	Hand Sep.	Test.
840	Woden	Woden Creamery	Indiv.	L. C. Peterson, Prop.	Woden	L. C. Peterson	Hand Sep.	Test.
<b>HARDIN COUNTY—</b>								
841	Alden	Alden Creamery Co.	Co-op.	T. E. Huston Sec.	Alden	N. H. Trimble	S. & G. C.	Test.
842	Buckeye	Buckeye Co-op Creamery Co.	Co-op.	E. A. Oarriel, Sec.	Buckeye	G. H. Whitney	S. & J. C.	Test.
843	Cleves	Cleves Creamery	Indiv.	Martin & Johnson Prop.	Ackley	A. J. Gimer	Separator	Test.
844	Eldora	Eldora Creamery	Indiv.	Peter Jensen, Prop.	Eldora	Ed Steensvad	S. & G. C.	Test.
845	Hubbard	Spring Branch Co-op Crm'y	Co-op.	J. K. Towley, Sec.	Hubbard	J. W. Mohler	S. & G. C.	Test.
846	Hubbard	Hubbard Co-op Crm'y Co.	Co-op.	Ernest Hilker, Sec.	Hubbard	Sol. Sames	S. & G. C.	Test.
847	Iowa Falls	Iowa Falls Crm'y Co.	Co-op.	G. L. Whinery, Sec.	Iowa Falls	J. J. Ross	S. & G. C.	Test.
848	New Providence	New Providence Crm'y Co.	Stock.	W. T. Kersey, Sec.	New Providence	Chas. N. Hart	S. & G. C.	Test.
849	Radcliffe	Concord & Scott Crm'y Co.	Co-op.	O. E. Fadan, Sec.	Garden City	R. H. Alcorn	Separator	Test.
850	Radcliffe	Concord & Scott Crm'y Co (s)	Co-op.	O. E. Fadan, Sec.	Garden City		Separator	Test.
851	Garden City	Concord & Scott Crm'y Co (s)	Co-op.	O. E. Fadan, Sec.	Garden City		Separator	Test.
852	Steamboat Rock	Steamboat Rock Crm'y Co.	Co-op.	F. L. Willis, Sec.	Steamboat Rock	M. J. Mansager	S. & G. C.	Test.
<b>HARRISON COUNTY—</b>								
853	Magnolia	Magnolia Creamery Co.	Co-op.	F. H. Cadwell, Sec.	Logan R. F. D. 2	G. F. Scott	S. & G. C.	Test.
<b>HOWARD COUNTY—</b>								
854	Cresco	Cresco Creamery	Indiv.	C. W. Pierce, Proprietor	Cresco	C. W. Pierce	S. & G. C.	Test
855	Chester	Farmers' Creamery Ass'n.	Co-op.	G. C. Leslie, Sec.	Chester	E. B. Hoopman	Gath. Cr.	Oil Test
856	Elma	Elma Co-op. Creamery Ass'n	Co-op.	Daniel Fallgather, Sec.	Elma	John Whalen	S. & G. C.	Test
857	Elma	Maple Leaf Creamery Co.	Co-op.	B. Lane, Sec.	Maple Leaf	A. J. Herman	Separator	Test
858	Lourdes	Lourdes Creamery	Indiv.	B. Harness, Proprietor	Elma, R. F. D. 4	B. H. Arness	S. & G. C.	Test
859	Lime Springs	Lime Springs Creamery Co.	Stock.	H. P. Carpenter, Sec.	Elkader	Allen Gulbranson	Gath. Cr.	Test
860	Protivin	Protivin Creamery Ass'n	Co-op.	J. A. Dostal, Sec.	Protivin	J. A. Dostal	Gath. Cr.	Oil test
861	Schley	L. T. Fosse & Sons (s)	Indiv.	L. T. Fosse & Sons	Schley		S. & G. C.	Test
862	Saratoga	Saratoga Co-op. Creamery Co.	Co-op.	Alfred Miles, Sec.	Saratoga	Henry Fosse	Gath. Cr.	Oil Test



CREAMERY LIST-CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
<b>HUMBOLDT COUNTY—</b>								
363	Arnold.....	Grove Co-op. Creamery Co.	Co-op.	Charles J. Nelson, Sec.	Arnold.....	John F. Schultz.	S. & G. C.	Test
364	Bradgate.....	Bradgate Co-op. Cream'y Assn.	Co-op.	J. L. Van Horn, Sec.	Bradgate.....	Fred D. Shifflet.	S. & G. C.	Test
365	Bode.....	Bode Creamery Ass'n.	Co-op.	John Pederson, Sec.	Bode.....	M. H. Rossing.	S. & G. C.	Test
366	Goldfield.....	Owl Lake Creamery Co.	Co-op.	C. M. Clausen, Sec.	Goldfield.....	L. M. Tysvor.	S. & G. C.	Test
367	Hardy.....	Farmers' Co-op. Creamery Co.	Co-op.	A. N. Clancy, Sec.	Hardy.....	Ira O'Neill.	S. & G. C.	Test
368	Humboldt.....	Humboldt Creamery Co.	Stock.	G. L. Cruikshank, Sec.	Humboldt.....	L. D. Hill.	S. & G. C.	Test
369	Ottosen.....	Wacousta Creamery Ass'n.	Co-op.	L. J. Clave, Sec.	Ottosen.....	I. J. Shursen.	S. & G. C.	Test
370	Renwick.....	Renwick Co-op. Creamery Co.	Co-op.	W. M. Huffman, Sec.	Renwick.....	J. P. Bogh.	S. & G. C.	Test
371	Rutland.....	Rutland Creamery Ass'n.	Co-op.	S. S. Bartley, Sec.	Rutland.....	Ben Lanning.	S. & G. C.	Test
372	Thor.....	Clover Creamery Co.	Stock.	Lewis Olson, Sec.	Thor.....	Ben Lanning.	S. & G. C.	Test
373	Arnold.....	Arnold Creamery.	Indiv.	J. F. Schultz, Proprietor.	Arnold.....	John F. Schultz.	S. & G. C.	Test
<b>IDA COUNTY—</b>								
374	Arthur.....	Arthur Creamery	Indiv.	M. J. Concklin, Sec.	Arthur.....	M. J. Concklin.	Hand sep.	Test
375	Holstein.....	Hopkins & Hubbard Creamery	Indiv.	Hopkins & Hubbard.	Correctionville.	Arthur R. Meen.	Hand sep.	Test
<b>IOWA COUNTY—</b>								
376	Conroy.....	Shimer Creamery Co.	Co-op.	S. H. Stanerson, Sec.	Conroy.....	W. H. Woodcock	Separator	Test.
377	Genoa Bluff.....	Genoa Bluff Creamery Co.	Co-op.	M. W. Kelting, Sec.	WilliamsburgR.	Geo. P. Byrne.	S. & G. C.	Test.
378	Ladora.....	Ladora Creamery Co.	Co-op.	L. W. Wilson, Sec.	Ladora.....	John Baitinger.	S. & G. C.	Test.
379	Marengo.....	Marengo F. M. Co-op. Cr. Assn.	Co-op.	Dennis Sullivan, Sec.	Marengo.....	W. F. Reid.	S. & G. C.	Test.
380	Victor.....	Victor Co-op. Creamery Co.	Co-op.	H. Whitworth, Sec.	Victor.....	G. W. Baitinger.	S. & G. C.	Test.
381	Williamsburg.....	Troy Creamery Co.	Co-op.	Geo. C. House, Sec.	Williamsburg	E. E. Montgomery	Separator	Test.
382	Williamsburg.....	Troy Creamery Co. (s)	Co-op.	Geo. C. House, Sec.	Williamsburg	Separator	Test.	
383	Williamsburg.....	York Creamery Co.	Co-op.	H. W. Huedepohl, Sec.	WilliamsburgR.	Theo. Winter.	Separator	Test.
384	North English.....	Yorkshire Creamery (s)	Stock	R. N. Morrell, Sec.	Ottumwa.....	Gath, Cr.	Test.	
<b>JACKSON COUNTY—</b>								
385	Fulton.....	Fulton Co-op. Creamery Co.	Co-op.	John Heide, Sec.	Fulton.....	Howard Coulson	Separator	Test.
386	Monmouth.....	Monmouth Creamery	Indiv.	J. P. Younger.	Chicago, Ill.	C. E. Mills.	S. & G. C.	Test.
387	Maquoketa.....	Farmers Union Co-op. Crm. Co.	Co-op.	Walter M. Miller, Sec.	Maquoketa.....	C. C. Post.	S. & G. C.	Test.
388	Miles.....	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	A. J. Spohn.	S. & G. C.	Test.
389	Zwingle.....	The Ladd Creamery	Indiv.	F. G. Ladd, Prop.	Zwingle.....	J. T. Mogle.	S. & G. C.	Test.
390	Preston.....	Preston Creamery Assn.	Co-op.	Samuel McNeill, Sec.	Preston.....	Jno. S. Smith.	S. & G. C.	Test.
391	Preston.....	Preston Creamery Assn. (s)	Co-op.	Samuel McNeill, Sec.	Preston.....	Jno. S. Smith.	S. & G. C.	Test.
392	Preston.....	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	A. J. Negus.	S. & G. C.	Test.
393	Spragueville.....	Springbrook Creamery (s)	Indiv.	John Newman Co.	Elgin, Ill.	A. J. Negus.	S. & G. C.	Test.
394	Union Center.....	Springbrook Creamery (s)	Indiv.	John Newman Co.	Elgin, Ill.	A. J. Negus.	S. & G. C.	Test.
395	Lamotte.....	Sterling Separator Creamery	Indiv.	N. A. Hoffmann, Prop.	Lamotte.....	John M. Hoffman	S. & G. C.	Test.
396	St. Donatus.....	St. Donatus Creamery	Indiv.	Krier & Dupont, Props.	St. Donatus.....	P. J. Dupont.	S. & G. C.	Test.
397	Baldwin.....	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Mgr.	Monticello.....	P. J. Dupont.	S. & G. C.	Test.
398	Maquoketa.....	Hansen Cold Storage Co.	Indiv.	E. D. Hansen, Prop.	Maquoketa.....	C. C. Clifton.	S. & G. C.	Test.
399	Lamotte.....	Lamotte Creamery	Indiv.	N. B. Nemmers, Prop.	Lamotte.....	J. C. Nemmers.	S. & G. C.	Test.
400	Maquoketa.....	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	G. S. Wing.	S. & G. C.	Test.
401	Zwingle.....	Zwingle Creamery	Indiv.	F. J. Ladd, Prop.	Zwingle.....	Frank Thell.	Hand-Sep.	Test.
402	Springbrook.....	Subuque Butter & Milk Co.	Stock	H. H. Hopkins, Pres.	Oubuque.....	E. S. Mike.	Hand-Sep.	Test.
<b>JASPER COUNTY</b>								
403	Baxter.....	Baxter Dairy Co.	Co-op.	H. Krampe, Jr. Sec.	Baxter.....	H. C. Schettler.	Separator	Test.
404	Newton.....	Newton Creamery Co.	Stock	H. A. Bohne, Prop.	Newton.....	H. A. Bohne.	S. & G. C.	Test.
405	Newburg.....	Newburg Creamery Co.	Stock	G. Dalden, Sec.	Newburg.....	H. E. Webb.	S. & G. C.	Test.
<b>JEFFERSON COUNTY—</b>								
406	Fairfield.....	Fairfield Creamery Co.	Co-op.	Jacob Roth, Sec.	Fairfield.....	G. Y. Ross.	S. & G. C.	Test.
407	Four Corners.....	Four Corners Creamery Co.	Co-op.	C. L. Schuber, Sec.	Four Corners.....	C. L. Schuber.	Separator	Test.
408	Glendale.....	Yorkshire Creamery (s)	Stock	R. N. Morrell, Sec.	Ottumwa.....	Hand Sep	Test.	
409	Fairfield.....	Elmwood Creamery Co.	Stock	Jno. McLain, Mgr.	Fairfield.....	Hand Sep	Test.	
<b>JOHNSON COUNTY—</b>								
410	Oxford.....	Oxford Creamery	Indiv.	Adam Flouchinger, Prop.	Oxford.....	H. Ambler.	Gath. Or.	Test.
<b>JONES COUNTY—</b>								
411	Anamosa.....	Fawn Creek Creamery	Indiv.	J. S. Condit, Proprietor.	Anamosa.....	Wm. Gierhart.	S. & G. C.	Test.
412	Monticello.....	Clover Leaf Creamery Co.	Co-op.	John Folkerts, Secretary.	Monticello.....	W. A. Kizer.	Separator	Test.
413	Amber.....	Amber Creamery	Co-op.	James P. Younger, Prop.	Chicago.....	Frank Nickel.	S. & G. C.	Test.
414	Center Junction.....	Center Junction Creamery	Indiv.	James P. Younger, Prop.	Chicago.....	Frank Nickel.	S. & G. C.	Test.
415	Hale.....	Hale Creamery Co.	Indiv.	O. E. Walston, Sec. & Mgr.	Chicago.....	A. E. Robertson.	S. & G. C.	Test.
416	Langworthy.....	Langworthy Co-op. Cream'y Co.	Stock	Louis Batchelder.	Hale.....	W. H. Brownell.	Separator	Test.
417	Martelle.....	Martelle Creamery	Co-op.	S. C. Batchelder, Prop.	Langworthy.....	J. H. Batchelder.	Separator	Test.
418	Monticello.....	Klondyke Creamery Co.	Indiv.	R. Bohren, Secretary.	Monticello.....	S. C. Batchelder.	S. & G. C.	Test.



Office record number	Location.	Name of Creamery	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
419	Monticello	Diamond Creamery Co.	Co-op	C. W. Simpson, Manager.	Monticello.	W. B. Johnson.	S. & G. C.	Test.
420	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
421	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
422	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
423	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
424	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
425	Monticello	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
426	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
427	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
428	Wyoming	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
429	Oxford Junction	Diamond Creamery Co. (s)	Stock	C. W. Simpson, Manager.	Monticello.		S. & G. C.	Test.
430	Onslow	Clay Valley Co-op. Cream. Co.	Stock	John C. Newlands, Secretary	Onslow		Separator	Test.
431	Anamosa	Jackson Creamery	Co-op.	J. L. Condit, Proprietor.	Anamosa	Fred M. Huych.	Separator	Test.
432	Olin	Olin Creamery	Indiv.	George D. Hogue, Prop.	Olin	Wm. Evans.	Separator	Test.
433	Scotch Grove	Scotch Grove Co-op. Cream. Co.	Indiv.	H. R. Jacobs, Secretary	Scotch Grove.	Geo. D. Hogue.	Separator	Test.
434	Wyoming	Wyoming Co-op. Cream Ass'n	Co-op.	L. M. Barrett, Secretary	Wyoming	J. M. Woellert.	S. & G. C.	Test.
435	Monticello	Downerville Creamery Co.	Co-op.	C. R. Wilder	Monticello.	S. M. Conley.	S. & G. C.	Test.
KEOKUK COUNTY—								
436	Webster	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Secretary	Ottumwa		Gath. Cr.	Test.
437	Hakesville	York-hire Creamery Co. (s)	Stock	R. N. Morrell, Secretary	Ottumwa		Gath. Cr.	Test.
438	What Cheer	Grinnell Creamery (s)	Indiv.	J. W. Fowler, Proprietor.	Grinnell		S. & G. C.	Test.
KOSSUTH COUNTY.								
439	Algona	Algona Co-op Creamery Co.	Co-op.	A. W. Sterzbach, Sec.	Algona	A. W. Sterzbach	S. & G. C.	Test.
440	Algona	Plum Creek Creamery Co.	Co-op.	C. W. Hopkins, Sec.	Algona	W. G. Sterzbach	S. & G. C.	Test.
441	Burt	Burt Co-op Creamery Co.	Co-op.	A. Dan, Sec.	Burt	D. L. Driver	S. & G. C.	Test.
442	Bancroft	Bancroft Co-op Creamery Co.	Co-op.	John Bernhard, Sec & mgr	Bancroft	A. J. Dolechal.	S. & G. C.	Test.
443	Fenton	Fenton Creamery Co.	Co-op.	F. C. Newel, Sec.	Fenton	H. W. Pettibone	Separator	Test.
444	Germania	Germania Co-op Creamery Co.	Co-op.	Peter Graves, Sec.	Germania	John Lundborg.	S. & G. C.	Test.
445	Hobart	Hobart Creamery	Indiv.	Wester Bros. Props.	Hobart	R. Wester	S. & G. C.	Test.
446	Irvington	Irvington Co-op Creamery Co.	Co-op.	A. P. Ives, Sec.	Irvington	August Nurrell.	S. & G. C.	Test.
447	LuVerne	LuVerne Co-op Creamery Assn	Co-op.	R. W. Hanna, Sec.	LuVerne	V. H. Raney.	S. & G. C.	Test.
448	Lone Rock	Lone Rock Co-op Creamery Co.	Co-op.	H. J. McChesney, Sec.	Lone Rock	J. T. Hanna.	S. & G. C.	Test.

449	Ledyard	Farmers Co-op Creamery Assn	Co-op	E. J. Skinner, Sec.	Ledyard	Henry M. Dyer.	S. & G. C.	Test.
450	Ringsted	Seneca Co-op Creamery Co.	Co-op.	Philip Ekholm, Sec.	Fenton, R. F. D. 1	August Johnson	S. & G. C.	Test.
451	Sexton	Sexton Creamery	Indiv.	Webster Bros. Props.	Hobart	H. F. Jones.	S. & G. C.	Test.
452	St. Benedict	Farmers Co-op Creamery Co.	Co-op.	Leo J. Wegman, Sec.	St. Benedict	F. J. Domayer	S. & G. C.	Test.
453	Bode	St. Joseph Co-op Creamery Co.	Co-op.	E. O. Clark, Sec.	Jode R. F. D. 1.	Chris Bogh	Separator	Test.
454	Swea City	Swea City Co-op Creamery Co.	Co-op.	Wm. Korreect, Sec.	Swea City	B. S. Nelson	S. & G. C.	Test.
455	Titonka	German Valley Co-op Cream. Co.	Co-op.	Herman Nelson, Sec.	Titonka	Ben Frank	S. & G. C.	Test.
456	Lone Rock	Lotts Creek Co-op Creamery Co.	Co-op.	Aug Boettcher, Sec.	Lone Rock R. 1.	Mark Oyer	Separator	Test.
457	Whittemore	Whittemore Creamery Co.	Co-op.	H. P. Hatch, Sec.	Whittemore	A. M. Whitney	S. & G. C.	Test.
458	West Bend	Garfield Creamery Co.	Stock	J. M. Borde, Sec.	West Bend	D. A. O'Neil	Separator	Test.
459	Wesley	Wesley Creamery	Indiv.	Wester Bros. Props.	Hobart	H. F. Hollenbeck	Gath. Cr.	Test.

## LEE COUNTY.

460	New Keokuk	The S. P. Pond Co.	Stock	C. S. Pond, V. P. & Gen mgr	Keokuk		Hand Sep	Test.
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## LINN COUNTY.

461	Anamosa	Birk Creamery	Indiv.	O. L. Perry, Prop.	Anamosa	O. L. Perry.	S. & G. C.	Test.
462	Central City	Central City Creamery	Indiv.	P. W. Sawyer, Prop.	Central City	P. W. Sawyer.	S. & G. C.	Test.
463	Central City	Valley Farm Creamery	Indiv.	P. G. Henderson, Prop.	Central City	St. Elmo Wright	S. & G. C.	Test.
464	Coggon	Coggon Creamery	Indiv.	J. J. McAreay, Prop.	Coggon	J. J. McAreay	Separator	Test.
465	Coggon	North Side Creamery	Co-op.	W. H. Trefz	Coggon	Fred Lehman.	S. & G. C.	Test.
466	Cedar Rapids	Gurley-Barth Co.	Stock	A. J. Barth, Sec. & Tres.	Cedar Rapids	C. C. McCue.	Hand sep.	Test.
467	Center Point	Center Point Creamery	Indiv.	J. W. Derfinger Prop.	Center Point	O. M. Fisoer.	S. & G. C.	Test.
468	Ely	Ely & Western Creamery Co.	Co-op.	Frank J. Dolezal, Sec.	Ely, R. F. D. 1.	Frank Vavricek	S. & G. C.	Test.
469	Western College	Ely & Western Creamery Co (s)	Co-op.	Frank J. Dolezal, Sec.	Ely, R. F. D. 1.		S. & G. C.	Test.
470	Springville	Springville Creamery	Indiv.	C. E. Batchelder, Prop.	Springville	C. E. Batchelder	S. & G. C.	Test.
471	Paralia	Springville Creamery (s)	Indiv.	C. E. Batchelder, Prop.	Springville		S. & G. C.	Test.
472	Troy Mills	Troy Mills Creamery	Indiv.	J. M. Tupper, Prop.	Troy Mills	J. M. Tupper.	S. & G. C.	Test.
473	Troy Mills	Highland Creamery Co.	Co-op.	John Tehl, Sec.	Walker, R. D. 8.	G. R. Batchelder	Separator	Hund.
474	Waubek	Waubek Creamery	Indiv.	Bates & Hemenway, Pro.	Waubek	H. C. Hemenway	Separator	Test.
475	Walker	Walker Creamery	Indiv.	H. J. Nietert, Prop.	Walker	S. W. Laird	Separator	Test.
476	Viola	Viola Creamery	Indiv.	W. S. Romine, Prop.	Viola	W. D. Romine.	Separator	Test.
477	Prairieburg	Diamond Creamery Co. (s)	Indiv.	C. W. Simpson, Mgr.	Monticello		S. & G. C.	Test.
478	Cedar Rapids	Cedar Rapids Crm. & Butter Co	Indiv.	F. W. Beyer, Prop.	Cedar Rapids	H. R. Bullis.	Hand sep.	Test.
479	Cedar Rapids	Iowa Creamery Co.	Stock	A. E. Thompson, Sec. & Tre	Cedar Rapids		Hand sep.	Test.

## LUCAS COUNTY.

480	Derby	Cold Colony Creamery (s)	Indiv.	James L. Humphrey Jr, prop	Humeston		S. & G. C.	Test.
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## LYON COUNTY—

481	George	The George Creamery	Indiv.	H. P. Jennings, Proprietor	George	Peter Peterson.	S. & G. C.	Test.
482	Little Rock	Little Rock Mt. Co-op. Cr. Ass'n	Co-op.	R. E. Stenzel, Sec. & Mgr.	Little Rock	O. W. Dubbs.	Gath. Cr.	Test.



Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
<b>MAHASKA COUNTY—</b>								
483	New Sharon.....	New Sharon Separator Cream'y	Stock.	W. J. Nicholson, Sec.....	New Sharon.....	Harry Martin.....	S. & G. C.	Test
484	Oskaloosa.....	Oskaloosa Creamery Co.....	Stock.	John Metzger, Manager..	Oskaloosa.....	.....	Gath. Cr.	Test
<b>MARION COUNTY—</b>								
485	Pella.....	Pella Creamery Co.....	Stock.	D. R. Rhynesbarger, Mgr.	Pella.....	T. Smorenburg.....	S. & G. C.	Test
486	Pallas.....	Beatrice Creamery Co. (s).....	Stock.	F. A. Leighton, Manager..	Des Moines.....	.....	Gath. Cr.	Test
<b>MARSHALL COUNTY—</b>								
487	Clemons.....	Minerva Valley Creamery Ass'n	Co-op.	H. P. Clemons, Sec.....	Clemons.....	G. R. Jackman..	Gath. Cr.	Test
488	Dunbar.....	Dunbar Creamery Co.....	Co-op.	O. J. Olson, Sec. and Mgr..	Dunbar.....	O. O. Bomberger	Separator	Test
489	Liscomb.....	Liscomb Cheese Co.....	Stock.	Thos. E. Culp, Sec.....	Liscomb.....	Thos. E. Culp..	Gath. Cr.	Test
490	State Center.....	State Center Farmers' Grass'n	Co-op.	C. Hansen, Manager.....	State Center.....	G. T. Shannce..	Gath. Cr.	Oil Test
491	New St. Anthony	Farmers' Creamery Co.....	Co-op.	T. A. Uavenport, Sec.....	St. Anthony.....	G. R. Price.....	Gath. Cr.	Test
<b>MILLS COUNTY—</b>								
492	Silver City.....	Waterloo Creamery Co.....	Stock.	Leroy Corliass.....	Council Bluffs..	.....	Gath. Cr.	Test
493	York.....	Waterloo Creamery Co.....	Stock.	Leroy Corliass.....	Council Bluffs..	.....	Gath. Cr.	Test
<b>MITCHELL COUNTY—</b>								
494	David.....	David Co-op. Creamery Co.....	Co-op.	F. M. Griffin, Sec.....	David.....	M. Fairbrother..	Gath. Cr.	Test
495	Osage.....	Rock Creek Co-op. Cream'y Ass'n	Co-op.	H. L. Johnson, Sec.....	Rudd.....	Sig Klemesrud..	Gath. Cr.	Oil Test
496	Orch rd.....	Farmers' Co-op. Cream'y Ass'n	Co-op.	J. W. Clay, Sec. and Mgr.	Orchard.....	M. M. Blandin..	Gath. Cr.	Oil Test
497	Riceville.....	Riceville Co-op. Cream'y Ass'n	Co-op.	F. J. Carpenter, Sec.....	Riceville.....	A. B. Grover.....	Gath. Cr.	Test
498	Stacyville.....	Stacyville Creamery.....	Indiv.	J. B. Spensley, Proprietor.	Stacyville.....	J. B. Spensley..	S. & G. C.	Test
499	St. Ansgar.....	Farmers' Co-op. Cream'y Co.	Co-op.	J. M. Tollefson, Sec. & Mgr.	St. Ansgar.....	B. O. Cliff.....	Gath. Cr.	Test
500	Toeterville.....	Toeterville Co-op. Cream'y Co.	Co-op.	L. C. Biker, Sec.....	Toeterville.....	A. M. Nofland..	Hand Sep.	Test
501	New Haven.....	Farmers' Co-op. Cream'y Co.	Co-op.	Fred C. Sheldon, Sec.....	Elma.....	D. C. Thomas..	Gath. Cr.	Oil Test
502	Osage.....	Osage Co-op. Creamery Ass'n.	Co-op.	John Torsleff, Sec.....	Mitchell.....	George Helfter..	Gath. Cr.	Test

<b>MONONA COUNTY—</b>								
503	Moorhead.....	Moorhead Creamery.....	Indiv.	P. D. Nelson, Proprietor	Moorhead.....	P. D. Nelson....	Gath. C.	Test.
<b>MONROE COUNTY—</b>								
504	Albia.....	Albia Creamery.....	Indiv.	Elder & Elder, Proprietors	Albia.....	W. A. Elder.....	S. & G. C.	Test.
<b>MUSCATINE COUNTY—</b>								
505	Wilton Junction	Nickel Plate Creamery.....	Indiv.	Geo. W. Kelley, Proprietor	Wilton Junction	E. E. Hesson....	Gath. Cr.	Test.
506	West Liberty.....	Iowa Condensed Milk Factory	Indiv.	R. L. Clark, Secretary.....	West Liberty.....	.....	Milk.....	Test.
<b>O'BRIEN COUNTY—</b>								
507	Germantown.....	Caledonia Creamery Co.....	Stock.	Fred Hoeckmann, Sec.....	Germantown.....	Wm. Gehris.....	S. & G. C.	Test.
508	Hartley.....	Hartley Creamery.....	Indiv.	A. D. Rozeboom, Prop.....	Hartley.....	W. Webster.....	Gath. Cr.	Test.
509	Pringhar.....	Hubbard, Bristol & Co.....	Indiv.	A. W. Hubbard, Manager..	Correctionville..	Geo. Bristol.....	Gath. Cr.	Test.
510	Sheldon.....	Sheldon Creamery.....	Indiv.	D. A. Miller, Proprietor.	Sheldon.....	M. Hauer.....	Hand Sep.	Test.
511	Paulina.....	Union Creamery Co.....	Stock.	Wm. Strampe, Secretary	Paulina.....	W. Strampe.....	S. & G. C.	Test.
<b>OSCEOLA COUNTY—</b>								
512	Ashton.....	Ashton Creamery.....	Indiv.	Kramer & Davis, Props.....	Ashton.....	C. W. Davis.....	S. & G. C.	Test.
513	Sibley.....	Sibley Creamery.....	Indiv.	C. A. Smith, Proprietor.	Sibley.....	Dick Cosgrove..	Hand Sep.	Test.
514	Allendorf.....	Allendorf Creamery.....	Co-op.	A. Klampe, Secretary.....	Allendorf.....	.....	Gath. Cr.	Test.
<b>PAGE COUNTY—</b>								
515	Clarinda.....	Clarinda Poultry, Butter & Egg Company.....	Stock.	W. T. S. White, Secretary	Clarinda.....	Herman Beck....	Hand Sep.	Test.
<b>PALO ALTO COUNTY—</b>								
516	Ayrshire.....	Silver Lake Creamery Co.....	Co-op.	C. H. Hookinham, Sec.....	Ayrshire.....	Fred Shellman..	Separator	Test.
517	Cylinder.....	Cylinder Butter & Cheese Assn.	Co-op.	Theo. DeMouth, Secretary	Cylinder.....	E. P. Conrad....	Separator	Test.
518	Curlew.....	Rush Lake Creamery Co.....	Co-op.	J. H. McCreary, Secretary	Curlew.....	S. R. Stratton..	Separator	Test.
519	Emmetsburg.....	Emmetsburg Creamery Co.....	Stock.	Lewis Stuchmer, Secretary	Emmetsburg.....	N. H. Knudsen..	Separator	Test.
520	Fairville.....	Fairville Creamery Co.....	Co-op.	Jos. Kliegl, Secretary.....	Cylinder.....	W. D. Kucker..	Separator	Test.
521	Graettinger.....	Lost Island Creamery Co.....	Co-op.	Lars. O. Christenson, Sec.	Emmetsburg.....	J. N. Bruck.....	Separator	Test.
522	Mallard.....	Mallard Butter & Cheese Assn.	Co-op.	T. C. Truog, Secretary.....	Mallard.....	J. W. Finnell..	S. & G. C.	Test.
523	Graettinger.....	Farmers Co-op. Creamery Co.	Co-op.	F. L. Lambe, Secretary.....	Graettinger R. 2	W. W. Bond.....	Separator	Test.
524	Osgood.....	Osgood Creamery Co.....	Co-op.	G. C. Thompson, Secretary	Emmetsburg R. 3	Edgar Chadwick	Separator	Test.
525	Graettinger.....	Palo Alto Creamery Co.....	Co-op.	Beth. A. Smith, Secretary	Ruthven R. F. D. 1	W. A. Thayer..	Separator	Test.
526	Ruthven.....	Farmers Co-op. Creamery Co.	Co-op.	Chas. E. Yocum, Secretary	Ruthven.....	A. L. Remington	S. & G. C.	Test.
527	Rodman.....	Rodman Co-op. Creamery Co.	Co-op.	C. J. Frye, Secretary.....	Rodman.....	C. M. Vohs.....	S. & G. C.	Test.
528	West Bend.....	West Bend Co-op. Cream'y Co.	Co-op.	G. W. Brown, Sec. & Mgr.	West Bend.....	Thos. A. Clarke	S. & G. C.	Test.
529	West Bend.....	Euarek Co-op. Creamery Co.....	Co-op.	Wm. Reardon, Sec. & Mgr.	West Bend.....	Chas. Kanutson..	S. & G. C.	Test.



CREAMERY LIST—CONTINUED.

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NINETEENTH ANNUAL REPORT OF THE

STATE DAIRY COMMISSIONER.

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Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
<b>PLYMOUTH COUNTY—</b>								
530	Kingsley	Paynes Creamery	Indiv.	Payne Bros., Proprietors	Kingsley, Ia. A.	Ira Stewart	Hand Sep.	Test.
531	Mammen	Grant Township Creamery Co.	Co-op.	H. P. Manst, Secretary	Struble	J. Kennedy	S. & G. C.	Test.
532	Ruble	Farmers M. Co-op. Cream'y Co.	Co-op.	Frank Jeffers, Secretary	Ruble	Wm. Anderson	S. & G. C.	Test.
533	Merrill	Hanford Produce Co. (s)	Stock	J. H. Whittemore, Sec.	Sioux City		Hand Sep.	Test.
534	Le Mars	Hanford Produce Co. (s)	Stock	J. H. Whittemore, Sec.	Sioux City			
<b>POCAHONTAS COUNTY—</b>								
535	Laurens	Laurens Creamery	Indiv.	W. & J. G. Hinn, Props.	Laurens	F. W. Johnson	Hand Sep.	Test.
536	Pomeroy	Hanford Produce Co. (s)	Stock	J. H. Whittemore, Sec'y	Sioux City		S. & G. C.	Test.
537	Plover	Plover Creamery Co.	Stock	H. Fitzgerald, Manager	Plover	Geo. Heathman	Hand Sep.	Test.
538	Pocahontas	Pocahontas Creamery	Indiv.	W. & J. G. Hinn, Props.	Laurens	S. L. Lohrger	Hand Sep.	Test.
539	Boile	Boile Edge Creamery	Indiv.	W. R. Rogers, Proprietor	Boile	W. R. Rogers	S. & G. C.	Test.
<b>POLK COUNTY—</b>								
540	Des Moines	Beatrice Creamery Company	Stock	F. A. Leighton, Manager	Des Moines	Moerwin Powers	Hand sep.	Test
541	Grimes	Grimes Butter & Cheese Co.	Stock	W. J. Steward, Secretary	Grimes	A. L. Rosenberg	Separator	Test
542	Campbell	Grimes Butter & Cheese Co. (s)	Stock	W. J. Steward, Secretary	Grimes	W. S. Gould	Hand sep.	Test
543	Des Moines	Des Moines Creamery Company	Stock	S. S. Schermerhorn, Pres.	Des Moines	W. S. Gould	Hand sep.	Test
544	Des Moines	Capital Creamery Company	Stock	Keller J. Bell, Manager	Des Moines	R. E. Blood	Hand sep.	Test
545	Des Moines	Crystal Spring Creamery Co.	Indiv.	Mac Rae Bros., Proprietors	Des Moines	W. McWilliam	Hand sep.	Test
<b>POTTAWATTAMIE COUNTY—</b>								
546	Avoca	Avoca Creamery	Indiv.	P. T. Hanson, Proprietor	Avoca	M. Larsen	Hand sep.	Test
547	Wainut	Farlie Rose Creamery Co. (s)	Stock	Leroy Corliss Vice-Pt. & Mgr	Omaha, Ne.	A. C. Zimmermann	S. & G. C.	Test
548	Council Bluffs	Waterloo Creamery (s)	Stock	Leroy Corliss, Vice-Pt. & Mgr	Omaha, Neb.	Perry Rubendall	S. & G. C.	Test
549	Minden	Waterloo Creamery Co. (s)	Stock	Leroy Corliss, Vice-Pt. & Mgr	Omaha, Neb.		S. & G. C.	Test
550	Minden	Minden Creamery	Indiv.	N. P. Jorgenson, Proprietor	Minden	N. P. Jorgenson		
<b>POWESHIEK COUNTY—</b>								
552	Gaenssey	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	O. W. Hicks	S. & G. C.	Test
553	Grinnell	Grinnell Creamery	Indiv.	J. W. Fowler, Proprietor	Grinnell	Gath. Cr.	Test	
554	Brooklyn	Grinnell Creamery (s)	Indiv.	J. W. Fowler, Proprietor	Grinnell	Gath. Cr.	Test	
555	Hartwick	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	Wm. Thies	S. & G. C.	Test
556	Montezuma	Springbrook Creamery	Indiv.	John Newman Company	Elgin, Ill.	John Cane	Gath. Cr.	Test
<b>SAC COUNTY—</b>								
558	Early	Early Creamery	Indiv.	Charles A. Dermo, Prop.	Early	C. A. Dermo	S. & G. C.	Test
559	Herring	Herring Creamery	Indiv.	M. R. Wright Prop.	Herring	M. W. Wright	S. & G. C.	Test
560	Lake View	Lake View Creamery	Indiv.	J. P. Thorkelsen, Prop.	Lake View	O. S. Holliday	S. & G. C.	Test
561	Nemaha	Doleware Center Creamery Co.	Co-op.	Clark N. Searls, Secretary	Nemaha	M. M. Lewis	S. & G. C.	Test
562	Schallert	Farmers Creamery Company	Stock	J. A. Cranston, Secretary	Odebolt	Ed McFarland	Hand Sep.	Test
563	Schallert	Schallert Creamery	Indiv.	Perry Rubendall, Prop.	Schallert	Perry Rubendall	Hand Sep.	Test
564	Schallert	Eden Creamery Company	Co-op.	Albert Zemke, Secretary	Schallert	M. P. O'Grady	Hand Sep.	Test
565	Wall Lake	Wall Lake Creamery	Indiv.	Thos. A. Hers, Proprietor	Wall Lake	D. A. Provost	S. & G. C.	Test
<b>SCOTT COUNTY—</b>								
566	Long Grove	Star Creamery	Indiv.	J. M. Merriott, Prop.	Long Grove	J. W. Blair	Gath. Cr.	Test.
567	Davenport	Aswood Creamery Co.	Stock	F. A. Waugh, Sec.	Davenport	H. D. Wendt	Hand Sep.	Test.
<b>SHELBY COUNTY—</b>								
568	Corley	Corley Creamery Co.	Co-op.	A. C. Dinesen, Sec.	Avoca	W. F. Pettes	Hand Sep.	Test.
569	Earling	Earling Creamery Co.	Stock	O. E. Loehr, Sec.	Earling	S. F. Stephane	Hand Sep.	Test.
570	Harlan	Buck Valley Creamery Co.	Co-op.	R. Rasmussen, Sec.	Harlan	M. Jensen	Hand Sep.	Test.
571	Jacksonville	Farmers Mt. Co-op. Crm. Co.	Co-op.	S. C. Jensen, Secretary	Kirkman, B. No. 1	Julius Anderson	S. & G. C.	Test.
572	Kirkman	Clay Township Creamery	Indiv.	Peter H. Anderson, Prop.	Marne, B. No. 1	Chris Tomson	Hand Sep.	Test.
573	Kirkman	Fortsmouth Creamery	Indiv.	N. A. Schermerhorn, Prop.	Fortsmouth	M. Ankerterne	Hand Sep.	Test.
574	Portsmouth	Prarie Rose Creamery Co.	Co-op.	J. D. Lorentzen, Sec.	Walnut, B. No. 2	Christ Back	Separator	Test.
575	Walnut	Waterloo Creamery Co. (s)	Stock	L. Corliss, Vice Pt. & Mgr.	Omaha, Neb.		S. & G. C.	Test.
576	Shelby							
<b>SIOUX COUNTY—</b>								
577	Alton	The Alton Creamery	Indiv.	Geo. R. Mueller, Prop.	Alton	Geo. H. Mueller	Hand Sep.	Test.
578	Grassville	Hanford Produce Co. (s)	Stock	J. H. Whittemore, Sec.	Sioux City		S. & G. C.	Test.
579	Hesper	Hesper Creamery	Indiv.	Roever & Roteman, Prop.	Hesper	Emil Zoer	Gath. Cr.	Test.
580	Hawarden	Hawarden Creamery	Indiv.	Mueller Bros. Props.	Hawarden	Mike Flach	Hand Sep.	Test.
581	Hull	Hull Creamery	Indiv.	Rud Stenavad, Prop.	Hull	J. L. Curtis	Hand Sep.	Test.
582	Rock Valley	Rock Valley Creamery	Indiv.	C. H. Day, Proprietor	Rock Valley	John L. Clark	Hand Sep.	Test.
583	Sioux Center	Jelgerhuis & Co.	Indiv.	Rud Stenavad, Prop.	Hull	E. SenHerler	Hand Sep.	Test.
584	Inwood	Inwood Creamery Co.	Co-op.	L. M. Foot, Sec. & Mgr.	Inwood	H. C. Nelson	Gath. Cr.	Test.



CREAMERY LIST—CONTINUED.

Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
<b>STORY COUNTY</b>								
585	Ames	Iowa State College	Indiv.	G. L. McKay	Ames		S. & G. C.	Test.
586	Cambridge	Cambridge Farm's Co-op (Crm Co)	Co-op	M. F. Ding, Secretary	Cambridge	J. F. Burdette	T. & G. C.	Test.
587	Closed							
588	Gilbert Station	Farmers Co-op Creamery Co.	Co-op	C. P. Lake, Manager	Hilbert Station	C. P. Lake	S. & G. C.	Test.
589	Huxley	Huxley Farmers Co-op Cym Co.	Co-op	A. H. Rheldahl, Sec.	Huxley	P. J. Severald	Separator	Test.
590	Roland	Roland Farmers Creamery Co.	Co-op	L. T. Olson, Secretary	Roland	Geo. Wick	Separator	Test.
591	Story City	Story C. Farmers Co-op Cym Co.	Co-op	Alex. Henderson, Sec.	Story City	P. J. Severald	Separator	Test.
592	Slater	Slater Farmers Co-op Cym Co.	Co-op	Andrew Maland, Sec.	Slater	R. T. Naa	Separator	Test.
593	Zealand	Zealand Creamery Co.	Stock	C. P. Bean, Secretary	Zealand	R. R. Hadley	S. & G. C.	Test.
<b>TAMA COUNTY</b>								
594	Chelso	Springbrook Creamery	Indiv.	John Newman Jo.	Elgin, Ill.	John Sucher	S. & G. C.	Test
595	Elberon	Springbrook Creamery	Indiv.	John Newman Co.	Elgin, Ill.	Chas. Sucher	S. & G. C.	Test
596	Tama	Tama Co-op Creamery Co.	Co-op	E. D. Armstrong, Prop'r.	Tama	W. H. Graham	Hand sep.	Test
597	Cutler	Cutler Creamery	Indiv.		Cutler	E. D. Armstrong	Gath. Cr.	Test
<b>TAYLOR COUNTY</b>								
598	Clearfield	Clearfield Creamery Co.	Stock	Joe Donbet, Sec.	Clearfield	George McNair	Hand sep.	Test
599	Bedford	The Bedford Creamery	Indiv.	Frank Dunning, Proprietor	Bedford	Leslie Kloppe	Hand sep.	Test
600	Lenox	Lenox Creamery Co.	Co-op	J. L. Jacoby, Secretary	Lenox		S. & G. C.	Test
<b>UNION COUNTY</b>								
601	Treston	Clarinda Poultry, Butter and Egg Co.	Stock	W. T. S. White, Sec'y	Clarinda	J. C. Hall	Hand sep.	Test
<b>VAN BUREN COUNTY</b>								
602	Bonaparte	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec.	Ottumwa		Gath. Cr.	Test
603	Milton	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec.	Ottumwa		Gath. Cr.	Test
604	Stockport	Yorkshire Creamery Co. (s)	Stock	R. N. Morrell, Sec.	Ottumwa		Gath. Cr.	Test
<b>WAPELLO COUNTY</b>								
605	Blakesburg	Blakesburg Creamery	Indiv.	Foland Bros., Prop's.	Blakesburg	Foland Bros.	Separator	Test
606	Ottumwa	Yorkshire Creamery Co.	Stock	R. N. Morrell, Sec.	Ottumwa	W. H. Davis	Gath. Cr.	Test
<b>WARREN COUNTY</b>								
607	Carlisle	Carlisle Creamery	Indiv.	H. L. Owens, Proprietor.	Carlisle	H. L. Owens	Separator	Test
<b>WASHINGTON COUNTY</b>								
<b>WAYNE COUNTY</b>								
608	Hameston	Old Colony Creamery	Indiv.	Jas. L. Humphrey Jr., Prop.	Hameston	S. Petersen	S. & G. C.	Test.
609	Lewisburg	Old Colony Creamery (s)	Indiv.	Jas. L. Humphrey Jr., Prop.	Hameston		S. & G. C.	Test.
610	Corydon	Old Colony Creamery (s)	Indiv.	Jas. L. Humphrey Jr., Prop.	Hameston		S. & G. C.	Test.
<b>WEBSTER COUNTY</b>								
611	Duncombe	Duncombe Creamery	Indiv.	S. Smith, Proprietor	Duncombe	Geo. Corey	S. & G. C.	Test.
612	St. Dodge	Palmer-Hubbard Co.	Stock	C. V. Rosenberger, Sec.	Independence	S. H. Deucher	Hand Sep.	Test.
<b>WINNEBAGO COUNTY</b>								
613	Buffalo Center	Farmers Co-op Creamery Co.	Co-op	Geo. J. Andrews, Secretary	Buffalo Center	A. Woolery	Gath. Cr.	Test.
614	Forest City	Forest City Co-op Cr. Ass'n(s)	Co-op	John Carson, Secretary	Forest City	W. C. Frank	S. & G. C.	Test.
615	Forest City	Forest City Co-op Cr. Ass'n(s)	Co-op	John Carson, Secretary	Forest City		S. & G. C.	Test.
616	Mt. Valley Twp.	Lake Mills Creamery Co.	Co-op	J. A. Horvel, Secretary	Lake Mills	T. A. Storvick	Separator	Test.
617	Dahle Church	Lake Mills Creamery Co. (s)	Co-op	J. A. Horvel, Secretary	Lake Mills		Separator	Test.
618	Newton Twp.	Lake Mills Creamery Co. (s)	Co-op	J. A. Horvel, Secretary	Lake Mills		Separator	Test.
619	Rake	Lincoln Co-op Creamery Co.	Co-op	J. Quamme, Secretary	Rake	P. N. Peterson	Separator	Test.
620	Scorville	Scorville Creamery Association	Co-op	E. J. Larson, Partnership	Scorville R. D. 1	Soren Kristensen	Separator	Test.
621	Scorville	Scorville Creamery Association	Co-op	Nels Berg, Secretary	Scorville	E. A. Gudvang	Separator	Test.
622	Rake	Eden Co-op Creamery Ass'n	Co-op	J. I. Moore, Secretary	Briely, Minn.	Andrew Hanson	Separator	Test.
623	Thompson	Thompson Creamery Co.	Co-op	H. H. Mattison, Secretary	Thompson	Emos Albertson	S. & G. C.	Test.
624	Lake Mills	Fertile Co-op Dairy Co. (s)	Co-op	J. T. Jackson, Secretary	Fertile		Separator	Test.
625	Woden	Buffalo Center Co-op Creamery	Co-op	L. C. Peterson	Woden	John T. Olson	Hand Sep.	Test.
<b>WINNEBAGO COUNTY</b>								
626	Burr Oak	Silver Creek Creamery	Co-op	Clayton A. Reid, Sec.	Burr Oak	Victor Johnson	Gath. Cr.	Oil Test
627	Calmar	Calmar Creamery	Indiv.	Bee & Nelson, Proprietors	Calmar	Iver Barlow	Gath. Cr.	Oil Test
628	Decorah	Decorah Creamery	Indiv.	Johnson & Krome, Prop's.	Decorah	T. N. Seim	Gath. Cr.	Oil Test
629	St. Atkinson	St. Atkinson Creamery Co.	Stock	H. R. Carpenter, Sec.	Elkhart	E. B. Forsberg	Gath. Cr.	Oil Test
630	Festina	Festina Creamery Co.	Co-op	H. L. Denzel, Secretary	Calmar, K. F. D. 1	H. Hesse	Gath. Cr.	Oil Test
631	Highlandville	Highland Creamery	Indiv.	Bidne & Akre, Proprietors	Highlandville	Peter J. Bidne	Gath. Cr.	Oil Test
632	Rock Springs Creamery Co.	Rock Springs Creamery Co.	Stock	M. Peterson, Secretary	Sp. g Grove, Minn.	E. M. Peterson	Gath. Cr.	Oil Test
633	Kendallville	Kendallville Creamery	Indiv.	Bee, Nelson & Jo., Prop's	Kendallville	Ed. Holme	Gath. Cr.	Oil Test



Office record number.	Location.	Name of Creamery.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Butter Maker.	Separator or gathered cream.	Method of receiving milk.
635	Nordness .....	Nordness Creamery Co.....	Stock.	J. N. Bragestad, Sec. & Mgr.	Nordness .....	Knut Hauge.....	Hand sep.	Oil Test
636	Nordness .....	Red Oak Creamery Co.....	Co-op.	N. E. Ramsey, Secretary	Decorah .....	Hans Foss.....	Gath. Cr.	Oil Test
637	Ossian .....	Silver Springs Creamery Co..	Stock.	M. J. Nicholson, Sec. & Mgr.	Decorah, R. D. 2	Ole Hauge.....	Gath. Cr.	Oil Test
638	Ridgeway .....	L. T. Fosse & Sons Creamery.	Indiv.	O. A. Fosse, Secretary.....	Ridgeway.....	O. A. Fosse.....	Gath. Cr.	Oil Test
639	Ridgeway .....	Lincoln Fms' Co-op. Cr'y Ass'n	Co-op.	A. W. Prann, Secretary.	Ridgeway.....	G. A. Bakken.....	Gath. Cr.	Oil Test
WOODBURY COUNTY-								
640	Correctionville ..	Hopkins & Hubbard Creamery	Indiv.	Hopkins & Hubbard, Props.	Correctionville ..	M. J. Goodnow..	Hand Sep	Test.
641	Sioux City .....	Hanford Produce Co.....	Stock	J. H. Whittemore, Sec'y ..	Sioux City.....	W. O. Wheelock	Hand Sep	Test.
WORTH COUNTY-								
642	Fertile .....	Fertile Co-op. Dairy Co.....	Co-op.	J. T. Tallackson, Secretary	Fertile .....	J. A. Johnson ..	S. & G. C.	Test.
643	Joice .....	Nordland Creamery Co.....	Co-op.	P. R. Hammer, Secretary..	Joice .....	A. H. Nelson ..	Separator	Test.
644	Kensett .....	Danville Creamery Co.....	Co-op.	M. O. Bray, Secretary.....	Kensett .....	Gilbert Olson ..	S. & G. C.	Test.
645	Manly .....	Farmers Co-op. Creamery Co..	Co-op.	E. R. Stock, Secretary.....	Manly .....	H. E. Ford .....	S. & G. C.	Test.
646	Meltonville .....	Lorenzen Bros. Creamery.....	Indiv.	Lorenzen Bros., Proprietors	Meltonville ..	N. E. Lorenzen ..	Gath. Cr.	Oil Test
647	Northwood .....	Farmers Butter & Cheese Ass'n	Co-op.	M. D. Johnson, Secretary..	Northwood ..	E. S. Bergsather	S. & G. C.	Test.
648	Northwood .....	Hartland Dairy Association....	Stock	E. L. Loberg, Secretary.....	Northwood R. 3	A. M. Hansen ..	Separator	Test.
649	Northwood .....	Brookfield Creamery Ass'n ..	Co-op.	E. A. Tenold, Sec. & Mgr.	Northwood ..	A. C. Talle .....	S. & G. C.	Test.
650	Bristol Townsh'p	Lake Mills Creamery Co (s) ..	Co-op.	J. A. Horvel, Secretary.....	Lake Mills .....		Separator	Test.
651	Tenold .....	Tenold Creamery .....	Indiv.				Gath. Cr.	Test.
WRIGHT COUNTY-								
652	Belmond .....	Norway Co-op. Creamery Co. .	Co-op.	O. J. Baxter, Secretary.....	Belmond R.F.D. 2	C. H. Vanderham	Hand Sep	Oil Test
653	Clarion .....	Clarion Creamery Association	Co-op.	O. P. Morton, Secretary ..	Clarion .....	E. W. Umbreit..	Gath. Cr.	Oil Test
654	Goldfield .....	Fountain Creamery .....	Indiv.	DeWitt Goodrich, Prop.....	Goldfield .....	John Beck .....	Hand Sep	Test.
655	Galt .....	Galt Creamery Co. ....	Co-op.	A. E. Ketchum, Secretary.	Galt .....	A. Fatland .....	S. & G. C.	Test.

## IOWA CHEESE FACTORY LIST.

Alphabetically Arranged According to Counties and Towns Near Which Factory is Located, Together with Information Pertaining to Each.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of receiving milk.
BENTON COUNTY-							
1	Atkins .....	Ideal Cheese Factory.....	Indiv. ..	A. C. Stewart, Proprietor..	Atkins .....	A. C. Stewart ..	Hundred.
BLACK HAWK COUNTY-							
BREMER COUNTY-							
2	Janesville.....	The Fowler Co.....	Stock...	Geo. V. Fowler, Manager..	Waterloo .....	J. McMurray ....	Test.
CHERO GORDO COUNTY-							
3	Burchinal.....	Burchinal Cheese Factory.....	Indiv. ..	T. R. Coates, Proprietor...	Burchinal.....	T. R. Coates....	Test.
CRAWFORD COUNTY-							
4	Astor .....	Astor Cheese company.....	Indiv. ..	O. A. Olson, Proprietor...	Astor .....	Arthur William.	Hundred.



## IOWA CHEESE FACTORY LIST—CONTINUED.

Office record number.	Located at or Near.	Name of Cheese Factory.	How operated.	Name of Proprietor, Secretary or Manager.	P. O. Address of Proprietor, Secretary or Manager.	Name of Cheese Maker.	Method of receiving milk.
	CLARKE COUNTY—						
5	Weldon .....	Weldon Cheese Factory .....	Indiv...	L. M. Parr, Proprietor .....	Weldon .....	L. M. Parr .....	Hundred.
	FLOYD COUNTY—						
6	Charles City .....	Elm Springs Factory .....	Indiv...	H. D. White, Proprietor .....	Charles City .....	Walter B. Pfeiffer .....	Hundred.
	GREENE COUNTY—						
7	Dana .....	Dana Mutual (Co-op. Crm. Company) .....	Co-op...	W. J. Elling, Secretary .....	Dana .....	W. J. Elling .....	Test.
	GUTHRIE COUNTY—						
8	Jamaica .....	Jamaica Cheese Factory .....	Indiv...	Goreham & Coon, Props .....	Jamaica .....	W. E. Goreham .....	Hundred.
	HARDIN COUNTY—						
9	Iowa Falls .....	Ellis Cheese Factory .....	Indiv...	W. I. Clark, Proprietor .....	Iowa Falls, R. 3, B. 18 .....	W. I. Clark .....	Hundred.
	HOWARD COUNTY—						
10	Cresco .....	Cresco Cheese Factory .....	Indiv...	Wm. Kellow .....	Cresco .....	W. N. Lathrop .....	Hund.
11	Cresco .....	Clover Leaf Cheese Factory .....	Indiv...	J. J. House .....	Cresco .....	J. J. House .....	Hund.
	HENRY COUNTY—						
12	Noble .....	The Christner Butter and Cheese Co .....	Indiv...	C. C. Christner .....	Wayland .....	C. C. Christner .....	Test.
	JEFFERSON COUNTY—						
13	Pleasant Plain .....	Pleasant Plain Cheese Factory .....	Indiv...	J. H. Sasseen .....	Pleasant Plain .....	Fred L. Reynold .....	Test.
14	Veo .....	Veo Cheese Factory .....	Stock...	E. A. Hosler .....	Pleasant Plain .....	H. W. Spencer .....	Test.
	KEOKUK COUNTY—						
15	Talleyrand .....	Talleyrand Factory .....	Stock ..	L. M. Tucker, Secretary .....	Talleyrand .....	Clifton Tucker .....	Test.
	LEE COUNTY—						
16	Franklin Station .....	Franklin Station Cheese Company .....	Stock ..	Chas. Klingler .....	Donnellson .....	A. W. Newell .....	Test.
	MONROE COUNTY—						
17	Albia .....	Bone Cheese Factory .....	Indiv...	S. G. Bone, Proprietor .....	Albia .....	S. G. Bone .....	Hund.
	MARSHALL COUNTY—						
18	Liscomb .....	Liscomb Cheese Company .....	Stock...	Thomas E. Culp, Manager .....	Liscomb .....	Thos. E. Culp .....	Test.
	MUSCATINE COUNTY—						
19	Wilton Junction .....	Muscatine French Cheese Company .....	Co-op ..	Fritz Kolb, Secretary .....	Wilton Junction .....	Homer Carson .....	Hund.
	POWESHIEK COUNTY—						
20	Jacobs .....	Jacob Cheese Factory .....	Indiv...	A. C. Payne, Proprietor .....	Jacobs .....	S. M. Payne .....	Test.
	SCOTT COUNTY—						
21	Princeton .....	Wapsie Cheese Factory .....	Stock...	Chas. A. Pope .....	Princeton .....	Perry E. Bower & O. A. Hope .....	Test.
	STORY COUNTY—						
22	Ames .....	I. A. C. Cheese Factory .....	State ..	G. L. McKay, Manager .....	Ames .....		Test.
	TAYLOR COUNTY—						
23	Sharpsburg .....	Sharpsburg Cheese Company .....	Indiv...	G. S. Eastlack, Proprietor .....	Sharpsburg .....	G. S. Eastlack .....	Hund.
24	Blockton .....	Blockton Cheese Factory .....	Indiv...	Waldrip & Bonafield, Props .....	Blockton .....	Waldrip & Bonafield .....	Hund.
	WASHINGTON COUNTY—						
25	West Chester .....	Leet Cheese Factory .....	Indiv...	W. E. Leet, Proprietor .....	West Chester .....	W. E. Leet .....	Hund.
26	Richland .....	Clay Cheese Factory .....	Stock...	B. A. Meachman, Sec. ....	Richland, R. 2 .....	W. J. Abeer .....	Test.
	WAYNE COUNTY—						
27	Sewall .....	Sewall Cheese Manufacturing Co. ....	Stock...	Ira Banta, Secretary .....	Sewall .....	Samuel Souder .....	Hund.
28	Lineville .....	Lineville Cheese Factory .....	Indiv...	Mathew DeHaan .....	Lineville .....	Mathew DeHaan .....	Hund.
29	Seymour .....	Seymour Cheese Company .....	Stock...	E. A. Weagley, Secretary .....	Seymour .....	R. E. Spencer .....	Hund.



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