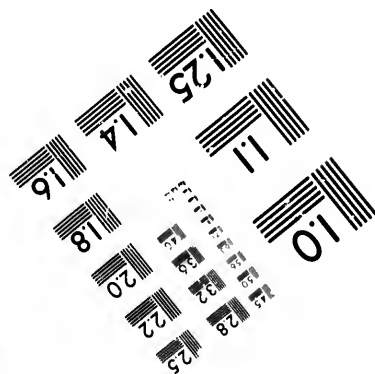
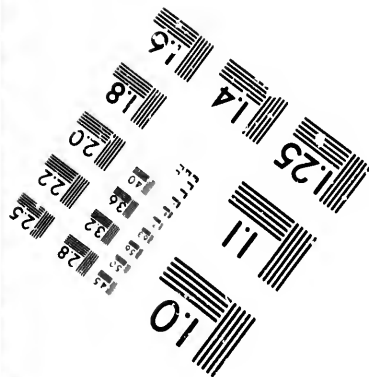
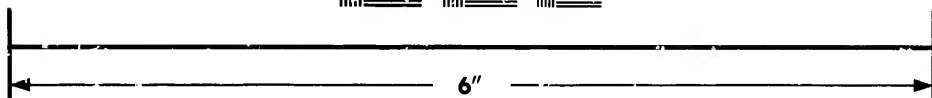
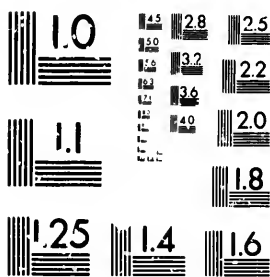


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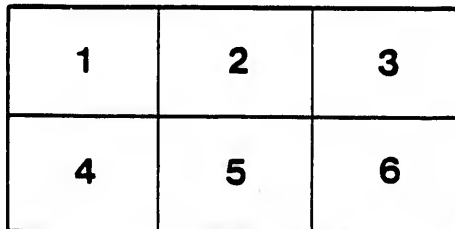
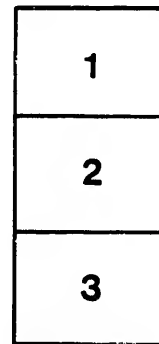
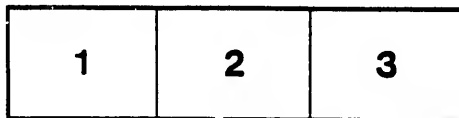
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EXPERIMENTAL DAIRY STATION

—AT—

NEW PERTH

AND ITS WORK IN 1892,

WITH SCHEDULE OF BUSINESS FORMS, ETC.

BY J. HAMILTON.

“Dairy education must go ahead of dairy establishment,
if there is to be success from the start
and lasting.”—J. Gould.

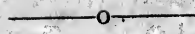
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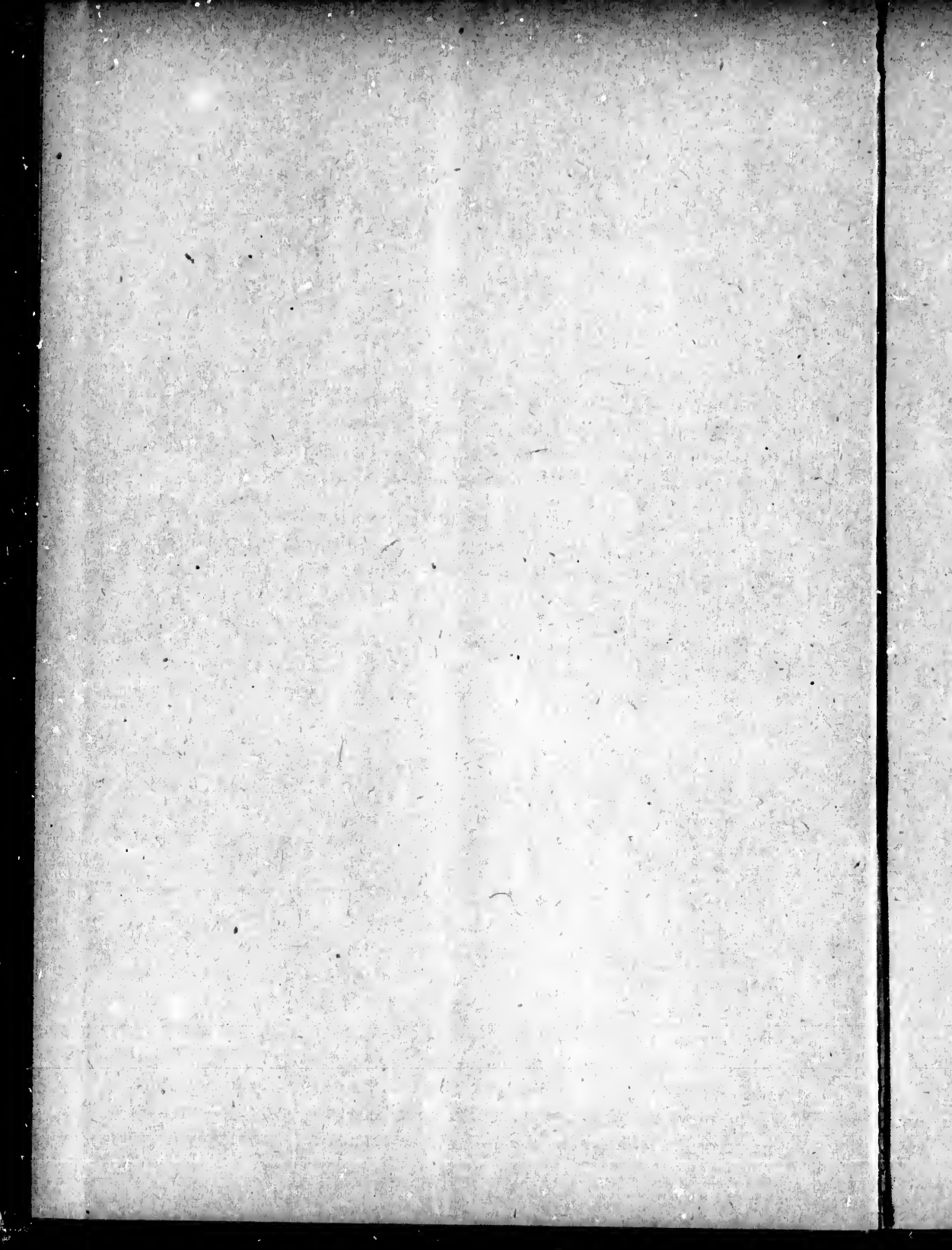
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1893.

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DEDICATORY.

To the Honourable the Leader of the Government :

SIR :—I have the honor to submit for your approval the following descriptive account of the Experimental Dairy Station at New Perth, operated during the past season by Mr. Thomas J. Dillon, of Ontario, an experienced Cheese and Butter maker on the staff of the Canadian Dairy Commissioner.

The success so far attending the experiment in Cheese making here has excited unusual interest, and enquiry among the agricultural population, not only in King's County but also in the other parts of the Island.

The result has been that tentative efforts are now on foot in near and remote localities for the purpose of building and fitting out similar establishments to prosecute the industry on an extended scale.

The business as regards co-operative association is new, and but little understood among us in the country ; hence information of every kind relating thereto is eagerly sought on all hands. As Secretary of the Perth Directors, and closely associated with the work from the time of its inception, I have correspondence and other data in my possession that have been in very considerable demand during the autumn, and up to the present time ; so much so, that my supplies are likely to be exhausted long before the demand is satisfied. In this posture of affairs it occurred to me that a general statement of cost and outfit of the Station, with brief schedule of necessary forms, together with such remarks and observations as might cover the main ground of enquiry regarding the establishment and its work, published in pamphlet form, and placed at the disposal of the Government for general distribution, would save trouble, and give some slight impetus to a movement now

everywhere regarded as a departure in the right direction from the old methods of domestic dairying. I therefore submit this very humble effort to supply an undoubted need among many of my fellow farmers (especially in out of the way settlements), for your inspection, and that of your Honorable colleagues, to be dealt with as you, Sir, and they in your discretion may think fit.

I have the honor to be, Sir,

Your Obedient Servant,

JOHN HAMILTON.

New Perth, King's County, P. E. I., Jan. 26, 1893.

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with

INTRODUCTORY.

Experimental Dairy Stations.

Professor Robertson in his Annual Report to the Minister of Agriculture for the year 1890, treating of this subject at pages 132 to 134, says among other things:—

“The value of all experimental work is two-fold. Every act of investigation has in itself a double power of service. It is competent to discover what was before unknown and unrecognised; it is also capable of imparting information and instruction by illustration and demonstration. . . . Hence Experimental Dairy Stations, while providing for the work of carrying on the original investigation, should also be centres whence reliable and authoritative instruction in the best practices should emanate.

“Again, the magnitude of the Dairy interests of Canada is unequalled by any other single branch of agricultural or manufacturing industry in the Dominion. The success of the Cheese trade in Ontario and Quebec has been satisfactory to the farmers.

“The other Provinces in many respects, are as well adapted for the prosecution of the industry, but a little outside encouragement is needed to set it going in them.

“I would cite the case of Prince Edward Island, which is admirably suited for the development of dairying on a large scale. Over twelve years ago several cheese factories were established; they were managed with such ill success that now the farmers are doubtful as to whether there is not some inherent condition in their situation, soil, cattle or circumstances which prevents them from succeeding. A branch experimental station there would serve for direction, illustration and demonstration, and thus help both manufacturers and farmers.

“As an instance of this, let me refer to the experience of one brief trip to the Saguenay district last year. One cheese maker drove sixty miles to receive one day's instruction from me at a factory at Ha! Ha! Bay. His patrons reported afterwards that

the cheese from his factory sold for one cent per pound relatively higher than they did before. A branch Experimental Dairy Station could be visited at least once a year by large numbers of cheese makers.

"Again, the instructors of the cheese-makers in the several Provinces would acquire uniformity in their methods from having the privilege of visiting these Stations."

On the subject of winter butter making the Professor remarks :

"The buyers in England hardly know what fresh-made Canadian creamery butter is like. The quantities exported are often stale before they reach the consumer. That fact led the members of the Dominion Dairy Convention in Ottawa last year to pass a resolution, urging upon the Government the desirability of making a provision of at least \$5000, for the purpose of making weekly shipments, with a view to opening up this trade.

"The Danish Government supervised the shipments of butter for a considerable period. And one of the Australian Governments gives bonuses now to promote shipments.

"These branch Experimental Dairy Stations would encourage the farmers to furnish milk during the winter season, and also provide small quantities of finest butter to be used as trial shipments for introducing fresh made creamery butter to foreign markets. The plan is a feasible one, and well within the usual policy of Governments in looking after the interests of the farmers, and the foreign as well as the domestic trade of Canada."

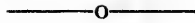
The result of these recommendations is that in "Ontario there are now 18 co-operative factories, making, with 50 in the Province of Quebec, 68, as against two last year. In New Brunswick the Dominion Government has also established an Experimental Dairy Station. The educational establishments in Quebec and New Brunswick are supported by the Provincial and Federal Governments—the latter Province having voted \$2,000 for the maintenance of travelling dairies to go all over the Province and show the best methods of making butter."

In his speech on the "Food Production of Canada," at the Home and Foreign Produce Exchange, London, G. B., the Commissioner, referring to P. E. Island, said "that it contained 2000 square miles of land. London had got practically nothing from the Island in the past, but there was a shipment of cheese coming that would fetch 57 shillings this week in the market. It was as fine as any cheese he had ever shipped from Ontario, the cheese from which Province were like the finest Scotch Cheddars, but with more butter in them. Farmers there had now commenced to grow Indian Corn as fodder. They used to laugh at him when he advised them to do this, and tell him it would not grow. He said: 'I will give you a

little bag—just enough to plant a quarter of an acre—for nothing, at the Government expense.' Last year he again visited the district and found large areas of the corn growing that would feed as cheaply as hay at 15 shillings a ton. The year before only ten acres were grown. A great quantity of cheese was being sent out of the Island already. It would be worth the while of some London dealers to get an agent out there to buy produce on the spot." (I quote from the London Grocers' *Gazette* of 24th December, 1892.)

In his speech at the Produce Exchange, before the Liverpool Provision Trades Association, on the 21st of the month, he speaks of the Island as follows: "P. E. Island is now beginning an export trade with Great Britain in cheese and eggs, and this will, doubtless, be followed in a few years by butter and bacon. The Dominion Government has established an Experimental Dairy Station at New Perth, and the product is expected from it at this port some time during the present week. The Island is capable of supporting at least fifty large co-operative cheese and butter factories, the product from which will ultimately find its way into this market." (I take this extract from the *Liverpool Mercury* of December 21st.)

The Station at New Perth, King's County.



This Station is located near the Georgetown Road, a few chains east of the division line between Townships 51 and 52. Its distance from Charlottetown by rail from Perth Station is 36 miles, from Georgetown 10 miles, from Cardigan Railway Station 4 miles, from the shipping port of Montague Bridge $4\frac{3}{4}$ miles. The distance of the factory from "Perth" (the nearest Railway Station) is about 2 miles.

The length of the main building is 45 feet 6 inches; its width 25 feet; height of post 12 feet.

The engine room annex adds 13 feet 6 inches to the ground length of the structure, and runs across its whole breadth. Its height to the eaves is 8 feet, with hipped roof, secured with zinc flashings to the western gable and end wall. The front of the building runs parallel with the main road.

A covered drive-way in front extends 19 feet, is 13 feet 6 inches broad; its roof, resting on a row of pillars 8 feet high, has the same pitch as the main roof. Under this covered way and against the wall stands the milk weighing platform, 3 feet 6 inches high, 7 feet long, 3 feet 6 inches broad. On this are placed the weighing scale and receiving can of 500 lbs. capacity, and here the milk wagon stands while the carrier delivers his freight, securely sheltered in bad weather.

The sills are set on rows of cedar posts, 10 inches in diameter, sunk 4 feet 6 inches in the ground, are well rammed with stone to a height of 2 feet from the bottom, the remaining space to the surface solidly packed with clay.

A cold air drain for lowering temperature in hot weather, sunk to a depth of 3 feet, extends 100 feet from the building, with a fall outwards of one in fifty. In the bottom is placed a hemlock box shute of 3 inch lumber, 12 x 12 inches clear inside, with funnel end in the field, its head 2 feet above the surface, surmounted by an adjustable galvanized sheet iron cowl to catch the wind. The end under the curing room is carried up to and into the floor, and is provided with a 14 x 14 inch square casting and regulating register.

The scantling in the walls is 2 x 6 inch, and 4 x 6 inch for door and window studding. The walls on the outside are covered with rough boards, full inch thick, and shingles, with building paper between. The roofs of the main building, engine house and passage way are covered with No. 1 sawn spruce shingles, laid $4\frac{1}{2}$ inch to the weather, having 4 inch strips of tar paper laid on all the seams. The roofs, eaves, window and door frames, also shutters and all doors received two coats of anti-corrosive paint, colored to produce the best effect, and suit their various positions and uses. The shingles on the walls are 5 inches to the weather and were served with two coats of fresh lime wash mixed with size and salt put on hot.

The studs are covered on inside with one inch lumber nailed on horizontally; this lumber is covered with building paper and the finishing of all the walls inside, over the paper, consists of mill dressed grooved and tongued, matched and beaded spruce boards, the ceilings and partitions are finished in the same manner with dressed lumber. The upper floor is of $1\frac{1}{4}$ inch grooved and tongued lumber.

The floor of the making and press room is of $1\frac{1}{2}$ inch narrow mill dressed, grooved and tongued boards, nailed on the joists, furred up at the outer walls two inches, so as to give the floor a fall from either side to the gutter or drain that carries the whey from the milk vats, and the washing slops from the floor, to the under-slauce connected with the reservoir or whey tank outside. This floor is exceedingly solid, smooth and even; the brad punch holes were carefully filled and the surface had applied to it two coats of heated raw and boiled linseed oil. The gutter is 3x4 inches, runs in the floor below the ends of the milk vats, dips towards the middle partition, is zinc lined and has an opening through which its contents are discharged under the floor into the slauce already mentioned.

The curing room is double floored; the under tier is of rough inch boards, the upper of $1\frac{1}{4}$ inch mill dressed, grooved and tongued, with layer of dry felt paper between.

A ventilating box from the ceilings of the work and curing rooms respectively runs through the roof; these carry off heated air and foul odors from within, while the cool fresh air from the underground drain supplies their place with the pure element from without. All the inside doors slide on rollers; all the windows are provided with sashes suited for opening at top and bottom; those in the curing room have close shutters hung from the top by means of which the room can be kept dark when so desired.

The plan and specifications were based on a published drawing or model, marked 4, furnished by the Dominion Dairy Commis-

sioner and inserted at page 156 in his Report to the Minister of Agriculture, for the year 1890.

The working plan submitted for tender by the directors of the Perth Company differed, in some slight particulars, from the original drawing. It had to be enlarged to admit the placing of two milk vats instead of one on the floor of the working room, and other slight alterations to suit local circumstances were made.

Work on the building was commenced early in May last, and on the 20th of June following the first instalment of milk furnished by patrons was manufactured into cheese by Mr. Dillon and his assistants.

The items of cost of construction of the factory and adjuncts are as follows:—

For Plan and Specification	\$ 10 00
“ Contract price	825 00
“ Whey Tank (fixture)	15 00
“ Factory Well	43 47
“ Sundries, say	10 00
	<hr/>
	\$903 47

The site and enclosure adjoining was a free gift to the company from one of the stockholders, and a good deal of volunteer labor and material were expended by farmers in the vicinity in fencing the grounds, grading the foundations, and levelling the approaches.

The total cost, taking in some necessary outlays still to be incurred, may be set in round numbers at \$1000.

Following is a full inventory of apparatus and utensils employed in the manufacture during the season, viz:—

- 1 Steam Boiler and Engine, 6 horse power.
- 1 Water Injector.
- 2 Milk Vats, 6000 lbs. capacity each.
- 16 Cheese Presses.
- 1 Curd Cutter.
- 1 Curd Knife (perpendicular.)
- 1 Curd Knife (horizontal.)
- 1 Weighing Can, 500 lbs. capacity.
- 1 Milk Conductor.
- 1 Weighing Scales—one pair for milk, one pair for cheese, and one pair for salt.

- 2 Thermometers, 2 floating Thermometers—milk testing instruments.
- 1 Babcock Milk Testing Instrument.
- 1 Graduated Measuring Glass, 8 ounces.
- 1 do do do 16 ounces.
- 16 Press Rings.
- 2 Rakes, for stirring curd.
- 1 Flat-sided Curd Pail.
- 2 Bandagers.
- 2 Floor Brushes and Rubber Scraper.
- 3 Tin Pails, large Dipper, small Dipper and Strainer.
- Steam Pipes, Water Pipes and Hose connexions.
- Stencils, Stencil Plates and Brushes for branding.
- 1 Cheese Trier.
- 1 Water Tank of ten barrels capacity.
- 1 Water Barrel.
- 1 Inspirator or Pump for elevating whey.

Mr. Dillon places the cost of this plant at \$500 to \$600. When the manufacture of butter is introduced, the plant required will cost an additional sum of \$800. Taken altogether, a Cheese and Butter Factory combined, of 500 cow capacity, thoroughly equipped, will cost little short of \$2500.

The price of an outfit of milk cans is an item of cost the patrons and managers of a new factory will have to consider at the outset. These cans, of course, become the property of the patrons, and may be ordered separately by each, or collectively by the company's directors, who become responsible in the meantime to the dealer or manufacturer, with an understanding between themselves and the receiving patrons that the price of each can shall be checked against the latter in his monthly milk account.

The Perth patrons preferred the latter course, and the company contracted with Mr. John D. Bell, of Montague, for a supply of one hundred cans, of fifteen gallons capacity, at \$3.50 per can, besides a few additional ones of twenty gallons, at \$4.00, to accommodate those patrons who had the larger herds. The cans were delivered at the factory on the 15th of June, and the arrangement with the patrons in regard to their payment satisfactorily carried out, they being checked with the price in their September milk account with the Superintendent.

It may be well to note that these cans, although built to hold fifteen and twenty gallons respectively when filled to the brim, have really only a carrying capacity of twelve and one half and of seventeen gallons, on ordinary roads. This is owing to the construction of the cover, which, when the body of the can is suddenly jerked, will not prevent the milk from splashing over its edge when more than three quarters filled.

MILK ROUTES AND CARRIERS.

The establishment of these routes was a service of some difficulty. The prospects of supply were exceedingly doubtful all through the month of May and first weeks in June. Cattle were lean and the pastures backward, and farmers generally seemed to have little confidence in the undertaking. The Superintendent had to travel over the district in company with one or other of the directors, hold meetings, and almost literally beg for patronage. The milk had to be collected from a wider area than was at first anticipated, and special arrangements made with carriers who had the longest routes to travel. At length, when the persevering energy of the manager had brought matters into something like working order, a meeting was convened at the station, and the drawing of supply on the several routes sold at auction to the lowest bidder per hundred pounds, The prices for the service ranged as follows :—

- No. 1. 12 miles distance (special), \$1.50 per trip.
- “ 2. 12 cents per 100 pounds.
- “ 3. 10 cents do
- “ 4. 9¾ cents do
- “ 5. 15 cents do
- “ 6. 12½ cents do
- “ 7. 12½ cents do
- “ 8. 10 miles distance (special), \$1.00 per trip.
- “ 9. 15 cents.
- “ 10. 15 cents.

A strict agreement was entered into between the parties. The carrier was required—

- 1st. To keep his milk wagon clean and free from all bad smells.
- 2nd. That he shall protect the milk cans against damage.
- 3rd. That he shall provide straps or ropes to prevent spilling or waste.
- 4th. That he shall be liable for all losses incurred through his negligence.
- 5th. That he shall be liable to a fine of one dollar for every time he fails to reach the factory at or before the stipulated time, viz., 9.30 o'clock a. m., unless good and sufficient reasons are furnished to the manager for his delay.

On the part of the manager it was stipulated that three-fourths of the price of the service be paid about the middle of each consecutive month, and one-fourth retained as security for fulfilment of contract, until the end of the cheese making season.

This arrangement worked well all through the season. The carriers were punctual, and in no case was it necessary to impose a fine.

THE SEASON'S WORK AT THE STATION

Was performed by the manager and two assistants.

The first day's delivery of milk, on the 22nd of June, was 4300 lbs. In a few days the supply increased to 6, 7 and 8000 lbs., and on Monday mornings 9000 lbs. and upwards were discharged into the vats. This milk, although some of it was drawn distances of seven, eight and twelve miles, was delivered in excellent order all through the season, not more than half a dozen cans or so being returned to patrons during the thundery weather in August.

The following is Mr. Dillon's published statement of quantities "received" and "disposed of" from 22nd June to 31st October. :—

June—Lbs. milk received at station	53,918
July, " " " "	196,251
Aug., " " " "	198,555
Sept., " " " "	178,048
Oct. 1-15, " " " "	41,266
Oct. 16-31, " " " "	28,209

Total 696,247

No. boxes cheese made to Oct. 15	994
" " " " Oct. 16 to 31	80

Total 1074

No. lbs. cheese made to Oct. 15	53,019
" " " " Oct. 16 to 31	3,070

Total 66,089

Lbs. of milk to lb. of cheese 10

How cheese was disposed of:—

Retailed at Factory	3,891 lbs.
J. W. R., exported to Chicago	2,145 "
T. J. D., exported to London, Toronto, Montreal,	1,156 "
Wholesale for home consumption	22,468 "
J. W. R., for export	186 "
Dairying Co., St. John's relief	64 "
Consignment to J. W. R., Liverpool, Eng.	32,611 "
Manufactured for patrons at 1 cent per lb	3,070 "

Total 66,089

Amount paid for drawing milk	\$986 11
Average rate per 100 lbs	14

The Station at New Perth is simply an offshoot of the parent establishment at the Government Experimental Farm at Ottawa ; the methods and processes employed in the one for the manufacture of finest butter and cheese will be gradually introduced in the other, to serve as object lessons to advance the intelligence and quicken the enterprise of every farmer who favors the co-operative principle in dairying, and owns a herd of cows in any suitable district on the Island.

All the plant so far introduced is of the very latest scientific construction, and the manager in charge during the summer appeared to be thoroughly acquainted with its use, and determined to prosecute the work he was sent to do on the Island to a successful issue.

In regard to the plant, the original intention was to allow it to remain at any one station only so long as it was considered necessary to encourage the manufacture by Government aid at that particular place, and so soon as the business could be trusted to local management to remove it to another station. It was also intended to admit pupils who chose to come in from any part of the Island to receive instruction in dairying free of charge. During the summer only three such pupils availed themselves of the privilege. One continued throughout the season ; the other two attended at intervals.

Although but few pupils availed themselves of the manager's instruction, numbers of transient visitors from different parts of the Province came and went with each succeeding day. They were greatly interested by all they saw at the factory, and many of them carried away a considerable fund of useful information about the various methods employed by Mr. Dillon and his aids while engaged in converting the lactic fluid in his vats into the great solid cylindrical masses that stood in stately rows on the curing room shelves.

So great an interest was excited as the result of these visits that meetings have been held all through the autumn, and are still going on in all the more advanced settlements east of the Hillsborough, to discuss the new departure in dairy husbandry, and elicit every obtainable information in regard to co-operative action in carrying it on.

At Vernon River, Mount Stewart, Eldon, Brown's Creek, Lower Montague, Murray Harbor North and South ; at Souris, East Point, Roilo Bay and Morell such meetings have been held, and committees appointed to canvass for cows and stock to start factories. The movement is not confined to the eastern sections of the Island alone ; both Queen's and Prince Counties have had their meetings with the same object in view.

Whatever the practical outcome of the Professor's educational project may be in time to come, it has a fair start in King's County, and wears at the present moment a very promising aspect.

THE PIG COLONY

When the Commissioner made his final arrangements with the company last spring, he undertook to have a herd of pigs enclosed in a three acre field hard by, to consume the whey from the factory, expecting to be able to return the patrons some small dividend of profit at the close of the season, equivalent in value to the by-product of the milk furnished by each. He accordingly instructed the manager to purchase as many hogs of suitable age, breed and condition as would utilize the said by-product; also to purchase such additional dry feed for their maintenance as circumstances might warrant. Hogs were scarce in the neighborhood. It was difficult to procure the number required, and to make anything like a judicious selection was out of the question. Such animals as were offered had to be taken with little regard to quality, and very high prices had to be paid. Finally, after considerable effort the field was stocked, the barricades were closed, and a census taken, when the colony was found to contain a population of ninety-nine pigs. They were a heterogeneous, motley assemblage, variegated in color and diversified in character. They represented nearly all ages, sexes and conditions of their species, from the lineal descendants of the high-toned Chesters and Berkshires of the Model Farm, to the villainous progeny of the razor-backed clam-diggers of the North Shore. Their varied specific qualities as they followed the whey cart in their march of tumult across the pasture, or fought for their individual rights over the swill troughs, were a terror to the driver, and an interesting study for numerous spectators, who leaned over the enclosures and watched, with unflagging interest, the novel experiment in animal husbandry.

One morning it was announced at the station that a death had occurred in the colony. On enquiry it was found that a bibulous youth of six months had indulged in an overgorge of fresh whey and succumbed. His obsequies were brief; he was buried on the field. The death rate during the summer was lighter than many anticipated. It only reached 4 per cent. in four months, as recorded on the station's bills of mortality.

The profit and loss account kept with these hogs shows as follows :—

DR.	
Ninety-nine Pigs, cost	\$577 37
Feed and attendance	174 40
	\$748 77
CR.	
Realized on sales	725 26
	\$23 51

The patrons had no return from their by-product, but the experimental test convinced everyone that fresh whey from the factory is a valuable constituent in hog food. Served three times a day, with some crushed grain, it seemed to agree well with these swine (except in the instance above cited.) After they were fairly established and had got well over the hardships of the middle passage (many of them being imported from distant settlements), they improved considerably; and forty of the lot, when slaughtered after three months' feeding, sold to a packer in the city at six cents per pound. The balance of the lot was sold alive to a dealer in Nova Scotia, and shipped on the *Electra* from Montague Bridge. With a better selection of stock, obtained at moderate prices, the experiment would have had a different financial result. Professor Robertson, in a lecture delivered before the members of the Legislature in New Brunswick and others, said :—

“Dairymen neglect one of the best servants they can have in the animal creation when they do not avail themselves of the hog to aid in making money from the by-products of milk. . . . Whey is a valuable hog feed. There are nearly seven pounds in every hundred pounds of whey which the hog can use to advantage. The composition of sour whey may be given as follows :—

Water	93.00 per cent.
Nitrogenous substances	1.00 “
Fat	0.50 “
Milk Sugar	4.25 “
Lactic Acid	0.50 “
Ash	0.75 “
	100.00

“These elements of food value in whey should produce at least two pounds of live weight in hogs. One hundred pounds of

whey, fed in the most judicious manner, should produce two pounds of pork. It will not do it when fed alone, but fed in combination with other foods it will."



THE COW AS A WAGE EARNER.

The question is frequently asked, What will the average cow earn from the factory during the working season? This question is more easily asked than answered. At the present stage of the industry in Prince Edward Island we are only starting in the race, and have almost everything to learn. In Ontario, astonishing results are claimed for the well-fed, well-bred dairy cow. Her earnings there are quoted as high as \$40, and in some cases \$60, for the season of five months' continuance. The lean, straw-fed, ill-housed scrub cow of the Island settlements will not earn as much. Trying to get profits from such a cow is like calling spirits from the vasty deep; they never did and never will respond in either case. There is only one way with the dairy cow—use her well, and the most wretched looking scrub may be changed to a thing of beauty, and made earn wages sufficient at least to pay her board and lodging.

For an approximate calculation, assume that the average Island cow will give one gallon at each milking, *i. e.* two gallons per day. The factory season here for some time to come may be reckoned from the first day of June to the last day in October—say 150 days. The cow is not amenable to the moral law, and her milk, with a little care on the part of her owner, can be kept sweet from Saturday night till Monday morning. She will then yield three hundred gallons during the season. This, I think, is the quantity usually credited to what, in dairy nomenclature, is termed a "standard cow," and should (other things being equal), turn out three hundred pounds of cheese. This cheese, at 10 cents per pound, will be worth \$30. Allow $2\frac{1}{2}$ cents (the price paid by the New Perth patrons to the Government) for the manufacture, there remains \$22.50 as net value for the season's milk of a fairly good milch cow. The whey, under a judicious system of management, should realize about \$2.50 additional, or \$25.00 in all. This should not be regarded by any means as a hard and fast calculation. The quantity of milk will of course vary with conditions of pasturage and seasons, and values of product with fluctuations in market prices.

THE LITTLE JERSEY.

(*From Hoards Dairyman.*)

I drink to the little Jersey,
The queen of the modern churn,
The contents of whose udder
To nuggets of gold will turn.

She flavors her butter with clover,
She tints it with golden corn ;
She's docile, she's gentle, she's handsome,
From her hoof to the tip of her horn.

She's loved by both matron and maiden,
She's carressed by the children's hand ;
She's a picture in every meadow,
All over this beautiful land.

Sparkling with wine is my goblet,
To fill with good cheer every guest ;
But she gladdens the homes of the people
With a drink that's the purest and best.

When the World meets this year at Chicago
To honor all objects of worth,
We'll hang on the little Jersey
The finest gold medal on earth.

Sedalia, Mo.

GEO. B. LAMM.

NEW PERTH DAIRYING COMPANY.

STATEMENT OF STOCK AND SHARES.

Capital Stock	\$3000 00
Subscribed Stock	1365 00
Unappropriated	1635 00

Number of Shares	300	
Shares sold	136 1/2	
Shares remaining	163 1/2	
Par value of Shares		\$10 00
No. of Shareholders	62	

Total assessment on stock to date	\$682 50
Paid in on June call of 25 per cent	\$323 75
Paid in on Dec. call of 25 per cent	298 75
Remaining unpaid	60 00—
January 12th, 1893.	\$682 50

Audited and found correct,

WM. CAIN, Auditor.

May 13th, 1893.

JOHN HAMILTON, Secretary-Treasurer.

The within statement of Stock and Shares was approved by Stockholders convened at the Annual Meeting held at New Perth Schoolhouse, on Tuesday, January 17th, 1893, on motion of Fredk. G. Bovyer. Esq., seconded by Peter J. D. Edmonds, Esq..

JOHN HAMILTON, Secretary-Treasurer.

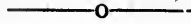
NO. 2.

NOTICE TO SHAREHOLDER FOR ASSESSMENT CALL ON STOCK.

To A. B.

Take notice that a call of _____ per cent. on
Shares held by you in the _____ Dairying Company's Stock
will be due and payable on or before the _____ day of _____
next.

By order of Directors, dated the _____ day of _____ 18____
C. D., President. E. F., Sec'y-Treasurer.



NO. 3.

RECEIPT.

Date, _____ 18____
Name,
Address,
No. of Shares,
Call of _____ per cent., \$

\$ _____ P. E. Island,
Received from
the sum of _____ Dollars,
being the _____ call of _____ per
cent. on _____ Shares in the
E. F., Sec'y-Treas.

NO. 6.

STOCK CERTIFICATE.

No.	No.	Share
	THE	DAIRYING COMPANY.
Shares	We certify that	
Name	
	of	is holder of
	of	Ten Dollars each, in the Capital Stock of
		Dairying Company, which Share
		transferable by the said
Residence	or his attorney or legal representative, only at	
	the office of the Secretary-Treasurer of the	Company, at
		a book to be kept by
	the Secretary-Treasurer for that purpose, and	subject to the By-Laws of the Company.
Date	This Certificate shows only that the person	
	in whose name it is drawn was the proprietor	
	of the number of Share therein specified at its	
	date, and are not available for any other purpose.	
	Given under our hands and the Seal of the	
	Company, this day of	A. D.
	[L. S.]	President.
	[L. S.]	Secretary.

NO. 7.

TRANSFER OF STOCK.

I	of	do hereby assign and
transfer to	Share	in the Capital Stock of The
	Dairying Company, in consideration of the sum	
of	Dollars, paid by	to me.
Dated this	day of	A. D. 18
Witness		
Signature		Signature.
I, the above named	accept the said	
Share	above assigned and transferred to me.	
Witness		
Signature		Signature.

NO. 8.

TENDER FOR BUILDING CONTRACT.

To the President and Directors of the *Cheese and Butter Manufacturing Company:*

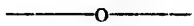
I, _____ of (*here insert calling and residence*) do hereby undertake to erect a building suitable for the manufacture of Cheese and Butter, on a plot of ground (*here insert locality*) as marked off for the purpose, agreeable to plan and specifications submitted by you, marked respectively A. and B., I furnishing all materials and labor, and agreeing to complete the contract on or before _____ day of _____ next, for the sum of _____ dollars.

A. B.

As sureties for due performance }
of contract I offer the names of }

C. D., of (*residence and calling.*)

E. F., of (*residence and calling.*)



NO. 9.

FORM OF BUILDING CONTRACT.

This Agreement made the _____ day of _____ in the year one thousand eight hundred and _____ by and between the _____ Dairying Company, of the one part, and _____ of _____ in _____ County, Prince Edward Island, Carpenter, of the other part, witnesseth that the said _____ covenants and agrees to and with the said, The _____ Dairying Company, to make, erect, build and finish in a good substantial, workmanlike manner, a building for cheese and butter making and general Dairying purposes, on a plot of land of _____ at _____ as marked off for the purpose. Said building to be built agreeable to the plans and specifications annexed hereto marked A. and B. respectively of good and substantial materials, and to be finished complete on or before the _____ day of _____ next, and the said, The _____ Dairying Company, covenants and agrees to pay to the said _____ for the same, the sum of _____ Dollars, as follows:—The sum of _____

Security against Mechanics or other lien is to be furnished by the said _____ prior to payment by the said, The Dairying Company, and for the performance of all articles and agreements above mentioned, The said, The

Dairying Company, do hereby bind themselves, their successors and assigns, and the said _____ doth hereby bind himself, his heirs, executors and administrators, firmly by these presents. each into the other, in the penal sum of

Dollars, of lawful money of the Dominion of Canada, as fixed, settled and liquidated, damages to be paid by the failing party to the other, their or his heirs, executors, administrators, successors or assigns respectively.

In witness whereof, the said parties to these presents have hereunto their hands and seals subscribed and set the day and year first above written.

[L. S.]

Signed, sealed and delivered by the said, The Dairying

Company, by its President, and the

Secretary thereof, subscribing their names opposite the seals thereto, and executing and delivering the same for and on behalf of the Company, and by the said

in the presence of E. H.

F. G. President.



J. K. Secretary.



L. M. Contractor,



NO. 10.

SURETY BOND.

Know all men by these presents, that we (name of Contractor) of _____ in _____ County, Prince Edward Island, Carpenter, and _____ of _____ in said County and Island (state calling) and _____ of _____ in said County and Island are held and firmly bound unto

