

Issued Each Week—Only One Dollar a Year

VOL. XXX.

NUMBER 27

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

JULY 6,

1911.



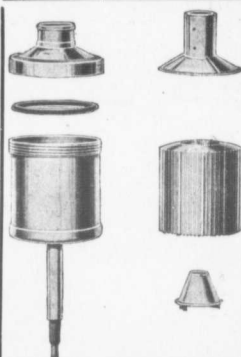
### IN THE FULL SWING OF MODERN HAY MAKING

The hay loader is not universally popular yet it has come into use on a great many farms in recent years and the fact of its utility has been established. It works best in conjunction with its companion machine—the side delivery rake. With these two implements to assist in haying, the work of putting in the hay crop may be so arranged that just what can be handled will be cut each day. Such practice will never find one caught with a ten-acre block of hay all ready to haul at once, and an old-time soaker of a rain working great damage upon it. Photo taken on Mr. John Salkeld's farm, Huron Co., Ont.

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BETTER FARMING AND  
CANADIAN COUNTRY LIFE

# A BUMPER CROP

The Western farmer looks to his wheat fields for his harvest. The dairy farmer depends largely on the product of his dairy. A great deal of the dairy farmer's success depends on the make of Cream Separator he uses. The up-to-date dairy farmer will use none but the best. Are you up-to-date?



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### Mr. Clemons Makes a Statement

Editor, Farm and Dairy.—Mrs. Partington once remarked that "comparisons are odorous." After reading the article in the May 25 issue of Farm and Dairy by A. S. Turner & Son of Ryckman's Corners, I would amend the saying and make it malodorous. Brood discussions are "flat, stale and unprofitable," but since the Messrs. Turner have used my name as authority for statements, about Evergreen March, of which they make use, I may be pardoned for using the columns of Farm and Dairy in order to set them correct.

In the article in question Messrs. Turner quote me as saying in an article in "The Farmer's Advocate" that Evergreen March had an average of 28 lbs. grain daily during Jan., 1911, and use that ration as a basis of comparison for cost of production of milk and butter fat, between Evergreen March and Snowflake, one of their herd. I say emphatically that I never made that statement in the "Farmer's Advocate," nor did I make any statement that could be construed to mean any such thing. Evergreen March was never fed 28 lbs. of grain in any one day in January, 1911, nor was she ever fed an average of 28 lbs. of grain a day for 30 days, nor even for seven days, and as I have handled her for nearly six years I should have her for nearly six years I should have knowledge to speak on the subject.

When I was officially testing Evergreen March I was running for records, not for economy of production, and I think all will admit that the end justified the means. I am not afraid to enter Evergreen March today in a food test against any cow in Canada, and in any breed, that freshened previous to Dec. 15, 1910.

It might be of interest to Farm and Dairy readers if the Messrs. Turner carried out on a correct basis a table of comparison showing the net profit from those cows during subsequent months, as I believe during the week from Feb. 21 to 28, Snowflake was giving an average of less than 60 lbs. of milk daily with four per cent. test, while Evergreen March was giving an average of practically 99 lbs. daily with an average of 3.2 per cent. fat. Is it possible that the cheap ration was unequal to the maintenance of the cow to which it was fed?—Percy F. Clemons, Brant Co., Ont.

### More About in-foal Mares

Editor, Farm and Dairy.—The article by Robert Graham, of Simcoe county, Ont., in Farm and Dairy, June 15, describing his treatment of in-foal mares and newly born foals is one of the most valuable things I have read in any farm journal in many years. Having reared many foals and lost a few, I can thoroughly appreciate the value of all that Mr. Graham recommends and does. Being a Scotchman, I judge that Mr. Graham raises Flemish and those, like all draught breeds, are more liable to losses than the lighter sorts of horses. While I have every confidence in the veterinary practitioner, I would trust Mr. Graham before most of them to handle a foaling mare in trouble. It is evident that he is naturally mechanical, and having had much experience in horse breeding, he is able to handle abnormal cases when they arise. The lowering of the forequarters of the dam, when a foal has to be turned or adjusted, was an old plan of my father's, and many a foal and mare have been saved by this method.

Too many stock raisers do not make a careful study of the anatomy of animals. Too few take the common-sense precaution of regard to putting the mare into the best condition for foaling. It is only reasonable that steady, light work up to foaling time is a good thing, because she is thus kept normal in health by reason of the regular exercise. While this is true,

no man with judgment would think of hitching a mare well advanced in pregnancy to a land roller or other implement that would jar and jolt her while at work.

Mr. Graham's treatment of the newly born foal is rational because it is harmless in any case and a wise precaution in cases of tenosynovitis or constipation. The sanitary measures are also safe and easy of application, and as Mr. Graham points out, the materials recommended are easily available.

Mr. Graham is to be congratulated for his generosity in making public such valuable suggestions for his fellow horse-breeders.—J. B. Spencer, Ont.

### To Drain or not to Drain

Some calculations on the financial side of drainage have recently been made by Prof. W. H. Day of the Ontario Agricultural College. A farm of 60 acres was divided into five 12-acre plots, although not drained it gives \$18 an acre. The value of the crop for five years in succession, together with compound interest, would be \$1444 at the end of five years, but if the water were to drain 10 acres of the land each year, and if the drainage increased the value of the crop by \$10 per acre (which is a low estimate) then the value of the crop for five years, with interest, would be \$5712. After paying for the drainage, with interest, he would have left \$4124, the same within \$20 as if he had not drained, but if he drained the whole 60 acres at once then the five crops, with interest, would be worth \$6908. After paying for the drainage would leave him a balance of \$5121, which is \$977 more than if he had not drained. During the next five-year period drainage by the installment plan would net him \$1604 more than not to drain at all, and the complete drainage would give him by 25% more than no drainage.

The price allowed for drainage in the calculation was \$28 an acre, and the increase in the crop was placed at \$10 per acre, as giving an idea of the increase is usually worth more than this, so that the computation is somewhat unfair to drainage, however it is better to err on the safe side.

But the increase in crop is not the only return from drainage, the value of the land is largely increased. This is illustrated in the case of a certain farm in Lincoln county. It was bought for \$6000 about two years ago. Last year \$2000 was spent in draining it and it has since been sold for \$12,500.

The Department of Physics, O. A. C., Guelph over which Professor Day has charge, has a large staff engaged in making drainage surveys for farmers wishing to drain; they are kept very busy. Those who wish surveys made this fall should apply at once as there are nearly as many applications in as can be attended to this season.

The terms on which surveys are made are explained in Bulletin 13 and 175, which may be had free from the Department of Agriculture, Toronto.

### Items of Interest

W. F. Stephen, Huntingdon, Ont., has for his farm a number of stock purchasers, Gilbert McMillan, Bester, N. Y., and Matt. Leggett, Bismore, Pa., intend to make it a stud farm, with Ayrshires a specialty.

Checks for the sixth annual dividend declared by the Ford Motor Company of Walkerville were mailed to stockholders last week, at the rate of 100 per cent. Several Windsor men received checks for sums ranging from \$500 to \$5,000. Last week the stockholders received dividends at the same rate as they are now getting, viz., 100 per cent.

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# FARM AND DAIRY & RURAL HOME

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Vol. XXX.

FOR WEEK ENDING JULY 6, 1911.

No. 27

## BIG MONEY OUT OF FEW ACRES—HOW IT COMES

### Secrets of the Success of a Very Successful Farmer

### Who Farms only a Few Acres. Food-thought for Many a Man Who Works Hard and Makes Little.

**T**WENTY-FIVE acres, not in the so-called fruit belt, supporting the proprietor, seven of a family, and two hired men engaged by the year, and returning a net profit approximating \$4,000 a year — such is the little poultry, fruit and bee farm owned and worked by Mr. J. W. Clark, of Brant Co., Ont. Mr. Clark is well and favorably known to many Farm and Dairy readers as one of the prominent Farmers' Institute lecturers, a very successful breeder and exhibitor of Buff Orpingtons, a staunch advocate of the money-making orchard, an all-round practical and successful poultryman, horticulturist and apiarist, and a citizen of whom Canada and Canadians may well be proud. Not the least of Mr. Clark's strong points is his willingness and ability to impart his invaluable store of information to others. Recently an editor of Farm and Dairy spent some hours with Mr. Clark on his small farm, and came away much enthused over the splendid possibilities of profitable returns from poultry, fruit and bees, as worked out by Mr. Clark on his small acreage, and with such satisfactory results.

Mr. Clark looks upon his apple orchard as the best money-maker. He gets, however, a very large return from his poultry, and since he has worked his stock of Buff Orpingtons up to such a high standard of excellence, having won the leading prizes at all the big exhibitions, including Madison Square Gardens at New York, he has developed an enviable market for his stock. This present season, up to the end of May, at the time of our visit, Mr. Clark had sold over \$700 worth of eggs for hatching purposes. Then Mr. Clark's bees net him a handsome return. He keeps about 65 colonies, which return him between \$500 and \$800 annually.

**INCOME FROM BEES, POULTRY AND FRUIT**

The stock commonly kept on the average farm is conspicuous by its absence on this small farm of Mr. Clark's. Horses to do the work, a few pigs, and two cows comprise the so-called larger stock. All of the income must come from bees, poultry and fruit, three things which to ordinary farmers are unworthy of attention.

One and a half acres of the farm is set to small fruit and cherries. About one acre is in grapes. About 18 acres of the farm, all told, are set out

to fruit, considerable of this having only recently been set. Mr. Clark has had this farm but six years, and as the bearing trees were planted and cared for with little regard to the more approved orchard practice he has not as yet got the place in what would be called ideal shape. Speaking of his small fruits and crops, Mr. Clark said: "They are profitable, but I would rather have the apples. There is more income in apples, and that with considerably less labor. I figure on my apple orchard returning me from \$100 to \$125 an acre one year with another."

**A SECRET IN ORCHARD WORK**

In his orchards recently set out the apple trees are 38 to 40 feet apart. Between these pear trees

Although he has but 25 acres, Mr. Clark employs two men regularly by the year. When spraying he hires an extra hand, and at seasons when the harvest is on he avails himself of labor from the nearby Brantford Indian Reserve. In the winter season one man is kept busy hauling manure from the city of Brantford, some four miles distant, and the other takes care of odd jobs about the farm and between times collects wood ashes on the Indian Reserve, trading soap for the ashes, one cake for a bushel of this valuable fertilizer.

The commercial fertilizer applied by Mr. Clark is purchased with the ingredients separate and is mixed at home. A mixture of acid phosphate 9 parts, potassium sulphate 6 parts, and nitrate of soda 4 parts, is applied at the rate of 500 to 600 lbs. to the acre. For the old orchard the potash and the phosphoric acid are applied without the nitrate and with wood ashes, as gotten from the Indian Reserve.

During the winter Mr. Clark gives of his own time and talent to the farmers of Ontario, lecturing as he does for the Ontario Department of Agriculture at the Farmers' Institute and other agricultural meetings.

### SAVING MONEY ON LIME-SULPHUR

For a couple of winters Mr. Clark was engaged by the Pennsylvania State College to lecture upon poultry at that institution. While there he made the acquaintance of Professor Stewart, the horticulturist at that college, who first discovered and made the lime-sulphur wash now so generally used by orchardists for combating insects, scale and fungous pests. Being interested in orchard work Mr. Clark watched Professor Stewart's experiments very carefully, and often assisted him with his work, with the result that Mr. Clark is an expert at making the lime-sulphur wash at home. He makes it at a cost of only \$1.75 a barrel, whereas in the commercial form, as many



Mr. J. W. Clark



A Money Making Department of a Farm

Mr. Clark may have been seen in his apiary of 65 colonies. Last year these bees produced 2 1/2 tons of honey, which sold wholesale for 10 cents a lb. Read in the adjoining article of Mr. Clark and his small, but very profitable farm.

—Photo by an editor of Farm and Dairy.

have been planted as fillers. Everything about the place, trees and crops, bear unusual evidence of thrift. The apple trees set out last year in size remind one of many apple trees as often seen after they have had three or four years' growth. This evidence of thrift and rapid growth is accounted for in the thorough cultivation given and the regular and frequent applications of manure and commercial fertilizer. "In orchard work," said Mr. Clark, "the chief thing is to get lots of fertilizer. Each year I aim to have the orchard covered with stable manure, applied about 20 tons to the acre, and then put on commercial fertilizer besides. If I can get them I endeavor to apply wood ashes every other year."



Grand in Type and a Noted Winner

A fine study in type of the utility Buff Orpington is here afforded. He heads Mr. Clark's list for this year. He is the 1st prize Ontario cockerel and won 3rd in New York in company with the best English and American birds.

orchardists know, this concentrated spray fluid costs \$8 a barrel. Mr. Clark experiences no trouble whatever in making the home-made concentrated lime-sulphur test from 30 to 31 with the Beaneum hydrometer. An illustration and description in detail of how Mr. Clark makes this home-boiled concentrated lime-sulphur will be published in due time in Farm and Dairy. The outfit for boiling can be installed at a very moderate cost, and since the average orchardist uses from two barrels up in quantity annually, this question of how to make the best lime-sulphur at home is of vast importance.

#### HOW THE BEES ARE MANAGED

Of the several departments on Mr. Clark's farm possibly the apiary is of special interest. With very little expenditure the bees, as indicated earlier in this article, give handsome returns and prove of great value in fertilizing fruit blossoms, and thereby aiding in a better set of fruit than is possible in individual cases on the old stands. He prefers to have his colonies packed in these individual clamps rather than in the larger combined clamps, since when left on their old stands the bees always know their location, thus saving the bees from being lost, and then the hives can be left in the packing cases until the warm weather comes, which assists in brood rearing. Mr. Clark runs his apiary solely for extracted honey, since there is more money in it than in comb honey and the bees are more easily manipulated. By allowing the queen plenty of room in brood chambers and giving plenty of ventilation swarming is reduced to a minimum.

#### A CHEAP AND FAVORITE POULTRY HOUSE

A great study in poultry houses and general chicken lore is afforded the visitor at Mr. Clark's place. Of his several houses Mr. Clark recommends most strongly the model devised by Professor Graham at the Guelph College, and used by him last winter for the first time with such satisfactory results. Mr. Clark built one of these houses last fall after seeing Professor Graham's late in November. The building is 20 feet square, set on a cement walk six inches wide nicely above the surface of the ground. It is made of cull lumber and covered over with crystal brand Brantford roofing. One hundred hens were wintered in this house and all came through in the pink of condition and laid exceptionally well. The building is wide open to the outside air in the front, there being an open space two feet high the whole width of the building, 20 feet being open at all times day and night, storm or calm. The males wintered in this house got their combs slightly frozen, but not a hen in the bunch suffered from frostbite. The building was erected at a cost of only \$60.

Of portable houses of the colony type, a unique, cheap, and very satisfactory structure Mr. Clark makes out of two piano boxes. The piano boxes cost \$2 each, and the whole house complete costs only from \$75 to \$86, there being plenty of lumber in the two boxes to make the roof and all parts, including the floor of the house, with the exception of two gable ends made from 12 inch by six feet long, which may be ripped to make the two gables. A complete plan, photograph and instructions of how to make these houses will be published in a subsequent issue on the poultry page of Farm and Dairy.

This piano box colony house is put to many uses—for wintering stock, and for the chickens after they are taken from the broods, or from the hens; some of his hens Mr. Clark sets in these chicken houses, four to a house. When the chickens hatch the four hens and chickens use the same house for shelter and when the chickens are old enough to get along without the hens they are used to going to the house, which is used to shelter them until they mature.

These movable houses and the poultry are scat-

tered here and there throughout the orchard and have the benefit of free range and cultivated land. A cultivated orchard for the chickens, Mr. Clark says, has a double advantage in that it provides much food and tender green stuff, also insects, which are eaten by the chickens to their distinct benefit and the benefit of the orchard as well.

The chickens are fed from hoppers, the feed being available to them at all times. Water is also provided in quantity, which needs to be replenished only on infrequent occasions, thus greatly minimizing the work of caring for the poultry. The ration fed from the hoppers is



Growthy Apple Trees One Year Set

Apple trees given proper culture and attention soon come into bearing. This illustration shows a two-year-old stock set last year by Mr. Clark. Note the remarkable growth. Good cultivation and well fertilized soil account for it.—Photo by an editor of Farm and Dairy.

crushed oats. The hoppers hold two or more bushels of this feed at one time.

There are many other things we would like to note about Mr. Clark's little farm and his methods of farm management. For the most part these will be written about later and will appear in short articles in various departments of Farm and Dairy. Before concluding, however, we must make mention of Mr. Clark's incubator and brooder house. Natural gas is available in abundance in the Brantford district, and Mr. Clark has this piped in to his incubators and brooders, thus furnishing heat without trouble or bother of any kind, and at a much less cost for fuel than coal oil.—C.C.N.

#### Notes from Farmers

It is time enough when two or three years old to think of getting young horses filled out and nice and sleek for sale. In the meantime, the idea should be to develop a good frame and a strong constitution.—E. F. Eaton, Colchester Co., N. S.

For my part I do not care what kind of soil is used for corn because I have seen magnificent crops of corn on every kind of soil you can imagine from the heaviest clay down to the lightest blowing sand, and even the blackest kind of black muck, two or three feet deep; I have seen splendid crops of corn growing under all these conditions.—J. H. Grisdale, Dominion Agriculturist.

When driving through this county last April, I noticed that despite all that has been said and written on the silo, some farmers are still digging the corn shocks out of the snow. It must be a paying proposition to cultivate and hoe corn for a whole season and then have to shovel it out of the snow banks in the winter!—D. F. Armstrong, Leeds Co., Ont.

#### The Matter of Selecting a Bull

"In the selection of a bull for breeding purposes" said Mr. John McKee of Norwich, Ont., the well-known Ayrshire breeder, to an editor of Farm and Dairy who visited his farm in Oxford county recently, "I have always made it a point to insist on seeing if possible the dam of any bull I purchase. For this reason I have never had an imported bull on my farm. I realize that many fine bulls have been imported that have done much for the breed in Canada. I feel, however, that so much depends on the breeding of the bull and on the bull's dam, that I have always insisted on seeing the bull's dam before I would consent to use him on my herd.

"To satisfy me the dam must be a good strong animal of large capacity, with a well-formed udder and large, well-placed teats. I always want to know all I can about her breeding and also of the breeding of the bull's sire and of his sire's dam. Some breeders seem to be crazy to procure an imported bull. Such men are apt to forget that there are scrubs in Scotland even among pure bred as well as in Canada. Some imported bulls have not turned out well in Canada.

"As regards the bull himself, I want him to be a naturally good, strong feeder, as such a bull is likely to leave strong, vigorous calves. I aim to give my bulls plenty of room for exercise. My herd bull has a box stall and a paddock by the barn where he can be turned out at nights all summer. Even in winter he is let out a little while in the afternoons. When exercised in this way the bull's feet maintain their natural shape and never require trimming.

"I have never been in favor of shutting cows up all winter. We let ours out on nice afternoons. They are not allowed out long enough to get chilled but they are given time to rub and enjoy themselves."

#### Gains from Cow Testing

C. F. Whitley, In Charge of Records, Ottawa.

The chart below shows what cow testing is designed for, and what it accomplishes in the hands of dairymen wise enough to profit by the teachings of the scales and test.

It is evident that a very modest estimate is made when it is claimed that as cow testing becomes generally practiced the production of all cows in the Dominion can easily be increased by 1,000 pounds of milk; this means additional income for farmers to the extent of twenty millions of dollars.

#### SOME DEFINITE GAINS FROM COW TESTING

Name and Address	AVERAGE YIELDS PER COW				INCREASE
	1906	1907	1908	1909	
	lbs	lbs	lbs	lbs	lbs
S. A. Freeman, Culliton, Ont. . . . .	5149	5871	6211	6708	1559
W. J. Curtis, Wiltshire, Ont. . . . .	4334			6267	1933
W. E. Thomson, Woodstock, Ont. . . . .	5500			10530	5030
A. J. Davis, Woodstock, Ont. . . . .	4500			9144	4644
T. E. Jory, Lakeside, Ont. . . . .	4961			6511	1550
J. E. Moore, Peterboro, Ont. . . . .	6709	8050	8978	298	2269
W. Paul, Peterboro, Ont. . . . .	4359	5218	5845	206	1486

Such remarkably substantial increases should be an inspiration to every dairyman.

The chart also shows that farmers in Western Ontario are getting more good out of cow testing than those in Eastern Ontario. This is strange, especially in view of the fact that the East depends more than the West upon dairying as a means of livelihood; it might further be pointed out that the East seems to need the improvement more. The average yield per cow in the East is below that of the West, and can be considerably increased.

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## 12 Years With Summer Ensilage

M. Hartly, Oxford Co., Ont.

After about 12 years' experience feeding ensilage to dairy cows in the summer, I am convinced that there is no other supplementary feed so cheap, so convenient, and so readily eaten by the cows. Dairy cows must have something that will fill them up and satisfy them. Ensilage has this advantage over grain alone, as grain is too expensive to give them all they want of it.

With regard to the effect of ensilage on the milk, I have never been able to detect any difference. I have always had well matured corn, and in the warm weather I have fed half the silo down at a time. There are a few inches of the surface of the half that is left that will spoil, but I would rather lose that than be always feeding spoiling ensilage. One should take two or three inches of the whole surface that is being fed at least once a day.

It is important to keep the manure free from spoiled feed that would contaminate the fresh ensilage that is put in.

As to quantity, I give the cows as much as I can get them to eat with a little grain as an extra inducement. This keeps them up in flesh and ensures a regular flow of milk for the season.

## Aeration of Soil by Drainage\*

A farmer at one of our drainage demonstrations the other day aptly expressed one benefit of underdrainage when he said: "Tile are always running full, if not with water they are with air. I have nearly two miles of drains in and would rather see them running full with air than with water." The taking off of water is not the only benefit of underdrainage; while many of the other advantages naturally follow this work of carrying off surplus water they are worth knowing in order that we may appreciate them.

When water falls upon sloping land, it cannot readily enter the soil, as the space is already occupied by air; this air has first to be displaced before water can get in. Unless there be an underdrain in the soil the air must come upward, and while this action is taking place water is running away down the slope. Now, if there is a tile drain under that land the air goes to the drain and the water follows it. If a lighted match is held at the mouth of a drain during a rain it will be seen that there is a draught outward. Hence it is that a passing shower will moisten the underdrained land much deeper than land not drained, as there is so little lost through it running away on the surface.

## LAND MADE MOIST AND MELLOW

The free passing of air and water through the soil following after the installation of underdrains rapidly makes it more open and mellow.

A farmer recently asked me why it was that when plowing on a hillside in which there was a drain leading from wet land above he could always tell when he was within 30 feet of the drain, since the land there turned up softer and moister. His question I have answered. Actual experiment has proved that when undrained and drained land are apparently dry the drained land contains nearly 28 per cent. more moisture than the undrained.

A free circulation of air through the soil is of great advantage. It may be explained in this way. There are in the soil two kinds of bacteria (very small forms of plant life). The one kind are exceedingly beneficial; for example, those which cause the nodules to form on alfalfa roots, about which Farm and Dairy readers are well informed. These gather the free nitrogen from the air and store it in the form of available plant food. These bacteria are technically

called "aerobic," and as the name suggests, they require the presence of air in order to live.

The other kind of bacteria are known as anaerobic; these require the absence of air. They work upon the plant food in the soil and break it up, allowing the nitrogen to escape back into the air; these, therefore, Farm and Dairy readers may see, are very detrimental. They cause the cold, sour condition of some soils so often seen, and upon which nothing grows but coarse brown grass and weeds. Conditions are just right for the anaerobic bacteria in the hard, closely packed soil lacking underdrainage. On the other hand the drained soil furnishes the best conditions for the growth of the beneficial bacteria; this explains why alfalfa requires, and does so well on, drained land.

The benefits derived from drainage, as here enumerated, are but a few. I have said nothing about there being in drained land more root space, seed germinating better, soil warmer in the spring, and so forth, of which Farm and Dairy readers have all read and can readily understand. I have endeavored here to answer a few questions only which seem to puzzle farmers at demonstrations, and to set forth that it will pay to drain land even if water does not stand on it.—H. C. N.

## Experience With Mares and Colts

Hy. Glendinning, Victoria Co., Ont.

The best season to have the colts arrive is when the mares are on grass. We plan to have ours come at that time, and we never lose a colt.

The mare is generally in good condition at that time, the green grass induces a good flow of milk, and the mare's bowels

are in good order. I have found that if the mare's bowels are right the foal's will be also.

If a foal, however, has difficulty in passing its manure I remove the manure balls with a greased finger. If this is not effective I give an injection of oil or milk to loosen up the contents of the rectum.

I do not consider it wise to give a physic. It is a long way from the mouth to the intestines, and all that could be safely given would not be sufficient

to move the large mass of matter three collected.

We never have trouble with diseased navels. When the mares

foals in pasture all surroundings are clean. The dirty litter, generally the cause of navel ill, is encountered only in stables or barnyards. We always take the precaution, however, of dressing the navel with a disinfectant.

## RE WORKING THE MARE

We work the mare regularly up to foaling time, but not much after. Of course, even before foaling the work is light. After foaling, if we need an extra horse we use the mares, but always give them the lightest work. When the mares are working the colts are kept in the pasture. If allowed to run with the mare there is a danger of it getting hurt.

We try to get the foal to eat oats before weaning. After weaning skim milk is one of the principal foods. They may not like it at first, but if not watered for a while they will drink the milk, and in a few days they are looking for

it. Skim milk does not make wind-suckers, as many believe. I have a mare that is a wind-sucker, but not one of her five colts suck with it, and all have been fed skim milk.

I feed a little ground flax also. It gives the colts a nice, slick appearance that denotes thrift. Too much flax might not be good.

Colts should be allowed to exercise regularly. We have no arrangement whereby the colts can run at liberty (the best method), but they are given a run in the yard each day. They will take a lot of exercise in a short time.

## Jersey Milk—Quality and Cost

I have read with interest Mr. Porter's article on quality of milk as published in Farm and Dairy, June 15; he puts the case very plainly. Quality in milk is what is wanted; there is plenty of water available without taking the trouble to feed the cows to produce it.

And again there is no disputing the fact that quality in milk means quality in products manufactured therefrom, and quality we must have in these products if we are going to hold our own in the markets of the world.

Cost of production is another very essential factor that is nearly always left out of milk records. This should not be so. We are not feeding cows for the fun that is in the work, but for the dollars. It is a more business-like proposition to feed a cow that produces 7000 lbs. of milk making a profit of \$80, than it is to feed two cows producing three times that amount of milk but making only a profit of \$40 each.

I do not want to stand on the fence and yell Jersey! Jersey! Jersey! as fanciers of some other



A Prolific Ayrshire in the Home Land of the Breed

The three-year-old Ayrshire here shown last year dropped one calf as a two-year-old, and this year she dropped three healthy calves, as shown in the picture. She belongs to John Hardy, Lampits Ferry, Carletons. Mr. W. F. Stephen, secretary of the Canadian Ayrshire Breeders' Association, when forwarding this print wrote: "Who says Ayrshires are not prolific and profitable."

breeds do in the interest of their respective breeds. All we Jersey men wish is to see the Jersey get fair play by the recognition of quality and cost of production of milk, and to set facts concerning the breed before the public and let them judge for themselves.

I will give the following official record of a cow in my possession. It is nothing extraordinary but it shows a fairly good profit.

Sylvia, of Maple Grove (Jersey) No. 1086.

Ration, crushed oats, bran, oilcake, roots, hay and some straw.

Production, 8967 lbs. milk, 475 lbs. fat, 554 lbs. butter. Value of fat, \$142.60, skim milk, \$18.00; total value, \$160.60.

Value of food consumed, valued at market prices, \$73.50. Profit, \$86.91. — Wm. Clark, Queen's Co., P. E. I.

\*The second of a special series of articles on things worth knowing about underdrainage, prepared expressly for Farm and Dairy readers by an expert on underdrainage work.

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its wonderful capacity

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Siles, Ontario

### Looking For Alfalfa Nodules

I am sending you a sample of this year's seeding of alfalfa sown on the 19th of May. I inoculated the seed with nitro- to search for nodules after the seedlings were a month old, and to report to them. I can find no nodules as yet. As it is my first experience, I do not know alfalfa, would you kindly let me know what you think of the seedlings so that I can report? I seeded six acres with crop of barley, and it is looking fine.—J. B. Howick Station, Que.

The alfalfa plants were so dried up by the time they reached us that it was impossible to ascertain whether

or not nodules were present on the roots. One of the roots appeared very much like as if it had a dried nodule.

If the soil is mellow and you dig up the roots carefully, and they require to be dug very carefully, causing the nodules from the roots, you should have no difficulty in determining whether or not nodules are present.

The nodules, of course, are small on small plants. They often have a pinkish appearance and look like a little cluster of small grapes or warts.

From the length and evident thrift of the plants you sent we should judge that your alfalfa has taken well and you should have no difficulty in making out a satisfactory report for the College at Guelph.

### Makes Money in Dairying

D. F. Armstrong, Leeds Co., Ont.

I have made money out of dairy cows and I have a few figures to submit for the consideration of those who claim that there is no money in dairymilk. We commenced to weigh our cows then milking three years ago and the seven others were due to calve in March, April, and May. In December these cows made 3,750 lbs. of milk and 154.5 lbs. of butter. In January eight cows gave 3,565 lbs. of milk, which made 180 lbs. of butter; in February, 3,060 lbs. of milk and 150.5 lbs. of butter. In March five cows gave 3,890 lbs. of milk and made 175 lbs. of butter, a total of 674 lbs. of butter in the four months, as well as 244 quarts of milk for the house. This income is in addition to what they returned me in the factory season when they were at full flow.

On March 1st, 1911, I bought two cows at auction paying \$161 for the pair. In that month the two of them gave 2,326 lbs. of milk and making 119.5 lbs. of butter that sold for 25 cents a lb., or \$28.12. The two calves sold for \$12, a total of \$40.12 for the two cows for one month.

It is not out of the reach of the ordinary farmer to obtain \$100 a year per cow, first, by keeping cows of good dairy quality, and then giving them good care and feed. Things are working out pretty well for the dairy farmer; and with the proposed trade agreement with the United States in operation we shall do even better.

### Experience in Spraying Potatoes

E. F. Eaton, Colchester Co., N. S.

The spraying of potatoes to protect them from bugs and blight is quite as important as the spraying of orchards.

I have had no experience in spraying orchards but from figures given from time to time in Farm and Dairy I can figure out just as good returns from spraying potatoes. I have heard farmers say that they had saved the crop by their spraying outfit from one acre of potatoes in one year.

Some years ago I visited the Experimental Farm, at Truro, and was surprised to find that although it was in September the potato tops were still green and growing. Our own potatoes and those of all our neighbors had died down under the attacks of blight sometime before. I got directions as to how to spray from Mr. Fuller, the farm superintendent, purchased a spray-motor for \$20 and have been spraying my own potatoes since with very satisfactory results. Two years ago when blight was very bad we harvested 200 bushels to the acre and had hardly a sign of rot. Our next neighbor, who had two and one half acres of potatoes might have had a very good crop but owing to the blight he did not have 50 bushels of marketable potatoes to the acre. He could have bought two or three spraying outfits with the potatoes he lost this year.

In spraying for bugs early in the season use arsenate of lead, or Paris green, usually the latter. Two and

one half lb. of arsenate of lead or one pound of Paris green are used in 40 gallons of water and this will spray one acre of potatoes when the tops are small. We prefer to have the tops arranged to throw the spray forward against the tops. Where the spray is directed straight down only the bottom of the leaves are reached by the poison.

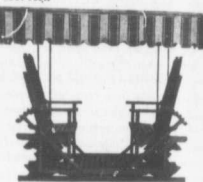
In spraying for blight it is important that both top and bottom of the leaves be drenched. Two sprayings are usually given for bugs early in the season.

It is important in spraying for blight to spray in time. I have heard Professor Smith at the college say that he could go out on an evening and smell the blight on the potato field. He then started to spray. I do not care to take a risk such as that as I have seen fields apparently healthy one day, completely covered with blight only two days later.

We give our first application of Bordeaux mixture (4-4-40) early in August and spray every 10 days or two weeks until early in September. The growing period for the potatoes is extended by spraying and when they are harvested they can be put in the cellar with the assurance that they will not rot, if it is necessary to hold them for a better market.

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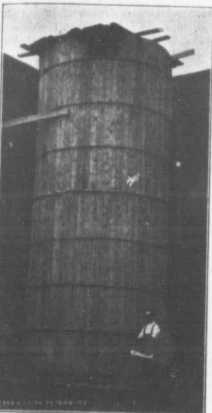
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**FARM MANAGEMENT**

**What it Costs to Build a Silo**

"I believe the silo is the right thing and wherever much stock is kept a silo is of great advantage. But silos are expensive and supposing I built one, I would find difficulty in getting it filled." Several farmers in Victoria and Peterboro counties, and one farmer in Western Ontario recently made remarks to this effect to an editor of Farm and Dairy who was calling at their places.

The matter of cost is a prime consideration and one should satisfy himself about the cost before he builds a silo. Three weeks ago one of the editors of Farm and Dairy called on Mr. W. E. Bryant, of South Paris Plains, in Trail Co., Ont., who last year appropriated a cement block silo 11 feet by 35 feet. The silo is a finished job and



**A Satisfactory Silo for \$65**

This silo was built last year and has given the best of satisfaction. It cost its owner, Mr. W. J. Telford, who may be seen in the illustration, \$75, but he says he could build it to-morrow for \$65. Mr. Telford is one of the competitors in the Interprovincial Dairy Farms Competition this year. —(Photo by editor of Farm and Dairy.)

makes a splendid appearance, and while it is a paying investment, the average farmer would not care to make a large expenditure for a silo as did Mr. Telford on his 60 acre farm. His silo cost over \$300 and some extras besides.

What kind of a silo to build is a question which each farmer must decide for himself. Those who hesitate to expend the necessary money to erect one of the larger and more permanent cement silos will be interested in the illustration of the stave silo, published herewith, and the particulars about it as given in the following.

**A LOW COST SILO**

This silo was erected last year by Mr. W. J. Telford, of Ennismore township, Peterboro county, and is the second of two silos erected in the township. It is built strictly for business and without any unnecessary expense. "The silo cost me \$75 all told," said Mr. Telford, an editor of Farm and Dairy recently when taking the photograph. "I could build it again to-morrow for \$65."

"The silo is of hemlock and is 12 by 27 feet. I put up the first tub myself and got a neighbor to help me

put up the top. Where the ends of the staves join they are ripped in the ends and a two-inch piece of hoop-iron is imbedded. As may be seen in the photograph a wide hoop, made of old wagon tires, is fitted around the silo at this point. It makes a complete job and there is no give to the staves when thus arranged."

As to the advantages of this silo Mr. Telford demonstrated to our satisfaction when he took us up in his barn to see the feed he had left there. "The silo saved a lot of hay and shepherd's that we used to feed our stock. I sold over \$100 worth of hay this last year that otherwise, without the silo, I would have had to feed and you see I have a considerable quantity left."

"I like the silo fine. It is a paying affair and I would hate to be without it again. I have six feet of silage in it now, which I will try for summer feeding." Mr. Telford had four acres of corn last year and it being exceptionally good filled the silo to a height of four feet above the top it having been cribbed up with extra planks in order to get the corn all in. Mr. Telford stated that he had three men in the silo tramping part of the time while filling. His corn was not too thick and so was well cared.

**A Story About Hay-making**

The sky looked beautiful one morning in haying time. A good many men thought we were surely going to have a "long spell of weather." We did. These men went out and mowed and mowed and mowed, till some of them had all their meadows down in the swath.

The next morning it began to rain, and before it stopped all that splendid hay was wet through and through till it was rotted beyond all use. Tons of it never were drawn into the barn. Not all men were thus caught. Some had their weather eye open. They said, "These up-to-date mowers will cut down an immense amount of hay in a little while. It is grand to see it fall over the sickle bar. No wonder the boys like to mow! But it is safe to mow no more in one day than we can take care of."

And when the storms came and the winds blew and the rain descended, their meadows were all cleared up and their hay safe under cover.

"Well," somebody may say, "men who are as conservative as that never set the river afloat."

True; but why should anybody want to set the river on fire? Is it not better to let it run right on in its course, turning all the water-wheels, bearing on its bosom the ships of commerce? Why set the river on fire?

It is worth a great deal more to keep a steady hand, clear up the meadows every night, and live a good while, than it is to make a grand splurge and lose the whole hay crop.

**The Corn Crop in Dry Weather**

It requires the later as well as the early rains to mature the corn crop, unless the tiller conserves the moisture which has sprouted the seed and sent it on its upward way. The farmer can assist the shriveling effect of a drought on the corn crop. The dust mulch is the solution of the problem, known to all informed farmers. Repeated cultivation of the surface makes available tons of water caught below when the plants refuse to come down from above.

This cultivation must be shallow, throwing of the damp soil up so the drying rays of the sun and a desiccation of the root system of the plant is the way not to cultivate in a drought. Surface cultivation means a fining of the top soil, so that capillary attraction may be arrested before the subsoil moisture is evaporated through the surface. It will add available moisture from the stores below.

A tearing up with big shovels will intensify the water famine.

A log or a binder or mower wheel dragged up and down the corn rows, when the stalks prohibit the use of the cultivator, will add bushels to the yield in a dry time. The dust mulch keeps the thirsty sun from pumping from the ground the moisture for which the crop suffers. It is worth all it costs, and it will save a crop in dire extremity.—B. G.

**Watch Weeds in Clover**

L. K. Shaw, Welland Co., Ont. One of the most common means by which noxious weeds are introduced into new sections is through the small seeds—clover, alfalfa, and timothy.

We have found that timothy seed is cleaner than the others, and if there are weed seeds in it, it can be cleaned by a proper adjustment of the fanning mill. Clover seed, however, is almost certain to contain noxious weed seeds, and the seed is somewhat difficult to clean. To avoid introducing weeds through this medium, we have been growing our own clover seed.

The easiest time to keep weeds out of the seed is to pull them in the growing clover. The field itself may be either a second cutting or a clover field that has been pastured, not too close, in the earlier part of the season. All stock, however, should now be taken off and the field allowed to give all its energies to producing a crop of seed.

One of the weeds that we most commonly find in our clover, and it was introduced onto the farm through clover seed, is the narrow-leaved plantain known to seedsmen as buckhorn. This weed is a perennial or biennial,

with a short, thick, root stalk, and differs from the common plantain commonly seen around barnyards, in that the leaves are narrower, the head not so long, and the pollen sacks come from the middle of the spike only. We have found that the easiest way to get rid of this pest is by cutting off with a spud below the crown. Our spud is made by attaching an old chisel to a hoe handle.

Curled dock, a weed known to all, is also troublesome in clover. The seeds of this weed are very numerous, and a comparatively few heads missed in going over the clover field will mean all kinds of trouble with the field that is seeded with this clover. It can be readily pulled by hand. Other weeds that we have found troublesome are green foxtail, ragweed, and bladder campion. All of these are carefully pulled by hand at intervals of one or two weeks.

If there is any one job on the farm that the farmer himself should attend to, it is the seeding of his clover seed patch. The hired man or the boys are bound to be careless, and the missing of one weed may mean several hundred weeds to pull in some future crop. This weeding should be carried on right up to the time the clover is to be cut.

The split log drag we have been using is made of two feet by six pieces of hardwood eight feet long connected by half inch iron bars three feet long. A loose chain runs along the front, and the point at which the horses are hitched to this chain determines the obliquity of the drag.—Jas. Christie, Colchester Co., N.S.



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**SOME HISTORY about Typewriters**



**Modern and Ancient**

CHAPTER EIGHT

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**HORTICULTURE**

**Of Interest to Fruit Growers**

Fruit growers are reminded that the Inspection and Sale Act prescribes—

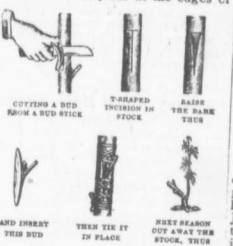
1. That every closed package (box or barrel) must be plainly and indelibly marked with
  - (a) the name and address of the packer,
  - (b) the name of the variety, and (c) the grade.
2. That the word "Fancy" or the numerals, No. 1, No. 2 or No. 3, must be used to designate the different grades.
3. That a "Fancy" grade must be perfect fruit.
  - (a) No. 1 grade must be 90 per cent. free from all defects,
  - (c) No. 2 grade must be 80 per cent. free from defects causing material waste, and containing no culls.
4. That the faced or shewn surface must be the same grade of fruit as the rest of the package.
5. That the minimum size of the apple barrel is: 26 1-4 inches between the boards, inside measure, a head diameter of 17 inches, and a middle diameter of 18 1-2 inches.
6. That the apple box must be 10 inches in depth, 11 inches in width and 20 inches in length, inside measurement.
7. That fruit baskets are of 4 sizes, viz.:
  - (a) 15 quarts or more,
  - (b) 11 quarts,
  - (c) 6 quarts,
  - (d) 2 2-5 quarts.
8. That berry boxes must contain—
  - (a) 4-5 of a quart,
  - (b) 2-5 of a quart,
  - (c) Under-sized boxes must be marked with the word "Short."

The Act provides a severe penalty for the alteration, effacement or obliteration of marks on any package which has undergone inspection. Bulletin No. 11, entitled "The Inspection and Sale Act, Part IX, and Amendment of 1907-8," and General Notes," will assist on application to the Fruit Division, Department of Agriculture, Ottawa.

**How to Practice Budding**

Budding time is nearly here. The following along with the illustration tells how to do it.

The art of budding consists in taking a bud from one tree and inserting it under the bark of some other tree. The union of the two, the bud and the stock, takes place at the edges of



**A Lesson on How to Bud**

the bark of the inserted bud. For this reason the bud should be inserted as soon as cut from its twig and before it has had time to dry out. The bud should also be full, plump and well matured, and cut from wood of the current season's growth.

**A Letter From Mr. Clark**

The following letter, received from Mr. Clark at the time he returned the copy of the article published on page 3, is so full of interest to Farm and Dairy readers that we take the liberty of publishing it:

Editor, Farm and Dairy.—I have been exceedingly busy late with berries and bees (some of my colonies have made over 100 lbs. surplus honey already this season) that I did not find time to go carefully over your possibly complimentary article. I think you have said more than I am deserving of. However, the proof of the pudding, they say, is in the eating; I am getting big returns for my labor; and what I can do others can do also.

I am satisfied that the best money I expend is for good labor. I firmly believe far too many farmers are doing believe far too small an amount of hired help, thinking they are saving, when as a matter of fact they are losing in the end.

I was through my orchard today trying to find an apple showing signs of the codling moth work. I discovered only one, and I examined several hundred in different parts of the orchard. In my neighbor's orchard, unsprayed, just over the fence, I can find them by the hundreds. I will have a good fair crop of apples this year; they are beginning to show up well now. All my orchard is plowed and well cultivated. I can see a marked difference between the size of apples on trees that are worked around and those that are not. I have a few trees that I cannot get at to plow around. On those the dry weather is showing its effect in the size of the fruit already. I fear in

many orchards not worked this year if it continues dry, the fruit will be much under size.—J. W. Clark, Grant Co., Ont.

**An All-the-year Vegetable**

Although one of the coarse vegetables, cabbage finds a place in the home garden as well as in the market garden and the truck farm, and in some sections of America it is extensively grown as a farm crop. No adequate estimate, however, can be placed on the value of this crop, as it fluctuates very decidedly from year to year, both in acreage and price; but the output is large—the three states of New York, Pennsylvania, and Virginia, which outrank all the others, grow commercially about 50,000 acres of this vegetable, either as a spring or autumn crop.

Early cabbage is practically all consumed as a green vegetable; the late crop, on the other hand, is handled as a winter vegetable, as a storage crop and for manufacture of sauerkraut. Cabbage is always in demand, and, under present conditions, is always on the market either in spring as the product of the southern farms, in the early winter from the northern farm and market garden, or in the winter from the storage house, where the surplus has been preserved for this demand.

**Power in the Apple Orchard**

Cultivating and spraying an orchard of 70 acres would be a large proposition were the work done by horse power as it usually is. Mr. B. J. Case, of New York State, told Ontario growers in Toronto last fall that in a 170 acre orchard he has solved the problem of cultivation by setting his traction gasoline power to work in his orchard intensive cultivation and the use of cover crops is practised, following it down by gang plows hauled by a traction engine. When harrowing, all of the space between two rows of trees is covered at one operation.

Mr. Case finds that the gasoline engine takes away with the wages of four or five men, and is, in his orchard, an economical power.

"The secret of getting good results from spraying," said Mr. Case, "is to spray at the right time, apply the spray under strong pressure, and thoroughly drench the tree. Were the old hand pump used in my orchard it would take a great many to spray at the right time, and with hand pumps the average man will not put on pressure enough; furthermore, with a small barrel much time would be lost in refilling. We use large sprayers on tanks that hold 300 to 400 gallons of spray mixture.

"We have solved with gasoline power the problem of managing a large orchard."

**A New Book on Weeds**

Many excellent bulletins describing injurious weeds have been issued by our various departments of agriculture. The demand for these bulletins has been so great that second and third editions have been necessary in a comparatively short time. Comparatively few books, however, have been of use to the farmer, but have been written on this important subject. But now we announce a new book on this subject, it being "Weeds of the Farm and Garden."

"Weeds of the Farm and Garden," by L. P.ammel, Professor of Botany at the Iowa State College, has been prepared to meet a long felt need. It deals in a clear and specific manner with the distribution of weed seeds, the testing of seed for weeds and methods for the extermination of weeds. Most of our worst weeds are illustrated and described. The price of the book through Farm and Dairy is \$1.65 postpaid

July 6, 1911

**POULTRY**

**Are Hens Profitable?**

"Do you get profitable on this? This is one question submitted by Oregon by Prof. poultry department of the Agricultural College directed to those who sell eggs prices, not to poultry keepers, was a fancy price."

"A farmer about such things, but he was very much benefited by his public is the pig is that he would not, so they are in answering long association showing gratitude for the eggs, fairly abundant."

"If the farmer on the hens, loss in the agriculture should amount business that about \$100,000 of the United States farmers most business ability they are going on business of operation a year, if it were but lost to work."

"Answers to sent us by 333 answered. Yes, we were non-committal their answers, of these. The day is almost unanswerable. Later evidence from the "Among the

**THE COST OF A CUP**

Will raise water store it so that ting water in the k room; in the k also use the water when for a

The cost of a low cut our out. Send a post

The Ontario Pump Co. WINNIPEG TO

**FOR SALE AND TWO CENTS A WORD**

FOR SALE—Iron Halls, Chalo, Wisconsin, all sizes, very cheap, what you waste and Metal

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150 ACRES FOR half price from 20 miles from St. Louis; good soil, held Monday, L



worked this year  
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**Vegetable**

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**Vegetable**

Will raise water to any height and  
store it next to you, and run the  
running water in any part of your  
home, in the kitchen, in the bath  
room, in the laundry, etc. You can  
also use the water to water your  
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The cost of installation is very  
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Sails, Chain Wire Fencing, Iron Posts,  
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of what you want. The Imperial  
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**HARDWOOD ASHES**—Best fertilizer in  
use—George Stevens, Peterboro, Ont.

**150 ACRES FOR SALE**—LOT 14, COON, E.  
Lobo Township, good buildings;  
half mile from school and post office,  
ten miles from London; convenient to  
railways; good soil, good water. Archi-  
bald McLaugh, Lobo, Ontario.

**POULTRY YARD**

**Are Hens Profitable on Farms**

"Do you consider poultry keeping profitable on the farm?" This is one of the series of 25 questions submitted to the farmers of Oregon by Prof. James Dryden of the Oregon Department of the Oregon Agricultural College. The question was directed to farmers on general farms who sell eggs or poultry at market prices, not to fanciers or special poultry keepers who sell eggs and stock at fancy prices.

"A farmer has ideas of his own about such things," says Prof. Dryden, "but he doesn't go out of his way very much to give the public the benefit of his ideas, and therein the public is the loser. The retrievable loss is that very few farmers keep a pencil and notebook in their chickens, so they must guess a good deal in answering such a question. By long association with fowls, however, showing grain to them, and gathering the eggs, he is able to form a fairly accurate estimate of the profit."

**CREDIT BUSINESS ABILITY**

"If the farmers are losing money on the hens, it means a tremendous loss in the aggregate. If the loss should amount to 15 per cent. on the business that would mean a loss of about \$100,000,000 to the farmers of the United States. One should give the farmers more credit for their business ability than to believe that they are going on year after year doing a business of over half a billion dollars a year, if it were a losing proposition. But listen to what they say!

"Answers to the above question were sent us by 333 farmers, of whom 288 answered 'Yes,' 29 'No,' and the rest were non-committal. A few qualified their answers, and I shall quote some of these. The decision on the question is almost unanimously in the affirmative for I have given some evidence from the experiment station.

"Among the answers given by the

farmers were the following: 'A profitable side line.' 'To a certain extent receive income otherwise wasted.' 'Depends upon circumstances.' 'Very much so.' 'From 15 to 30 hens; over that a nuisance.' 'Not in the strict sense of the word.' 'Yes, to pick up waste.' 'Yes, as a side issue.' 'Not unless you raise grain.' 'Yes, if kept warm in winter.' 'Of course.' 'Merely as a convenience.' 'Don't know yet.' 'To some extent.'

**BETTER THAN OTHER THINGS**

"One answers emphatically: 'Yes, more than hogs, sheep, grain or



**An Open Lunch Counter for Chickens**

This illustration shows an outdoor feed hopper for chickens running on free range in the orchard on Mr. J. W. Clark's farm, Brant Co., Ont. Crushed oats is the feed used and it is before the chickens at all times.—Photo by an editor of Farm and Dairy.

fruit under present market conditions.' Another says, 'Yes, by all means.' Others say, 'Yes, best paying on the farm.' 'To a certain extent.' 'Yes, up to about 25.' 'Very profitable.' 'Yes, much company.' 'Yes, if you have good luck.' 'Yes, in moderate doses.' 'Yes, if not too many kept.' 'Only for family use where no grain is raised.' 'Yes, to a moderate extent.' 'Yes, if one owns his own farm.' 'Very profitable.' 'Yes, for family use.' 'Would not do without hens.' 'Yes, pay big profit.' 'When proper attention is given.' 'Not the way we keep them.' 'Yes, in a small way.'

"With good houses, etc., yes, otherwise, no," says one, and another makes a similar reply. 'With proper care and attention, yes, but if not, I say no.' Others say, 'Yes, as well as anything else.' 'Yes, if proper attention is given.' 'Has not been so far.' 'Don't think much of it.' 'Will be when properly regulated.' 'The most profitable on farm of anything.' 'Fairly.' 'Total failure last year.' 'A small flock.' 'Large farm, yes; small farm, no.' 'If you have good hens.' 'Owing to the care they get.' 'Yes, if all did as well as the old hens.' 'Yes, on small place.' 'You bet I do.' 'Yes, if taken good care of and feeds are kept pure.' 'Yes, on a small scale.' 'Only in a small way.' 'Yes, sir; I get in it this year on a big scale.' 'Where grain is raised on the farm.' 'It helps some.' 'Yes, if systematic.' 'Yes, properly handled, though I have not been particularly successful myself.' 'Yes, if the waste on the farm is considered, and not too many are kept.' 'Yes, on a large farm, not on a small place.'

"The replies would seem to indicate that the profit is in proportion to the care given the poultry, and the amount of the feed raised on the farm."

**Gapes in Chickens**

My neighbor's chickens are all dying with gapes, and I have 166 which I would like to save. Can you tell me what to do for them, and also advise a remedy for lice on little chicks?—P. C.

This disease is due to little worms in the windpipe, which come from the chicks eating earth-worms. If they are never allowed on the ground where there are earth-worms, they will not get the gapes. For example, if you can keep them on the barn floor, or on soil well covered with lime or ashes, they will be free from this disease; but, of course, they do much better if allowed to run out, especially during nice weather.

Within the earth-worm the little gape worm is encysted, just as the parasitic worm causing the human disease known as trichinosis is encysted in the flesh of pork and develops when eaten by a person. In the same way does this little gape worm remain in the earth worm until eaten by the fowl or chick, when it develops into the gape worm, causing the disease which indicates its presence.

A successful physician has recommended to me to destroy the pest by putting the chicks into a box and dropping a few drops of carbolic acid on hot bricks, closing the box, and letting the chicks breathe the fumes for a few minutes. Repeat treatment once or twice. There is, of course, danger of overdoing this by making the fumes too strong, if one is not careful.

One simple remedy which I have seen successfully used this spring is common kerosene or lamp oil applied by dipping the tip of a feather into it, and inserting it into the windpipe mouth of the chick. The shank of the feather should be stripped of its side barbs and only the tip remain to act as a soft feather brush. By opening the tongue slightly, and pulling the windpipe is to be seen, and the feather can be inserted. This apparently does not cause much pain, and the operation is soon finished. It appears that a little touch of the oil against the gape worm is enough to kill it, even though it is not removed with the feather at the time of treatment. I saw a large number of chicks so treated this spring and everyone recovered after treatment. This appears to me to be more certain, and even more humane than to attempt to remove with a horse hair loop, which is commonly used inserted in the windpipe.

For lice on little chicks I recommend a drop of grease on the head and under the wing. Do not use much. Only a slight drop or touch is enough, and put a little under the wings of the mother hen.—Prof. H. A. Surface, State Zoologist, Pa.

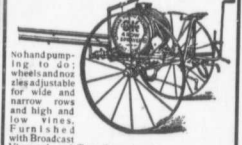
There are a great many ways and plans for building poultry houses. The plan and house little difference as long as the house is dry and free from draughts.—Mrs. J. H. Rosebrugh, Brant Co., Ont.

**You Can't Cut Out A BOG SPLEEN, PUFF OR THROUGHPIN, BUT**

**ABSORBINE**

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wheel-and-rod  
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Printers' notices containing further information as to conditions of proposed Tender may be seen and blank forms of Tender may be obtained at the Post Office of Peterboro and at the Office of the Post Office Inspector at Kingston.

U. C. ANDERSON, Superintendent  
Post Office Department, Mail Service Branch, Ottawa, June 23rd, 1911.

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The soil is rich and productive and covered with valuable timber.

For full information regarding homestead regulations, and special colonization rates to settlers, write The Director of Colonization, Department of Agriculture, TORONTO

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FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.

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6. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles.

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7. Sworn detailed statements of the circulation of the paper are made and filed by title by countries and provinces, and are sent free on request.

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FARM AND DAIRY PETERBORO, ONT.

OPPORTUNITY IN ONTARIO

A visit to the small farm owned and worked by Mr. J. W. Clark, of Brant Co., Ont., described on page three this week, brings one face to face with the cold fact, long known, that we in Ontario have plenty of opportunity. We need but to grasp our opportunities lying thick all about us and succeed.

Any man of intelligence, willing and eager to learn and to adapt himself to conditions as he finds them can do again just what Mr. Clark has done and is doing. A lot of us farmers would find it very profitable to pay more attention to a few acres, farm them with more labor and develop their possibilities rather than keep on with the less-profitable, extensive work over many acres of what ought to be and will yet be developed into very high priced land of which we have lots in Ontario as good as the best elsewhere that people eagerly seek and pay long prices to get.

We deem ourselves fortunate in having had the privilege of inspecting Mr. Clark's farm and his work and we are glad to place before Farm and Dairy readers an account of his successful establishment. May it be the means of causing others to rise to their possibilities and demonstrate to others and to the world at large the unbounded wealth capable of being developed on small farms in Ontario.

DARE WE BELIEVE?

A little knowledge is a dangerous thing, and it is well that we farmers generally are not too quick at forsaking the old and taking on the new. Many of us, however, are working this principle overtime, much to our direct loss.

The situation was well illustrated to an editor of Farm and Dairy recently while conversing with a farmer in Western Ontario, and more recently with another farmer in Victoria county. The question was brought up thus: The Western Ontario friend said, "But can we believe these things that we read about in the farm papers? We hear about those cows that make such splendid records and such big profits. Now, I have what I consider to be some real good cows, and I kept track of what they did for three months. The best return I could get was \$10 a cow per month."

We assured this friend that if he could do that well with all of his cows he had no cause to complain or to question better results secured by others. We asked how much meal he fed and with what other rations. As near as could be estimated these cows were receiving from four to five pounds of meal a day, whereas we assured this man that the cows the records of which he could not believe had probably received from 20 to 30 pounds of meal a day, and these cows were of special breeding and probably were given special preparation before entering on their record making period.

Our Victoria county friend was not aware of the identity of our representative, and when discussion turned to the matter of increasing his farm returns financially, he said, "Well, you know, I believe that I should have a silo and grow corn, and I should grow alfalfa, and there are many other things that perhaps I might do to advantage as I read about in Farm and Dairy. I take several papers, but the only one I care a snap about or ever read very much is the Farm and Dairy. However, I am not just certain in my own mind whether or not it is safe to believe these things we read about." Then we made a truer acquaintance and had a real good talk.

Many of us have gotten ourselves up to that stage where we believe this or that to be the proper thing to do, but we hesitate on the brink of the necessary action and expenditure, fearing that we have been misinformed. On this point we can assure Farm and Dairy readers that our editors are practical farmers and men of experience who are in touch with the most approved methods of money-

making, farm-improving farm practice, and while, being human, we are liable to err, every safeguard is exercised that only reliable information may appear in these columns. Our whole business is at stake and is behind what we publish in Farm and Dairy. Therefore, one may with every reasonable assurance follow the methods advocated in these columns.

Those who will continue to hold back have only themselves to blame if, when they are awakened some years hence, they find that they have lost five years, it may be 10 or more, during which time they might with great profit to themselves have followed the suggestions and adopted the practice of the more successful farmers as is advocated and explained in these columns from week to week.

RECIPROCIETY AND U. S. FARMERS

Interested parties in Canada are going to much trouble and great expense to tell us Canadian farmers that reciprocity will be our ruin. Some of this kind advice comes from the pork packers and millers who fear that they may have to share their enormous profits with the farmer should reciprocity become law. Other and wider interests—all those who benefit by tariff favors—feeling that the whole system of protection is menaced are joining in the cry against reciprocity and through that part of the press that they control are drawing a long face and prophesying hard times for us farmers should we open our markets to the farmers of the United States and take advantage of markets in the United States.

The way in which the United States farmers view the privilege of free entry to our markets may be seen from the following paragraph that appeared in display type in the National Grange Monthly, the official organ of the organized farmers of the United States:

"The time has come for the farmers of the country to strike a telling blow against Canadian Reciprocity, now under discussion in the Senate of the United States. Whatever is done must be done quickly, and the farmers must act together. The proposed treaty strikes a blow at the agricultural prosperity of the country, will reduce the income of every farm home, diminish the value of every acre and blight the prospects of every farmer owner and worker in the United States. The farmer treaty would force the farmer upon an absolute free trade basis on everything he has to sell, but retains high protection on everything he has to buy, thus violating every principle of right, fairness and justice. Only by might and united protest can the farmers of the country effectually ward off the impending disaster, and the time for action is at hand. The case is urgent, the need imperative, the 'call a duty.'"

Why this fear of reciprocity on the part of the United States farmers? Surely if our market is as valuable to them as the "interests" would have us believe, United States farmers would be fighting for reciprocity rather than opposing it. The fact of the matter is that the

farmers of the United States see as clearly as we do that the U. S. market is the better of the two, that while in the United States consumption is rapidly overtaking and will soon pass production, in Canada the tendency is exactly in the opposite direction.

The determination with which reciprocity is opposed by the farmers of the United States and by our protected interests should be a convincing argument to all us Canadian farmers that free entry to the United States markets will be of great benefit to us.

SOMETHING TO THINK ABOUT

British battleships that passed before King George's eye on the occasion of the naval review at the coronation represented a value of \$400,000,000.

In years of unusual prosperity the wheat crop in Canada is valued at \$100,000,000.

Mr. J. A. Ruddick, Canadian Dairy Commissioner, was considered by many to be too optimistic when he valued the total dairy output of Canadian dairy farms last year at \$100,000,000.

Twice the combined value of our wheat crop and our dairy produce was represented by that part of the British Navy that assembled in the home waters at the time of the coronation!

We in Canada are supposed to be free from the curse of militarism. We have been too busy building up our country to spare men and money to "protect" us against illusionary foes. But few of us realize how serious has become the burden of militarism even in Canada. With what many are pleased to call a "tin-pot" navy and with a system of volunteer training, not supposed to be expensive, the money spent for military purposes in Canada last year totalled between 20 and 30 per cent. of our entire revenue. And yet we have hardly made a fair start towards establishing an army or navy. Ought we to permit this expenditure to go on and increase? We think not. Consider where it will lead us!

In districts where silos are as yet not common, many converts to the silo idea are holding back fearing the difficulty of filling the silo. These men might to their own and to their neighbors' great advantage get two or more neighbors to erect silos and purchase and operate on the cooperative plan a silo-filling outfit. Shortly after silos are once established in a district the problem of filling it is soon solved since every thrasher, in order to get and retain patronage, must operate a silo-filling outfit for the convenience of his patrons.

A Silo Problem

Improvement of quality in any line of produce always induces larger consumption, even under advanced prices. This is why orchardists who spray and poultrymen who specialize in guaranteed fresh eggs never vary about over-production.

July 6, 1911

The New Brantford Brant Co. raised an unusual number of subjects of the tract

An Oil Man out working day in Brant Co., editor of the "Farm" working farm, on the

mers of Brant years had a responsiveness, a find elsewhere districts such buildings, and five, almost pe found in it all testifying to the soil and the the tillers there ed for themse their basic co likely ever be the oil busines promise these immissively over extra effort

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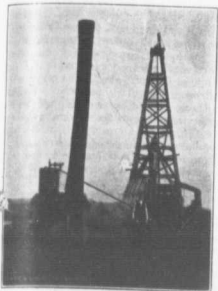
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### A New Interest in Brant

The discovery of gas and oil in Brantford and Onondago townships, Brant Co., Ont., in recent years has caused an unusual interest, amongst farmers and others in that part, in subjects of the soil other than relating to the practice of farming. The far-



### An Oil Well Drilling Outfit

Many outfits such as here pictured are working day and night drilling for oil in Brant Co., Ont.—Photo taken by an editor of Farm and Dairy of a contractor's rig working on Mr. J. W. Schryver's farm, on the Paris and Appa Road.

Farmers of Brant county have for many years had a reputation for their progressiveness, and one probably will not find elsewhere in a general farming district such fine, farms, substantial buildings, and such large and attractive, almost palatial, homes as are to be found in that district, those things all testifying to the natural wealth of the soil and the progressive industry of the tillers thereof who have established for themselves these ideal homes. Their basic occupation—farming—will likely ever be their mainstay, but if the oil business develops as it gives promise, these people may rapidly wax financially even much better off without extra effort.

It is some few years since gas was first obtained in the district. Now it is almost a common thing for farmers, especially those in Onondago township, to have their own gas wells supplying all their heat and lighting and returning them a monthly income of considerable proportion through feeding the main pipe lines of the gas company.

### LAND UNDER LEASE

Land in all directions in the lower part of Brant has during the past winter and spring been placed under lease to what is supposed to be the Standard Oil Company. The conditions of the leases vary according to the demands made by individual farmers. The terms generally are that the gas company may drill at such points as they may choose, and should they strike oil, every eighth barrel produced goes to the farmer or the owner of the land, the company to market the product and settle for the business. Should they strike gas in paying quantities, the company will give \$100 for each well and supply the farmer with all the gas he requires both for heat and light.

A number of farmers, their land totals about 1,000 acres in a block, combined together and secured much better terms than mentioned in the foregoing. They arranged to get every fourth barrel, and the company is to continue right ahead with their drilling on this property.

### GOOD BARGAINS FOR OIL RIGHTS

Some of the farmers have sold their interest, outright, in any oil that may be discovered under their land. Of these farmers we might mention Mr. R. A. Smith, on the Paris and Appa Road, who is to receive \$200 an acre

for his farm provided the company gets a well in his farm that will produce 10 barrels a day. On these conditions Mr. Smith is to get the \$200 per acre and still own his farm, and may work the same. It is, of course, problematic whether or not oil on this farm will be struck in paying quantities, but nevertheless it is a very interesting and an attractive proposition for anyone to have such an offer in writing for what may be found on his farm.

The leases as held between the farmers and this oil company are good for one year. The work of drilling must start within 30 or 60 days from the time the lease is drawn, and after that time the farmer receives \$1.00 a day until such time as drilling commences, otherwise the lease becomes void.

### POSSIBILITIES OF GOOD RESULTS

Only 10 miles away from this location on the Paris and Appa Road it was learned by an editor of Farm and Dairy, who was in this district recently and took the photos reproduced herewith, that oil is being produced in paying quantity. Down near Onondago some highly productive wells have been struck. One well, it is said, is producing 30 barrels a day, and it is a flowing well. It will be seen that at any rate the farmers south of Brantford possess what looks like a good prospect for oil, and one can appreciate how the situation locally has caused lots of talk. The farmers (wise they are) are keeping on working as usual, and if the oil is struck they will be that much to the good.

### ONE MAN'S PROFITS

After visiting a number of farmers on the South Paris Plains, our representative drove on down through Cainsville and on to near Onondago,



The Contractor, Drill and Baler

To the extreme right may be seen the "bit" of the drill used to sink the oil well. Next to it the left is the baling device used to empty the well of any water that may come in. Mr. F. E. Axon, Mr. Schryver's whose outfit is working on the illustration, is he who appears in the illustration.

Photo by an editor of Farm and Dairy.

where are the rich producing oil wells. At Cainsville it was learned that for some time there had been 14 cars a week of oil loaded on the railway. Some extra good wells had been struck, these being from 600 feet to 800 feet in depth. One farmer three miles below Cainsville, who has a 40 acre farm and has it leased to the oil company, is now getting therefrom from between \$7 and \$8 a day net return, this without having been required to

make an outlay of even \$1. He might be receiving much more had he made a better lease with the company.

All through this district drilling machines are at work day and night running with two shifts of operators. Coal is being hauled to run the engines, and where the producing wells are, pumps are working day and night pumping the oil and running it on to the railroad stations, where it is loaded on to the cars.

### NATURAL GAS IN A FARM HOME

While in this district our representative stayed over night with Mr. A. W. Van Sickle, of Onondago township. Within the past two or three years he has put in three gas wells, one of which, the first one, has proved to be an exceptionally good producer. Mr. Van Sickle draws a monthly income from these wells and uses the gas for both heat and light about his place. What a splendid thing this natural gas is may be appreciated from the fact that in Mr. Van Sickle's house last winter in connection with his hot water system of heating, this gas required no attention whatever, not even to be turned on or off after once it was started in the early winter.—C.C.N.

### The Jersey Cow for Butter

The Royal Danish Agricultural Society, after testing all the leading breeds of dairy cows, says the Dairy, an English exchange, have recommended the farmers of the country to use the Jersey. The Jersey is doing a great work in America. Since the present year commenced no less than 780 cows, tested by the officers of the U. S. Experiment Stations, have been accepted by the American Jersey Cattle Club, their average yield of milk having been 784 gallons, containing 5.4 per cent. of fat. At this rate the butter-fat produced averaged 421

lbs., equal to 460 lbs. of commercial butter.

The capacity of the Jersey as a butter-producer may be shown by the fact that 39 cows gave over 700 lbs. of butter in a year, while 84 gave over 1000 gallons of milk, three cows exceeding 1500 gallons. Four of the cows yielded over half a ton of butter in the year, the highest yield of all being 1126 lbs.—a figure so astounding that were it not authentic it would be almost impossible to accept.

It is worth remarking that the best average was made by cows above the age of five years, of which there were 240. These cows, which we may regard as in their prime, reached an average of 928 gallons of milk and 495 lbs. of fat equal to nearly 550 lbs. of butter, the highest yield of milk being 1725 gallons. The averages of younger cows taken in half-yearly stages decreased with their ages. The younger cows—those under two years—averaged 605 gallons, containing 324 lbs. of fat, but only 19 of the whole number tested gave less than 500 gallons.

Wherever Jerseys have been tested for any length of time against cows of other breeds they have produced the largest yield of butter, and their power of production appears to be gradually increasing. We are always delighted in this country when a single Jersey in a competition exceeds three pounds of butter in a day, but it is now a common practice in America for this quantity to be yielded for months in succession.

We have taken Farm and Dairy for 12 years, and would not like to be without it. We looked forward with much pleasure to the Household Number last year as we liked the first special very much.—Mrs. John Flett, Bury's Green, Ont.



## A BLOCK HEAD

Never appreciates SOLID FACTS.  
But with you, the superiority of the

# De Laval Cream Separators

Must stand unquestioned because 95 per cent. of the professional butter-makers of the WORLD use and endorse it. Over 1,300,000 sold to date.

Send for list of prominent users and handsome catalogue.

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### STEEL BARN TANKS

Our Tanks and Troughs are made of heavy galvanized steel, thoroughly riveted and solidly constructed, making them absolutely watertight. No matter what your requirements are in tanks we can fill your order. We guarantee quality of material and workmanship. Tell us what you require. Write for catalogue D and special prices. Agents wanted.

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If you desire rest and recreation, why not try

#### "THE RIVER ST. LAWRENCE TRIP?"

Folders descriptive of the Thousand Islands, Rapids, Montreal, Quebec, Murray Bay, Tadoussac, and other famous Saguenay River, etc., on application to any Railway or Steamboat Ticket Agent.

For illustrated guide, "Niagara to the Sea," send 5c in postage stamps to H. Foster Chaffee, c/o P.A., Toronto, or Thos. Henry, Traffic Mgr., Montreal, E. & O. Navigation Co.

### PARAFFINE WAX

Pure Refined Paraffine Wax in 120 lb. dust proof packages. Odorless, Tasteless. Free -No Sage Book-all about oils and waxes.

WAXERY OIL WORKS CO. PITTSBURGH, PA.  
Independent Oil Refiners

### 4 CENTS PER LB.

### SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

Any person who is the sole head of a family, or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Lands Agency, or sub-Agency, for the District Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties-Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 60 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter section alongside his homestead. Price \$5 per acre. Duties-Must reside upon the homestead or pre-emption six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead rights and obtained a pre-emption may enter for a purchased quarter section in certain districts. Price \$1.00 per acre. Duties-Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$200.

W. W. OBY,  
Deputy of the Minister of the Interior.  
N.B.-Unauthorized publication of this advertisement will not be paid for.



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### Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheesemaking and to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

#### Dairy Instructors at Belleville

Several of the many fine cheese factories in the Belleville District of Ontario were visited on Tuesday last week by dairy instructors from the far eastern counties of Ontario under the supervision of Mr. G. G. Publow, Chief Dairy Instructor for eastern Ontario. The visiting instructors were



Some Eastern Dairy Instructors on a Trip of Inspection

from that section of Ontario where small factories are the rule. Mr. Publow's object in bringing these instructors to see the large and well equipped factories of the Belleville District was to have them make a close range study of how cheese factories are conducted in a district that has a reputation for good factories and good cheese.

The instructors who made the trip of inspection were: G. H. Barker, Vankleek Hill; J. Buro, Mills Roches; W. W. Dool, Ottawa; T. J. Ellis, Chesterville; C. B. Larry, Finch; A. McKinley, Curran; J. McAllister, Curran; and C. W. Norval, Williamsburg. Mr. Henry Glendinning, president of the Eastern Ontario Dairy-men's Association, Mr. Thos. Ketcheson, of Belleville, and F. E. Ellis, of the Farm and Dairy editorial staff, was accompanied the party, which was under the direction of Mr. Publow. The local instructors, T. E. Whattam and H. Howie, also accompanied the party.

**IMPORTANT POINTS EXEMPLIFIED**

The party left Belleville in two automobiles, and spent the morning in the Prince Edward county. The Massagosa factory was first visited. This is a well equipped factory, and Mr.

Ward, the maker, had everything in fine shape, although he was not expecting a visit from so many dairy experts. The output of this factory is 105 tons. Its cool curing room attracted particular attention from the eastern instructors, as in all the district covered by the eight instructors not one has a properly equipped curing room. It was warm outside, but in the curing room the thermometer showed 58 degrees, and Mr. Ward said that the temperature the whole summer through rarely went above 60 degrees. Mr. Publow called attention particularly to the brand on the cheese boxes. All of the factories in the Belleville district have a similar brand, the name of the factory only differing. The uniform branding



In the afternoon four of the factories in Hastings county were visited, these being Foxboro, Sidney Town, Hall, Sidney, and Bayside. All of these factories each had an output exceeding 100 tons. All were equipped with cool curing rooms, and all were found in first-class condition, although the visit was unexpected. In the evening the instructors returned to Belleville well satisfied with what they had seen and learned during the day.

**SIGNIFICANCE OF THE TRIP**

Special significance may be attached to the tour of inspection made by the far eastern instructors, and it is this: The factor that stands most strongly in the way of progress in the eastern section of Ontario is the small factory. Practically all of the cheese factories in that section are privately owned. The proprietors are hardly making a living and are not in a position financially to improve their factories and to install proper facilities for making good cheese or for holding it for curing. Instructor Larry informed Farm and Dairy's representative that last year one of his factories made only 1,900 pounds of cheese. Several other factories had an output of from five to 10 tons; 25 to 40 tons is the rule.



Dairy Instructors Visit a Fine Prince Edward County Farm

On the occasion of the visit of the Eastern dairy instructors to the Belleville district last week a visit was paid to the farm of Mr. Jas. Anderson of Prince Edward Co., Ont., whose fine home may be seen in the background.

—Photo by an editor of Farm and Dairy.

Cheese made at this factory took first prize at the Dublin exhibition a few years ago.

At this factory the party was met by Mr. Jas. Anderson, a farmer well known to many Farm and Dairy readers. On his invitation a visit was made to his farm. Mr. Anderson puts forth every effort to produce sanitary milk. The stables are whitewashed, and are kept clean. In his combined milk and ice house is every facility for cooling the milk and for keeping it cool. The facilities for caring for milk were of particular interest to

the instructors. "I wish I could get all the patrons in my section," said Instructor Barker, "to visit this farm. It would be an eye-opener to them all right." Mr. Anderson is milking 34 cows, and is sending 120 lbs. of milk to the factory daily.

After partaking of refreshments provided by Mr. Anderson, a seven mile drive was made to the Quinte factory, where the party was received by W. I. Hicks, the maker. Seven miles from one cheese factory to another seemed extraordinary to the eastern instructors, who are used to having a factory at least every two or three miles. This factory, as were all others visited, was equipped with a splendid cool curing room, a steel whey tank, and all facilities necessary to make good cheese and to care for the by-product in a satisfactory manner. The party then returned to Belleville for dinner.

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Cheese cannot be kept in the curing rooms of these factories for any length

of time, and in some of the factories Saturday's cheese are taken out of the hoops and shipped on Monday. The instructors from these districts realize it will be impossible for their cheese to take the same rank as does that of the more westerly districts. The instructors from these districts of small factories have been made familiar with the cheese business as conducted in large, well-equipped factories, and they will go back to their home districts better prepared to preach the doctrine of larger factories and fewer of them.

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OF THE TRIP to be attach- spection made by ctors, and it is that stands now y of progress in of Ontario is the tically all of the that section are s proprietors, are not ally to improve to install proper good cheese or r. Instructor and Dairy's re- year one of his 1,900 pounds of factories had an of 10 tons; 35 to cept in the cur- es for any length

### Creamery Department

Butter makers are invited to send contributions to this department for questions on matters relating to butter making to the subject, subject to publication. Address letters to Creamery Department.

#### Favors the Pipette

E. A. Southworth, Victoria Co., Ont. My main reason for favoring the pipette in taking cream samples is that for practical creamery work it is speedier and gives results that I believe are practically accurate. In our creamery we have 220 patrons. I have plenty to keep me busy with out doing any testing at all. When the testing is added, therefore, we adopt the speediest method that will give the same time give accurate results. We rinse the pipette into the bottle, and in this way get in full volume of cream. Did we use the scales the pipette would have the weighing would mean that much additional work.

Thick sour cream may not get an accurate test by the pipette. I believe, however, that for the test it would be an incentive for the patrons to send sweet cream. I have not found that the use of the pipette induces them to send a thin acid but I believe, however, that for the pipette and practical work the scales were better, I would certainly adopt them.

Note.—The time necessary to test cream with pipette and with scales is in the opinion of many creamery men who have adopted the scales practically the same. Speaking on this subject at the last meeting of the creamery men of Western Ontario at Guelph, Mr. John H. Scott, of Exeter, claimed that the scales were equally rapid with the pipette. "The first day I used the scales," said Mr. Scott, "I said to myself, 'Well, I wonder if this job is to continue forever.' With more experience, however, I found that there was no material difference in the time taken to test the cream samples. As to accuracy, there is no question that the scales are to be preferred. The fact that in the leading states of the United States and in Alberta the use of the scales has been prohibited by law is sufficient indication that the pipette has been found to be inaccurate.—Editor.

#### Dairy Conditions in Michigan

Prof. W. B. Liverance, Prof. of Dairying, Michigan Agri. College. In Michigan there are four ways in which patrons are paid for their milk products. In the first place, milk is weighed at so much a cwt. This method is in use principally at cheese factories, although there are very a few creameries which are buying milk on this basis. We advocate very strongly that this method be done away with. There is another method of paying a patron a certain rate for his butterfat. This price is generally based on some eastern butter market, the creamery man paying practically the market price for butterfat delivered, or some amount off from this in case the factory collects the cream or milk.

Another way is to pay the creamery man a certain amount for making butter. The net proceeds of the creamery for each month are determined, and the net price a pound for butter, less three cents a pound for making is determined, and the patron is paid according to the amount he has delivered.

The last way of payment is the cooperative plan whereby the patron is paid from the net proceeds of the creamery that is, the total proceeds of the creamery are determined for a month, expenses deducted, and

the remainder divided among the patrons in proportion to the amount of fat each has delivered. In the private creamery, the payment of the patron is for his fat on some butter market quotation is principally followed, while all of the cooperative creameries pay on the cooperative system.

#### ALL USE SCALES, NOT PIPETTES

The creameries in Michigan are practically all using cream scales in the testing of cream, and this condition rules in all of our principal dairy states. We advocate to our creamery men every chance we get, and we are showing the farmers that it is to their interests to see that every creameryman tests his cream by the use of the cream scales.

It is generally conceded by all dairymen that the men of to-day are much more progressive than the old creamerymen. In our state we find that the old butter makers and cheese makers still cling to the old methods but the young and more progressive ones are taking up the new methods because they realize that they are the ones for the future.

#### A METHOD THAT OIDS HAD

Very few of the old methods are adhered to in this state except the buying of milk for cheese making by the weight. The reason these people do not change is that the farmers are educated to this method and have bred animals which will produce large quantities of milk with a low per cent. of fat. They realize that they could not get so much out of their milk if sold on the butter fat basis, and I have found it to be true in most cases that they are against taking up the new methods because of this fact. Several now on the butter fat basis and it will only a few years before they will be all paying according to quality.

#### Confidence in Creamery Work

A. H. Hall, Garretton, S. Dakota. That creamery patrons have confidence in the maker is important. I believe that most of my patrons have full confidence in me. This confidence is sometimes pretty hard to get, even if you deserve it. I always try not to make a patron feel "sore" by always going after him with "teeth and toenails" if his cream is not as good as it should be. I realize that it is sometimes necessary to go after a patron strongly to make him bring better cream, but I never say anything to him about his cream when other patrons are around, and when I do say anything I do not go after him in such a fierce way that he gets frightened and never again comes near the creamery door. I talk to them in such a way that they never get sore and sell to an outsider on that account.

All creamery patrons cannot be handled in the same manner. Some are very sensitive and need only a hint; others again need a lesson strongly emphasized in order to make any improvements. A successful buttermaker must know his patrons. It is to get well acquainted with my patrons. Those who do not come to the creamery themselves I make a point to see every now and then.

#### MUTUAL UNDERSTANDING

It is not only important that the buttermaker know his patrons, but the patrons must know the buttermaker. This mutual understanding of each other should spell confidence in each other and friendship. My experience has been that such a relationship between creamery management and patrons is a stronger force for the success of the local creamery than is discord or even attractive interest to pull the local creamery interest.

Local crackers against the home creamery are dangerous. When I hear of a patron who for some unavoidable reason is disgruntled I make it a

point to see him as soon as possible before he has a chance to stir up any trouble among the other patrons. It is usually a small misunderstanding that causes the dissatisfaction. As soon as the matter has been talked over and understood by the buttermaker and patron the trouble as a rule vanishes like a snowball in a warm room; if nothing is done in the beginning the trouble and dissatisfaction spreads and increases like a rolling snowball.

#### Mould on Butter

J. A. Ruddick, Dairy Commissioner. One of the troubles of butter storage is in the development of mould packages, on the surface of the butter and even throughout its mass. Mould is a low form of plant life. It is not a spontaneous growth, but comes from seed, just as the more highly organized plants of the fields do. The seeds, or more properly speaking, the spores, of mould are very common in the form of dust almost everywhere. The conditions, suitable which develop them are dampness, suitable food and a favorable temperature, with a rather wide range, all of which are present in a butter package.

The trouble can generally be traced to the creamery, where, by careless handling, either the parchment paper on the packages have been infested. Packages made from unseasoned wood are sometimes responsible for the growth of the mould. The salts of unseasoned wood appear to furnish suitable food for mould growth. Conditions in the cold storage warehouse may favor the development of the mould. Thorough disinfection of butter rooms at least once a year is imperative if the rooms are to be kept sweet and free from mustiness. I have found the best results from

washing all interior surfaces with a solution of one part of bi-chloride of mercury to 1,000 parts of water and, of course, everyone is aware of the beneficial effect of a periodical coating of whitewash.

## BEST RECORD Ever Made by Any Cream Separator. Only A SHARPLES Could Do It.

We have repeatedly told you that Sharple's Dairy Tubular Cream Separators wear a lifetime. One of our regular hand-driven Dairy Tubulars, of 500 pounds capacity per hour, recently finished work equal to 100 years' service in a five to eight one-dollar and fifteen cents.

Ask us to mail you the fully illustrated record of this great demonstration of Tubular superiority. See how the parts of this guaranteed forever wear. Tubulars are patron concern on this comment.

Tubulars outrun as well as outwear all others. Have two the skimming fork, built inside, clean Dairy Tubulars come no noise.

You will finally have a Tubular that the Tubular that you can see the Tubular for. It is asking. Dairymen representative will gladly tell you how to know him by his name.

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AMATITE roofing is weaned. It doesn't need to be watched over and fussed with and cared for.

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We will be glad to send you free a sample of Amatite Roofing so that you can see for yourself just what it looks like. Address our nearest office.

#### Everget Elastic Paint

Low in price. Great in durability. Invaluable for prolonging the life of ready roofings. Tarnish, iron work, etc.

#### Creonoid Liner

It will keep flies away from the cows. It will keep lice and ticks away from the poultry, make everything clean and increase their output.

THE PATTERSON MFG. CO. Limited  
Montreal Toronto Winnipeg Vancouver Halifax, N.S. St. John, N. I.

Amatite on ridge, of E. J. Abbey, Essex, Vt.



Next to excellence is the appreciation of it.—  
Thackeray

## The Road to Providence

(Copyrighted)

MARIA THOMPSON DAVIES

(Continued from last week.)

### SYNOPSIS OF "THE ROAD TO PROVIDENCE."

Mrs. Mayberry, a country physician's widow, has taken into her home Elinora, a famous singer, who has mysteriously lost her voice. Mrs. Mayberry is much loved throughout the countryside. Her son, Tom, is a rising doctor in the city, but among the home neighbors there is a humorous preference for "Mother" Mayberry's remedies. Miss Wingate becomes happier than she has been at any time since the loss of her voice. Mother Mayberry takes into her home a young man of a poor missionary. Miss Wingate discovers she is coming to care for Tom Mayberry, and he realizes that his strongest desire is to be able to restore her power to sing. Dr. Mayberry is told by Miss Wingate upon one occasion that she is so happy, it does not matter if she should never sing again; and upon hearing this Dr. Mayberry tells her that although he does not know why he knows he is going to give her back her voice. Many calls for Mother Mayberry's remedies are made, but she is always up and ready to respond to them. The sewing circle meets with Mother Mayberry, whose table and philosophic kindness are as usual beautifully served to her guests. Miss Wingate tells Tom the story of her early years. Tom goes off to the city in the morning without letting Miss Wingate know. Every one in the Providence neighborhood attends the wedding of pretty Betty Pratt the preparations for which were supervised by Mother Mayberry. That night Tom confesses to Miss Wingate that he loves her.

"Oh," said Miss Wingate, as she stood before her on the lower step and clasped her white hands against her breast, "do you suppose he is going to—to hurt me now?"

"Child," answered the Doctor's mother quietly, with a quick sadness spreading over her usually bright face, "they ain't nothing in the world that can be as cruel as true love when it goes blind. Tom Mayberry is a good man and I borned, nursed and raised him, but I won't answer for him about no co'ting connipions. A man lover is a shy bird and they can't nothing but a true mate keep him steady on any limb. You aint showed a single symptom of managing Tom yet, but somehow I've got confidence in you if you just keep your head now."

"But what can the matter be?" demanded Miss Wingate in a voice that shook with positive terror.

"Well," answered Mother Mayberry slowly, "I sarter sense the trouble, and I'll tell you right out and out for your good. Loving a woman are a kinder regeneration process for any man, and a good one like as not comes outter it humbler than a bad one most times. Tom have wrapped you around with some sorer pink cloud of sentiments, tagged you with all them boy-kays the world have give you for singing so grand, turned all them lights on you he first seen you accost, and now he's afraid to come nigh you. I suspect him of a bad case of chicken-heart and I'm a-pitying of him most deep. He's just lying down at your feet waiting to be picked up."

"I wonder where he is," exclaimed Miss Wingate as a light flashed into her eyes and a trace of color came back to her cheeks. "You'll find him," answered the Doctor's mother comfortably, "and when you do I want you to promise me to put him through a good course of sprouts. A wife oughtn't to stand on no pedestal for a man, but she have got no call to make strava tracks behind him neither. Go on and find him! A woman have got to come out of the pink cloud of her husband some time, but she'd better keep a bit to flirt behind the rest of her life. Look in the office!"

"Well, Martin Luther," remarked Tom a few minutes later, as she lifted the absolutely dead youngster in her arms, and rose to take him into the house, "life are all alike from Harpeth Hills to Galilee. A woman can shape up her dough any fancy way



A Neat and Attractive Cottage for the Hired Man

This cottage was built at a cost of \$300, by Mr. J. W. Clark, Brant Co., Ont., to accommodate his hired man. Mr. Clark keeps two men by the year on his 25 acre farm. He contends that many of us farmers with land much more profitable to the household department should build cottages to accommodate them. This article is by an editor of Farm and Dairy.

she wants to and it's likely to come under the oven a husband. All Elinora's fine songs are about to end in little chorus cheeps with Tom under Mother Mayberry's wings, the Lord be praised!"

And over in the office wing the situation was about as Mother Mayberry's experienced intuitions had predicted. Miss Wingate found the young Doctor sitting in the deep window and looking out at Providence, Nob, which the last rays of the sun were dying blood red, with his strong young face set and white. The battle was still on and his soul was up in arms.

"Where have you been?" she asked quietly as she came and stood against the other side of the casement. The light in his gray eyes set her heart throbbing, but she had herself in hand.

"When I came up the Road the others were all here and I waited to see Providence. Please, Tom, please!" And again she buried her head against his coat.

And as was his wont, the silly young doctor failed to answer a single word but just held her close and comforted. And how long he would have held her, there it had been to know, because the strain had been great on Mother Mayberry and in a few minutes she stood calmly in the door and looked at the pair of children with happy but quizzical eyes.

"It's just as well you got Tom Mayberry straightened out quick. Elinora," she remarked in her most jovial tone, "I've been getting madder and madder as I put Martin Luther to bed, and though I ain't never had a nip my mind to ask him out in the barn and dress him down just for once, she are you well over your tantrum. Now she demanded as she eyed the shamefaced young Doctor delightedly, "Mother," she exclaimed as he turned his head away and the color rose under his tan.

"You know without my telling you how very glad I am for you," he said, gently and his hand trembled on the window ledge.

"Are you?" she asked in a low tone, still with her eyes fixed on his face, but her lips pressed close with a sharp intake of breath.

"Yes," he answered quickly, and this time the note of pain would sound clearly in his voice. "Yes, no matter what it means to me!"

The pain of it, the haggard gray droop of the broad shoulders were too much for the singer girl and she smiled shakily as she held out her arms.

"Tom Mayberry," she pleaded with a little laugh, "please, please, don't treat me this way. I promised you to be stern with you but I can't! Don't you see that it only means to me what it means to you possibly that it would make any difference to me? Do you suppose for all the wide world I would throw away what I have found here in Providence under Harpeth Hills—my Mother and you? Ah, Tom, I'll be good, I'll go to Italy and India with you. I'll do you just the best I can!"

long, as she has given herself here to Providence. Please, Tom, please!" And again she buried her head against his coat.

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"Have you done made up your mind to travel down town to town with Elinora and make yourself useful at the door rest of your life? Are you over Tom follow her peaceable all over America, Asia and Africa?" And her eyes fairly over-danced themselves with delight.

"Mother!" and this time the exclamation came from Miss Wingate as she came over to rest her cheek against Mother Mayberry's arm. She also blushed, but her eyes danced with an echo of the young Doctor's barrastance laugh as she beheld his eyes.

"Yes," answered the Doctor, rallying at last, "yes, I'm ready to go with her. Will you go too, Mother, as I'm tired?"

"Well," I don't know about that," answered his Mother, with a laugh "not till 'Liza Pike have growed up to take my place here. But I'm mighty glad to see you take your dose of humble pie sadder, Tom, and I reckon I'll have to tell you how happy I am about my child here. It was kinder smart of you to cure her and she claim her sweet self as a fee, wasn't it?"

"I do feel that way, Mother, and I don't see how I can let her make the sacrifice. Her future is so brilliant and I—"

"Son," said Mother Mayberry with the banter all gone from her rich voice and the love fairly radiating from her face as she laid a tender hand on the singer lady's dark head on her shoulder, "I don't have to ask my honey-bird the choice she have made. A woman don't want to wear her life-work like no jewelry harness nor yet sacrifice herself in it like it were a soft-colored homespun dress to cover the pillow of her breast and the cradle of her arms to her tired folks against. Talk her to India or a dried cod strand if you must, for it's gave a wife to follow the husband-star. Long ago I sowed you to the Master's high call and now with these words I dedicate my daughter the same. She have waded through much pain and sorrow, but do it matter along how hard a Road folks travels if at last they come to they Providence?"

THE END.

### Some Fly Don'ts

Don't permit them near your food, especially milk.

Don't buy foodstuff where flies are tolerated.

Don't have feeding places where flies can load themselves with detestable from typhoid or dysentery.

Don't let flies crawl over the baby's mouth and swarm upon the nipple of its nursing bottle.

God is a Spirit  
ship Him must  
and in truth,  
life is willing  
our minds an  
consciousness  
but open our  
him to enter.  
God creates  
source of all  
dom. If we  
fall of power  
must invite th  
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gness, hat  
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God but of S  
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Neither God  
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our minds are

# The Upward Look

## Our Constant Fight

No. 15

God is a Spirit, and they that worship Him must worship Him in spirit and in truth.—St. John. 4:24.

God is the Infinite Spirit of Love. He is willing at all times to flow into our minds and to fill us with a consciousness of His presence, if we will but open our hearts to Him, and invite Him to enter.

God creates all things. He is the source of all power, all love, all wisdom. If we desire our lives to be full of power and love and wisdom we must invite the Spirit of God to come and dwell within us. When other spirits, those of fear, pride, jealousy, covetousness, hatred, exist in our hearts they prove the presence there not of God but of Satan. Our hearts every day are the battle ground of the good and of the evil spirits. The awful feature of this conflict, including the tremendous responsibility it casts upon us, rests in the fact that all of us have within ourselves the God-given power to cast our influence to one side or the other, and thus to determine the side upon which victory will rest at the close of each day.

Neither God nor Satan can prevent us from doing what we want to do in this never-ending conflict. God Himself has made us free agents. If our minds are made up to commit

sin in the path of destruction lies straight before us. Should we desire to do what is right God will help us, if we will but ask Him, and Satan himself cannot prevent us from climbing the path which leads ever upward to waters all that is best in life and in eternity. God is greater than Satan, and will prevail if we will but trust in His power to give us the victory, and ask Him, earnestly and constantly, to help us.

"Sin is a ceaseless, undying power in our lives," writes Henry Drummond. "A ceaseless, undying power must come against it. There is only one such power in the universe—only one which has a chance against sin: 'the power of the living Christ.'

"What most of us feel we really want religion to do for us, though it is not the deepest experience, is to 'save us from something which we feel in our life—a very terrible something which is slowly dragging our life downward to destruction. This something has gained an unaccountable hold upon us; it seems to make us go wrong whether we will or no, and instead of exhausting itself with all the attempts it has made upon our life in the past, it seems to get stronger and stronger every day.

"Even the Christian knows that this strange, wild force is just at his very door, and that if he does not pray to-morrow morning, for instance, before the day is out, it will have sought some mischief in his life. If he does not pray in the most natural way in the world, without any ef-

fort of his own, without even thinking about it, it will necessarily come to the front, and make his life go 'wrong.' Now, wherever this comes from, or whatever it is, it is a great fact, and the first practical question in religion that rises to many a mind is this, 'What must I do to be saved from this inevitable and universal and terrible fact of sin?'

"When once our eyes open fully and we realize that this 'terrible something' is the power of Satan as he strives, hour by hour, to draw us down to destruction, we are coming within reach of victory. Soon we will see how powerless we are of ourselves to cause its overthrow and we will inevitably turn to God for the power we need.

"What we make of our lives depends upon how we fight this fight. The victory can be gained. It is our duty to win it. If permitted, an effort will be made to describe more fully how we may do this, in following issues of Farm and Dairy.—I. H. N.

**Taking Minutes off**

Your true farmer's wife imagines there aren't any minutes to take off. She keeps on trotting, from kitchen to hen house, back by the dairy to the dining room, and around through the garden patch, from the time she gets wound up in the morning till she drops exhausted into the old rush-bottomed rocker at night.

Why, a woman wouldn't treat an alarm clock that way! She winds up her clock, and when it has worked itself around to a certain point, it goes

off—on time. But then it stops and rests, and thinks what hour it's to be set for next.

Isn't your body more delicate than an alarm clock? I knew a farmer's wife once who kept winding herself up and ringing time all day long. Then, when all the rest of us were in bed, she would sit up till 2 a.m. reading, in the back kitchen. Poor thing! She realized that, somehow, clock work wasn't life. She died early of apoplexy.

If you have never felt that luxurious feeling that comes from stretching out flat on your back for ten minutes at 11 a.m. and 4 p.m., and drawing long breaths—try it.—H. J.

**A Treat for our Readers**

"The Second chance," that new and fascinating love story by Mrs. McClung, author of "Sowing Seeds in Danny," will be published in Farm and Dairy, the first installment appearing next week. Our new serial is a sequel to "Sowing Seeds in Danny," which ran in Farm and Dairy two years ago.

"The Second Chance" is a beautiful idyl of country life in Southern Manitoba. The characters are all plain people, such as we meet every day, but their apparently commonplace lives are rendered beautiful by the magic of the writer's pen. The love story of "Martha" and the humor of "Pearlie Watson" will be enjoyed by all. "The Second Chance" will be a treat for Farm and Dairy readers.

ven herself here in Tom, please to her head again

went, the silver to answer a she held her close and re is no way to train had been in herry and in a od calmly in the pair of child quizzical eyes, you got Tom Ma- out quick. Elia in her most joy- getting, no madder Martin Luther, didn't never had it about made up out in the barn. Now, it's trantum, she eyed the shame- delightedly. I'm as he tried the color ro-

de up your mind town with Elia. He's at the door. You're going to all over Eng- And her eyes mselves with de-

s time the ex- Miss Winge rest her cheek try's arm. She eyes. Linger- her and the- a fee, wasn't

Mother, and I her make the s so brilliant

about that." e grew up to ut I'm might your dose of m, and I reck- now happy. I It was kinder her and the- a fee, wasn't

Mother, and I her make the s so brilliant

Mayberry with her rich voice- ting from her hand on the on her should- my honey-hie- le. A woman- life-work like yet no sacre- oves to cloth- a soft-cloth- the pillow of e of her arms- gainst. Take- stand if you- rite to fall- ago I wove- call and now- edicates my- have waded- sorrow, he- hard a Red- they come in-

n'ts

ur your food.

ere flies an-

laces when- with depe- dy-enters

or the baby's- he nipple of-



**Why don't some flours behave? Why don't they keep good?**

Because they contain too much of the branny particles, too much of the inferior portions of the wheat—may be little pieces of the oily germ.

Which act on one another—that's why some flours "work" in the sack.

**FIVE ROSES** is the purest extract of **Manitoba spring wheat berries.**

Free from branny particles and such like.

**Twill keep sound, and sweet longer than necessary.**

Keep it in a **dry** place, and when needed you find it **even healthier, sounder, fresher, drier** than the day you bought it.

Buy lots of **FIVE ROSES.**

**It keeps.**

# Five Roses Flour

Not Bleached  Not Blended

For Better Farm Life

"The real rural life problem will not be solved till we establish and build up better schools, churches, and rural organizations. They must all grow together and reach the highest efficiency before we have the best that is possible in country life."

In these words C. P. Curtis sounded the keynote of all the discussions at the Iowa life conferences held at Ames, Iowa, June 22-24. Some of the facts brought to light at the conference show in a truly deplorable light conditions in some of the rural sections of the United States, and should afford food for thought for all interested in the rural problem whether in Canada or the United States. Rev. C. S. Adams of Illinois gave the results of his investigations in 42 country communities in Central Illinois.

On the rich districts where land sold for \$190 to \$250 an acre he found that 55 per cent. of the land was farmed by tenants, only 66 per cent. of whom held leases for periods of five years or more. Country life was not attractive in most of the neighborhoods. The social, educational, and religious sides of country life were worse than the material conditions when compared to the same factors in the towns. He found that the average school year for the country boy and girl was 93 days against 146 days for the town child. The country teacher or received \$35 to \$70 a month against \$46 to \$150 for the town teacher. Country schools were for the most part poorly equipped and the teachers inefficient though usually conscientious and hard working.

COUNTRY CHURCHES LOSING GROUND. Of the 225 country churches of all denominations visited by Mr. Adams, only 77 have grown any in the past 10 years, 55 have stood still, 56 have lost and 47 have been abandoned completely. If the averages for the statistics are in the same proportions as for the districts visited, 1600 country churches have died in Illinois in the last 10 years and 1000 more are ready to die. He found 397 people to each church, while the churches averaged 125 members each. Thirty-one per cent. of the rural population were church members, 19 per cent. went to church and 13 per cent. to Sunday school. The richest and best improved communities were the lowest in church attendance. The two richest commun-

ties investigated sent only nine per cent. of their people to church.

Mr. Adams emphasized the importance of the country church to the church and nation at large. Half the people of the nation are country people. It is no small or unimportant matter to minister to 30,000,000 people. From the country come the leaders. Eighty-five per cent. of the prominent men in America come from the farms; 90 per cent. of the ministers have their roots come from the farms. The death of the country church means a change for the worse in the nation's leadership, and it has already borne fruit in a scarcity of ministers which will probably be felt more and more. His final call was for a church that would minister, not one "to be ministered unto."

Other speakers brought similar conditions to light. The organization of farmers into clubs similar to the Grange was cited as a method of regenerating country life. The making of the churches a centre for the social and athletic as well as the religious life of the community is being tried with success in many country districts.

Useful Knowledge

Better have the oven a little too cool than too hot.

Always open and close the oven door as carefully as possible; the jars are the cause of many mixtures falling.

A wooden spoon with long perforations is the best for creaming butter, and it will cream more easily if done before the sugar is added.

For any but the very finest cake it is just as well to mix quicker to warm the butter well before creaming. It may even be melted.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, and household management, please request to the Household Editor, Farm and Dairy, Peterboro, Ont.

FITTERS

TWO EGGS, two cups sour milk, one teaspoon sugar, four tablespoons of butter, flour to thicken, fry in pans, with lard.

GRILLED ALMONDS

Blanch a cupful of almonds and dry them thoroughly. Boil a cup of sugar in the same amount of water until it strings. Throw in the almonds and let them simmer, stirring occasionally, until they turn a yellow brown. Remove them from the fire immediately.

BEAN LOAF

Press the contents of a can of lima beans through a colander and season with salt, pepper and a little melted butter. Then add one egg well beaten and enough cream to enable you to make the mixture into the form of a loaf. If it seems a little too moist to retain its shape well, add a few breadcrumbs. Place in a small buttered baking pan, sprinkle the top with crumbs and dots of butter and bake brown. It is excellent when served with tomato sauce, or the sauce may be used in the loaf instead of cream. Left-over gravy from meat also makes a very good sauce for this dish.

SCALLOPED HAM

Chop fine two hard-boiled eggs, and put about two-thirds of a cup of cold boiled ham through the meat grinder. Take two-thirds of cup of fine-sifted breadcrumbs and mix them up with a tablespoonful of melted butter, so they are evenly coated. Sprinkle the bottom of a buttered baking dish with some of the crumbs, cover with half the eggs. Over this pour a good half-cup of white sauce and over this sprinkle half the ham; then repeat, and cover the top layer with the remaining crumbs. Bake till the crumbs are brown.

The Sewing Room

Patterns 10 cents each. Order by number and size. If for children, give age; for adults, give waist measure for waists, and waist and neck for skirts. Address all orders to the Pattern Department.



CHILD'S ONE-PIECE DRESS, 75c Dresses that are made in this style are sure to appeal to a busy mother. This one-piece frock is in a way to make becoming fullness a thing of the past. It is only one piece. There is no undergarment seams that are extended into the sleeves. It is joined to the yoke and the closing is made at the back.

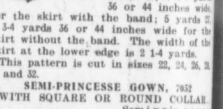
For a child of two years of age use size 2; 3 years of age, size 3; 4 years, size 4; 5 years, size 5. YOKES BLUES, 75c



The yoke blouse is always an attractive and becoming affair. It is a very effective and attractive combination of materials. This one includes sleeves that are styled to the armbolts.

For a woman of medium size will be required 2 1/4 yards of material 27, 4 1/4 yards 36 or 4 1/4 yards 36 or 4 1/4 yards 36, with 1/2 yard 27 inches wide for yoke and cuffs, 7/8 yard of lace 1/2 yard wide for the under sleeve.

This pattern is cut in sizes 34, 36, 38 and 40 inch bust measurements.



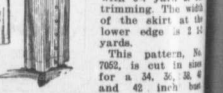
SIX-GORED SKIRT, 75c The skirt that is trimmed with a deep band at sides and front is a very new one and is exceedingly smart. This model can be treated in that way or can be left plain, while again the band can be made with a diagonal front edge or with a straight one.

For the medium size will be required 6 1/2 yards of material 27, 4 1/4 yards 36 or 4 1/4 yards 36 for the skirt with the band; 5 yards 36 for the skirt at the lower edge is 3 1/4 yards.

This pattern is cut in sizes 32, 34, 36, 38 and 40.

SEMI-PRINCESS GOWN, 75c

WITH SQUARE OR BOWED COLLAR. Semi-princess gowns closed at the front are among the newest and most desirable offered.



Scalloped edges are greatly in vogue and the gown is made with the front edge and upper edge of skirt scalloped and buttoned or bound, would make a charming effect.

For a woman of medium size will be required 3 1/4 yards of material 27, 4 1/4 yards 36 or 4 1/4 yards 36 or 4 1/4 yards 36, with 1/2 yard 27 for trimming. The width of the skirt at the hem is 42 inches.

This pattern, 30 7/8, is cut in sizes 34, 36, 38 and 42 inch bust measurements.



Baby's Own Soap

garde son parfum délicat jusqu'au dernier petit morceau. Il est si bien fait qu'il s'use à la finesse d'une feuille de papier.

Albert Soaps Ltd., Montreal. Mises sous des contrôles et sousstitutions.

Quality Butter

That's the kind you make with Maxwell's "Favorite" Churn.—



Maxwell's "Favorite" is used all over the world—in Denmark, the butter country of the world—in the United States, in spite of high tariffs—and in every Section of Canada. Our Agricultural Colleges and Govt. Inspectors recommend it, because it is the finest butter-maker in the world. Write for catalogue if your dealer does not handle it. DAVID MAXWELL & SONS, ST. MARK'S, ONT.

Advertisement for Gourlay Piano, featuring the text 'Some of the characteristics which have won popularity for the Gourlay Piano are Its beautiful singing tone. Its evenness of Scale. Its responsiveness of action. Its beauty of Design and Its capacity to withstand hard usage without becoming "tunny." Gourlay, Winter & Leeming 188 Yonge Street Toronto'.

OUR F...

Corr... PRINCE...

CARDIAC... had above t... hay and gra... will be gre... most of farm... Prospects for... fall. Many... many farme... grab called t... their wholet... add complete... series are do... season. Next... roses, as the... loss unless i... at \$8 to \$9;... and bringin...

CAR...

BRITANNIA... had above t... everything... enter looked... well. Cor... should Heavy... at it Many a... is selling at \$1... 85 to 90... \$6.5 for new... tables are a go...

CARSTON...

WORTHING... ing well. How... ing. A few h... Cox are milkin... ing his 24 y... prices are espe... 24 yards 36... 24 yards 36... a very light... annually good... crop are not... and more var... scarcely any Sp... good as it has... ion of the old... looking well.—

HAST...

SINE, June 2... fine. The usu... and clove h... but more than... a very hot Ma... below the aver... June 1 and th... has improved... these made wit... last year.—

WATER...

WATERLOO... dry weather in... most of the cr... most two wee... Sugar beets, ma... fine. It is... trips to popul... are looking fine... are out in h... and some be... killed in patch... order of the d... to that the h... have, consistin... side stood the... clover. Some... may be seen.—

BRAN...

FALKLAND, J... swing. A few... are greatly in... a poor crop, e... being killed. R... Timothy is thin... all grains need... good just now... Many fields are... will be short... Fall wheat loc... Corn and root... The cutworms d... many fields. H... \$7.10 being off... \$7.5, and wheat...

OXFO...

GOSPIER, Jan... Bait is com... Drought is com... grain, especiall... to all in the ba... the clover. It... crop, but short... will crowd hayin... and many piece... Most farmers so...



OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND.

KINGS CO., P.E.I. GARDINER BRIDGE, June 23.—We have had showers that will be a gr-at help to hay and grain. Grain is doing fairly well. Hay will be a light crop. The rain will be a great help to the corn. Most of farmers are sowing this week. Prospects for apples are good; cherries fair. Early potatoes are looking fine. Many farmers are complaining about a grub which the joint worm cutting off their heads. One farmer had a four acre field completely destroyed. Cheese factories are doing fairly well for a dry season. Nearly all of us spray our apple trees, as the apples are almost worthless unless this is done. Hay is selling at 85 to 89; oats, 40c to 45c; potatoes, 40c to 45c a bush. Horses are in good demand, bringing fairly prices.—H.P.

ONTARIO

CARLETON CO., ONT. BRITANNIA BAY, June 23.—The recent heavy showers have freshened everything. The grain and hay crops are looking better. Potatoes are doing well. Apples are looking as well as it should. Heavy showers had a bad effect on it. Many are just sowing turnips. Hay is selling at \$11 and \$12 a ton; oats, 35c; wheat, 85c; butter, 28c; pork, 65c for heavy and 87 for light. Vegetables are a good crop.—J.A.D.

NORTHUMBERLAND CO., ONT. CARLETON, June 26.—Crops are looking well. Most farmers are done planting. A few have sown their buckwheat. Cows are milking well and cheese is selling well. Hogs are in great demand, and pigs are expected to go up.—H.P.M. WICKLOW, June 23.—The recent rains have helped hay very much, but it will be a very light crop. Pasture is keeping unusually good. Prospects for an apple crop are not as good as last year, but some varieties are good. There are scarcely any Spys. The grain crop is as good as it has been within the recollection of the older inhabitants. Stock is looking well.—E.B.H.

HASTINGS CO., ONT. SENECA, June 27.—The crops are looking fine. The usual acreage of corn, grass and clover has been secured this spring, but more than usual of alfalfa. Owing to a very hot May the out of hay will be below the average. After the rains of June 1 and the showers since, pasture has improved and the milk produced and cheese made will compare favorably with last year.—C.H.S.

WATERLOO CO., ONT. WATERLOO, June 22.—The very warm dry weather in May has forced along most of the crops, so that they are almost two weeks earlier than usual. Sugar beets, mangolds, and corn are looking fine. It is rather dry just now for turnips to come up. The spring grains are looking fine, and barley and some oats are out in head. Alfalfa has been stored and hay is being cut. The spring grain is killed in patches. Clover cutting is the order of the day. It is also winter killed so far. The hay crop will not be very good, consisting mostly of timothy. Alfalfa stood the winter better than red clover. Some excellent fields of wheat may seem.—C.H.S.

BRANT CO., ONT. FALKLAND, June 24.—Haying is in full swing. A few old fields are good; the most of this and short. Alfalfa is a poor crop, many fields were mearly winter killed. Red clover also suffered. Timothy is thin and short. Spring and fall grains need rain badly. Oats are good just now. Barley is only fair. Many fields are very poor and the straw will be short. Very few peas are grown. Fall wheat looks good, but needs rain. Corn and root crops are looking well. The cutworms did considerable damage in many fields. Hog prices are coming up. 87.10 being offered. Cattle are dull at 15.75, and wheat still stays at 80c.—L.T.

OXFORD CO., ONT. GOLFIE, June 27.—We have very dry weather. Rain threatens, but passes over. Drought is commencing to tell on the grain, especially on late grain. Alfalfa is out of the barn, and we are commencing to cut the clover hay, which is regular crop, but short. The fall wheat harvest will exceed having. Barley is headed out, and many fields of oats are headed also. Most farmers sow their peas late on account of the pea weevil. Cows are going down in their milk, as the pasture is getting dry. Some farmers think it early to start feeding, but it will pay. Milk, but not so easy to get them up again.—A.M.McD.

MIDDLESEX CO., ONT. WHITE OAK, June 27.—Some very good fields of wheat are seen. The land being gravelly, the wheat did not winter kill to any extent. Many of the farmers are remodeling their barns or building new ones. The cheese factory is doing a good business, and some fine herds of cows are seen. Pooled-Angus cattle are much to be seen in this part. There are some splendid farms, and land sells at a high figure. Rain is badly needed.—J.E.O.

LAMBTON CO., ONT. TREDFORD, June 27.—Boscquet township, Lambton Co., particularly the portion near Lake Huron, has a soil and climate well adapted to fruit growing, as apples, plums, cherries, berries, and peaches. The people are so convinced that there is a good thing in peaches that they set out 100,000 trees this spring, and more will go in next season. There are but few small orchards bearing now, sufficient to show that the venture



This swing is made of well seasoned hard wood lumber, nicely finished. It is made strong and durable, will stand great strain, is built for four passengers. The back can be adjusted and hammock or bed. Made in various styles at different prices. Write to-day for illustrated catalogues M.

E. S. Hopkins, B.S.A., Norwood, Ont. The recently appointed Peterboro County District Representative of the Ontario Department of Agriculture, who will succeed Mr. Duff, Mr. Duff has received an appointment at Markdale, Grey Co., Ont.

has a good chance to succeed. Corn and oats are our most valuable farm crops, with corn on the increase. This is somewhat due to the profitability of alfalfa. Every summer new ones are erected. Alfalfa grows in favor; much more would have been sown had the price of the seed not ranged so high. The new meadows are doing well, the old meadows suffered severely. The hay generally is short, though, it is thought, it will not be far below an average crop. Fall wheat, too, is an average crop. There are some splendid pieces, while others are decidedly poor.—N. J. Keating.

NIPPISSING DIST., ONT. WAH-TAY-BEG, June 27.—The last few weeks have been the driest known in this northern country, but crops are doing well. There have been one or two hard frosts, and those who have not large clearings to the north are losing their crops. Mr. Ward, a foreman on the colonization road on the town line between Carr and Taylor, has nearly finished his job for this year. Mr. Hewitt, foreman on the colonization roads in Taylor township, has opened up about one hundred miles of road, which makes a vast improvement to the country. Before this fall we hope Mr. Hewitt will have seven miles of road fit for driving on both summer and winter.—P.G.M.

GOSSIP The Grand Trunk Railway Station is the popular route to Bushok Lakes. Lake of Bays, Temagami, Algonquin Park, Magnetawan River, French River, Georgian Bay, Lake Simcoe, Kawartha Lakes, etc. Full partitions and tickets from any Grand Trunk Agent, or address A. E. Duff, D.P.A., Union Station, Toronto, Canada.

A CHAMPION JERSEY A Red Deer, Alta., Jersey cow holds the championship of Canada. Result of Old Basing raised and owned by C. A. Julian. Result of Red Deer completed on May 23, 1911 a second consecutive year's official test.

In her year's official test February 23, 1909, to February 24, 1910 she gave 10,279 lbs. of milk, average test 5.37 per cent. fat, equal to 729.69 lbs. 80 per cent. butter. In the second year, May 24, 1910 to May 23, 1911, she gave 11,278.12 lbs. of milk, average test 5.5 per cent, equal to 745.027 lbs. of butter; in the two seasons a total of 22,557 lbs. of milk and 1474.717 lbs. of butter. This is a higher record for butter than any other cow of any age or breed in Canada. Her cream is sold at a premium in Calgary and with the value of the skim milk has been worth in the two seasons \$533.66.

TORONTO FAT STOCK SHOW The Toronto list for the Second Annual Toronto Fat Stock show to be held at the Union Stock Yards December 31 and 12 has been received. The success of the first Toronto Fat Stock show held last December has induced the management to enlarge the classification and premium list for the show this year.

The show aims to bring stockmen, feeders and shippers more closely in touch with a central market, where actual values of the different grades of live stock can be checked by actual sales. Visitors to the show have the added advantage of seeing a large and growing live stock market in active operation.

The judging will be done by practical men who know market grades and values. This work will prove of great educational value to the live stock interests of the province. Most of the live stock entered at this show will be sold at public auction, so that exhibitors and visitors will have a chance to compare the judges' awards on different animals with their actual value to the packer and butcher.

WESTERN FAIR, LONDON, ONT. Prize lists, entry forms, and advertising matter of different kinds in connection with the Western Fair of London, Ontario, have been sent out by the management. One thousand dollars in cash has been added to the prizes this year. Breeders and stockmen should make calculations to include this popular exhibition in their circuit this year. Exhibitors at the London exhibition always report large sales of their stock as a result of attending. It is fully expected that this year will eclipse the last. Exhibitors all who have worthy stock of any kind cannot afford to miss it. The dates this year are Sept. 8th to 16th. If you have not received a prize list write the Secretary, A. M. Hunt, London, stating the kind of entry form you wish and it will be promptly sent.

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Farns and Sows for Sale. J. W. Todd, Springhill, Ont. Maple Leaf Stock Farm.

**FOR SALE**

Netherland Beauty's Butter Boy, pure bred Holstein bull, born March 4, 1911. His dam, Netherland Beauty De Kol, 6067, in March, on official test, gave 422.46 lbs. milk and 22.55 lbs. butter in 7 days. Average test, 4.27 per cent.; best three consecutive days, milk 147.77, testing 4.32 per cent. fat. This compares favorably with the record of the winner at the Ottawa Dairy Show, 1911, of 184.3 lbs. milk, testing 4.2. His sire is the famous Falfur Butter Boy, 6654, whose milk and butter record, on 1950, gave under R.O.P. test in Ontario, 174.65 lbs. milk and 25.15 lbs. butter, at 12 years of age, and whose sire's dam, Falfur 518, 2798, gave 550 lbs. milk and 26 lbs. butter in 7 days. This calf is beautifully marked and in prime condition and will be shipped to any point in Ontario for \$125.

W. H. CHERRY, GARNET, ONT.

**THE SALES. AGED COWS.**

Beuchan Snowdrop 2nd	Mrs. Erhardt	\$950.00
Blake Girls of Kales	R. E. Ness	350.00
Howie's Statesley Queen	P. E. Ness	750.00
Liberalton Main's Swell	P. E. Ness	550.00
Castlemain's Blinder 2nd	P. W. Vanderhoof	200.00
Castlemain's Pansy 4th	B. R. Wilbur	325.00
Greenhills	P. W. Vanderhoof	550.00
Dorothy	B. E. Ness	425.00
Stockport Primrose	P. W. Vanderhoof	450.00
Isle perland Nell	Gilbert McMillan	425.00
Lesnescock Lady Kate	Hector Gordon	300.00
Lesnescock Pansy 2nd	P. W. Vanderhoof	350.00
Auchenbrin Favorite 11th	J. Shirwin	275.00
Auchenbrin White Legs 4th	B. R. Jenkinson	300.00
Auchenbrin Buntie 16th	P. E. Spooner	375.00
Ardena Carolyne 4th	P. E. Spooner	375.00
Lesnescock Queen Kate	P. E. Spooner	375.00
Lesnescock Lady Kate	B. R. Wilbur	300.00
Netherhall Lady Jean	V. Rodden	300.00
Lesnescock Suele	T. E. Jenkinson	300.00
Glenhamwood Cherry	P. E. Spooner	300.00
Oldhall Cherry 7th	Mrs. Erhardt	800.00
Princess Ann 3rd	D. M. Watt, St. Louis Station, Que.	425.00
Scottie's Nell	Jas. Beuning, Williamsstown, Ont.	450.00
Garraugh Snowball	B. E. Ness	250.00
Garraugh Madge	P. E. Spooner	300.00
Kilninchell 3rd	J. E. Darragh Pendleton, Ont.	425.00
Torra Cony 3rd	Adm. Seliz, Waukesha, Wis.	275.00
Stacklawhill Nancy 3rd	P. W. Vanderhoof	300.00
Lesnescock Thibbe 2nd	P. E. Spooner	450.00
Lesnescock Broomie	P. N. Freeman	300.00
Auchenbrin Nestome	W. T. Rodden	475.00
Anchor Marsha 5th	W. T. Rodden	375.00
Ardena 1st	Hector Gordon	425.00
Barzow Miss Arthur	P. E. Spooner	300.00
Auchenbrin Bloomer	J. W. Orden	359.00
Shell Salt 3rd	P. W. Vanderhoof	250.00
Lauriston Ladymith 4th	W. T. Rodden	275.00
Springhill Snowdrop 3rd	Gilbert McMillan	300.00
Auchenbrin Nell	J. E. Johnston	500.00
Lesnescock Love Grace	P. W. Vanderhoof	300.00
Springhill Spry 2nd	P. W. Vanderhoof	300.00
Springhill Miss Owens	W. T. Rodden	355.00
Auchenbrin Ellen	P. W. Vanderhoof	355.00
No. of animals, 21	Total, \$7,800.	Aver. \$371.

**TWO-YEAR-OLD HEIFERS.**

Dunandime Snowdrop	W. T. Rodden	\$855.00
Lesnescock Nardus	J. Shirwin	500.00
Lesnescock May Blossom	B. R. Wilbur	275.00
Lesnescock Midge	Spiegelman	625.00
Lesnescock Glad	W. Rodden	325.00
Castlemain's Pansy 4th	D. T. Ness, Howick, Que.	275.00
Lesnescock Nell	P. E. Ness	300.00
Anchor Marsha 5th	P. W. Vanderhoof	275.00
Ardena 1st	B. R. Ness	250.00
Barzow Miss Arthur	P. W. Vanderhoof	275.00
Auchenbrin Bloomer	J. W. Orden	359.00
Shell Salt 3rd	P. W. Vanderhoof	250.00
Lauriston Ladymith 4th	W. T. Rodden	275.00
Springhill Snowdrop 3rd	Gilbert McMillan	300.00
Auchenbrin Nell	J. E. Johnston	500.00
Lesnescock Love Grace	P. W. Vanderhoof	300.00
Springhill Spry 2nd	P. W. Vanderhoof	300.00
Springhill Miss Owens	W. T. Rodden	355.00
Auchenbrin Ellen	P. W. Vanderhoof	355.00
No. of animals, 21	Total, \$7,800.	Aver. \$371.

**YEARLING HEIFERS**

Springhill Christian	A. H. Sacerdorth	375.00
Springhill Cherry	Mrs. Erhardt	300.00
Springhill Miss Wallace	W. T. Rodden	350.00
Springhill Rosey	P. W. Vanderhoof	275.00
Lesnescock Little 2nd	B. E. Ness	250.00
Lesnescock Jess	B. E. Ness	250.00
Ardena 1st	D. M. Watt	225.00
Anchor four 6th	J. W. Orden	225.00
Ardena 1st	J. W. Orden	225.00
Chwillan Dandy 2nd	W. T. Rodden	225.00
Netherhall Queen Ness	Wm. Leitch & Son, Cornwall, Ont.	425.00
Torra Princess	W. T. Rodden	325.00
Lesnescock Hughina	B. E. Ness	325.00
Lesnescock Beulah	B. E. Ness	300.00
Lesnescock Joan	J. Shirwin	115.00
Lesnescock Baroness	J. Shirwin	105.00
No. of animals, 18	Total, \$4,375.	Aver. \$243.

**AGED HEIFERS**

Lesnescock Durward Lely	J. E. B. Wilbur	300.00
Burgcock Victor Hugo	A. H. Sacerdorth	300.00
No. of animals, 2	Total, \$3,150.	Aver. \$1,575.

**YEARLING BULLS**

Toward Point Superior	F. Spiegelman	\$325.00
Auchenbrin Pride	W. T. Rodden	400.00
Springhill Prince	P. J. Barrett, St. John, N.B.	115.00
No. of animals, 3	Total, \$840.	Aver. \$280.

**BULL CALVES**

Netherhall Right Forward	R. W. Smith, Canby, Ont.	\$125.00
Netherhall Pavmenter	Montrose Cotton Co.	125.00
Springhill Victor King	J. B. Wilbur	100.00
Springhill Prince	Jas. Cotnam, Ont.	75.00
Lesnescock Sir James Miller	J. Boden, Danville, Que.	75.00
Springhill Madeline	A. F. Spooner	100.00
Springhill Masterpiece	J. D. Melle, Avonmore, Ont.	100.00
Springhill Doranda	A. H. McDonald, Greenfield, Ont.	35.00
Springhill Royal Seal	W. Deane, Antrim, Ont.	35.00
Bull Calf	P. N. Freeman	25.00
No. of animals, 10	Total, \$835.	Aver. \$83.

**HEIFER CALVES**

Springhill Prudence	B. R. Wilbur	\$225.00
Garraugh Mistletoe	B. E. Ness	250.00
Auchenbrin Buntie 2nd	Mrs. Erhardt	475.00
Auchenbrin Deward 6th	Mrs. Erhardt	475.00
Chapel Hill Louisa	P. E. Spooner	325.00
Chapel Hill Dora 3rd	P. W. Vanderhoof	325.00
Chapel Hill Louisa	P. W. Vanderhoof	325.00
Kirkland Nellie 1st	P. D. McArthur, N. Georgetown, Que.	300.00
Hillhouse Dandy Girl	W. T. B. Eden	235.00
Springhill White Lady	Hector Gordon	175.00
Springhill White Lady	Hector Gordon	175.00
Springhill Heatsie Hugo	B. E. Ness	425.00
Springhill Beattie Hugo	Mrs. Erhardt	425.00
Springhill Whiffleflower Hugo	Mrs. Erhardt	425.00
Springhill Queen	B. E. Ness	425.00
Springhill Carolyne Hugo	B. E. Ness	425.00
Springhill Snowdrop	Central Experimental Farm	100.00
Springhill Kate	E. J. Darragh	55.00
No. of animals, 18	Total, \$5,150.	Aver. \$286.

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Sons of Pontiac Korndyke, sire of the record cow Pontiac Clothilde De Kol 2nd, 37.20 lbs. butter in 7 days. He is the sire of seven daughters whose 7 day records average 31.13 lbs. each, unequalled by the daughters of any other sire of the breed living or dead. He is the sire of the youngest bull of the breed to sire a 20 lb. daughter.

We also offer sons of Rag Apple Korndyke, whose dam Pontiac Rag Apple is a full sister to Pontiac Clothilde De Kol 2nd, 37.20 (world's record) giving this young sire's dam and her full sister 7 day records that average for the two 24.18 lbs. each.

We have in service, and can offer you sons of Sir Johanna Olantha Glad, a son of the highest record daughter of Hengerfeld De Kol 1st A.R.O. daughter, four or six to the each. This young sire is a son of the highest record daughter of dam Clothilde 4th's Johanna, has a 7 day record of 35.23 lbs., making his dam and his daughter average 32 lbs. which is higher than that of any other sire of the breed living or dead. Write for Price and quote price on anything you want in first-class Holsteins; young sire our Specialty.

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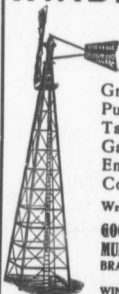
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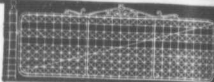
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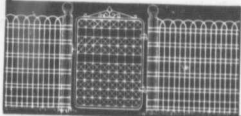
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