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FIFTEENTH ANNUAL REPORT

OF THE

DAIRY BUREAU

OF THE

MASSACHUSETTS BOARD OF AGRICULTURE,

REQUIRED UNDER

CHAPTER 89, SECTION 12, REVISED LAWS.

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JANUARY 15, 1906.



BOSTON :

WRIGHT & POTTER PRINTING CO., STATE PRINTERS,  
18 POST OFFICE SQUARE.

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DAIRY BUREAU—1905.

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CARLTON D. RICHARDSON, WEST BROOKFIELD, *Chairman.*

JOHN M. DANFORTH, LYNNFIELD CENTRE.

HENRY E. PAIGE, AMHERST.

---

*Secretary.*

J. LEWIS ELLSWORTH, *Executive Officer and Secretary of the  
State Board of Agriculture.*

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*General Agent.*

P. M. HARWOOD.

ADDRESS, ROOM 136, STATE HOUSE, BOSTON.



# Commonwealth of Massachusetts.

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## REPORT.

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The nature of the Bureau's work has not materially changed from that of the two preceding years. In the number of cases prosecuted, violations of the renovated butter, oleo-margarine and milk laws have been as in the order named. It gives us pleasure, however, to announce that violations of these laws are, on the whole, decreasing. In 1903 the Bureau made 5,524 inspections and secured 272 convictions; in 1904, 5,594 inspections and 166 convictions; while in 1905, with 5,836 inspections, the number of convictions was but 155. The total convictions, 593 for the three years, were secured from 596 violations of law, — a net loss of but a trifle over one-half of one per cent. This year there were no cases lost.

Many calls have been made upon this department during the year for lectures, use of the stereopticon, publications, dairy demonstrations, judging of dairy stock and dairy products, etc. These have been responded to so far as time and appropriation would permit, and as a result an increased amount of educational work has been done.

There has been no change in the membership of the Bureau. C. D. Richardson, reappointed by Governor Douglas, has remained as chairman; P. M. Harwood, re-elected by the Board of Agriculture, has continued as general agent; A. W. Lombard has served as agent, and four others have been temporarily employed. The chemical work has been done by Dr. B. F. Davenport. The summary of the work is as follows: —

Total number of inspections, . . . . .	15,836
Number of inspections where no sample was taken, . . . . .	4,887
Number of samples of butter and oleomargarine, nearly all purchased, . . . . .	851
Number of samples of milk and cream, mostly purchased, . . . . .	120
Cases in court, . . . . .	155
Meetings addressed by the chairman of the Bureau, . . . . .	15
Meetings addressed by the general agent, . . . . .	21

Cases prosecuted during the year, by months and courts, with law violated, and results, are as follows:—

COURT.	Month.	Number.	Law violated.	Con- victed.	Dis- charged.
Walpole, . . . . .	January, . . . . .	2	Renovated butter, . . . . .	2	—
Worcester, . . . . .	January, . . . . .	2	Oleomargarine, . . . . .	2	—
Holyoke, . . . . .	January, . . . . .	2	Renovated butter, . . . . .	2	—
Quincy, . . . . .	January, . . . . .	4	Renovated butter, . . . . .	4	—
Fall River, . . . . .	February, . . . . .	15	Renovated butter, . . . . .	15	—
Haverhill, . . . . .	March, . . . . .	4	Renovated butter, . . . . .	4	—
Lowell, . . . . .	March, . . . . .	30	Renovated butter, . . . . .	30	—
Lowell, . . . . .	March, . . . . .	5	Oleomargarine, . . . . .	5	—
Charlemont, . . . . .	March, . . . . .	1	Milk, . . . . .	1	—
Gloucester, . . . . .	March, . . . . .	6	Renovated butter, . . . . .	6	—
Worcester, . . . . .	April, . . . . .	8	Renovated butter, . . . . .	8	—
Worcester, . . . . .	April, . . . . .	2	Oleomargarine, . . . . .	2	—
Fitchburg, . . . . .	April, . . . . .	6	Renovated butter, . . . . .	6	—
Boston, <sup>2</sup> . . . . .	April, . . . . .	1	{General food laws, Boron preservative, }	1	—
Boston, <sup>2</sup> . . . . .	April, . . . . .	18	Renovated butter, . . . . .	18	—
Cambridge, . . . . .	May, . . . . .	4	Renovated butter, . . . . .	4	—

<sup>1</sup> Twenty-two extra samples were taken during inspections, therefore this total is twenty-two less than the sum of the next three items.

<sup>2</sup> In connection with milk inspector of Boston.

COURT.	Month.	Num-ber.	Law violated.	Con- victed.	Dis- charged.
Worcester, <sup>1</sup>	May, . . .	8	Oleomargarine, . . .	8	—
New Bedford, .	June, . . .	4	Renovated butter, . . .	4	—
New Bedford, .	August, . . .	4	Renovated butter, . . .	4	—
Haverhill, . .	August, . . .	6	Milk, . . . . .	6	—
New Bedford, .	September, . .	3	Oleomargarine, . . .	3	—
New Bedford, .	September, . .	2	Renovated butter, . . .	2	—
Worcester, . .	October, . . .	8	Oleomargarine, . . .	8	—
Peabody, . . .	November, . . .	1	Milk, . . . . .	1	—
Pittsfield, . .	December, . . .	5	Renovated butter, . . .	5	—
North Adams, .	December, . . .	4	Renovated butter, . . .	4	—
Totals, . . . .	. . . . .	155	. . . . .	155	

<sup>1</sup> In connection with milk inspector of Worcester.

The charges in the several cases in court for the year have been as follows:—

Selling renovated butter in unmarked packages, . . . . .	118
Boron preservative in renovated butter, . . . . .	1
Oleomargarine in imitation of yellow butter, . . . . .	17
Oleomargarine sold as butter, . . . . .	2
Oleomargarine sold in unstamped wrappers, . . . . .	5
Oleomargarine sold without a license, . . . . .	1
Oleomargarine sold without registering, . . . . .	1
Milk below standard, . . . . .	8
Interference with an officer, . . . . .	2
Total, . . . . .	155

The following is a list of inspections without samples and the number of samples taken in the years 1900–1905 inclusive:—

YEAR.	Inspections without Samples.	Samples taken.
1900, . . . . .	1,612	826
1901, . . . . .	1,757	911
1902, . . . . .	3,895	1,078
1903, . . . . .	4,135	1,395
1904, . . . . .	4,456	1,157
1905, . . . . .	4,887	971
Totals, . . . . .	20,742	6,338
Averages, . . . . .	3,457	1,056+

The following is a list of the number of cases entered in court and also the number of convictions secured in the years 1900–1905, inclusive:—

YEAR.	Total Cases.	Convictions.
1900, . . . . .	178	144
1901, . . . . .	252	218
1902, . . . . .	285	238
1903, . . . . .	289	272
1904, . . . . .	168	166
1905, . . . . .	155	155
Totals, . . . . .	1,327	1,193
Average convictions, . . . . .	—	199—

## OLEOMARGARINE.

According to statistics of the Treasury Department at Washington, the output from the factories of the United States for the past six years is as follows:—

		Pounds.
Under the old law,	{ 1900, . . . . .	107,045,028
	{ 1901, . . . . .	104,943,856
	{ 1902, . . . . .	126,316,472
	{ 1903, . . . . .	71,804,102
Under the new law,	{ 1904, . . . . .	48,071,480
	{ 1905, . . . . .	49,880,982

In Massachusetts the Dairy Bureau had in court for violation of the oleo laws: in 1900, 178; in 1901, 215; in 1902 (new national law going into effect during this year), 90; in 1903, 56; in 1904, 22; and in 1905, 26.

There are indications that certain peddlers in this State are also manufacturers, in the sense that they buy uncolored oleomargarine, color it and peddle the same, which is not only violation of our own anti-color law, but is also violation of national laws. One such violator has served a jail sentence, imposed by the United States courts during the year.

There are also indications and even statistics which show that oleomargarine does not meet with great popular favor in its uncolored (natural) condition, but that its sales depend to a large extent upon the retailer being able to pass it off as butter, when colored in imitation of the latter article. For instance, the output of artificially colored oleomargarine in 1904 was 1,639,102 pounds for the whole country; in 1905 the output was 3,284,850 pounds, an increase of 1,645,743 pounds, which nearly covers the 1,809,502 pounds total in-

crease over the previous year, leaving but 153,784 pounds as the increase of uncolored goods during the year.

The oleomargarine business needs watching all the time.

The number of persons who paid a United States tax the past four years is shown by the following table:—

YEARS ENDING JUNE 30.	Wholesale.	Retail.
1903 (colored), . . . . .	1	24
1903 (uncolored), . . . . .	7	314
1904 (colored), . . . . .	—	17
1904 (uncolored), . . . . .	9	326
1905 (colored), . . . . .	—	4
1905 (uncolored), . . . . .	9	138
Current year (colored), . . . . .	—	4
Current year (uncolored), . . . . .	10	120

#### RENOVATED BUTTER.

The business of manufacturing renovated butter is still on the increase in this country, so far as the total output is concerned; but, according to Secretary Wilson, “The law [national] has not proven in any way detrimental to the makers of country butter, whose product forms the bulk of the stock worked up in factories.” The same authority reports an improvement of quality in renovated butter. The Commissioner of Internal Revenue at Washington reports that the output of process or renovated butter for the year ending June 1, 1905, was 61,366,400 pounds as against 55,747,736 pounds for the preceding fiscal year. The same report shows a falling off in the number of factories of about 30 per cent.

The real value of our State law lies in securing honest dealing, quite as much as in the protection of dairy interests; and the condition as we have found it during the past

two years is encouraging, inasmuch as the number of cases of violations of the renovated butter law found in this State during 1904 and 1905 together were 35 less than the number in 1903.

#### EDUCATIONAL.

For the past three years this Bureau, through lectures delivered by its general agent, and otherwise, has been encouraging the farmers to produce a better dairy product, especially a cleaner milk. We believe that it is for the interest of the dairyman, as well as for every one else that this be accomplished, and we do not believe that the production of clean milk is a prohibitively expensive operation. There can be no nobler work done by any one than improving the quality of food for our people, especially such an important and universal food as milk, thus adding to the health, happiness and general welfare of the human race. Milk can never be too clean or in too good condition for human consumption. The mortality of young children is yet far too high, especially in our large cities. Every possible effort should be made on the part of an intelligent public to improve this condition.

But, meanwhile, let us not be unmindful of existing facts, — facts sometimes overlooked when this question is considered, — one of which is, that there has been a constant improvement in the quality and condition of milk furnished the peddlers for the city of Boston for the last thirty years at least. Of this we have personal knowledge. The general public little realizes the efforts put forth during that time by the various milk contractors and others to urge better care at the farms, and these same contractors have spared no expense to improve their own plants year after year, by adding latest and most up-to-date appliances.<sup>1</sup> Only those who have personally observed through the period mentioned know these facts ; the general public has hardly kept informed. Then, too, a considerable number of well-known, public-spir-

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<sup>1</sup> Mr. Tower, late of the firm of C. Brigham Company, spent most of his time during the last few years of his life in going about among farmers and improving conditions at the stables, and as a result many separate milk rooms were built.

ited individuals have come to the front in recent years, with their sanitary dairies; agricultural colleges and experiment stations have done their work; the national government has issued circulars and bulletins; farmers' institute lecturers and grange speakers have expostulated; physicians and city boards of health have been active; not to forget the work now being done by the various State departments. All these have yielded results, until it is safe to say that not only has the condition of the milk supply of the city of Boston improved steadily for the last thirty years, but never before was the public so sure of getting a fairly clean article as it is to-day; and it may reasonably be questioned whether Massachusetts has a peer among all her sister States in the quality and marketable condition of her milk supply, though perhaps far from perfect at that. This to our mind is encouraging, and also the very best argument for still better farm conditions.

Of course there are some filthy dairies, — dairies perhaps where owners should and may go out of the business for lack of requisite neatness of habit, and most dairies can be improved; but it seems that the time is at hand when the shafts of reformers should be also aimed at consumers in our cities and towns, to the end that the milk be properly cared for and suitably prepared for consumption, and that the milk producer be not called upon to bear undue share of blame for child mortality. He certainly may have much to answer for, but he is not to blame for neglected children, filthy rooms, stuffy atmosphere, cold milk, irregular meals, improper or insufficient quantity, the lashes of poverty or the whims of fashion, both of which often place the child in the hands of a third and more or less disinterested and not unfrequently incompetent person, — and many other things which might be named. The campaign of true progress is the one which keeps ever in view the mutual benefit of both producer and consumer; thus making no undue demands or reflections upon the one, and observing the rightful needs of the other. It is along this line that this Bureau is conducting its educational work. We have during the year offered many suggestions, some of which at least have been adopted;

and we have received, both verbally and by letter, very cordial appreciation of our efforts.

In support of our contention of an improved condition, we quote from the last annual report of the Boston Board of Health. In 1875, 43.84 per cent of all the deaths were of children under five years of age, and in 1904 the percentage was 28.87; under one year of age in 1875 the percentage was 24.98, and in 1904 it was 20.52. Thus it will be seen that the death rate among children under five years has been reduced in that time practically one-third, and of children under one year about one-fifth. Of course milk is not the only cause of this decrease, any more than it is the cause of the entire mortality; but as 80 to 85 per cent of children are brought up on cow's milk, this food may possess the controlling influence.

Taking the State as a whole, we find that in 1875 the death rate of children under one year per 1,000 living at that age was 226.56, and in 1900 it was 190.10, — an improvement of nearly one-sixth. In 1875 the death rate of children under five years of age per 1,000 living at that age was 73.96, and in 1900, 57.79, — a reduction of practically one-fifth.

These figures for 1900 and 1904 are the latest obtainable, and 1875 is taken for comparison because it was in that year that the firm of C. Brigham Company opened up a fresh milk supply in Barre, Hardwick and New Braintree, which was the beginning of our experience with the milk business of Boston. We realize that figures such as these are at best simply pointers, but it is gratifying to know that they all point in the right direction.

The price paid the farmer to-day is practically the same as in 1875. The quality of the milk has been much improved, as has been shown. Is not the farmer, then, in a fair position to demand a better price, as a matter of justice, and can such demand, in any spirit of justice, be refused?

#### BUTTER.

The butter market of 1905 has been in some respects remarkable. The appended tables, relating to the Boston market, virtually tell the story. With but about five and

one-half million pounds on hand Jan. 1, 1905, nearly two million pounds less than the year previous, followed by four successive months of light receipts and consequent high prices, the arrival of May witnessed the beginning of unparalleled receipts, which continued, with the exception of November, unbroken throughout the year, leaving, after unprecedented consumption, a stock on hand of ten million pounds, or almost double the amount on hand the year previous. High as butter was during the early part of the year, the average price for the year is below that for 1902 and 1903, but is well above the average of 1904. As a result of the high price in the early part of the year, there was a stimulated activity in "imitations," which resulted in increased prosecutions wherever the law was broken.

The following table shows the average quotation for the best fresh creamery butter in a strictly wholesale way in the Boston market for the last eight years:—

	1905. Cents.	1904. Cents.	1903. Cents.	1902. Cents.	1901. Cents.	1900. Cents.	1899. Cents.	1898. Cents.
January, . . .	28.0	22.7	28.0	25.0	25.0	29.5	21.0	22.5
February, . . .	31.6	24.6	27.0	28.5	25.0	26.0	24.0	21.5
March, . . .	28.0	24.1	27.0	29.0	23.0	27.0	22.5	22.0
April, . . .	29.1	21.6	27.5	32.0	22.0	21.0	21.0	22.5
May, . . .	23.9	19.9	22.5	25.0	19.5	20.5	19.0	18.0
June, . . .	20.7	18.4	22.75	23.5	20.0	20.5	19.0	17.5
July, . . .	20.6	18.3	20.5	22.5	20.0	20.5	19.0	18.5
August, . . .	21.6	19.1	20.0	21.5	21.0	22.5	21.5	19.5
September, . . .	21.2	20.8	22.0	23.5	22.0	22.5	23.5	21.0
October, . . .	22.1	21.5	22.5	24.5	21.5	22.0	24.0	21.5
November, . . .	23.0	24.1	23.5	27.0	24.0	25.0	26.5	21.0
December, . . .	23.9	25.7	24.5	28.5	24.5	25.5	28.0	21.0
Averages, . . .	24.47	21.73	26.23	25.0	22.3	23.5	22.4	20.5

The Chamber of Commerce's figures regarding the butter business in Boston for 1904 and 1905 are as follows:—

	1905. Pounds.	1904. Pounds.
Carried over, . . . . .	5,612,592	7,567,360
Receipts for January, . . . . .	2,097,952	2,345,447
Receipts for February, . . . . .	2,015,265	2,400,922
Receipts for March, . . . . .	2,698,064	3,087,017
Receipts for April, . . . . .	2,393,951	2,658,679
Receipts for May, . . . . .	5,260,758	3,776,547
Receipts for June, . . . . .	10,696,890	8,076,244
Receipts for July, . . . . .	10,068,394	8,513,155
Receipts for August, . . . . .	10,376,813	7,480,505
Receipts for September, . . . . .	7,743,859	6,512,408
Receipts for October, . . . . .	6,549,119	4,554,447
Receipts for November, . . . . .	3,135,224	3,238,005
Receipts for December, . . . . .	3,688,555	2,791,828
Total supply, . . . . .	72,337,436	63,002,564
Exports for twelve months, deduct, . . . . .	2,551,319	1,373,815
Net supply, . . . . .	69,786,117	61,628,749
Stocks in storage December 30, deduct, . . . . .	10,189,575	5,612,592
Consumption for twelve months, . . . . .	59,596,542	56,016,157
Increase in consumption for 1905, . . . . .	3,580,385	

#### MILK.

There is considerable variation in the price of milk, as now sold in Massachusetts. The retail price of average market milk throughout the State varies from 5 to 8 cents per quart. In Boston, "fancy" or "sanitary" milk, so called, sells at from 10 to 12 cents per quart and upward.

Milk sold by the half-pint jar at 5 cents means 20 cents per quart; that sold by the glass at 5 cents, usually the same. At 10 cents per glass, holding one-third quart, the price rises to 30 cents per quart; and sanitary milk, modified and put up by prescription for babies' use, ranges from 25 to 50 cents per quart. In the suburbs of Boston the usual price which the householder has to pay is 7 to 8 cents for average milk, and 9 to 10 cents for sanitary milk. There is a constantly increasing number of small dairies springing up among the wealthy fancy farmers in the eastern part of the State, which are producing sanitary milk and cream, and getting an extra price for it. Even a few farmers of limited means are now undertaking the project, as a business venture.

There is also variation in the wholesale price of milk, which the producer receives, dependent mainly upon his distance from market. The farmer who sells milk to Boston contractors is paid according to his distance from market, the average distance being 56 to 76 miles; and, as may be seen by the tables, the average price to the farmer in this zone for milk delivered to his local railroad station is  $26\frac{1}{2}$  cents in summer and  $28\frac{1}{2}$  cents in winter, provided he does not exceed his limit (see footnote with table); but in case the contractor returns clean cans,  $\frac{1}{2}$  cent each is, under the present contract, to be deducted for washing. The farmer is obliged to put up  $8\frac{1}{2}$  quarts for a can. Thus his average price per quart through the year is  $27\frac{1}{2}$  cents, divided by  $8\frac{1}{2}$ , or practically  $3\frac{1}{4}$  cents at the railroad station or 3 cents at the farm. Farmers 150 miles out get  $2.88+$  cents per quart, and those 25 miles out get  $3.47+$  cents per quart, for average milk. In some instances producers wholesaling their milk direct to peddlers get 4 to  $4\frac{1}{2}$  cents per quart for it.

High-class sanitary milk is rarely ever wholesaled. In the only case we know of the price quoted was  $8\frac{1}{2}$  cents, which was said to pay expenses, but yielded no profit.

There is no question but that the average price for average milk, which really means the bulk of all the milk sold in Massachusetts, is far too low, so far as the return to the producer is concerned; and it is undoubtedly true that no important food is cheaper than milk, at present prices. Even

the consumer can easily afford to pay an increased price for the better article of milk now demanded.

The following table shows the wholesale price of milk sent to the Boston market for the last ten years :—

*Summer Price.*

	Gross Boston Price. Cents.	"Straight Price," Boston. Cents.	Gross to Producer, Fifth Zone. Cents.	Straight Price to Producer, Fifth Zone. <sup>1</sup> Cents.
1896, April to October, .	33	-	22	-
1897, " " .	31 <sup>2</sup>	-	22	-
1898, " " .	31	-	22	-
1899, " " .	31	-	22	-
1900, " " .	33	-	24	-
1901, " " .	33	31	24	22
1902, " " {	36 in April, July, August, September. 35 in May, June.	34 in April, July, August, September. 33 in May, June.	} 27 26	25 24
1903, " " .	37½	35½	28½	26½
1904, " " .	37½	35½	28½	26½
1905, <sup>3</sup> " " .	37½	35½	28½	26½

*Winter Price.*

1896-7, October to April,	35	-	24	-
1897-8, " " .	33 <sup>2</sup>	-	24	-
1898-9, " " .	33	-	24	-
1899-0, " " .	33	-	24	-
1900-1, " " {	37 to January. 35 to April.	} -	{ 28 to January. 26 to April.	} -
1901-2, " " {	36 40 in December.	34½ 38½ in December.	27 31	25.5 29.5
1902-3, " " .	39½	37½	30½	29
1903-4, " " .	39½	37½	30½	28½
1904-5, " " .	39½	37½	30½	28½
1905-6, <sup>4</sup> " " .	39½	37½	30½	28½

<sup>1</sup> The price in the fifth zone, *i.e.*, the middle territory, is approximately the average price which the producers receive for their milk.

<sup>2</sup> This is a nominal rather than an actual change. With the dropping of the Boston price 2 cents the distance discount-schedule was also lowered 2 cents, so that producers received the same price.

<sup>3</sup> The so-called Knapp tables, allowing a variation of 16½ per cent either way from the given basis of uniform production, were made a part of this year's contract. Should the producer exceed this limit, up to a certain point the penalty is that he is obliged to take 1 cent less per can for his entire month's production; if he exceeds that point or second limit, another cent less and so on.

<sup>4</sup> It was agreed that in case the cans were washed and returned clean, ½ cent per can should be deducted.

## CREAMERIES AND MILK DEPOTS.

Appended we give a revised list of the principal creameries and milk depots owned and operated by Massachusetts individuals and corporations. There are in this State, in addition to these, a number of distributing plants for creameries owned and operated in other States. For instance, the Maine Creamery Company of Bangor, Me., has offices at 12 Foster Wharf, Boston. The Turner Centre Creamery of Auburn, Me., has distributing houses in Boston, Worcester, Taunton and Lowell, and ships to these points butter, cream, and to one at least skimmed milk.<sup>1</sup> The New England Creamery of Livermore Falls, Me., distributes through a Massachusetts company of the same name in Everett, which also distributes the "Hampden Creamery" goods. The Lyndonville Creamery of Lyndonville, Vt., has a plant at Watertown, from which it distributes milk, cream and butter. J. L. Humphrey, Jr., has four plants, one each in New Bedford, Fall River, Taunton and Brockton, for the distribution of butter and renovated butter (and sometimes cream) from his Iowa creameries. The Armours, Swifts, Hammonds, Morrises and other large packing houses, all representing western-made goods, distribute quantities of butter and renovated butter from their numerous establishments scattered over the State. Some of these also put out oleomargarine. Besides these, there is a considerable number of creamery companies and so-called creameries which buy their stock of producers in this and other States. These in the aggregate do a large business. Other private dairies or creameries also have town offices, restaurants, etc.

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<sup>1</sup> Pasteurized skimmed milk and cream are put together in the proper proportions required for standard milk, in the Boston plant, and the milk thus made is placed upon the market.

*Creameries and Milk Depots in Massachusetts.*

Location.	Name.	Co-operative or Proprietary.	Superintendent or Manager.
Amherst, . . . . .	Amherst Creamery, . . . . .	Co-operative, . . . . .	F. J. Humphrey, agent.
Amherst, . . . . .	Fort River, . . . . .	Proprietary, . . . . .	E. A. King.
Amherst, . . . . .	Dairy School, Massachusetts Agricultural College.	Educational, . . . . .	Prof. W. P. Brooks, director.
Ashfield, . . . . .	Ashfield Creamery, . . . . .	Co-operative, . . . . .	Geo. G. Henry,
Belchertown, . . . . .	Belchertown Creamery, . . . . .	Co-operative, . . . . .	M. G. Ward, president.
Boston, 494 Rutherford Avenue, . . . . .	H. P. Hood & Sons, . . . . .	Proprietary, . . . . .	H. P. Hood & Sons.
Boston, 793 Boylston Street, . . . . .	Walker-Gordon Laboratory Company.	Proprietary, . . . . .	Walker-Gordon Laboratory Company.
Boston, 556 Rutherford Avenue, . . . . .	D. Whiting & Sons, . . . . .	Proprietary, . . . . .	D. Whiting & Sons.
Boston, 388 Rutherford Avenue, . . . . .	Boston Dairy Company, . . . . .	Proprietary, . . . . .	Boston Dairy Company.
Boylston, . . . . .	Adelphia Creamery, . . . . .	Proprietary, . . . . .	E. M. Laws.

*Creameries and Milk Depots in Massachusetts — Continued.*

LOCATION.	Name.	Co-operative or Proprietary.	Superintendent or Manager.
Bridgewater, . . . . .	Plymouth County Creamery, . . . . .	Proprietary, . . . . .	S. Neilson Houlburg.
Cambridge, 158 Massachusetts Avenue.	C. Brigham Company, . . . . .	Proprietary, . . . . .	C. Brigham Company.
Charlmont, . . . . .	Charlmont Creamery, . . . . .	Proprietary, . . . . .	T. M. Totman.
Cheshire (P. O., Adams), . . . . .	Greylock Creamery, . . . . .	Co-operative, . . . . .	C. J. Fales, president.
Cheshire, . . . . .	Highland Creamery, . . . . .	Proprietary, . . . . .	Clayton W. Prince.
Cheshire, . . . . .	West Shore Creamery, . . . . .	Proprietary, . . . . .	Seth W. Curtis.
Chester, . . . . .	Chester Creamery, . . . . .	Co-operative, . . . . .	W. S. Wilcox.
Conway, . . . . .	Conway Creamery, . . . . .	Proprietary, . . . . .	Boston Dairy Company.
Cummington, . . . . .	Cummington Creamery, . . . . .	Co-operative, . . . . .	S. W. Clark, president.
Easthampton, . . . . .	Hampton, . . . . .	Co-operative, . . . . .	W. H. Wright, treasurer.
Egremont (P. O., North Egremont), . . . . .	Egremont Creamery, . . . . .	Co-operative, . . . . .	H. O. Harrington.
Everett, . . . . .	Hampden Creamery Company, . . . . .	Proprietary, . . . . .	Hampden Creamery Company.

Frammingham (P. O., South Frammingham).	Echo Farm Company,	Proprietary,	W. E. Marchent.
Fitchburg, 26 Cushing Street,	Fitchburg Creamery,	Proprietary,	G. S. Learned.
Gardner,	Boston Dairy Company,	Proprietary,	Boston Dairy Company.
Groton,	Lawrence Creamery,	Proprietary,	Myron P. Swallow.
Heath,	Heath Creamery,	Proprietary,	I. W. Stetson & Son.
Hinsdale,	Hinsdale Creamery,	Co-operative,	B. C. Bliss.
Lee,	Lenox Creamery,	Proprietary,	P. A. Agnew.
Leominster,	Leominster Creamery,	Proprietary,	G. H. Wass.
Marlborough,	Este's Creamery,	Proprietary,	F. F. Este.
Monson,	Monson Creamery,	Proprietary,	W. C. Moulton.
Montague,	Montague Creamery,	— <sup>1</sup>	A. M. Lyman.
Monterey,	Berkshire Hill Creamery,	Co-operative,	D. A. Campbell.
New Boston,	Berkshire Creamery,	Co-operative,	N. H. Snow, president.

<sup>1</sup> Leased and operated by Tait Bros., Springfield.

*Creameries and Milk Depots in Massachusetts — Concluded.*

LOCATION.	Name.	Co-operative or Proprietary.	Superintendent or Manager.
New Salem (P. O., Millington), . . . . .	New Salem Co-operative Creamery Company.	Co-operative, . . . . .	W. A. Moore.
North Brookfield, . . . . .	North Brookfield Creamery, . . . . .	Proprietary, . . . . .	H. A. Richardson.
Northfield, . . . . .	Northfield Creamery, . . . . .	Co-operative, . . . . .	L. R. Smith.
Orange (P. O., North Orange), . . . . .	North Orange Creamery, . . . . .	Co-operative, . . . . .	C. E. Dunbar.
Shelburne Falls, . . . . .	Shelburne Falls Creamery, . . . . .	Proprietary, . . . . .	Cressy & Campbell.
Southborough, . . . . .	Deerfoot Farm, . . . . .	Proprietary, . . . . .	S. H. Howes, manager.
Southfield, . . . . .	Maple Lawn, . . . . .	Proprietary, . . . . .	A. C. Lockwood.
Springfield, . . . . .	Springfield Milk Association, . . . . .	Co-operative, . . . . .	F. B. Allen.
Springfield, . . . . .	Tait Bros., . . . . .	Proprietary, . . . . .	Tait Bros.
Uxbridge, . . . . .	Farnum Creamery, . . . . .	Proprietary, . . . . .	Geo. A. Farnum.
Warren, . . . . .	Worcester County Creamery Association.	Co-operative, . . . . .	F. N. Lawrence, treasurer.

Westfield (P. O., Wyben), . . .	Wyben Springs Creamery, . . .	Co-operative, . . .	C. H. Wolcott.
West Newbury, . . .	West Newbury Creamery, . . .	Co-operative, . . .	R. S. Brown, treasurer.
Williamsburg, . . .	Williamsburg Creamery, . . .	Co-operative, . . .	E. T. Barrus, president.
Worthington (P. O., Ringville), . . .	Worthington Creamery, . . .	Co-operative, . . .	M. R. Bates, superintendent.
Worcester, . . .	Wachusett Creamery, . . .	Proprietary, . . .	E. H. Thayer & Co.

## EXPENSES.

The following is a classified statement of the expenses for the year:—

Bureau: compensation and travelling expenses, . . . . .	\$488 92
Agents: compensation, . . . . .	1,953 00
Agents: travelling expenses and samples purchased, . . . . .	2,493 12
General agent: travelling and necessary expenses, . . . . .	501 32
Chemists: analyses, tests, court attendance, . . . . .	864 50
Printing and supplies, . . . . .	195 18
Educational, . . . . .	503 96
	<hr/>
Total, . . . . .	\$7,000 00

P. M. HARWOOD,

*General Agent.*

Accepted and adopted as the report of the Dairy Bureau.

C. D. RICHARDSON.  
JOHN M. DANFORTH.  
HENRY E. PAIGE.