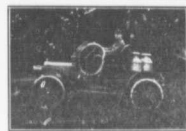


Fifth Annual Special Breeders' Magazine Number

# FARM AND DAIRY & RURAL HOME

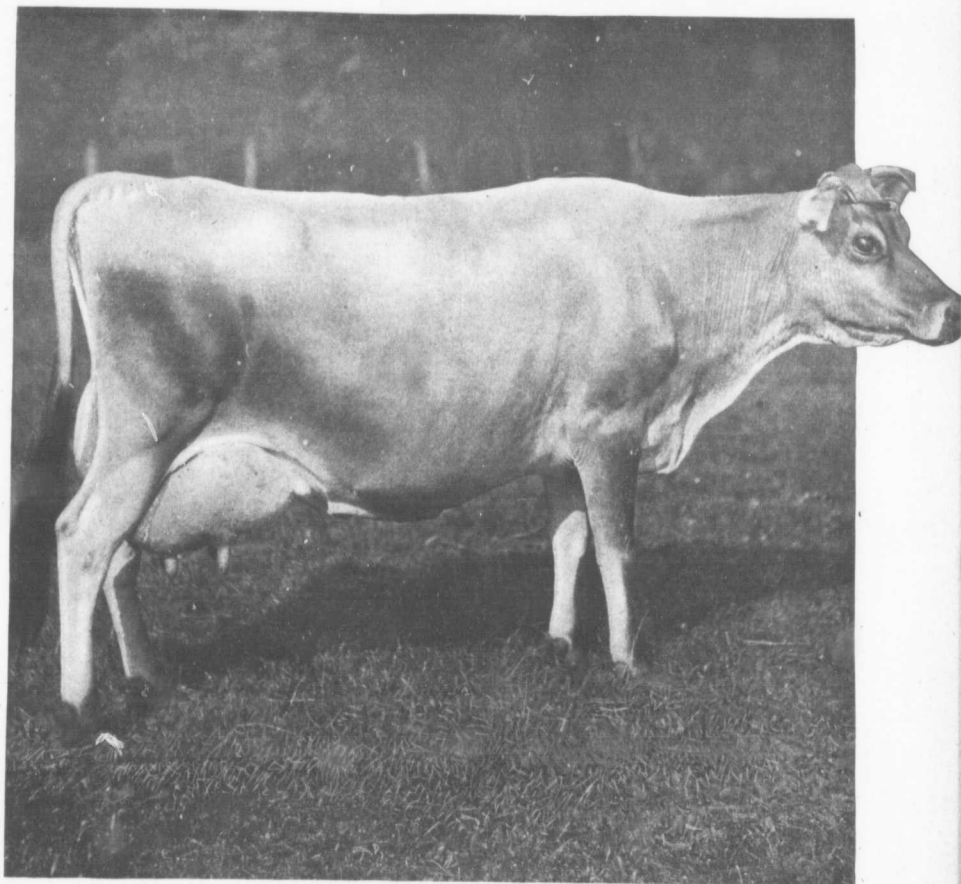


DEVOTED TO  
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COUNTRY LIFE



Dairy and Cattle Shows  
are coming Dec.

Peterboro, Ont., Dec. 4, 1913

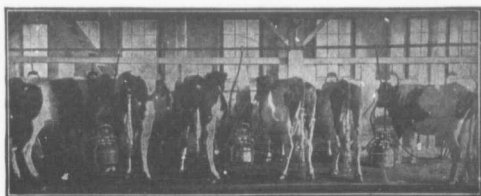


A DAIRY QUEEN OF ISLAND BREEDING

ISSUED EACH WEEK

**Rural Publishing Co., Ltd., Publishers**

ONE DOLLAR A YEAR



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FOR YOU

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He is taking great pains in the care of the milk and the way the cows are handled, but he is milking 100 cows in two hours with six machines, operated by two men, and a third to carry the milk. He effects an actual saving of \$1,568.00 per year, with an equipment that cost him \$222.00 complete.

It is impossible for us to tell you more this week, about the B-L-K and what it can do for you in the way of saving labor, money etc., but if you drop us a card we'll gladly send you literature giving full details. Get your card and pen now, before the matter slips your memory.

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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

## The Midnight Sun

If you must stay up, get a Rayo lamp. Kerosene light is nearest sunlight and the

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gives you soft, eye-soothing light without smell or dirt. Solid brass, nickel-plated. Handsome. Durable.

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### Notes from our Shepherd

The only way to make money from sheep is to stay with the business year after year.

I have heard sheep men argue up and down that where roots are fed it is not necessary to supply water to the flock. This is entirely wrong. I would lay special emphasis on a plentiful supply of pure water for sheep.

An open shed is about as good as any structure for wintering sheep, providing it faces away from the prevailing fall and winter winds, is tight enough on three sides to prevent strong draughts and to keep out snow. And it must be well supplied with dry bedding. I am not an advocate of pure-bred sheep for every farmer. Many men are prepared to give sheep only scrub care and they do not deserve anything better than scrub stock.

A little ensilage is good for sheep. From one to three pounds might be fed profitably. But be sure it is good ensilage.

Too much corn is dangerous feed for the breeding flock. My preference is for oats. There is no better feed.

A run in the barnyard is fine for the flock in winter. Never, however, have the sheep out at the same time as are other stock, particularly horses. I know that many shepherds have expressed a preference for ewes on the thin side. Many more have taken this to mean noticeably thin. I would say do not have the breeding ewes noticeably fat, but do have them in good condition.

Keep the average dog away from the sheep. It can't drive sheep and it only worries them.

### Telephone Inventor as Sheep Breeder

Dr. A. Graham Bell, inventor of the telephone, ever busy on his beautiful estate, "Beinn Bhreagh," near Baddeck, Nova Scotia, in his laboratory or study, has yet found time to conduct some interesting experiments with his flock of sheep. Facts, details, incidents are all tabulated there; and tracing out the co-relation between conditions and results which characterize him, he noticed that certain of his ewes had twins, others had not. Why? Then examine the flock. Note, most of the ewes have only two teats or nipples, a very few have two extra ones partly developed, and these latter ones bear twin lambs. Question: is there a co-relation between multiple nipples and twin lambs? In the pamphlet re-printed from his notes he tells of his experiments to test for himself this proposition.

Experiments were begun in 1890 and by selection from the flocks of farmers in the vicinity quite a few sheep were discovered with four, five and six nipples more or less developed. These were purchased and breeding systematically began to reproduce the like.

#### SIX NIPPLED EWES

Passing over the very interesting story of how the results were obtained each year by the use of multi-nipple rams and ewes, it will be noted that in the spring of 1912, 53.6 per cent. of the lambs were six nipples. Now, there is a flock in which is kept only ewes with six functional nipples, and there seems very little reversion;

in fact the peculiarity has become fixed.

Now as to twin lambs: In 1912, 66 per cent. of the lambs born that year from three year old ewes were twins. One sheep, No. 1505, seven years old, has given 11 lambs.

As to feeding, Dr. Bell prescribes extra nourishment, say at a fortnight before breeding in October, then after mating reduce the feed, or to quote the axiom from Dr. Bell's pamphlet, "Good nutrition at the time of mating favors the conception of twins, and diminished nutrition after mating, favors their retention."

### Karakule Sheep for Canada

Prince Edward Island seems to have a liking for unusual branches of agricultural industry. First, it was black fox breeding, which is still being successfully prosecuted by the way, and now the progressive Islanders are planning to become the first Canadian locality to produce the so-called Persian lamb pelts.

Nine Karakule sheep have been purchased from Dr. C. C. Young, of Belton, Texas. These sheep will be taken to a farm in the vicinity of Charlottetown. It is anticipated that by crossing these sheep with the long wool breeds of Prince Edward Island, a strain of high breeds will result that will manifest the tight curls of the Karakule and have the strength and gloss of the local breeds.

### Winter Quarters for Sheep

James Snell & Sons, Huron Co., Ont.

Our sheep pen is 72 x 34 feet, and has a stone wall at the back the full length of the four windows. The ends are also stone, the front being built with frame studding. We have a row of box stalls at the south end, then a passage four feet wide and another row of little stalls in which we put the ewe until the lambs are big enough to run with the flock. We have a big pen for the breeding ewes and then a partition we have a box four by six feet, where we throw down the hay for the sheep.

When feeding the sheep, we have two box stalls, one for the ewe lambs and the other for the bucks.

At the north end of the building we have our root house, where we keep the turnips for feeding. We think there is nothing better for feeding sheep. Over the root house is a good cranary for bran, peas, oats and oil cake.

### Age for Registration

I have a heifer two years old and over whose dam and sire are both registered. She is a fine Holstein. I would like to know if I can register her at that age.—E. P. Stormshaber, Co., Ont.

The age of the animal makes no difference so long as the sire and dam are already recorded. Double fees are charged for an animal over one year of age.—W. A. Clemons, Sec. of Canadian Holstein Breeders' Association.

The following is from a U. S. dairy paper's report of the methods of a champion corn grower: "His success is due to the placing of a wind break over the plant last winter to keep it from the snow." Probably he planted the seed during the January thaw. But then there were so many thaws last winter that he might have planted the seed almost any time from November to May.



We Welcome

Trade Increase

Vol. XXXII.

**T**HE person who wanders of nation after nation achieves no success in his business before him.

Let a person be kind with no fixed place will not only manage, but when he has something entirely new. Therefore, as a just starting to of his herd, as older ones who have progress as breed that if you are the of your business the desire of every one you must get right root of matters-out, make sure of you will no doubt veristy, but when a strong ideal will rocky places. If makes a mistake able to discover itify the same.

One of the great breeder without an is that he is liable and his animals p expectations. He make a try at some he will not stick to make a success.

The man whose cess, must from a definite object in a successful breeder his breed, study



Dairy Heifers



We Welcome Practical Progressive Ideas

# FARM AND DAIRY

## & RURAL HOME

The Recognized Exposition of Dairying in Canada



Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

Vol. XXXII.

FOR WEEK ENDING DECEMBER 4, 1913

No. 49

## The Breeder's Ideal--Why So Necessary?

Geo. A. Laidlaw, Elgin Co., Ont.

THE person with no ideal is much like the wanderer of the highway; he has no destination other than wandering; therefore, he never achieves much. The breeder who will win success in his business must have an ideal ever before him.

Let a person start to erect a building of any kind with no fixed idea of what he wants, and he will not only make very slow progress in building, but when he has it completed he will have something entirely different from what he wants. Therefore, as a warning to the young breeder just starting to lay the foundation of his herd, as well as to some older ones who have made very little progress as breeders, let me say that if you are to make a success of your business (which I think is the desire of everyone so engaged) you must get right down to the very root of matters.

Before starting out, make sure of what you want. You will no doubt meet with adversity, but that is just the time a strong ideal will carry you over the rocky places. If one with an ideal makes a mistake they will then be able to discover it and at once rectify the same.

One of the great dangers that a breeder without an ideal encounters is that he is liable to start with a certain breed and his animals probably do not come up to his expectations. He will then drop that breed and make a try at something else, with the result that he will not stick to any one breed long enough to make a success of it.

### BE STEADFAST

The man whose achievements pronounce success, must from the start be steadfast, with a definite object in view. If he is going to be a successful breeder of live stock he must choose his breed, study it, study what constitutes

a true type, and get firmly fixed in his mind the true type of the breed he has chosen. To win the greatest success a breeder must have his ideal stamped on his mind's eye so distinctly that he can almost see the animal in front of him. That which we think we can reach we will reach, but without something definite in view we will certainly accomplish little.

The reason why some judges fail to give satisfaction in the show ring is because they have

efforts (if he puts forth any) to luck. There is no such thing as "luck" in either success or failure in breeding and developing live stock.

A point which I wish to emphasize is in the selecting of the sire. This is where we need a very high ideal. The sire stamps his characteristics on every offspring in the herd, while the dam is only influencing her own progeny. Personally speaking, I give the selecting of our sires credit for the greater part of our own success.

### TWO BREEDERS START EVEN

Let me give an illustration of two breeders who

started with a certain breed of cattle at practically the same time, that being about nine or 10 years ago.

Both purchased some good cows. When it came to selecting the sire of the herds, one breeder had an ideal, while judging from what transpired, the other had none. He has always tried to buy his sires cheap, and as a result he has secured inferior animals. The writer had the opportunity this fall of attending the fair where these two breeders were in competition. I need scarcely mention the results.

I have never in my experience seen a better demonstration of the weakness that goes with lack of an ideal. The only prizes secured by

the man with no ideal when selecting his sire were in the classes that the other man did not have enough animals to fill the class.

To the beginner, I would say: If you expect your environment to be filled with an atmosphere of success, you must have an ideal first, last, and all the time. Not only is it necessary to have an ideal, but it is just as necessary to seek to attain to that ideal. Do not let the matter of a few dollars side track you, especially in selecting the herd sire. It is not what we buy,

(Concluded on page 19)



What will be the Future of this Oxford County Herd of Holsteins?

Will it improve or go back? That depends on whether or not its owner has an ideal toward which he is working.

no ideal. When such is the case one will see animals of all types being awarded highest honors.

### MUST BE EXPERT JUDGES

To become a most successful breeder, one must be an expert judge of the breed he is aiming to develop. The man starting in live stock breeding with the idea in his mind that he can do as well as his successful predecessors, and that with no study of the breed he has chosen, will certainly reap very unsatisfactory results. He is then liable to pronounce the result of his



Dairy Heifers such as These are Found Only Where the Breeder has a Fixed Ideal—A Bunch of Two-year-olds on the Farm of Hector Gordon, Chateauguay Co., Que.

(Photo by an Editor of Farm and Dairy)



## Wider Markets for Pure Bred Dairy Cattle

**W. A. Clemons, Sec'y, Holstein-Friesian Ass'n of Canada**

IS it desirable to widen the market for pure bred dairy cattle, particularly for pure bred bulls? If so, why?

Canada has approximately 3,000,000 cows; yet this country is importing milk from the United States and butter from New Zealand. We exported no butter in 1912, and our export cheese trade is rapidly dwindling. This condition of affairs is not pleasant to contemplate when we consider that Canada is naturally blessed with agricultural possibilities equal to those of any other country in the world.

It is highly desirable, therefore, that we have more and better cows, particularly in the Western Provinces, where the consuming population is increasing at such a rapid rate. We have in Canada possibly 50,000 pure bred dairy females of all breeds, and comparatively few can be imported from other countries. How, then, can we hope to obtain more and better cows? Not to any great extent by the distribution of pure bred females, for a century of breeding would not yield a sufficient number of pure bred to supply the country's needs.

### THE MISSION OF PURE BRED STOCK

Practically all improvement in the number and the producing capacity of our cows must come through the process of grading up with good, pure bred sires of the dairy breeds, combined, of course, with better care and selection. What, then, is the mission of pure bred stock of all kinds? The answer is: "To produce the prepotent sires necessary for the improvement of the ordinary stock of the country."

Breeders will agree with me that at the present time the majority of their sales (possibly 75 per cent.) are made to men who are already owners of pure bred stock. There is a steady demand on the part of the smaller breeders for more and better cows. Beginners in considerable numbers are always ready to pick up a cow or two for foundation stock at prices that appeal to them. On this account pure bred females scarcely ever fail to find a market at a profit to the seller. Practically all the heifer calves are raised, and these become money makers for their owners

immediately after freshening. Accordingly, little effort is needed to widen the market for pure bred females. There is a ready market now at good prices for all that can be produced, pro-



**College Herds Tend to Widen the Market for Pure-bred Dairy Cattle**

This photo, by an editor of Farm and Dairy at Macdonald College, Que., shows a mixed herd of pure-bred Ayrshires, Holsteins and French Canadians. Who can say how many dairy farmers have been inspired with a love for good stock through inspecting the splendid dairy herds maintained at our agricultural colleges? The importance of the college example in this connection can not be overestimated.

vided always that the animals show capacity at the pail.

### THE SURPLUS BULLS

It is when we come to the question of finding a market for the surplus bulls that difficulties begin to loom up. If Canada is to do her share as a producer of dairy goods, we must have and use large numbers of pure bred dairy bulls from good milking dams. The problem of finding a market at paying prices for all the useful bull calves that breeders can raise is one of vast importance, not only to the breeders themselves, but to all who are interested in the welfare of the Canadian dairy industry.

Breeders of Holstein-Friesians have perhaps

less cause than others to complain of the bull market, but there can be no doubt that owners of high-class herds are slaughtering the bull calves from excellent cows rather than take the trouble to raise them to salable age. The demand for milk is so great and the price so good that little can be spared for feeding bull calves that will bring only \$50 or \$75 when fit for service. Two or three bulls from the best cows may be raised, as these meet a demand from owners of pure bred herds and fetch good prices. That inferior calves and calves from inferior dams should be slaughtered is a blessing. But that any large number of good useful bulls should meet a similar fate is a public calamity. Every good bull is urgently needed to assist in improving the quality and increasing the number of our dairy cows.

### FARMER MUST SEE A PROFIT

We hear a great deal nowadays of the education of the farmer. Farmers are proverbially conservative, and where advice is so abundant and cheap, they may be pardoned for being slow to accept it all. After all what leads a farmer to adopt any particular course of action in his agricultural operations. Nine times out of ten it is simply the conviction that it will pay him to do so. Our problem then is to convince the dairy farmers that it will pay them to go into the raising of pure bred dairy cattle.

(Continued on page 18)



**Pure-bred Females Find a Ready Market**

A string of pure-bred Holstein heifers as photographed by an editor of Farm and Dairy on the farm of G. A. Brethen, Peterboro, Co., Ont. The marketing of heifers such as these does not present serious difficulties.

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## Friendly Advice to My Fellow Ayrshire Breeders

John McKee, Oxford Co., Ont.

**R**ESPONDING to the request of an editor of Farm and Dairy for an article on the above subject, I am led to infer that in the editor's estimation there may be some matters in connection with the breeding of Ayrshires to which our breeders might do well to pay some particular attention in the future. I am somewhat at a loss to know why I should be selected to administer the medicine.

According to an article from the pen of one of our leading Canadian dairy authorities, which appeared in one of our farm papers somewhat over a year ago, an Irishman has no business with the "high strung Scot's cow." Although I am of Irish descent I must say that after an experience of over 40 years with the breed, that I do not find the Ayrshire cow possessing any more of a "fixin temperament" than cows of other dairy breeds. We find to-day that the splendid dairy qualities of the Ayrshire breed are being recog-

perfectly level sole to the udder not indented between teats.

If we are to get away from the small teat we must allow a reasonable indentation between teats. Ayrshire breeders should ever keep in view the great importance of maintaining the well balanced strongly hung udder with good sized teats. We should avoid the deep, narrow, pendulous udder with its constant liability to injury as well as the type shown in illustration No. 1.

Another rock which many Canadian Ayrshire men have struck is the breeding of heifers at too early an age. This has resulted in many Canadian Ayrshires being undersized as compared with the imported stock. Our standard calls for a weight of not less than 1,000 lbs. for mature cows and 1,500 lbs. for mature bulls. I think we should aim at a couple of hundred pounds above these weights.

While we all desire to see quality in our Ayrshires there is such a thing as carrying the matter too far. While beauty, refinement, and general attractiveness are characteristic of the Ayrshire cow, we must not lose sight of the fact that the ability to make good yearly records of milk and butter fat under perfectly normal conditions, is what the practical dairyman wants in a cow. To get these results we must have strong constitution and feeding capacity, together with the ability to transform her food into large quantities of milk and butter fat.

Our Record of Performance work is furnishing us with a lot of very valuable information on this point. I find the great majority of the cows making the large yearly records are cows of good

size, long in body as well as possessing good length of neck, and weighing from 1,000 to 1,500 lbs. at mature cows. Every Ayrshire breeder knows that the smooth, short necked heifer carrying great refinement or finish is not the one that is going to develop into the big, strong, long-bodied dairy cow.

### LIGHTHOUSES ON THE WAY

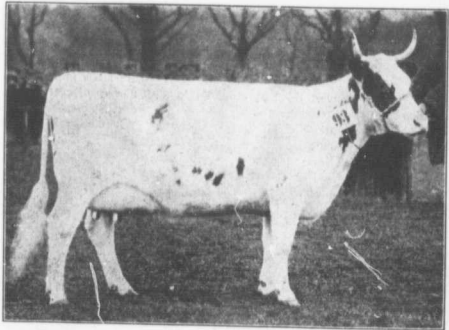
We can take warning in this respect from the fate of our Jersey friends who struck the rock of too much finish and refinement in the type of cattle they have been breeding during the past 20 years. Size and feeding capacity in many families have been sacrificed to fineness of finish. "The Practical Dairyman," with Balancy Fuller as managing editor, in its issue of April 15th, last, said:

"The Practical Dairyman has persistently and alone attempted to point out the injury being done to us good a breed for its inches as ever stood on four feet—Jerseys—by the breeders disregarding the necessary constitution and dairy capacity of the animals of the breed and the prevailing craze for only 'fineness of finish.'"

We do not require to steer to the very opposite side of the channel and strike the rock that many Holstein breeders have run into. In conversation with one of the most noted Holstein breeders of Canada recently, in speaking of this matter, he said, "You take many of the large rings of exhibition Holstein cows and you will find a dozen different types.

Some Holstein breeders have gone crazy over the records made by some ancestors of their stock bull

(Cont'd on page 37)



Note the Typical "Fancy" Vessel of this Scotch Ayrshire Cow

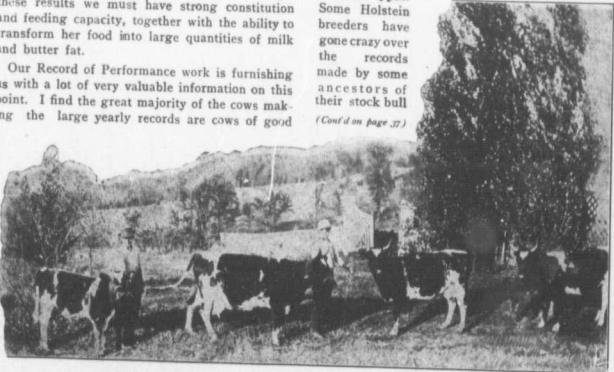


A Good Canadian-bred Ayrshire of the Utility Type

nized by the practical dairy farmer to a greater extent than ever known before, not only in Canada, but in foreign lands as well. The Ayrshire, however, like all other breeds has its strong points and its weak ones.

The present is perhaps a very opportune time to refer to a few matters which have in the past injuriously affected the usefulness of some strains of Ayrshires in the practical working dairy. In this connection I am reminded of the story of the old Scotch woman who said that "she didn't think the Scriptures were aye a safe guide, for David was held up as an example to us 'a' when he was a sinful mon." "Hoots, woman," said her neighbor; "David wasna pit there as an example at 'a'. He was just meant for a lighthouse to warn us aff the rocks."

One of the rocks which some Ayrshire breeders struck in the past and which injuriously affected the dairy qualities of the particular strains or families bred by them to a greater extent than any other single cause, was the fad for the tight level udders and thick level forms with the corresponding short teats. A cow typical of this type is shown in illustration No. 1 in this article. The cow is a mature one, five years of age. Contrast the type in illustration No. 1 from a utility point of view with the cut of the Canadian-bred Ayrshire in cut No. 2. The Canadian-bred cow has a year's record of 20,174 lbs. of milk and 903 lbs. of butter. I am of the opinion that even Canadian judges in our show rings have paid too much attention and attached too much importance to a



An Old Breeding Maxim Receives Added Justification in This Illustration

Does "like produce like?" Study the illustration. Second from the left is Jean Armour, bred by Jno. McKee, Oxford Co., Ont. She is one of the greatest producing and reproducing Ayrshires of the breed. To the right markings with herself. This old law of like producing like enables the breeder to propagate the qualities of his best stock. It also enables the rest of us with poorer stock to improve by the use of well bred sires.

## The Training of a Horse

F. S. Key-Smith

GOOD training and care are synonymous with "good horse." It is marvellous what can be accomplished. Bad training and poor care will quickly convert the best animal into a poor horse.

It is not only remarkable, but lamentable how little is understood about training and care. Ninety per cent. of those handling horses seem to think when a bed of straw, three meals a day, water and a little grooming is given, a horse is excellently cared for. They then imagine he should be ready at all hours for any work required. If he is not they quickly lose patience and jerk and cuff him about.

It matters not how the horse may feel, he must adopt the humor of his master. Show speed and action, if desired, or, if not, then have neither. Now, it is not infrequently happens when the rider or driver is feeling in one mood, the horse is in another, yet the poor animal in nine cases out of 10 is given little consideration, but is forced to respond to the whims of his master. He naturally rebels and resents the injustice, and in the course of time his noble nature is made sullen and dogged. It is

needless to say by such handling the best results are made impossible. Some one has said, "The history of every horse is a record of human endeavor to mar his utility."

A colt should never be teased, spoken to harshly

value impaired it is impossible to conceive.

Properly handled your voice should, and will be, the quieting, reassuring voice of a friend—encouraged by which he can be induced to face almost any peril or danger. True, to accomplish such results much patience is required—patience—persevering patience—is the rule, but in the long run it will be found to pay.

Study your horse's moods, and humor them, not to the point of allowing him to impose upon you, but to the end that due consideration may be made for his condition. If not quite up to the mark do not unnecessarily urge him to great exertion—let him take his time. He will appreciate it and later reward you for your kindnes. On the other hand if you observe him to be a playful or ambitious humor it is best to encourage him. Never make the mistake of checking him suddenly by a cruel jerk. If he wants to frolic to some extent let him, and it is a very good plan to frolic a little with him; firmly, but kindly, speaking to him if he exceeds proper bounds. You will be surprised to find how quickly he will catch on.

(Concluded on page 21)



If You Want a "Sure Thing" Investment Try a Few Like These

"Sure thing" investments, especially when advocated by the professional promoter, are apt to be "sure" for the promoter only. Brood mares of weight and quality, such as the ones here illustrated, are in another class. They have never been treated to promoters' fireworks and, with intelligent handling, are a sure thing for the farmer investor. Thousands of investors so testify.

or struck. Patience and kindness should alone be adopted. Being very timid and of a nervous nature a harsh word or blow no doubt quickly frightens a horse into submission, but at a cost which would appal if fully realized. How very much his high strung, noble spirit is thus injured and his

## Can We Improve Our Dairy Queen?

Geo. W. Laithwaite, Huron Co., Ont.

the case of the Jersey, the Island type is beautiful and sought after for the show ring. The American type is coarser and larger, the difference being brought about by climatic conditions and environment. We must decide in our own mind which type we desire. One breeder might base his choice on auction and show rings, while an-

If we take the actual utility type for our guide, which gives us producing and reproducing animals, we have facts before us from which every breeder can draw his own conclusions.

Type is good enough, but it is not the best scoring by which to judge a cow. Type without production will lead us astray and the Jersey will be no longer the "Dairy Queen." I have seen the one called "Jacoba Irene. No other cow of any breed equaled her record for twenty-five consecutive months. I have also seen several of the best record cows of the breed and have noticed a great difference between their type and that favored by the show winners at the large shows.

Here is something of the type of cow that will put up a record: She will show a lean, bony form, sharp, prominent back bone, ribs far apart, sharp withers and incurving thighs. This shows dairy temperament. For consuming a large amount of feed she will have a long, deep, and roomy barrel, a well sprung rib, broad muzzle, and a strong jaw; large heart girth, deep chest, large open nostrils, large windpipe, the region of the hips wide, and also wide space between thigh, giving room for a large udder. If you have a cow of this type, prove her by the pail, scales, and Babcock test. Year in and year out the victories at St. Louis and Chicago are won by animals of this class.

Will our herd sire be the best that money can (Concluded on page 35)

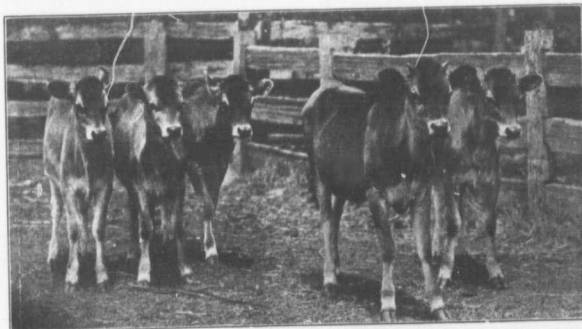
ABOUT 14 years ago we had on this farm one of the best herds of grade Durham cows in the county. I often said I would not have a Jersey on the place; but I happened to get a Jersey calf and after raising it got a surprise. When she freshened at two years of age we thought she was too young to milk and raised her calf on the milk. In the fall we sold the calf for veal at \$15. Then we started to milk this Jersey. We always kept a record of our cows and to our surprise the little Jersey proved herself as good as any two of our big Durhams. We gradually changed to grade Jerseys; then to pure bred.

After 10 years experience with the Jersey, during which time I have studied breeding pedigrees, type and almost everything pertaining to the business, I have come to the conclusion that you don't know what you have to know in order to know how little you know. I am willing to exchange ideas with others who know more than I and invite them to correct me should I go astray in this letter.

I feel somewhat puzzled to know just how to put the improvement of the Jersey in words that will bring to light some errors that my fellow breeders and myself are overlooking in bringing our "Dairy Queen" up to the point of perfection.

WHICH TYPE IS TO BE PREFERRED?

We read and hear a great deal about type. In



Who Could Refuse to Take an Interest in Youngsters such as These?

other might prefer performance. It is not easy to understand why auction and show ring success should be taken as a measure of the ability of any given animal to hand down its qualities to its descendants. No certain rule can be established because this depends on advertising and the whims of the purchaser. Show yard success is not a safe guide for breeders to follow for what is fashionable one year might be out of date the next.



At H This comfort prominent breed.

changed commendation. New breed not only every year. Some say, "last." Let ther and st anything red. We find pure bred and raised i as a dual pu meat and d worth of me nually, the Holland.

These cat tics. The H He has an id tem. It is a usually selec



## The Safe and Sure Road for the Holstein Breeder

A. C. Hallman, Waterloo Co., Ont.

IN reviewing the history of Holstein-Friesian cattle and noting the wonderful progress of the breed, and the phenomenal records they have made in America, or the wide world over, within the last 25 or 30 years, a person becomes fairly amazed and begins to ponder and look around for a reason.

We find they are the most recent breed of pure bred cattle introduced into America and yet they by far outnumber all other rivals. We find them in all parts of the civilized world, from the extreme north to the most southern clime, where cattle are raised. Easily acclimating and adapting themselves to their new environments and



At Home with a Breeder of Holland

This comfortable Dutch farm house is the home of a prominent Holstein breeder in the home land of the breed. Doesn't this home speak of comfort and prosperity?

changed conditions, they receive the highest commendation everywhere.

New breeders are entering into the business, not only by the hundreds but by the thousands every year and they become enthused with results. Some say, "Holsteins are booming, but it won't last." Let us look into this matter a little further and study their origin and see if there is anything really surprising about it.

We find them the oldest established breed of pure bred cattle in the world, having been bred and raised in Holland for upwards of 2,000 years as a dual purpose cow. There they supply all the meat and dairy products, with millions of dollars worth of meat, butter and cheese for export annually, they being the only breed of cattle in Holland.

### BREEDING IN HOLLAND

These cattle have fixed type and characteristics. The Hollander is a constructive breeder. He has an ideal and works on a well-defined system. It is a survival of the fittest with him. He usually selects about one-half of his heifer calves

from his most typical cows every year to replenish his herd. When old enough to breed, he again goes over them carefully and if any of them do not come up to his required standard they are sold for beef. In the selection of his herd bull, he chooses only the best and most typical, and the rest go for veal and beef.

The first importations of Holstein-Friesian cattle into Canada or America, were strong, robust, roomy, long, deep-bodied animals, with good heart girth, wide muzzles, good strong bone, without being coarse. They had spacious udders, mellow hides, showing good quality, and the majority were nice and straight in outline. They were of two different types; some were low, deep set animals, while others were more lofty, or rangy. But mostly all, whether high up or low down, had the same characteristics with large middle, good outline and strong constitution.

When I recall those good old matrons, or foundation cows, whose names are so familiar to every Holstein breeder and which are so freely linked in to the names of our cows and their pedigrees, I wish I could find space to describe them or have some of our present day breeders see them. It would do them good. They would feel, as I often do, that some of the high-sounding flashy looking pedigrees of some animals are a disgrace to their worthy ancestors. Many of those old imported cows or their immediate offspring would leave our present day winners entirely in the shade.

Of course the beauty of form possessed by these old imported cows is not the only aim of the breeder. Production must be the first consideration. We cannot expect all animals to be of the show ring type and yet be useful breeders. The percentage of real show animals is scarce in all breeds and it is dangerous to breed for that type only and lose sight of production.

Then what about production? I think I can hear some of our present day enthusiasts say those old cows had no such phenomenal world's records. Their records were just as startling to the public as they are now. If we look up the records they would give our present day record-breakers a close shave. I must give credit to many of our breeders for the advances they have made by mating high class individuals. Where



Canadian Holstein Breeders, too, are Prosperous

Mr. J. C. Bales, York Co., Ont., has a home that may well satisfy an ambitious man. He also has a Holstein herd that is his special pride.

this has been done I must admit that possibilities for great records have been increased. But who can say we didn't have any 40 or 44 lb. butter cows in a week or 30,000 lbs. milk in a year?

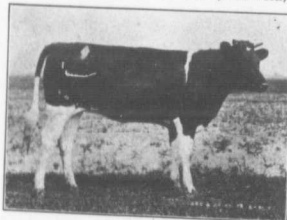
There is no boom in Holsteins, and never was; just a natural expansion and demand, owing to their superior excellence. People do not go blindly into things these days. Facts and figures speak louder than words. The work of these cows with ordinary farm care, on experimental farms, and in private, public and official records by the week, month or year, has so clearly

ly demonstrated to the public their wonderful producing ability under all conditions, that it is merely an awakening to facts based on business principles, that is causing this tremendous demand for Holsteins.

Now, the friendly advice I wish to give to my fellow breeders is simply this: Be more like the frugal Hollander—a constructive breeder. We find lots of good, careful, skilful breeders doing valuable service for the breed, but with the great demand for

Holsteins, and the phenomenal records made by some breeders, there is a tendency to boost some certain strains, mating the offspring to as many cows as possible and selling the bulls at fabulous prices, regardless of quality. We are not doing enough weeding. I have seen lots of these flashy

(Concluded on page 22)



The Holstein as Found in Holland

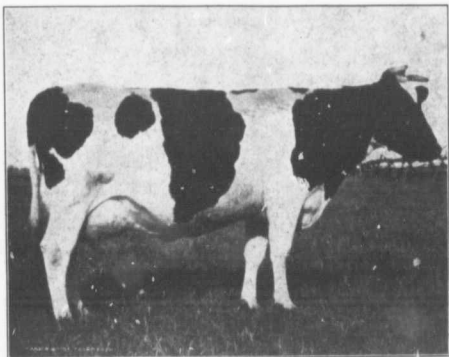
This heifer is a prominent prize winner at fairs in the Netherlands. She exemplifies the type for which the Dutch breeder strives; the type so favorably mentioned by Mr. Hallman in the article adjoining.

—Photo by our Dutch correspondent.



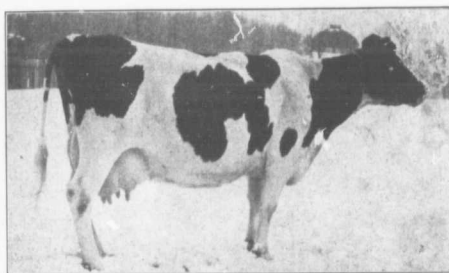
Canadian-bred Holsteins in Their New Zealand Home.—A Portion of Neil Sangster's Recent Exportation

# Cows That Produce 100 lbs. of Milk a Day



**Daisy Pauline Pietertje, 110.7 lbs. Milk**

Milk in 1 day, 110.7 lbs.; 741.5 lbs. milk, 22.59 lbs. butter, 7 days; 3,079.1 lb. milk, 116.14 lbs. butter in 30 days; the only cow in Canada to produce over 100 lbs. milk per day for 30 consecutive days, and averaging 100 lbs. per day for 42 consecutive days. She gave over 14,000 lbs. milk in six months in R.O.P. and is now milking over 75 lbs. per day. Photo five months after freshening shortly after milking. Owned by Archibald Parks, Napanee, Ont.



**Rhoda's Queen, 102 lbs. Milk**

One of Neil Sangster's most famous Holsteins. She has had a notable career of 11 years in the show ring and in dairy tests. As a two-year-old she was champion in the Ottawa Dairy Test, champion cow in 1910 and champion milker in 1912. She holds the world's record for milk production in the three-day public test, her highest day being over 105 lbs. Her grand constitution and ideal producing type has carried her to the front.



**Victoria Burke, 106 lbs. Milk**

Butter, 7 days, 30.81; milk, 7 days, 686.5 lbs.; highest day's milk, 126 lbs.; butter, 30 days, 121.00 lbs.; milk, 30 days, 2,532.2 lbs. In the 7-day class of mature cows this cow ranks 5th in Record of Merit, and 4th in 30-day class. Owned by Jas. A. Chakay, Madoc, Ont.

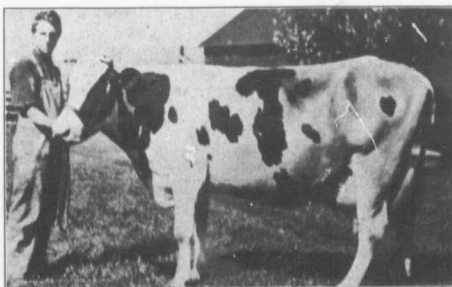
Each and every one of these pure bred Holstein-Friesian Cows illustrated on these two pages and on page 11, have produced over 100 lbs. of Milk in one day under official supervision. The average cow does well to produce 25 to 30 lbs. of milk. Is it any wonder that Holstein Breeders are Optimists?

These Records did not happen by chance. They bear testimony to the skill and good judgment of their respective owners as breeders and feeders. Live Dairymen know that it will be the offspring of such animals as these that will be the record makers of the future.



**Fairview Queen Korndyke, 108 lbs. Milk**

Belongs to the herd of Dr. Farewell, of Oshawa. She is a daughter of Pontiac Korndyke. Pontiac Queen Korndyke, her dam, has a record of 31.91 lbs. butter; 337.20 lbs. milk in 7 days, averaging 4.61 per cent fat. Fairview has a 7-day record made under conditions far from ideal, of 722 lbs. milk, with a yield of 26.25 lbs. butter. She is good for a 30-lb. record and possibly a world's record for yearly production.

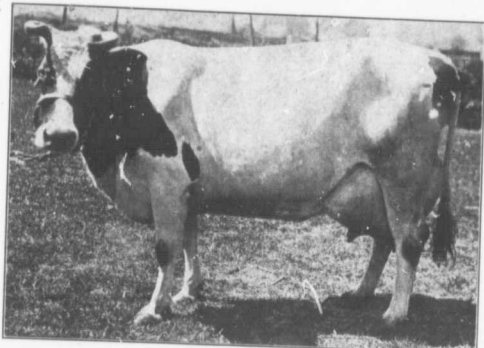


**Princess Helene of Harlam, 103 lbs. Milk**

Born March 23rd, 1906. Official record, 7 days, 630 lbs. milk, 22.3 lbs. butter. In 3 months, August, September and October, she gave 7,150 lbs. milk (August 14th, 15th and 16th—100, 193, 161 lbs. milk). In 360 days she gave 37,663 lbs. milk and 67 lbs. butter fat in official R.O.P. From present indications she will make 9,000 lbs. milk in 4 months. Owned by G. A. Kingston, Campbellville, Ont.

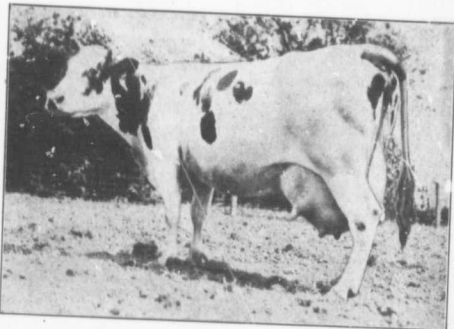


# A few of Canada's Greatest Milk Factories



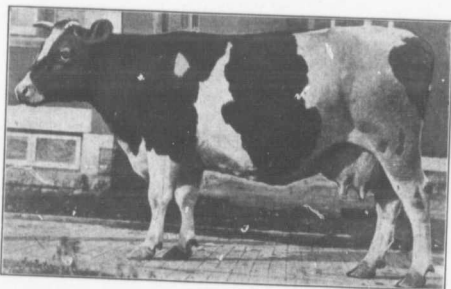
**Netherby Queen Jane, 111½ lbs. Milk**

Sire, Sir Inka De Kol Butter Boy (1687); dam, Netherby Queen (3047). In 230 days she made 123½ lbs. milk and 26.5 lbs. butter. Although freshening very thin 10 months later she made 70 lbs. milk and 22.7 lbs. butter in 7 days. She was bred by J. H. McLean, Inkerman, Ont. and is now owned by Allison Bros., Chesterville, Ont.



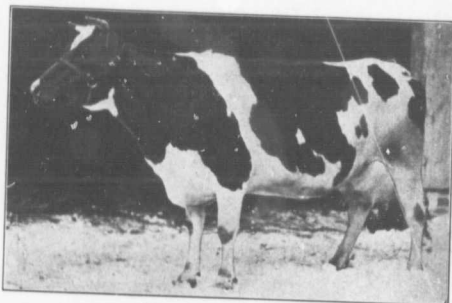
**May Echo, Averaged 103.8 lbs. Milk for 7 Days**

Sire, Count Echo De Kol; dam, Rosa May. Her record—23,707 lbs. milk, 1,042.056 butter (average per cent fat of 3.512) in 266 days as a 10-year-old, is the Canadian record which she has held ever since. At 11 years 6 months she made 726.6 lbs. milk, 31.84 of butter in 7 days—another Canadian record. In 14 days she made 1,641.09 lbs. milk and 58.36 of butter. Eight months after calving she gave 355.50 lbs. milk and 16.75 lbs. butter—Canadian record. She was bred by F. E. Mallory, of Frankford, but is now in the herd of Allison Stock Farm, Chesterville Ont.



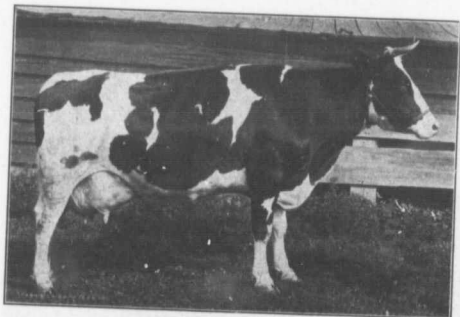
**May Echo Verhelle, 104 lbs. Milk**

Bred by B. Mallory, Frankford, Ont., owned by Allison Bros., Chesterville. Dam, May Echo; sire, Verhelle 4th Count Calamity. She comes of the great May Echo family and has a record of 324 lbs. of milk a day, 762.2 lbs. in 7 days and a yearly one of over 21,000 lbs. She is one of the most valuable Holstein cows that we have in Canada today.



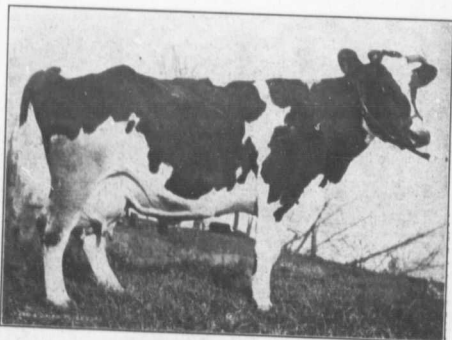
**Oleana Patroness, 102 lbs. Milk**

Another one of the big producers who works for Mr. Neil Sangster at Ormstown, Que. She is one of the strong constitutioned kind and has produced 102 lbs. of milk per day.



**Sara Jewel Hengerveld, over 100 lbs. Milk**

The first cow in Canada to produce 100 lbs. of milk in 1 day under official test. Her official record, 66 lbs. milk in 7 days; 2,627.75 lbs. in 30 days; 212 lbs. butter in 7 days and 116.15 lbs. in 30 days. Raised by Brown Bros., of Lyn, Ontario. She and her daughter sold for \$3,000 and \$2,000 respectively. Another daughter (A.R.O. 23.17) and other descendants are still in the Lyndale herd.



**Queen Inka De Kol, 109.4 lbs. Milk**

Born 1907. Sire, Sir Pietertje Posch's Son; dam, Posch Inka Sylvia (butter, 7 days, 23.7). Butter, 7 days, 27.53; milk, 692; butter, 30 days, 111.70; milk, 3,055.4. Has made in Record of Performance since March 7th, 1913, up to the end of October, 17,461.3 lbs. milk. Owned by E. F. Gaiser, The Lakesview Farm, Bronte, Ont.

## PUBLISHERS' DESK

also mark another forward step. As suitable illustrations are secured, other of our old headings will be replaced with new ones.

A feature of this issue which pleases us greatly is the fact that it is being mailed to more paid subscribers of Farm and Dairy than we have ever had in the past. The subscription list of Farm and Dairy is well over 16,000, which represents an increase of almost 100 per cent. within the past three years. Can any other old-established farm paper in Canada show such a percentage of increase for the same period? \* \* \*

WE would especially direct attention to our new British Columbia department. This department will be run monthly from now on for the benefit of "Our Folks" in British Columbia. It is now a couple of years since the dairy farmers of British Columbia decided that Farm and Dairy was the best agricultural paper in Canada for the dairyman, and adopted Farm and Dairy for their official organ. Hereafter, we have not given "Our Folks" in British Columbia the attention that we felt they deserved. Our chief difficulty lay in the direc-

THIS, the Fifth Annual special breeders' Magazine Number of Farm and Dairy, goes to "Our Folks" containing more radical improvements than have ever been made in one issue before. Did you recognize it when you received it? Our new front cover design is such an improvement you would not be surprised to hear that you had had to look at it twice before you recognized your old friend, Farm and Dairy. If doubts again assailed you when you turned to page three and saw our new heading and motto for that page, and later to the various new departmental headings that we have introduced in this issue, we feel sure you will be pleased when you finally realized that all these changes meant only still further improvements in Farm and Dairy.

WE take special delight in the front cover of Farm and Dairy. Time and again we have been offered large sums of money by advertisers if we would sell them this space. One large advertising agency reserved for a year and a half first option on this space, but finally gave up hope when they realized that we had no intention of selling it. We know that "Our Folks" like our front cover illustrations and watch for them every week. Our chief aim in publishing Farm and Dairy is to please our readers. Therefore, we have no intention of publishing advertisements on our front cover. You will agree with us, we are sure, that the front cover on this issue is the nicest we have ever published. Occasionally we will make use of our old front cover design, but the main purpose using the one that appears for the first time on this issue. It calls for larger and more expensive illustrations, but this does not matter as long as "Our Folks" are pleased. \* \* \*

HOW do you like the new design on page three and the motto which appears underneath? The artist at your request endeavored to furnish a drawing which would represent the ideal home of a prosperous dairy farmer. We know that many readers of Farm and Dairy live in homes just as attractive as the one shown, and therefore feel that the drawing is not an exaggeration of actual conditions on Canadian dairy farms. The homes and buildings of some of the prize farms at our Dairy Farms Competitions are fully the equal of the home shown. \* \* \*

THE motto that appears on page three was selected with the greatest care and only after several months' research. Many mottoes were suggested, but the one chosen appealed to us the most. We desired a motto which, by some well-known Canadian or British statesman, Lord Chatham was better known as William Pitt, who, as our readers know, was Prime Minister of Great Britain for many years. We feel that this motto is one which, as rural depopulation continues, will increase in importance. The greatest problem that confronts our country to-day is the one which is involved in the desertion of our country districts and the urban centres. We cannot overestimate its importance. We purpose giving it more and more attention in Farm and Dairy. We trust, therefore, that our motto, which was selected for us by Geo. H. Locke, Chief Librarian of the Toronto Public Library, will appeal to all our readers. \* \* \*

The new department headings that appear on various pages of this issue



## The Starvation Process

By F. C. Brown

The most common mistake in the poultry world, and the most dangerous one, is that it is possible to overfeed the laying type. I have repeatedly been called to advise poultrymen—sometimes at long distances—in regard to the failure of their stock to lay or their inability to withstand disease, and when I have reached the scene of the trouble it has only been to find the starvation process has been at work, the birds probably not having received sufficient nutriment even to maintain them in proper health, much less to enable them to produce eggs.

The day has gone for allowing hens to scratch for their living, and the scientist has yet failed to discover just how much a hen needs to nourish her body or to manufacture her almost



## Quite as Enthusiastic about the Birds as Their Daddy

These youngsters are the daughters of Mr. H. Groo, a poultry fancier of Peterboro, Ont., whose winnings have extended far beyond the local shows to the big fair at Ouelth. Children are somewhat like grown-ups. It is no trouble to get them interested in something really worth while, such, for instance, as pure-bred stock, or poultry.

tion of getting a suitable correspondent who would be well in touch with dairy farmers in that province and in a position to conduct such department. From one of our British Columbia friends who have stayed with us so loyally, will have a department in Farm and Dairy that they can call their own.

What do you think of the heading that we have adopted for this new British Columbia department? It is a British Columbia scene. Doesn't that big, substantial barn speak well of the kind of folks we have in that province? The photo was taken on the farm of A. C. Wells & Son, Sardis, B. C. \* \* \*

ALL these changes and improvements are the result of several months of planning. Besides, the improvements already noted we have been looking for the best men who could write the strongest articles on the subjects that are dealt with. Many of the best photographs that have come into our hands for months were reserved for this issue. We wanted to make it a pleasant Christmas surprise for "Our Folks," and hope we have succeeded. \* \* \*

In our advertising columns, where our rate now is \$1.40 an inch an insertion, will be found the advertisements of many of Canada's most reliable business firms, as well of

(Concluded on page 10)

meal and a spare ration at another; it means liberal and regular feeding.

The food supplied must be of the right quality—food capable, after the bodily wants of the birds have been supplied, of enabling eggs to be manufactured from it, for it is impossible to get something from nothing. And while the food supply should be ample, the bird should be maintained in the best of health in order that he may be able to stand the great strain on her system which heavy egg-production entails.

## Pleasure in Poultry

There are many pleasures and charms associated with country life and the raising of animals and fowls that the city dweller—and some ruralists also—seldom realize. A dialogue between two poultry breeders is recounted in a recent issue of the Poultry Item, Selkirk, Man., which illustrates this point very forcibly. We reprint it here:

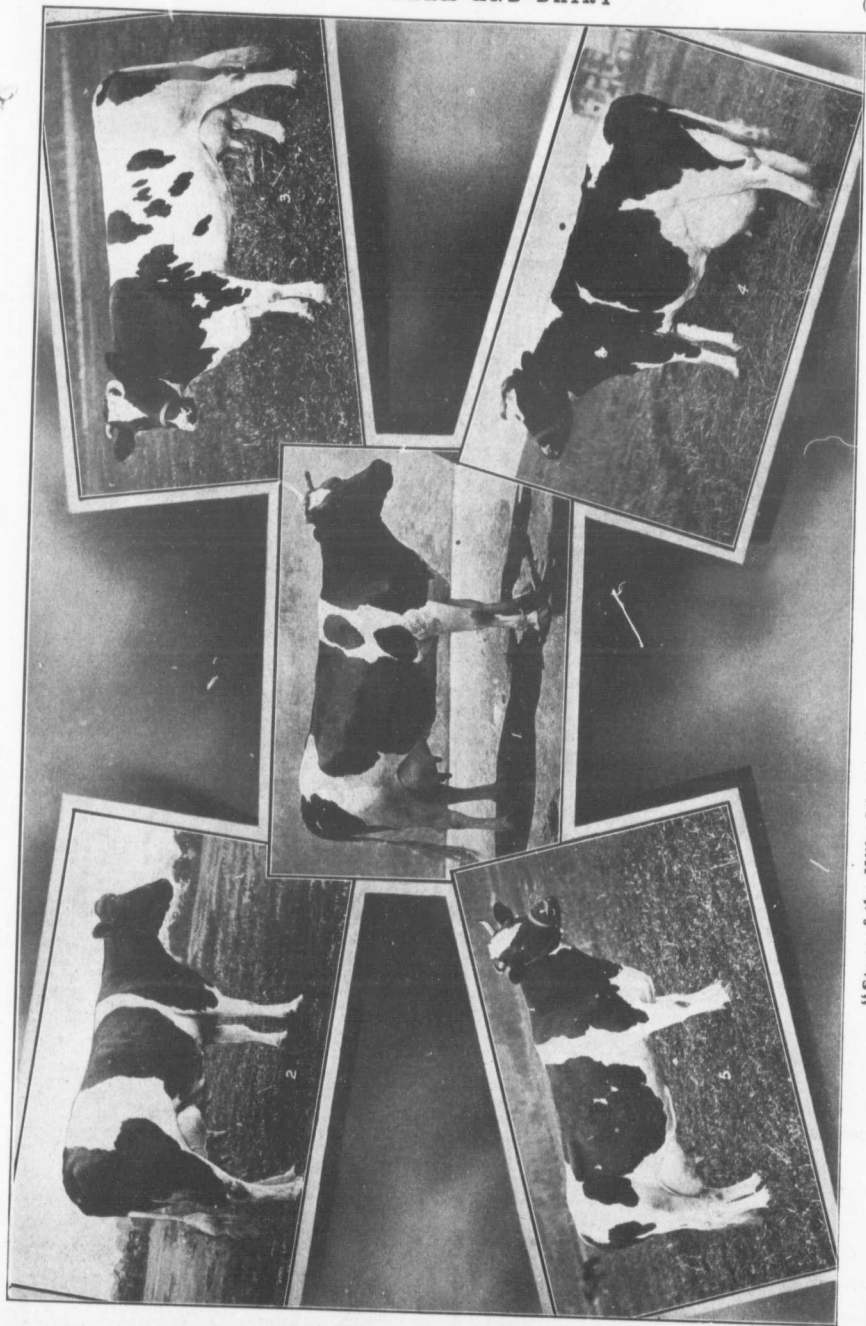
"There are two classes of poultry folks, one raising fowls to make money and the other keeping fowls for pleasure. As the deepest-dyed-in-the-wool cranks on fancy fowls are the Bantam breeders, it may not be out of place to record here a conversation between a Bantam breeder and a utility poultry farmer.

"Do you keep Bantams?"  
"I do."  
"What for?"  
"For pleasure."  
"But that don't pay, does it?"  
"I think it does. But let me ask you a few questions."  
"Go ahead."  
"Do you keep fowls?"  
"Yes."  
"What for?"  
"For profit."  
"And why do you wish to make a profit from your fowls?"  
"Because I want the money they will bring in."  
"But what good does that do you?"  
"It enables me to purchase things which give me pleasure."  
"Ah, that is it. In the last analysis it is pleasure after all which induces you to keep fowls. The difference between you and me then, is simply this, you raise fowls to obtain the means of procuring pleasure, while I keep them for the pleasure itself. In other words, your fowls afford you pleasure indirectly, and at second hand, while my Bantams afford me pleasure directly and constantly at first hand."

## Electricity and Egg Production

Some interesting details are now published as the result of experiments that have been carried out by Mr. W. H. Cook, at Orpington, Kent, England, where nearly 300 yards of fowl houses, containing 6,000 birds, are artificially lighted during the dark mornings and early nights since Christmas last, and he states that his total increased output in eggs during the dark months by this system has been between 30 and 40 per cent. His fowl houses are lighted by 300 lamps, divided into 32, 16 and eight candle power-clocks in the evening. At 9.30 the 16 candle power lamps are employed, and at 10 o'clock the eight candle power lamps are substituted for a quarter of an hour before the hens are left in darkness. Mr. Cook explains that it is necessary to give a rough imitation of the setting sun, otherwise the hens would go to sleep on the ground and become a prey to parasites.

In the case of young, artificially incubated chickens the electric light is employed to make them feed longer in the darkness. Mr. Cook explains that this is necessary to give their growth during the winter months by almost one-third.



**"Stars of the Milky Way" - Cows that Produce 100 lbs. of Milk a Day.**

British Columbia is satisfied with nothing but the choicest of dairy cattle. Of the 21 1908, we have the following list of stars of the Milky Way. These cows are to be found in British Columbia and six of these at Colony Stock Farm, Comoxium. We herewith present to you the names of the stars of the Milky Way, their owners, and their records. (1) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (2) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (3) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (4) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (5) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (6) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day. (7) *Star of the Milky Way*, a more valuable herd of Holsteins could not be found in any age. Born March 26th, 1909; calved May 13th, 1910; milk 106.8 lbs. in a day; butter 5.6 lbs. in a day.

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# WANT FARM DEPARTMENT NUMBERS ?

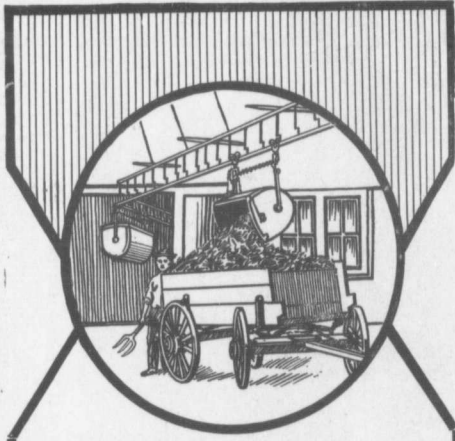
IN Our 1914 Specials  
ON 5th ANNUAL SERIES

THESE  
 Big Poultry Feb. 5  
 Orchard and Garden Mar. 5  
 Dairy Magazine Apr. 5  
 Farm Improvement May 7  
 Farm Machinery Aug. 4  
 Exhibition Special Oct. 8  
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BETTER SERVICE THAN EVER FOR YOU

FARM AND DAIRY, PETERBORO, ONT.



## LESS WORK CLEANER BARN

If you could do four men's work in your stable, taking out four wheelbarrow loads of manure instead of one, wouldn't that be worth real money to you?  
 If you could get the manure many yards from the barn, in spite of mud or snow drifts, and not spill a single speck till you

get to the sleigh or wagon or pile, wouldn't that be worth dollars and cents to you?

And if you knew this could be done by a method that would pay for itself in a single winter, wouldn't it be worth your while to investigate?

## BT MANURE CARRIER

You can do those very things with the BT Manure Carrier. Half-a-ton of manure is its capacity—its big load—cleans your

It runs on a level overhead track, suspended from the mud sills of your barn, and out along a swing pole into the yard. It's easy for a boy to load and push it out, no matter what is the condition of the yard. Saves more

hard disagreeable work than any other implement on your farm. Will do the work for fifty years.

Used by the leading dairymen and on all the Government and Agricultural College farms. Write for our Illustrated Book No. 22 that gives detailed information about BT Manure Carriers. Sent free if you will mail the coupon. Address

1055 Beatty Bros. Limited Hill Street Fergus, Ont.

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### Orchard and Garden Notes

Tramp the snow well about apple and plum trees to prevent injury by mice.

Clean straw from four to six inches deep should be placed on the straw-beries.

Go over the cabbage and other vegetables stored in the cellar and pick out the diseased specimens.

Take sions of apple trees for next season's grafting. Bury them in sand or sawdust in a cool cellar.

Butternuts and walnuts gathered last month, with popcorn and apples, add to the enjoyment of the long evenings.

Should there be quail in the vicinity, encourage them to lodge near you, and do all possible to prevent their destruction, either by hunters or the elements. They are too valuable on a farm to be destroyed.

Clean hay or straw may be placed on perennials and covered with boards or tar paper to prevent the plants from getting wet. It is well to avoid putting on any material that will smother the plants or permit of their getting wet.

Encourage the birds to lodge near the farm buildings by placing grain, suet, or other food where they can get it easily. Nearly all birds, with the exception of the British sparrow, are a decided advantage to the farm.

### Winter Protection for Trees

John Sanderson, Wentworth Co., Ont.

I have been told that of all the orchards planted, only 25 per cent are properly attended to before coming into bearing, and a good large percentage never bear fruit at all. Those of us who have spent money in setting out young orchards, and there must be a goodly number of us if the reports of the nursery companies are true, will do well to see that the trees get proper attention this fall in order that the winter injury that plays havoc with so many trees may be avoided.

One point on which I would lay special importance is the cutting away of all growth for a space of two or three feet around each tree. Such growth is a shelter to mice, and trees so surrounded are apt to be girdled. One can cut away all the growth around a tree in less than a minute if he has a good sharp hoe. I always take a file along to the orchard with me. Throwing a shovelful of earth around the trunk of a tree to keep away vermin is a fairly good plan that I sometimes practice. A point to be noted is that the earth be lifted from the ground several feet away from the tree. If taken immediately beside the tree, a hole is left in which water will settle.

Sunscald is another form of winter injury for which I am prepared. My method is to take ordinary news papers and wrap them around the tree, tying tightly at top and bottom with binder twine. An important point here is to start the wrapping at the top of the tree and proceed downwards spirally. When this method is used the overlapping paper sheds snow or water, whereas if one started to wrap at the bottom of the tree the overlapping would be such as to allow of water getting in next to the trunk and ice forming there. Another important point is to see that the paper is tied right tight to the tree at the top.

Other methods of protecting the

trunk that I have seen practiced with good results are to wrap corn stalks around it, to protect with two boards nailed together in a "V" shape and stood against the south side of the tree and wood veneer. Saw-poppers, however, afford the cheapest protection, and they are quite effective.

### Mulch for Small Fruits

L. Montgomery, Halton Co., Ont.

Strawberries will survive the winter without any special attention—occasionally. As a general rule, however, it is much more advisable to mulch the strawberry plantation in the fall. This mulch, which in my plantation consists of straw, is applied to a depth of three or four inches over the mulched rows as soon as the ground freezes and a heavy cart can be driven over it without injury to the plants. In the spring this mulch is drawn off the plants into the space between the rows. It then tends to keep the berries clean, keeps down weeds, and is very effective in retaining moisture. Last summer when the weather was particularly dry, we picked half as many strawberries again on the main portion of the plot as on two or three rows at the sides that, owing to a shortage of straw, had not been mulched.

Our raspberry plantation is conducted on what we call the mulch system. For the first year the plantation was kept thoroughly cultivated and that fall straw was scattered around to a depth of almost a foot. For work with our raspberry plantation consists in adding a little more straw mulch every necessary.

We are not sure that this mulch system would work satisfactorily with bush fruits such as strawberries and currants, but we intend to give it a trial.

### The Family Orchard

R. Neil, Oxford Co., Ont.

I can remember the day when almost every farm house in this county had alongside its family orchard. In many cases the trees have been allowed to die out or have been cut down, and the family orchard is not the popular institution that it formerly was. This is a mistake. A plentiful supply of raw fruit in summer and fall, and of preserved fruit in the winter, is a source of pleasure and satisfaction that we can't afford to miss.

I would suggest that in planning for a family orchard that we have an exceptionally good cooker. One tree of Astrachan, one of Yellow Transparent, one of Duchess, and one of Snow apples. These four are the main supply of fruit have a few trees of such varieties as the Spy and Blenheim. I am also favorable to a tree or two of Talman Sweets as this variety is an exceptionally good cooker. Some of the varieties that I have here mentioned, notably the Spy and Blenheim, do not come into bearing until 10 or more years after setting. I would suggest that these varieties be planted 40 feet apart each way and every 20 feet plant such early bearing varieties as the Wagner.

For cherries I would recommend two or three trees each of Early Richmond for early fruit and Montmorency for late fruit.

My favorite variety of pear is the Bartlett. Clapps is a good variety of early pear and the Busch of late pear. A few plum trees also might be planted to good advantage. In selecting varieties here the housewife knows her own preferences best.

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It pays to grade the pigs carefully, put the smaller ones by themselves and give extra care.

Smaller pigs are kept stunted if left with the larger stronger ones, by being crowded from the feeding trough.

If hogs become lousy they never do well. They should be dipped in a tank or thoroughly scrubbed with a disinfectant.

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Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Office of Lakeshore, Lakehurst, Hall's Bridge and St. Mary's, and at the Office of the Post Office Inspector Kingston. H. MERRICK, P.O. Inspector, P.O. Inspector's Office, Kingston, November 20, 1913.

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**Sows During Pregnancy**  
Prof. W. B. Richards, N. D. A. C.

Assure the pregnant sow an abundance of exercise; and fortunately the farmer succeeds in complying with this requirement better than the breeder, who has a tendency to house his pure-bred too much. If you have a piggery, I do not believe it advisable to keep the sows in it during the winter months, unless they have access from it to large yards where they are free to get some indolence to exercise. A good practice is to let the pregnant sows run in the barnyard after the cattle. Avoid letting the horses run in the same yard, if this can be done, for they frequently injure pregnant sows where they are together.

The best way to feed the sows during pregnancy is to scatter some underground oats or barley on the ground and let them pick it up. Place the grain as far from their sleeping quarters as possible in order to compel them to take some exercise in going to and from their feed. In addition to this feed a slop made from middlings at least once a day and in addition supply them with all the water they wish to drink. It is advisable to heat the slop feed, especially during cold weather, to avoid freezing in the trough, and to make it more palatable.

Many farmers use a straw covered shed in which to shelter the brood sows. This proves very successful. We have used one with good results at this experiment station. Where straw is so abundant such a shed is very easily made. It is well, however, to use considerable care in order to construct a frame work which will support the straw placed over it. Cases have been known where they have "caved in" from the weight of the straw over them and the pigs have been smothered.

I had taken your paper for some time before but was persuaded to change for another farm paper; but I have decided to change back again, as I like Farm and Dairy the best.—Geo. Wilson & Sons, Ontario Co., Ont.

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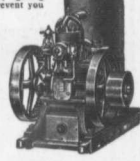
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**Dairy Conditions Unsettled**

(From our B.C. Correspondent)  
Occurrences in British Columbia this fall have been big portent for the dairying industry. Never, perhaps, has the future been so bright, and certainly never has the situation been so unsettled. Grade dairy cows have sold this fall at auction for as high as \$232. Such auctions of stock as have been held have been largely attended and characterized by sharp bidding, and poor indeed, has been the grade cow which did not command \$70. On top of this, by virtue of an act passed by the last legislative session making testing compulsory, government inspectors have been systematically testing and condemning tuberculous cows in many sections, the consequence being that before the end of the year every affected animal in the entire province will have been destroyed.

This would be enough to make an exact forecast of events problematical, but still another factor to be reckoned with exists. The livestock department at Victoria has formulated a plan by which milk testing stations will be established immediately in all sections pasturing within certain limits 400 cows, and ultimately Mr. H. Rivex, dairy inspector, states, every cow in the province will be tested as to quality and quantity of milk production.

**MAKING PROGRESS WITH BAREE**  
That the dairying industry in the Coast province is being revolutionized, and in very rapid fashion, is indicated by the foregoing bald statement of facts. Not only is the tuberculin test, formerly welcomed only by progressive dairymen, now compulsory but the butter fat test will be taken regularly in every herd of cows. In other words, not an occasional dairy herd, but every herd in the province, is going to be scientifically tested. And culling will follow the testing as a matter of course.

The provincial department of agriculture is taking the bull by the horns in an endeavor to produce conditions in British Columbia superior to those in any other section of North America. It has not been content with simple enforcement of the existing regulations. During the present season it has imported from Ontario and auctioned off at special terms to farmers a total of 500 head of choice dairy cows. The animals have been purchased by government agents, and while not pure bred, are high grades. Introducing them with pure bred bulls, the department officials are actively working for the betterment of the dairy blood in the province.

**COMPENSATION INADEQUATE**  
Naturally some opposition to the government's campaign has manifested itself. The principal objection raised has been that the compensation paid for condemned animals, which is generally considered inadequate. This feeling found an outlet at a recent meeting of the Lower Mainland Milk and Cream Shippers' Association. The matter was considered of such importance to the Fraser Valley that a resolution was passed to be placed before the authorities.  
"This association," the resolution

read, "has repeatedly protested against the glaring injustice of testing and slaughtering the dairy cows of British Columbia and paying a very insufficient compensation, while at the same time allowing milk from untested herds in the United States to be sold without restriction to the British Columbia consumer. We, therefore, again repeat our protest against such unjust action."

"While this association welcomes the testing of all dairy cattle in the province, and fully recognizes the importance of securing and maintaining a pure supply of milk for the consumers, we strongly object to the sacrifice of our herds for less than a third of their value, which sacrifice can only result in reducing the supply of milk over which the government has control and increasing the supply from the American side over which the government up to the present time has exercised no control. Therefore, the meeting feels that the dairymen of the province would be justified in resisting the forcible testing of the cows until the past conditions are rectified; and that the secretary be instructed to send a copy of this resolution to the government and all members of the association, asking their hearty cooperation and assistance at a mass meeting if necessary."

The government has made no reply to this resolution, and the testing and slaughter of tuberculous stock is found to be going on. The mass meeting of protesting dairymen has not yet been held. The Vancouver Sun, a Liberal organ, has made the compulsory testing of cattle the subject of an attack, both in its news and editorial columns, upon the government, its contention being that the necessity for killing slightly tuberculous cows has not yet been proved. If the compensation was larger, however, it is safe to say that not half a dozen dairymen in the province would object to the tuberculin test.

Thoughtful dairy farmers realize that the complete elimination of tuberculosis from local herds is the very best means of combating the American competition referred to in the above resolution. So far as length of haul is concerned, the Washington producer is now able to compete with British Columbia milk. But how well will he be able to compete when the fact is published in Vancouver, Victoria, New Westminster, and the other cities that a bottle of local milk cannot possibly contain germs of bovine tuberculosis—that there is not a tuberculous cow in the entire province?

**PAID FOR EXTRA QUALITY**  
It should pretty nearly every Washington milk out of the market. I know of a progressive dairyman near Vancouver who for many months secured 13 cents a quart for his milk, while others were getting 10. The explanation is quite simple. He advertised the fact that all his cows were tuberculin tested, that the milk was bottled under sanitary conditions, and that the civic authorities examined it regularly and certified it to be pure. The dairy farmer, like every man on the land, must some time realize, as did this rancher, that his product can

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**British Cow**  
"That it... ing that th... to discontin... slaughter a... cattle, unles... such time a... made of the... until such t... in a position... ditions up... milk."

The forego... almost un... Columbia da... ference to di... and the sla... mals sines... written to B... British Colum... ing the cour... dairymen ma... tions. Mr... for the dairy... to the govern... bovine tuberc... to the human... tuberculin... third, granti... action being... desired effect... not control... to the provin... Washington.

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The dairy f... ing to build... ter should us... Rolled butter... days.

not be too good. The better it is, the better will be the return.

All herds on Vancouver Island have now been tested and the affected animals killed, so that the entire district is free from tuberculosis. We have the word of Mr. W. T. McDonald, Live Stock Commissioner, that the same cannot be said of another similar area on the American continent. Lulu Island and Delta herds have been tested, and the inspectors are now proceeding inland to Chilliwack. Each farmer is notified when his herd is to be examined, and the tests cover several days. One pleasing feature of the inspections made to date has been the relatively small number of reactions.

#### TESTING LEADS TO EFFICIENCY

The tuberculin test cooperates with the butter fat test to make dairy herds more efficient. The systematic tests as to quantity and quality of milk produced by each individual cow will be made at the joint expense of the government and local cow testing associations, the latter being given a yearly bonus. At Chilliwack, which is perhaps the premier dairying district of the province, a testing station has already been established with a competent inspector in charge. This man will visit monthly every herd in the district, taking the record of each cow. At the end of each year the records will be averaged.

For the present, similar testing stations will only be established where within certain areas there are as many as 400 cows. Later, however, the live stock division expects to make provision for the monthly testing of every dairy cow in the province.

#### British Columbia Dairymen Act

"That it is the opinion of this meeting that the government be requested to discontinue their action in the slaughter and quarantine of dairy cattle, unless full value be paid, until such time as a thorough test can be made of the milk offered for sale and until such time as the government is in a position to enforce the same conditions upon all the producers of milk."

The foregoing resolution was passed almost unanimously by 300 British Columbia dairymen who met in conference to discuss the tuberculin test and the slaughter of condemned animals since the foregoing article was written to Farm and Dairy by our British Columbia correspondent. During the course of the meeting, the dairymen made several important contentions. Mr. John Oliver, who spoke for the dairymen, said that it was up to the government to prove first that the tuberculin test was transmissible to the human race; second, that the tuberculin test was reliable, and third, granting the two foregoing, the action being taken was not having the desired effect as the government has not control over the milk imported into the province from the state of Washington.

A dairymen from Langley claimed that he had innocently purchased six previously condemned cows that had not been quarantined by the government inspector. The dairymen also claimed that the law which allowed their animals to be slaughtered with little compensation was not legal as it infringed on the duties of the Dominion Department of Agriculture.

After over two hours of discussion by the dairymen on one side and Hon. Price Ellison, Minister of Agriculture, on the other, the resolution that we have quoted was passed.

The dairy farmer who is endeavoring to build up a private trade in butter should use the print exclusively. Rolled butter is not in demand nowadays.

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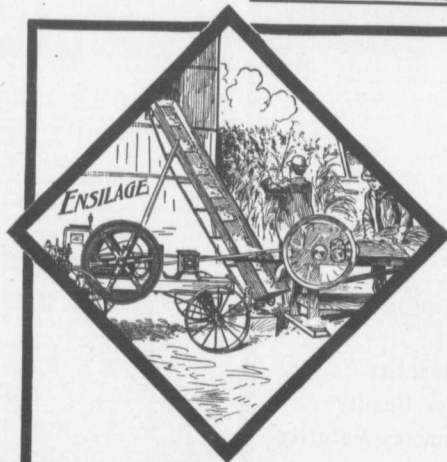
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A Renfrew Standard gasoline engine would furnish you with power for sawing all your wood, cutting your fence posts, turning handles, running the grindstone and the emery wheel.

It would drive your thrasher, grain elevator, straw cutter, fanning mill and hay press. Some people even use the Renfrew Standard for running the sausage grinder, green-bone cutter, separator, washing machine, while on other farms it is used to pump water and run electric lighting plants for house and barn.

We have letters by the score from farmers telling us that they wouldn't know how to get along now without a Renfrew Standard engine. They say, too, that they are sure there is no other gasoline engine so efficient as the Renfrew Standard.

Certainly there is no engine that starts so easily; for the Renfrew Standard starts without cranking in all kinds of weather, hot or cold, fair or rainy.

And where else will you find an engine that runs so smoothly, and is so perfectly balanced, that it does not "creep"—does not need to be anchored down? Where is there another engine that has no pipes, fittings, cooling pumps or fans to lock, freeze or get out of order? Where another engine so simplified, so free from complications, so easy to understand?

The Renfrew Standard is the kind of gasoline engine you want and need. And if you will tell us the size of your farm and general requirements we will give you the value of the knowledge of our experts in choosing the size of engine. But be sure and write for our free booklets and circulars. Do so today—Now.

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# POTASH

## PRODUCES PROFIT

Experiment on Beans  
Conducted by V. G. Hector, Erindale, Ont.



UNFERTILIZED      COMPLETE FERTILIZER      PLANTAGE BEANS POTASH

Yield per Acre	Baskets	Baskets	Baskets
	702	1194	758

Increase directly due to application of POTASH  
—456 Baskets.

The past year has witnessed a remarkable increase in the consumption of POTASH for Agricultural purposes in the Dominion; an increase of nearly 100 per cent. being recorded.

POTASH is an essential Plant-food and this large increase proves that the Canadian farmer realizes the value of POTASH in the production of his crops. Whether a farmer mixes his own fertilizer or uses a ready-mixed brand he should always ensure that his mixture will contain a high POTASH content, because most crops remove more POTASH from the soil than Nitrogen and Phosphoric Acid, and also because

### Potash Increases Quantity

### Potash Improves Quality

### Potash Promotes Maturity

POTASH can be purchased in the highly concentrated forms of

#### MURIATE OF POTASH and SULPHATE OF POTASH

from the leading fertilizer dealers and seedsmen.

Write us for copies of our FREE, educative bulletins, which include

- "Artificial Fertilizer; Their Nature and Use."
- "Principals Potash Crops in Canada."
- "Fertilizing Orchard and Garden."
- "Farmer's Companion."

## German Potash Syndicate

1102-1106 Temple Bldg., TORONTO, ONT.

## NOTES FROM THE MARITIME PROVINCES

### Fall Fairs in Nova Scotia

W. A. MacKay, Provincial Dairy Superintendent for Nova Scotia

After the Provincial Fair came the Cumberland County Fair at Parrsboro, on the Basin of Minas. This was the second annual fair there, and the people of town and country were justly enthusiastic over it. The exhibits in all lines were three times as great as last year, and the attendance for the two days about equally large. The people there all turned in with a vim, determined to make it a success, and they did. They haven't yet got a pavilion for inside exhibits, but three large canvas tents made a good substitute, and the committee were busy discussing ways and means of getting a pavilion up by another year, and no doubt they will succeed.

On the same date the East Hants and Colchester Exhibition was held at Stewiacke. This exhibition is one of the best farming districts in the province, and particularly noticeable were the herds of dairy cattle. It is from this district that most of the Halifax milk supply comes.

On September 28, 29, and 30, the Lunenburg County annual exhibition was held at Bridgewater. This county is largely populated by people of German descent, and is noted for its fishing industries, being bordered on the south shore with a long coast line on the Atlantic Ocean, but judging from the agricultural exhibits at their annual exhibition, one must come to the conclusion that there is considerable farming done, and that the possibilities in this line are great. Their plant is perhaps the finest in the province, and this year a new building was in course of construction at the end of the horse barn, that is to play a very prominent part in the educational part of the show as years go by.

This is a two-storey building, and is to be called the demonstration building, the lower floor to be a stock judging pavilion, where the points of the different classes in competition will be demonstrated to the people by talks from the judges and discussion. The second storey will be a lecture room, where practical talks and demonstrations on the different branches of farm work will periodically take place during the exhibition. It will also be used during the winter months for putting on a short course somewhat similar to what is being carried on at the Agricultural College.

### OXEN A PROMINENT FEATURE

Particularly noticeable at the Bridgewater Exhibition was the exhibit of working oxen. The ox is the beast of burden in this country, and perhaps nowhere in Canada can be seen an exhibit of working cattle be found in one place as here. Great large 1,400 to 1,600 pound steers, fat and groomed as slick as any horse would be, the horns nicely polished with shining brass tips, the "head yoke" accurately made and nicely painted, fitting securely behind their horns by means of straps around the horns, were a source of pride to the exhibitors. It is claimed that when the "head yoke" is properly fitted (which only an expert in the work can do) that they are much easier on the animal and that they can draw

a bigger load than with the neck yoke. The main feature of the exhibition here is the ox drawing contest, where perhaps 20 or 30 pairs compete as to who can draw the largest load. This year 7,300 pounds was the load that was drawn by one pair on a flat stone boat. One year not long ago there were 80 pairs of working oxen on exhibition.

The people here are now building an up-to-date cream gathered creamery, and when they give the same attention to their cows as they give to their working cattle, they will no doubt make a huge success of it.

The meet on the list was the Queen's County Exhibition away up at Caledonia, the terminal of a branch line of the Halifax and South-Western Railway. This was one of the smaller exhibitions, but the same enthusiastic spirit prevailed, and the exhibits were quite on a par with Bridgewater, and as at all the exhibitions in the western end of the province, there were more working oxen than horses.

This was the main week of the exhibitions, five being held as follows: Yarmouth on the 1st, 2nd and 3rd which is one of the oldest annuals, and where there has been a development from year to year, until it is now from point of attendance the largest county exhibition in the province. A strong committee in charge has kept this annual on the forward march. New buildings are added from time to time; this year a new one that will be used for a demonstration building and the holding of a short course during the winter months.

Pictou County Exhibition, in the old shiretown of Pictou, an annual fair, held from September 28th to October 1st, was marked by a large attendance and one of the best exhibits of live stock, an extra large number of horses, making big classes that were so closely matched as to make it difficult work for the judges to decide the winners. Cattle were also out in larger numbers than usual.

### A FOUR COUNTY AFFAIR

Then came the Cape Breton Island second annual exhibition at Sydney, from September 30th to October 4th, which shows the greatest development of any of the exhibitions in any of the four counties in the island, with special classes for each county, and in all classes of live stock the exhibits certainly were creditable to the island, and showed to a marked extent the great possibilities along agricultural lines in that county, which is known largely as an Iron and Coal County. When the Sydney people take hold of an enterprise it means it must go, and this was exemplified by their second annual exhibition, with an attendance of well over 60,000.

Guyabro, on the 3rd and 4th, was another of the smaller shows, but the exhibits were good in nearly all classes. The weather man, however, doesn't seem to favor the Guyabro people, for now for three consecutive years it has rained on both days, which, of course, had a marked effect on the attendance.

The annual fruit show of King's, Hants and Annapolis Counties, or

(Concluded on page 39)

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These two g... Mr. Trimba... Albin con... Land. Per...

sacrificed th... true Ayrsh... tution, and... does not ch... a matter of...

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3rd. Unde... heifers bef... The R. o... more clearl... not get heav... derized cow... breed is on... capacity to f... feed and gr... stand the st... herself the... into milk an... In the true



WHAT IS THE TRUE TYPE OF THE AYRSHIRE COW?

G. D. Mode, Prescott Co., Ont.

THERE has been in the past, there is to-day, I suppose there always will be, a vast difference of opinion as to what is the true type of Ayrshire cow. As with all other breeds of live stock, each breeder has his own peculiar idea regarding type, regardless of the official scale of points as laid down by the different associations of the perfect animal.

In Ayrshires, many tell us that there are two different and distinct types, namely, the showyard or fashionable type and the producing type. It may be that certain of our breeders are working with a different object in view, but regarding type I have always held and do hold that there is only one true and correct standard or type of Ayrshire cow, one standard embracing both the showyard and the producing cow.

True, some of our breeders and a number of our judges have laid too much importance on neatness and attractiveness. In doing so they have

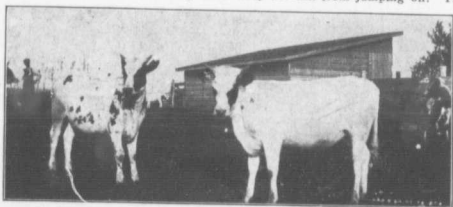
these characteristics, and if we breed for these we will have no trouble getting records or of combining the two types into one high standard of performance cow.

A Hot Grindstone

H. Percy Blanchard, Elterhouse Farm, Hants Co., N.S.

A short while ago I was in the Windsor Foundry and saw there a little emery wheel they had for sharpening tools. I coveted it. On enquiry they told me that they would make me one for seven or eight dollars.

It consisted first of a small stand, about 10 inches high fastened with four bolts to the bench. Through the top went a little shaft, on one end of which the stone was fastened. The other end had a pulley wheel about two inches in diameter for a two inch belt, and flanged at both edges to keep the belt from jumping off. The



Does Western Air Make Heifers Grow Larger?

These two growthy heifers are the property of Mr. A. H. Trimball, Red Deer, Alta. Mr. Trimball writes Farm and Dairy that Ayrshires seem to grow larger under Alia. Under conditions than in the case of other parts of Canada or even in the Old Land. Perhaps the outdoor life and Mr. Trimball's good feeding are more responsible.

stated the greatest essentials of the true Ayrshire and dairy cow, constitution, and capacity. However, this does not change our standard. It is a matter of fashion in breeding.

WHAT OF THE CONSEQUENCES? At the same time, is it not a factor of great importance to our favorite breed? What will be the outcome if this craze for attractiveness continues to increase? Prof. Barton tells us that the breed, like all other breeds, has its defects. No matter how high the Ayrshire cow stands in our estimation, if she has defects it is up to our breeders to overcome them.

Careful breeding and selection will overcome any defect, and as breeders we can make our favorite breed just in accordance to the standard of our ideal.

Having made a careful study of this important question, I find that about 50 per cent. of both males and females are under size and do not come up to our standard regarding size. This is a serious matter, and one which every zealous breeder must face. Three causes I find which have caused these results:

- 1st. Undersized by being underfed in order to develop neatness.
  - 2nd. Undersized by using undersized sires.
  - 3rd. Undersized by breeding our heifers before they mature.
- The R. of P. test is showing us more clearly every day that we cannot get heavy producers in small undersized cows. The dairy cow of any capacity to handle a large amount of feed and great constitution to withstand the strain and having within herself the ability to turn this food into milk and fat.
- In the true Ayrshire cow we have all

stone they gave me was about eight inches in diameter and five-eighths inch face. It was not the old fashioned emery wheel but made of carborundum. This material will cut a tool to a fair edge, but will not burn it if rightly used. At the foundry they called the metal part an "arbor." Some machinists, when he sees this letter, will make some of these, and advertise them in Farm and Dairy.

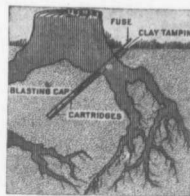
MAN POWER NOT NEEDED

But specially what I want to tell you is the way I have mine mounted. I got a really strong box about two feet long and a foot wide and deep. At one end of the outside of the box, I started on my arbor, the shaft cross-bolted on the side of the box. Then I stretched the driving belt over the flywheel of my gasoline engine that is in the barn, and put the box in proper position to belt up the emery wheel to the engine. Then I had cleats to the floor on three sides of the box, so as to hold the box just in place. Next, I start the engine, sit on the reserved end of box, and grind away, as for instance this afternoon to sharpen the root cutter knives.

You should have seen the gaps in those knives; it would have been an all day job for two men on the old-fashioned grindstone. And 15 minutes put them in shape like new on the carborundum wheel. When I was through I picked up the box and stowed it with arbor still mounted on it, in a corner. I will leave the cleats on the floor to be handy for next time.

The Canadian-Australian Royal Mail steamer Niagara, which arrived in Vancouver, B.C., on November 12th, had a cargo of 18,000 boxes of New Zealand and Australian butter.

Turn Waste Land Into Profit



C  
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YOU are losing money every day by allowing stumps and boulders to occupy the richest and most productive parts of your farm. Why not remove them with C.X.L. STUMPING POWDER? The cheapest and quickest method known for clearing land. Write to-day for our Free Booklet. Write us about arranging Demonstrations.

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I thrive on hard work—just "get it up"—and it costs but a trifle to keep my 15 H.P. "hustle" vice because I am one of the famous



Engines—the line that exactly meets every farm need with a high quality engine at a low price. I will give you to write for full particulars of Gilson's "Does Like Heavy Engines. 1 to 10 H.P. Gilson Mfg. Co., Ltd 1010 York St. Toronto, Canada.

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Silver Manufacturing Co., Salem, Ohio



\$18.00 freight prepaid, is the price of the DILLON LITTER CARRIER. Our Track, Hangers, Brackets, etc., at correspondingly low price. One size, One Grade of Material, (the very best) and One Price.

We do not employ middlemen but sell direct to the farmer. Order Now. Prompt delivery.

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## To Farmers and Farmers' Sons

### SHORT WINTER COURSES

AT THE

# Ontario Agricultural College

Guelph

(The only expense to you is board at reasonable rates while in Guelph and reduced railway fare)

#### STOCK AND SEED JUDGING

January 13th to January 24th, 1914.

Judging Horses, Sheep, Cattle and Swine; Slaughter Tests; Lectures on Breeding, Feeding, etc. Judging grains and seeds of other farm crops; selection, germination, purity, etc.

#### FRUIT GROWING

January 27th to February 7th, 1914.

Varieties; nursery stock; spraying; fertilizers; pruning; marketing, etc.

#### POULTRY RAISING

January 13th to February 7th.

Poultry houses; breeding and mating; judging; feeding; winter eggs; fattening; dressing; marketing, etc.

#### DAIRYING

Three months course in factory and farm dairying.  
January 2nd to March 20th, 1914.

Summer course in butter and cheese making. Courses of one week for Cow Testers.

#### BEE-KEEPING

January 13th to January 24th, 1914.

Care and management; swarming; queen rearing; diseases and treatment; quality of honey; marketing, etc.

For full particulars write for our Short Course Calendar, which will be mailed on request.

**G. C. CREELMAN**  
President

### Wider Markets for Pure Breed Cattle

(Continued from page 4)

ing of pure bred stock or to grade up their herds of common cows with the very best pure bred dairy sires available for that purpose.

The agricultural paper, through its editorial news and advertising columns, has been and is now a very potent factor in spreading knowledge regarding the economic value of pure bred stock. Dairy papers and books are becoming more and more influential and farmers are fast losing their old contempt for book-farming. The great drawback with this, as with nearly all means of agricultural education, is that it reaches the good farmers rather than the poor ones.

**THE BREED SOCIETIES**

The dairy cattle breeders' associations have a large field for popularizing their favorites through the press by means of contributed articles, advertising, news items, and supplying literature to inquirers reached in this way. Pamphlets may be provided also for distribution by the secretaries of breeders' clubs, the local offices of the provincial departments of agriculture, also at exhibitions and other public gatherings. Encouragement of milk and dairy tests by means of money grants is, of course, an old and efficient way of acquainting the public with the superior qualities of pure bred stock.

The Holstein-Friesian Association has even offered prizes at foreign shows in order to promote a foreign trade with our cousins in South Africa, New Zealand, the West Indies, and other countries. This gives the breeder a second string to his bow, and so enables him to conduct his operations with greater assurance of making the best progress along the line of maintaining first class sires and dams unless they see a fairly sure market within their reach. While therefore the sale of good stock to go abroad does not directly benefit Canadian dairymen, it helps indirectly by encouraging breeders to produce more and better cattle.

**THE INDIVIDUAL BREEDER MAY HELP**

Each individual herd of well-bred, well-fed and profitable cows becomes an illustration centre from which radiates the best sort of advertising in a volume that no man can measure. In these days seeing is believing. An actual demonstration of economic value is far ahead of glittering talk. It is, therefore, wise for breeders to keep private records of every day's production of their cows, as well as to take advantage as far as possible of all the facilities provided for making official and semi-official tests. Dairy tests at the winter fairs and other exhibitions are equally potent factors in proving to the general dairymen the benefit which may derive from the use of pure bred sires.

Only a few of our breeders have yet realized the power of printer's ink as a factor in selling stock. Plenty of advertising, if skilfully done, will seldom fail to find a market at profitable prices if a man has the right goods to sell. Salesmanship, as pointed out by Mr. Nixon in Farm and Dairy a few weeks ago, is possibly the weakest point in connection with the business of our stockmen. Breeders of Ayrshires will readily select one of their number, breeders of Jerseys one, and breeders of Holsteins a genius for selling cattle in large numbers. Salesmanship is certainly an art worth cultivating.

**GOVERNMENT ASSISTANCE**

The distribution of pure bred sires undertaken by the Live Stock Branch this year seems to me to be along the right lines. The aim is to aid sections where pure bred sires are lacking and to encourage new communi-

Don't Cut the timber for your new barn before investigating The Steel Truss Barn. a card to The metal Shingle & Siding Co Ltd Preston Ont will bring full information. Send today

### What Every Dairyman Needs

A clip to hold the cow's tail while milking. Handy and easy to use. Saves the milkers many a nasty blow in the face from the cow's tail while milking. Sent post paid to any address, with full instructions as to how to use them. Return receipt of 50c fifty cents. Address

**R. A. CHAMBERLIN**  
61 BIRSWATER AVE., OTTAWA, ONT.

### The Call of the North

Do you know of the many advantages that New Ontario, with its Millions of Fertile Acres, offers to the prospective settler? Do you know that obtainable free and at a nominal cost, are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, home stead regulations, settlers' rates, etc. write to

**H. A. MACDONELL**  
Director of Colonization,  
Parliament Buildings,  
Toronto, Ontario

### Be Safe!

Don't take too many chances with spavin, splint, white line, lameness, long growing, swelling of hock, etc. of horses. Use KENDALL'S SPAVIN CURE

It has been used by horsemen, veterinarians and farriers for 25 years—and it has proved its worth in hundreds of thousands of cases.

Bickerdike, Alta., Jan. 29, 1913.

"I have used Kendall's Spavin Cure for a good many years with good results. In fact, I am never without it."

H. NEEDHAM

Dr. B. J. KENDALL COMPANY  
Enosburg Falls, Vermont, U.S.A.

ties in follow-up help to provide uniform grade of The building institutions, sons, etc., grade herds the use of



This is Burkey O'Reilly, Eminent efficient cow has anec test, and 22 lbs. and for 77 lbs. of milk a this great cow for

another way of illustration to This, of course, one not giving With the furrt testing system, see some sort given to records Semi-official a yearly records, tend to give g work of the da to encourage th herd. A cow p dard amounts o



Good Enos Kets Hengerfeld mer, is one of max Marie Farm, near

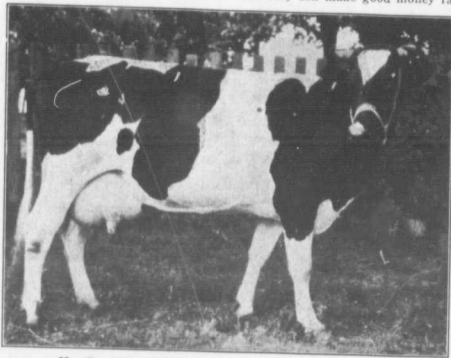
be given a certifi she, a grade cov sired by a pure b name, number a duced in one year vention the specifi and fat

WESTERN BE Trainload after

ties in following an intelligent system in breeding. This plan should help to provide a market for the medium grade of dairy bulls.

The building up, at our experimental farms and other Government institutions, such as hospitals, prisons, etc., of first-class working grade herds from common stock by the use of good pure bred sires is

what we need. This plan should help to provide a market for the medium grade of dairy bulls. The building up, at our experimental farms and other Government institutions, such as hospitals, prisons, etc., of first-class working grade herds from common stock by the use of good pure bred sires is



**Her Production is Equal to that of Five Average Cows**

This is Burkerje Hengerveid, 996, a pure bred Holstein cow owned by Joseph O'Reilly, Ennismore, Ont. Freshening at four years and seven months, this magnificent cow has produced 15,300 lbs. of milk in eight months, in Record of Performance test, and is still milking over 40 lbs. a day. Her best day's milking was 92 lbs., and for the first four months and 17 days after freshening she averaged 77 lbs. of milk a day. Look up the gossip columns for information about a son of hers for sale.

—Photo by an editor of Farm and Dairy.

another way of affording an excellent illustration to the country at large. This, of course, is a slow process and one not giving immediate results.

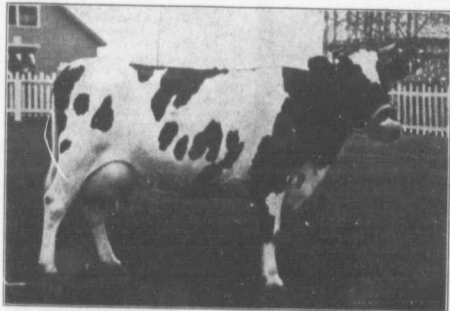
With the further growth of the cow testing system, I believe that we shall see some sort of official approval given to records made by grade cows. The Semi-official authentication of the yearly records of good grades would tend to give greater interest to the work of the dairy farmer as well as to encourage the improvement of his herd. A cow producing certain standard amounts of milk and fat might

**The Breeder's Ideal**

(Continued from page 3)

what we breed and develop that determines our destiny as a breeder.

It is of far greater credit to a breeder to go into the show ring with a line of animals of his own breeding



**Good Enough for First Place at the Canadian National Exhibition**

Meta Hengerveid Posh, first in the section for cows in milk at Toronto last summer, is one of many good cows that Sir Henry Pellett has collected at his "Lake Marie Farm," near King, Ont. At the time this photo was taken she was making 86 lbs. of milk a day.

—Photo by an editor of Farm and Dairy.

he given a certificate to the effect that she, a grade cow of a certain age, sired by a pure bred bull of a certain name, number and breed, had produced in one year under official supervision the specified amounts of milk and fat.

Training a horse to walk increases its efficiency on the farm and does not injure any other gait.

WESTERN DEMAND FOR COWS  
Trainload after trainload of grade

**Ontario Wind Engine & Pump Company's  
LINES ARE SUPREME**

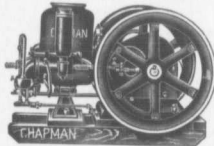


We have made our goods good, our users made them famous. We manufacture what our customers say, to be the best Kerosene and Gasoline Engines, Wind Mills, Feed Grinders, Saws, Pumps, Scoops, Tanks, Water Basins, Stanchions, Well Drills and Pressure Tanks, and we believe they know.

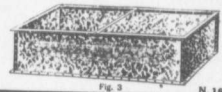
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Have you a Toronto Pneumatic Tank? Get all the advantages of a city home where you live. Put the water on the top floor in your bathroom, and sprinkle your lawn and garden. Enjoy the comforts of running water and baths, and protect your home to the beauties of country life the advantage of plenty of water by turning a tap.

Get our Pressure Tank and Power Catalog. It is what you want. It's yours for the asking. Write to-day.



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**LIVINGSTON'S  
Pure Linsed Oil Cake Meal**

50 Years the Best by Test

A Food to Make Cattle Fat

TONES THE SYSTEM

Makes More Butter Fat

Try Our Nutted Meal for Sheep

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All Good Feed Stores and Dealers

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**Ontario Provincial Winter Fair**

GUELPH, Dec. 9th to 12th, 1913

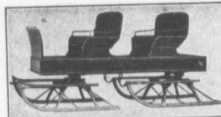
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 London, Ont.

R. W. WADE, Secretary  
 Parliament Buildings, Toronto



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On Your Sleigh  
 until you get our Pocket Cata-  
 logue No. 33, and then you will  
 see "Sleighs" to all other prices  
 and sleighs, for we sell direct to  
 you.

**GIDLEY CARRIAGE CO.**  
 Sales Dept. D.  
 PENETANG, ONT.

**The Feeders' Corner**

The Feeders' Corner is for the use  
 of subscribers. Any interested  
 are invited to ask questions, or  
 send items of interest. All ques-  
 tions will receive prompt attention.

**When Feeding a Cow**

By W. J. Gillett

Always keep the cow taking her  
 grain ration with avidity.

Always place the feed before her in  
 an appetizing manner. Always keep her manger sweet and  
 clean.

Always weigh every ounce of grain,  
 roots and silage you feed that you may  
 know exactly what you are doing and  
 always make a note of the weights of  
 the feed which you will find helpful  
 to you in acquainting yourself with  
 individuality, for surely you will find  
 that every cow in the herd has an in-  
 dividuality peculiarly her own and  
 that individuality may change from  
 year to year according to condition  
 and environment.

Always consider that palatability is an  
 important point in the selection of  
 your feeds and always remember that  
 variety is very desirable in the make-  
 up of your ration.

**Warm Water for Cows**

Experiments made at the Missouri  
 Station show that drinking water is  
 needed in proportion to the milk yield.  
 That is, a cow giving six gallons of  
 milk a day, needs about twice as  
 much water as a cow giving three gal-  
 lons a day. If the water is too cold  
 to be comfortable if drunk in large  
 quantities, the cow will not drink  
 enough and as a result will drop con-  
 siderably in her milk yield.

When Missouri Chief Josephine was  
 giving about 100 pounds of milk each  
 day she drank daily about 31 gallons  
 of water. Imagine how she would  
 have suffered if that had been ice  
 water. It was warm, however, and  
 Josephine did not chill after drink-  
 ing.

A good tank heater, or some other  
 device should be used this winter to  
 warm the water for the cows. It will  
 pay.

**Silage for Steers**

By W. F. Ward, Animal Husbandman

Silage is a quick finishing roughage  
 in milk that it produces large daily gains  
 and produces a glossy coat and a soft,  
 pliable skin. Moreover, it can be  
 used to advantage at times for carry-  
 ing cattle for a longer time so as to  
 pass over a period of depression in the  
 market, or to carry the cattle along in  
 thrifty condition so they can be finish-  
 ed at a later period.

For many years the belief was gen-  
 eral that cattle which received silage  
 as a major portion of the roughage  
 would have to be kept in warm barns  
 and not be exposed to the cold. While  
 they do need protection from the cold  
 winds and rains and need a dry place  
 to lie down, it has been clearly dem-  
 onstrated that warm barns are not only  
 unnecessary but that fattened cattle  
 make both larger and cheaper gains  
 when fed in the open sheds than when  
 confined in barns. Stocker or thin  
 cattle receiving silage will of course  
 need more protection than animals  
 which are being fattened.

The theory that silage-fed cattle  
 shrink very heavily in shipping to  
 market is erroneous. While the ac-  
 tual shrinkage during transit is some-  
 times greater, the fill taken at market  
 is usually good, and if good judgment  
 is used in preparing them for ship-  
 ping the net shrinkage is no greater  
 than for cattle which have been fed  
 on dry feeds. For 36 hours previous  
 to shipping rice-bright hay and stover  
 should be substituted for the silage in  
 the ration.



**"Griselda"**

Owned by GEO.  
 WINTER, Rockburn,  
 Quebec, and sold re-  
 cently to R. R. Hum-  
 phrey, Chateaugay,  
 N. Y., for \$3000.00.  
 Official yearly record  
 22,880.7 lbs. milk and  
 gave birth to her calf  
 7 weeks after test  
 closed, weighing 92  
 lbs. Fed during entire  
 test 6 lbs. Caldwell's  
 Molasses Meal daily.

**"PALATABILITY"**

We have had the printer spread out that word as you see it here for the sake of emphasis.  
 And it needs to be emphasized to lots of otherwise shrewd stockmen and farmers who fail to  
 recognize it as an essential element of all worth-while feeds.

Animals are pretty much like humans in this respect. If they don't like the taste of their  
 feed they won't thrive on it. They'll eat as little of it as they can help and hence lose both  
 condition and value.



**Caldwell's  
 Molasses Meal**

is the most palatable feed on the market, not because we say so, but  
 because it has demonstrated itself as such. We also guarantee its in-  
 gredients:

**84% pure cane molasses, and  
 16% edible moss, famous for  
 its therapeutic qualities**

and print them on the tag attached to every bag. Now, you know that that combination cannot be  
 beat for palatability—your animals will like it and thrive on it.

Caldwell's Molasses Meal increases the milk-flow of cows and keeps them in prime condition—it puts  
 spirit and go into your horses—it is the best and quickest fattener of steers, sheep, lambs, and hogs—  
 —because all animals like it.

The consistent use of Caldwell's Molasses Meal will reduce your forage bills by making other  
 cereals more palatable and digestible—its use is a big economy. Sold by all good dealers—let us  
 know if your dealer should be out of it.

**THE CALDWELL FEED CO., LIMITED, DUNDAS, ONT.**

Molasses Meal, Dairy Meal, Cream Substitute Calf Meal, Poultry Meals

The Be  
 Scrub stee are a  
 from stallions s  
 was invented. T

# In the Horse World

\*  
Timely Suggestions  
for  
Horse Owners



### Horsev Notes

A good brushing of the horse's mane around the roots induces a long, flowing growth.

Never hitch a heated horse in a chill wind without a blanket. Fifteen minutes of such treatment will injure him more than a hard drive of as many miles.

The proper trimming of the colt's hoofs promotes the development of well-formed and shapely legs.

When sending the colt crop to market make sure that the teams are nicely matched, not only in color, but in conformation and gait.

If there were more cement floors in horse stables there would be less thrush and other diseases of the hoof.

Have light entering the stables from the rear. It is enough to ruin any horse's eyes to have a window directly in front of him. Another point is to have the windows near the ceiling.

To keep the horse's digestive and assimilative organs in good running order, light work is necessary all through the winter.

### The Training of a Horse

Continued from page 6

Unless frightened, or made to do otherwise in handling, most horses are considerate of a novice, and are less apt to misbehave than with an experienced rider. This is especially true with children who frequently take liberties which would be fraught with more or less danger to an adult.

Nothing is to be gained by impatience and harshness; on the contrary, every impatient and harsh act will require 10 times as much patience and kindness to offset. By kindness and gentleness have been accomplished, and many dangerous positions passed in safety where a harsh word or blow would have resulted in disaster. On the other hand, firmness and a commanding voice are upon occasion absolutely required.

There is a great difference, however, between a firm and determined command when the occasion calls for it, and a harsh, impatient word or blow, and a horse is quick to appreciate the difference, rendering immediate and perfect obedience to the

one and sullen resentment to the other. What every real horseman will strive for is to gain the confidence of his horse. No satisfactory results can be accomplished without it, and it can only be gained by patience and kindness.

### Ensilage for Horses

Can I, with safety, feed ensilage to my horses? This is a question that farmers are continually asking but which few are in a position to answer. On most farms in Canada enough of other roughage is grown to feed the horses. Occasionally feed is scarce, however, and the silage question has been done with ensilage as a feed for horses. The Pennsylvania Station has conducted one very complete test.

At this station a group of horses for market were fed, one-third of which were fed silage in quantities sufficient to replace one-half of the hay normally used. This resulted in a smaller consumption of grain, less expensive grains and a finish equal to that secured when dry feeds were fed exclusively. There were seven horses in the silage lot, six of which also did not take kindly to it. Each horse was started on five pounds per head daily, which was increased gradually to fifteen pounds at the end of the first week. A further increase was then made to twenty pounds per head daily, which was the maximum quantity fed.

### NO EVIL RESULTS NOTED

During the 84 days of the test, the total quantity of silage fed per horse varied from 1,043.3 pounds to 1,536 pounds. No evil results of any sort were noted because of its use during the period when it was used, which demonstrates that where proper precautions are taken in harvesting, storing and feeding silage, it will prove to be a wholesome feed in the hands of a careful man. Because of its nature, however, it would not be a safe feed in the hands of one who is in any way careless.

As the total saving because of its use in horse feeding on the average



Bruised, Swollen Knee, Bog Spavin, Thoroughpin, Windpuff, Bowed Tendon, Capped Hock, Shoe Boil, Curb, Splint, etc.

Are Promptly and Permanently Reduced with

# Absorbine

THE ANTISEPTIC LINIMENT

(TRADE MARK REG. U.S. PAT. OFF.)

It is mild and pleasant to use—does not stain or leave a greasy residue. It is soothing, cooling, healing and powerfully penetrating, a true discutient and resolvent liniment—strengthening and invigorating to tired, lame muscles and tendons. Always pain promptly and stops lameness—takes out soreness and inflammation. In addition it is an

### Antiseptic and Germicide

containing no minerals or poisons and therefore harmless to the most sensitive tissues. Effective in Poll Evil, Quittor, Sores, Lacerations, Bruises, Cuts, Scratches or Speed Cakes. No danger of infection or proud flesh formations where **ABSORBINE** is used.

### ABSORBINE Does Not Blister or Remove the Hair and Horse Can Be Used

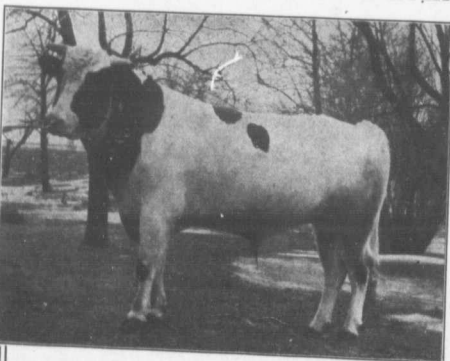
It is economical as only a few drops are required at a application. A bottle of **ABSORBINE**, diluted as per formula on label, makes three gallons of effective liniment at a cost of 80 cents a gallon. This diluted liniment is also antiseptic and germicidal.

**USE ABSORBINE** to remove Burs! Entanglements, Bog Spavin, Thoroughpin, Puffs, Shoe Boils, Capped Hocks, Swollen Glands, Inflamed Parts, Thickened Tissues, Rheumatic Deposits, Enlarged Veins, Painful Swellings and Affections; to cure any strain or lameness; to repair strained, ruptured tendons, ligaments or muscles; to strengthen any part that needs it. **Horse Book Free.**

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## Springbrook Stock Farm



### SIR KORNDYKE BOON

One of the best sons of Pontiac Korndyke, half brother to King of the Pontiacs, sire of the world's record cow, 44.18 lbs. butter in 7 days. Seven half sisters with records of from 31 to 38 butter, and his own dam, Fairview Korndyke Boon with a record of 32.17 lbs. butter in a week, 150 lbs. in 30 days, milk testing 4.86% fat.

If you want the most popular breeding get a son of one of the best sons of PONTIAC KORNDYKE. A few bulls to offer from One to Twelve months old. You cannot buy a daughter of the above bull, but will offer grand well bred cows in calf to him. The only way to get one of his Heifers. Good foundation for sale. Don't lose to write for prices. Just say when coming, to make your own selection.

A. C. Hallman - Breslau, Ont.

Waterloo Co. Bell Phone Connection



### The Best Friend of the Horse Industry is the Good Stallion

Scrub sires are a greater menace to our horse market than the automobile. Stock from stallions such as this one are in greater demand now than before the auto was invented. This fine Percheron is the property of F. J. Sullivan, Essex Co., Ont. He was prize-winner at London and Detroit.

## FARMERS. ATTENTION.

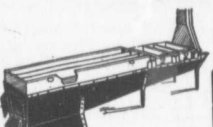
We want a man in every locality in Eastern Canada to sell our big line of Household Necessities, Medicines, Extracts, Spices, Stock Remedies, Poultry Supplies, etc., — direct to farmers. Every one a household necessity, sold on "Ravleigh's" Play-After-You-Are-Satisfied Plan.

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**\$100 CLEAR PROFIT**  
PER MONTH above all over and expenses. If you can furnish team, write at once for our matchless offer.

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- 2—Freedom from sagging in the middle or elsewhere.
- 3—Small interchangeable pans.
- 4—Less trouble with lime and other deposits.
- 5—Wearing the Evaporator uniformly.
- 6—Great convenience in cleaning or handling.
- 7—Finishing the syrup without reboiling.
- 8—Better syrup; therefore better prices.

**The Grimm Mfg. Co.**  
LIMITED  
88 Wellington St., MONTREAL, Que.

farm is so slight, it is doubtful whether or not its general use should be advocated. Where horses are being grown or developed or carried through the winter in idleness it would have a greater usefulness than where horses are at work. More study and investigation of its effect upon horses will result in approved methods free from danger being devised.

### A Much Overlooked Point

*R. J. Silling, Grey Co., Ont.*  
Did you ever dose a gelding for kidney trouble without satisfactory results? Perhaps your lack of success was because the trouble was in another quarter altogether. Examine the sheath. A dirty sheath will lead to the same symptoms as kidney trouble.

There is not a gelding anywhere that is not the better for having its sheath cleaned occasionally. Work horses on the farm should have their sheaths washed with warm water and Castile soap at least twice a year. Road horses should be cleaned oftener. Do the washing very gently. It will not take long, and I know it pays to give the horses this little attention.

### The Ideal Ration

By A. B. Nystrom

It is not possible to give a ration that will suit all conditions and all kinds of cows. In general, however, it may be said that the first requisite of an ideal ration for a good dairy cow is to give all the roughage (soiling crop, hay, silage, roots, etc.) she will eat up clean, and one pound of concentrates (bran, chop, all kinds of grain, soy bean meal, etc.) for each three to four pounds of milk she produces.

In most cases it will be found that this will be just about all she will eat regularly without going off feed. The second requisite in an ideal ration is that it should be nutritious. The ration should be sufficiently bulky on the one hand to fully distend the stomach and other digestive organs, and at the same time there should be enough digestible material to fully meet the requirements of the animal. Practical experience has shown that a proper balance is reached when about two-thirds of the total dry matter of the ration is in the form of roughage and one-third in the form of concentrates.

**VALUE OF PALATABILITY**  
In addition to this an ideal ration should be palatable so that an animal will eat it with a relish. While little is known concerning the effect of palatability, it is certainly true that of two feeds alike in all other respects, the one most readily eaten by the animal will be the more effective.

The secretion of milk seems to be intimately connected with the water content of the food. The cow needs a large amount of water to drink, but aside from this there is a demand for feeds containing a high percentage of water, such as green forage, silage, roots, etc. The cow's digestion is kept in much better tone when such feeds are used.

**THE IMPORTANCE OF BALANCE**  
To have an exact balance between the protein and the carbohydrates and fats is not so important as was once thought; for milk production it is necessary to have a larger amount of protein than for beef animals, but a dairy ration is now considered fairly satisfactory if the nutritive ratio falls anywhere between 1.4 and 1.65.

Let all of the ideal ration should be composed of such feeds as will furnish the largest amount of digestible nutrients at the lowest cost. This necessitates the liberal use of home grown feeds with proper selection of those which must be purchased.

### Safe Food for Holstein Breeders

(Continued from page 7)

looking pedigrees that looked very nice, but when I saw the animals, I wouldn't take them and use them in my herd as a gift.

We want to stick more closely to the good old Holland type, be more careful with the selection of our service bulls, study the weak points in our females, and select bulls strong in those points. Set up some standard for production and an ideal for type that we may feel proud of.

With a well-defined system skillfully applied, I believe we can do still greater things with the Holstein in the future than has been done in the past. Boasting phenomenal high records is dangerous and the buyer needs to exercise care before he pays long prices. These records are very attractive, but unless we get the pro-



### A Result of Grading

This cow, owned by C. O. Bennett, Ontario Co., Ont., has produced 61.6 milk daily when on grass with one gallon of chop. She is a grade Holstein and owes her milking qualities to her pure-bred sire.

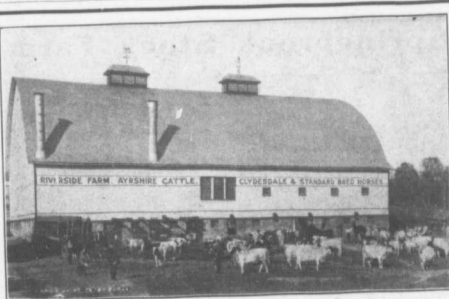
per conformation, it would be better to take a plainer pedigree and have a good individual. One of the greatest essentials, however, is good breeding, and when we get the right combination, we hardly know when we pay too much for a good service bull. Five hundred dollars' difference is a mere trifle in the choosing of a herd bull.

Greater care must be taken in the shape of the udders. We find some very handsome cow with very badly shaped udders. This spoils the look of any cow. When choosing a bull, this is a strong point to consider—see that the dam has a well-balanced udder. We are reproducing the ancestors through the sire, and any defects are sure to follow the offspring.

**HOLSTEINS FOR BEEF PRODUCTION**  
We also have great chances for beef production in the Holstein. Now that there is such a great demand for all kinds of meat and the prejudice against Holsteins is largely removed, we should lose no opportunities along this line. Every owner of Holsteins, and all males and females not up to the desired standard can be profitably disposed of for beef. With the changed tariff regulations, the opportunity is ours.

The color fad, of which we have heard so much of late, has absolutely nothing in it, so far as cow value is concerned. Some of the very best cows belong to all colors. Both have equal claims, and there are extremes both ways. A good cow, like a good horse, is never a bad color. It is a mere matter of fancy, and all that is necessary for them to come up to the required standard of the Holstein-Friesian Association.

There is lots of room for improvement with Holsteins in both Canada and the United States. I have been watching both sides of the line for over 25 years. Let us all do our best for there is a wonderful future ahead for the right kind of Holstein.



RIVERBIDE FARM, AVESHIRE CATTLE

CYBERDALE & STANBROOK BILLS HOTEL

The above is photo of stock barn and part of the Aveshire Herd on Riverside Farm (at Monte Bello Village), property of Senator Owens. This farm comprises 550 acres, of which 300 acres is under cultivation. It is a fine clay loam, free from stones, lime, drained, and as the manure from one hundred head of cattle, also hogs and horses, was spread daily upon the land, also heavy dressing of hardwood ashes last season, it is in a high state of culture and produces extra heavy crops of timothy, clover and alfalfa and grain. The balance of the farm — 250 acres — is in pasture and wood, including a hard maple orchard of over two thousand trees, constituting an ideal stock and grain farm.

The barn above shown is 76 by 125 feet. The lower part is stone and concrete floors and walls, well lighted, perfect system of ventilation, capacity for 80 head of cattle in stalls, with water basins for each animal, box stalls for 30 head calves and young cattle and for over twenty horses and colts.

The upper part or loft is 76 feet wide by 45 feet between the floors and track for carrier of horse fork. No posts or cross beams to interfere with hay and grain settling in the mow. Galvanized iron roof. Two hay barns, 30 by 40 and 30 by 100 ft. Suitable buildings for hogs, sheep and stables, carriages, implements, etc. All implements and machinery are modern, working in September, October and November, consequently very little frost-freezing in the winter. Cream is shipped to the largest flow of milk when prices are highest. Cream is shipped to the farm fronts on the Ottawa River at the Village of Monte Bello, within half a mile of P. Railway Station, quarter mile from steamboat wharf, post office and stores; long distance telephone and water in private residence and the farm manager's house. Two other good buildings on farm for laborers, all buildings and fences are in good order.

Under the system of winter dairying as practiced on this farm, with an extra good dairy herd, has won the gold medal offered for competition by the Senator Owens to capture the highest investment, and is unable to Provincial Government of Quebec. Unfortunately the Senator Owens has spent the summer season on the farm, as formerly, and now offers this farm for sale. This is a rare opportunity for someone to acquire a first class farm upon which all improvements have been made to place it upon a paying basis.

The celebrated  
"Oshaw" Ship  
on the Farm B  
Canada. You  
everywhere and  
are giving servi  
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**THE PEDLAR PEOPLE LIMITED, OSHAWA, ONT.**

# FARM AND DAIRY

AND RURAL HOME

Published by the Rural Publishing Company, Limited.

**1. FARM AND DAIRY** is published every Thursday. It is the official organ of the Ontario and Western British Columbia Farmers and Dairy Producers' Association, Quebec Dairymen's Associations, and of the Canadian Holstein Cattle Breeders' Association.

**2. SUBSCRIPTION PRICE, \$1.00 a year.** Great Britain, \$1.30 a year. For all countries, except Canada and Great Britain, add 50c per postage. Notices of the expiration of subscriptions are sent to all subscribers, who then continue to receive the paper until they send notice of discontinuation. No subscription is continued for more than one year after date of expiration. A year's subscription free for a club of two new subscribers.

**3. REMITTANCES** should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 20 cents for exchange fee required at the banks.

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**5. ADVERTISING RATES** quoted on application. Copy returned to the Friday preceding the following week's issue.

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

## CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 15,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 17,000 to 18,000 copies. No subscriptions are accepted at less than the full subscription rate. Detailed statements of the circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

## OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers we turn away all unimpeachable advertisers. Should any advertiser herein deal dishonestly with us as one of our paid advertising subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that you, as advertiser, you state: "I saw your advertisement in Farm and Dairy."

Rogues shall not trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor the debts of honest bankrupts.

# FARM AND DAIRY

PETERBORO, ONT.

## THE PURE BRED CATTLE BOOM

Don't you think this pure bred dairy cattle breeding business is being overdone?

This question has been asked of the editors of Farm and Dairy a few hundred times at least in the last three or four years. Sometimes it is a question in form only. The manner and tone of the speaker often indicate that he is dead sure that the "pure bred boom," as he is pleased to call it, will soon be at an end. Many of "Our Folks," who have been seriously considering the advisability of purchasing a few pure bred dairy cattle for a foundation herd, write us that they are deterred from carrying out their plans because of a fear that this pessimistic view of the future of the pure bred cattle industry may be the correct one. Let us consider the Canadian situation as it actually is.

In Canada at the present time we have about 50,000 pure bred dairy

females. Altogether, we have 3,000,000 milk cows; that is the proportion of pure bred to grades is in the ratio of one to sixty. We are safe in assuming, therefore, that no more than two or three per cent. of Canadian dairy farmers have yet launched forth as breeders of pure bred cattle, even to the extent of keeping a few head.

In the light of these significant statistics, can anyone with justice claim that the "pure bred cattle boom" is almost at an end? It would be more correct to say that the demand is just starting. We would, however, advise "Our Folks" to go slow with pure bred cattle. All of us are not adapted to the breeding of high-class stock, and for many of us the improvement of the grade herd with a pure bred dairy sire is the advisable course. But none of us need be deterred from experimenting with pure bred cattle because of fears for the future of the trade. That is assured.

## THE VALUE OF BARE ROCK

Farmers sometimes are at a loss, when the question of the taxation of land values is under consideration, to know how the value of land can be determined. The problem is not as difficult as it may seem. It is determined in two ways: First, by its proximity to population, and secondly, by its value for agricultural purposes. No reference is made here to mineral lands.

Land never has very high values for purely agricultural purposes. It reaches enormous values when required for community purposes. Take for example, an instance quoted by a correspondent of Farm and Dairy living in Port Arthur, who wrote us recently as follows:

"I saw a house yesterday on bare rock, of moderate size, and with no cellar or sewer connections, and a 20 minutes' walk from the centre of the city, that sold for \$7,000, and everybody said that it was sold too cheaply. On the main street they are selling lots at \$1,600 a foot frontage, just for bare rock, and if a cellar is wanted it has to be blasted out of the rock."

Land that is a bare rock has no value for agricultural purposes. In this case, however, we see that it has great value for community purposes. The value of land is always determined by not only the price people are willing to pay for it, but by the rental that can be charged for it, or that is being obtained for similar land nearby.

One reason why farmers need never fear the effect of a tax on land values is because their land has little value for community purposes and because, when the value of their improvements, including buildings, fences, underdrains, etc., is deducted, there is little value remaining to their farms. That is why the gradual removal of customs taxation, which bears with undue severity on the farmer, and its replacement by a tax on land values would tend to lift a great burden off the farmer and place it on the

land speculators who now make fortunes by appropriating to themselves the enormous land values in our towns and cities that the community at large creates, but which the community is not getting. Advances along this line, by making farming more profitable, would have an important effect in checking rural depopulation.

## WHAT READING DID FOR HIM

We were talking about illustrations with one of "Our Folks" just the other day. He was an inspiring young chap. He had been born and reared in a somewhat backward section. He had had little chance to see dairy farming conducted as it should be. A friend induced him to join "Our Folks" and take out a year's subscription to Farm and Dairy. He read carefully all the articles and he studied the illustrations. He came to know what fine things pure bred cattle were doing for many of "Our Folks." The articles started him thinking. The illustrations enabled him to formulate his ideals. He acted.

He now has a few pure bred cattle that are doing well for him. In fact, two of his four cows are giving more milk than did his whole original herd of ten milch cows. "I have Farm and Dairy, especially Farm and Dairy illustrations, to thank for getting me out of a rut and started in real, interesting farming," he told us a few days ago. In some early issue we are going to tell you the story of his success.

His is just one instance which we have encountered. Such a story is a great encouragement to us to go ahead and improve Farm and Dairy as we have never done before. No telling how many of our folks may be encouraged to better things as was this young man!

## THE FARMER'S IDEAL

"The problem of a dairy farmer is how to have a maximum of 'comfort and enjoyment, bodily and mentally, with a minimum of hard 'labor and anxiety.'"

These are wise words. They embody Prof. H. H. Dean's ideal of what should be the object and aim of the farmer. Prof. Dean's ideal is based on psychological truth as well as on commonsense.

We have just so much energy. True, the amount of energy that we possess is much more than some of us think, but it is a limited amount just the same. If we devote all of that energy to hard manual labor, there is none left for mental labor. Those of us who get up at half-past four in the morning and finish up our work by lantern light at night, are stunting our all-round development. We are getting to the point where we are valuable only as the horse is valuable—for manual work.

To attain a maximum of comfort and enjoyment does not mean the adding of farm to farm, the erection of great and imposing buildings and the accumulating of a large bank account. In fact, such objects as

## The Breeder

**T**HE successful breeder must have a clear and concise conception of the type he wishes to establish and with his intent constantly in mind must cheerfully sacrifice unlimited time and thought to the characteristics of the animals he wishes to produce. He should have a clear understanding of the "scale of points" or characteristics that go to make up the perfect animal. It should not be a casual and impartial critic of his own herd but should also take advantage of every opportunity to study the greatest individuals of the breed. He must be a man of courage and strong convictions but big enough to admit the possibility of mistakes when made.

He must be a close observer and a careful student of cause and effect. He must be steadfast in his purposes and not seek one ideal to-day and another to-morrow. Over and above all else he must enter into the spirit of the game with the earnestness and enthusiasm that will make the work a matter of joy and pleasure rather than of labor. —G. A. Dimock, Michigan.

these may be directly controverted to comfort; and generally to enjoyment.

That man who is content to live comfortably in his modest home, to make the most of his herd and farm and devote himself to the cultivation of his mental and social being, is, we believe, a truly successful farmer. His is true success. It will bring to him what great material success seldom brings—satisfaction.

## ONLY A FARMER

"I am only a farmer."

It was a prominent Institute speaker who made that remark, a man who had been very successful in his calling, who had a farm that was yielding him a very comfortable income, so comfortable that he could afford to devote his time in the winter to instructing others in the methods that had brought him success. His record was one of which he might well have been proud. And yet he stood before an audience composed of both farmers and townsmen, and said in the most self-deprecatory manner, "I am only a farmer."

People are liable to be taken at their own estimate of themselves. If we were ashamed of our calling we need not be surprised if the importance of our profession is not appreciated by other sections of the community. We farmers have the most responsible of all positions. We cater to man's greatest need, the need for food. Our occupation is the most healthful and most ennobling known to man. Let us not say, "I am only a farmer," but say it with a ring of appreciation and confidence in our voice. If we regard our own profession in its true light, others will see it in the same light.

One community in Northern Minnesota had been greatly handicapped for several years by lack of a road which they had been unable to get for some reason unknown to them. They organized a farmers' club and one of their first acts was to appoint a committee to secure the road. In a week work was begun on the road.

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Building a Dairy Herd

Gordon H. Gooderham, York Co., Ont.

Right at the start of this little preachment I would like to impress on the small breeder the value of testing, whether it be seven, 14, 30 days or yearly. The small outcrop for this work is absolutely nothing when you consider the high prices one gets for officially tested cows. Take one instance in my own herd:

I once offered an old cow, "eleven years old," for \$150 to a man who was buying for the west. Shortly after she calved giving me a fine heifer. As we were doing very well at the time we also started this old cow, and very much to my surprise she finished up by making 29 1/2 pounds of butter and 565 pounds milk in seven days; best days milking was 90 pounds. I have since refused \$800 for her. This goes to prove the value of testing.

FURTHER EVIDENCE OF TESTING VALUE

During the time I have been breeding Holsteins I have had many letters such as the one I have now before me. In this letter the writer says he has been offered \$150 more for a bull calf than he paid me for him, the dam having since been re-tested, but he will not sell as the animal suits

AD. TALK

EXVIII.

An Appreciation

Yes, we are human, too. And so we are looking forward to the Xmas. Season with the same anticipation as "Our People"—with that same goodwill and good-fellowship that prompts us all to renew again that fountain of kindness that breaks downward, for a time at least, those barriers that hold us aloof at other seasons.

It is said that the greatest pleasure a gift or favor can give is to know that it is keenly appreciated by the receiver. Isn't that just how it appeals to you? Of course it is.

During the past year and particularly in a very practical manner an appreciation from the friends to whom we have introduced "Our People" from week to week through our advertising columns. Here are a few of our advertisers whom you will find in this, our Breeders' and Xmas. Numbers. Most of these are with us for much larger space just at this season of the year, than usual. We hereby acknowledge their appreciation of our services and extend to them our relations with our folk—the dairy men of Canada—for the coming year.

Do you know these people, our advertisers? Note their advertisements in this issue. You will know them by the quality of their goods. You will find them carrying practically every line of up-to-date farm and home equipment—Frost Fences, De Laval Separators, Harb Fertilizers, Columbia Graphophones, Brantford Engines, Renfrew Scales, B. L. K. & Superior Milkers, B. T. Louden & Co. Cement, Five Roses Flour—in fact everything for the farm—just look over the list of firms who know that you are the live, progressive kind, and demand the best that can be produced. These people are doing just as much to solve the labor problem on our farms and to advance our system of Agriculture as are our Colleges and Farm Press. You will find every one of our advertisers the reliable kind—the only kind to whom we would introduce in wishing our folk another year of prosperity. Here's good will and success to both.

"A Paper Farmers Swear By"

him, as there is nothing so good as he in the whole neighborhood.

It is surprising the small attention the majority of farmers pay to the matter of breeding in their cattle.

The farmer of to-day is, in most cases, a keen business man, who conducts his farm on business principles. If he is buying a horse he will always pay more for one that is from good stock. Even if buying a dog it must be well bred. But in a large majority of cases a cow to the farmer is just a cow, and if it will have a calf and give milk, it is all that is required.

There is no animal on the farm that returns so large a profit for blood and breeding as the cow. It costs no more to feed and look after a good animal than an ordinary one. And the yield of milk and butter from a produce in large quantities, will be double the yield from an ordinary grade animal.

INITIAL COST SOON RETURNED

The initial cost of course is greater when buying, but apart from the extra profit sure to be derived from the increased yield in milk, the farmer will get a calf from a well bred cow, if she is bred to one of Canada's leading sires, that will sell for two or three times the original cost of the dam.

Apart from the financial benefits to be derived from having well bred cattle, is the pleasure and satisfaction one gets from having animals that can be shown to friends and neighbors as something out of the ordinary.

As has been many times asserted in Farm and Dairy, I agree that the sire is the most important in producing good stock. If the calf is a heifer the owner naturally will not think of disposing of it, but if it is a bull calf in most cases it is sold. Now comes the importance of a sire of undoubted breeding and backing, as the price to be obtained for a bull calf from such a sire will be three or four times that from an ordinary sire.

WHICH, \$15 or \$100?

To illustrate, if one had a bull calf from a dam with a 21 pound butter record in seven days, out of an inferior or ordinary sire, he would not get more than \$15 to \$25 for him, and very probably the calf would have to be sold for veal. A bull calf from the same dam, got by a sire with first-class packing, would readily sell for \$100.

Another important matter is that many breeders, especially beginners, stock must be pure bred. This is right so far as it goes, but they should go further and demand that the dam of the animal in question be a large producer, and the sire from back the producing strain goes the better, but it is essential that the immediate ancestors be producers.

In many advertisements one sees bull calves for sale related to some great dam or sire five or six generations back, but nothing said about the nearer ancestors. This kind are no good, it is the close ancestors that should be looked for over time.

As a breeder of Holsteins I am naturally prejudiced in favor of that breed, but these remarks apply to any of the dairy breeds.

The general feeling of the people is that the U. S. tariff is beneficial to the agriculturist, especially cattle raisers, also sheep and swine. The farmers about here are setting about to meet the coming demands. The increase is being received by the farmers on account of the larger markets in the States. It is expected a higher price for all stock, dairy products and grain. There is some question in the minds of some as to the horse market as yet.—James McKenzie, Cluny, Ont.

DE LAVAL CREAM SEPARATORS

MAKE FALL AND WINTER DAIRYING MORE PROFITABLE

There is surely no reason to delay the purchase of a separator or to A. De Laval Machine will save its cost by spring, and may be bought on such liberal terms if desired as to actually pay for itself meanwhile.

De Laval Dairy Supply Co., Ltd. Montreal Peterboro Winnipeg



CHALLENGE COLLARS

Advantages include the consumption of Water, Fuel, Oil, and other items.

THE ARLINGTON CO. of Canada, Ltd. 221 Bloor Street West Toronto

"ARLINGTON COLLARS" are good, but our CHALLENGE BRAND is the best

CRUMB'S IMPROVED WARRNER STANCHION



The standard of stanchion and equipment for a number of seasons. Dr. Geo. Howard of Howard's Pharmacy writes: "I have had very much improved with the practical application of Warner's Stanchions."

Write for booklet and quotation. List of one of the stanchions you desire. Crumb's Stanchion Co., Ltd., 111 St. George Street, Toronto, Ont. All correspondence should be addressed to the home office. Made in Canada if you prefer books in French or English.

You and Your Friends are Invited

To The

TORONTO FAT STOCK SHOW

Union Stock Yards

TORONTO

Judging, Saturday, December 6th, 1913 Auction Sale of Prize Winners, Monday, December 8th, 1913

Unsurpassed Exhibit of Cattle, Sheep and Swine Admission Free. Reduced Passenger Fares

The Ideal Farm Power

Massey-Harris Gasoline Engines are always ready in all kinds of weather, winter or summer, they not only develop their full rated horse power, but they do it on the least possible consumption of gasoline—for every gallon of gasoline you use, the Engine gives all the power the gasoline is capable of developing.

Their high efficiency, coupled with their economy of operation and durability, combine to make Massey-Harris Engines, without exception, the most reliable and satisfactory on the market to-day.

1 1/2 to 20 horse-power. Hopper Jacket or Closed Jacket. Direct-Connected Pumps, Spray Outfits, Saw Outfits, Pump Jacks, Governor Pulleys, etc.

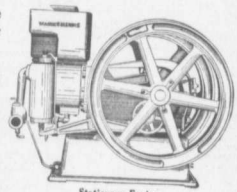
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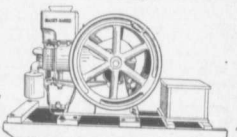
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Branches at—Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current, Calgary, Yorkton, Edmonton

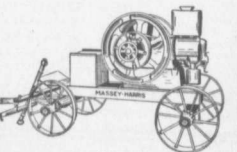
—Agencies Everywhere—



Stationary Engine



Engine on Skids



Portable Engine

# SHARPLES MILKER

If you know the users your confidence is absolute



America's foremost dairy-men use over 6000 Sharples Milkers.

A good example is Hershey, the great chocolate man. He put a Sharples Milker in one of his many dairy barns and tried it out. Then in another barn and another and another, and he now milks twenty-one herds with the Sharples Milker.

Another user is Stephen Francisco, father of certified milk, and the live wire on sanitary methods in the United States.

A small locality in Northern New York uses over 70 Sharples Milkers—the Province of Ontario milks 2500 cows with the Sharples and many thousands of machines are used throughout the continent.

An average operator milks thirty cows per hour, some milk forty, but we say thirty to be conservative.

It saves money, relieves the help problem, nightmire, and insures more and cleaner milk by making healthier, better cows.

*The Milkier who is good.*

*Sends for it.*

**The Sharples Separator Co.**  
West Chester, Pa.

Chicago, Ill.      Winnipeg, Can.  
San Francisco, Cal.      Dallas, Texas  
Portland, Ore.      Toronto, Can.  
Agents Everywhere



## The Carrier For You

IN choosing a litter carrier, one should consider all of the equipment necessary for a complete outfit: Carrier, Track, Hangers, Switches, and Swing Pole fittings. Do not place an order before learning of the many distinctive features to be found in Loudem Equipment.

## LOUDEM Litter Carrier

—is simple in construction, and easily operated. Carrier box is made of heavy galvanized steel, strongly reinforced with angle iron. Worm hoisting gear ensures maximum speed and power. Track is of high carbon steel and is easily installed.

Write today for Illustrated Catalogue.

Our architectural department will supply free floor plans.

**The LOUDEM MACHINERY CO.**  
Dept. — GUELPH, Ont.

## EGGS, BUTTER AND POULTRY

For best results, ship your live Poultry to us also our Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. Egg cases and poultry crates supplied. Prompt Returns.

**The Wm. DAVIS Co. Ltd.**  
Established 1854      TORONTO, ONT.

**DISTRICT DAIRY MEETINGS, 1913**

County.	Place for meeting.	Date.
Leeds—Elgin	.....	Dec. 6, 2.30 p.m.
Lennox—Napawan	.....	Dec. 6, 2.30 p.m.
Frontenac—Hastington	.....	Dec. 7, 2.30 p.m.
Hastings	8—Belleville	Dec. 7, 2.30 p.m.
Prince Edward—Pictou	.....	Dec. 10, 2.30 p.m.
Hastings	N—Stirling	Dec. 11, 2.30 p.m.
Northum	16—Campford	Dec. 13, 2.30 p.m.
Peterboro—Norwood	.....	Dec. 16, 2.30 p.m.
Victoria—Lindsay	.....	Dec. 17, 2.30 p.m.

## Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

### Encourage Richer Cream

B. M., Wellington Co., Ont.

Are we butter makers inclined to be too well satisfied with the progress that we have already made? Are we so wide awake as to suggest to the openings that there are for future progress in our occupation? That there are openings for progress is quite evident as in many particulars creamery management in Ontario is antiquated as compared with creamery management in the United States and even in Western Canada.

In one matter we are away behind. That is in our methods of taking samples for testing. If there was ever a method of sampling more thoroughly discredited than the common pipette method, I would like to know what it is.

Anyone who knows anything about cream at all knows that its weight varies greatly according as it is rich or poor in butter fat. The pipette method is based on volume of cream and not on weight.

We urge our patrons to bring richer cream, cream testing 32 to 35 per cent. At the same time we pay them under the system of testing that pays a decided premium on thin cream. If I were a patron and knew as much about cream testing as I do as a butter maker the creamery man might get down on his knees to me and beg for rich cream, but I would send him thin cream just the same.

My necker nerve, I must confess, is about the easiest nerve to touch in the easiest nerve to touch in the making of the average patron. If we adopt the cream scales in taking samples, and then give our patrons to understand that there is no particular advantage in sending thin cream, in fact many disadvantages, we will soon get the rich cream. Patrons are a whole lot wiser than we think. There is a pretty well fixed opinion among them that thin cream brings in more than rich cream. This opinion is based on facts, for where the pipette is used the thin cream is the most profitable—to the patron.

### Points on Washing Butter

In washing butter there is a middle road which all good buttermakers aim to travel, but which is different for different qualities of butter. The object should be to wash butter enough to ensure a low casing content, especially if butter is to be kept for a long period.

Recent experiments seem to indicate that when butter is salted fairly heavy, slight increases in casing content may not materially affect keeping qualities. However, in the light of present knowledge, low casing content in butter intended for storage is safer and worth working for. But in securing it the butter maker must avoid excessive washing.

Some butters require relatively little washing and others require more than necessary detracts from the quality or flavor; others may benefit by repeated washings, as in the case of butter made from inferior flavored cream.

In determining wash water temperature is subjected to the butter must govern, but sudden chilling or warming of the butter should always be avoided. There is a wide range in the amount of washing to which butter is subjected. Some say: "Others wash twice. When butter is not so soft as to mat closely a few revolutions of the churn, rollers off, while wash water is being produced. Another buttermaker—N. Y. Produce Review.

—BROWN V. BRAN

The buttermaker who dips a thousand gallons of cream out of his vat into the churn each day is working muscle against brain, and is as far behind the times as the farmer who uses a cradle in place of the self-binding. We buttermakers who read and do not heed things that would be of benefit are no better off than the

ones who cannot read at all. We hear so many people talk about luck and chance, but if some of us would get right down to hard work and determination, our luck would change; no one ever made a success of any undertaking without hard work and study.

And we can never expect to make very much out of ourselves unless we possess the virtues of study, work, and determination. The successful individual in any profession is the one who has had energy enough to push his undertaking, and is ready to listen and learn from others, as it is from one another we obtain a large part of our knowledge.—Butter, Cheese, and Egg Journal.

### The Guelph Meeting

The annual cheese and creamery meeting for the makers of Western Ontario will be held at the Dairy School of the Agricultural College, Guelph, on Wednesday, December 10th, at 1.30 p.m. The Winter Fair is then in progress at Guelph, and single fares can be secured on all railroads. Mr. Frank Hervis extends a cordial invitation to all cheese-makers, buttermakers, factory men, patrons, buyers, and instructors, to attend this meeting at the dairy school.

Among the subjects to be discussed are: The overrun from saltless compared with salted butter; the moisture test and salt test in creamery work; relations of acidity of milk to yield and quality of cheese; effect of salt on curd; a campaign among patrons for the storing of ice; paying for cream by grade; pasteurization of milk for cheese-making; composite samples or daily testing; preservatives for composite samples; inspection of metric cream scales; a standard cream test bottle; over reading and under reading the creamer; creaming competitive methods of cooling cream at the creamery; demonstration of the Walker casein test; beautifying the surroundings of these factories and creameries.

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Cow testing is one of the best labor-saving propositions that a Canadian dairyman can entertain.—G. F. Whitley, Ottawa.

## Cheese

Makers are invited to send questions on cheese-making and to suggest subjects for discussion. Address letters to The Cheese Department.

### In The

I have just read of the new States cheese into the breeches of the dairy industry. I am sure the patrons I understand very nominal the bull, just the animal.

This season's influence of a cheese in the neighborhood, factory and home.



### The

The cheese factory place in the rural area is a home made in the nearby world from the load from the women. The one of the Young's history.

of the plant. A plan would be of other factory offered its patronage. Even if not forthcoming, a question did in the factory man have the satisfied patrons a great

### British C

Although Great importer of cheese make a substantial needs. The an marketed is cheese of the value of us imply a magnitude, and evidence of its and at the cheese during the autumn dairy show at its sporting exhibition, Northw among others, a imposing collection of cheeses presented, values, amounting hundreds of tons presentative lot dairies engaged standard varieties.

It will be a cheesemaking is considerable source of direct source of accessory to get it is estimated that cent. of the total made into cheese emphasizes the so the dairy industry lessens the making. While with the huge but however, the che agricultural and Cheese is the str

## Cheese Department

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

### In the Breeding Business

David Creelman, Kings Co., P. E. I.

I have just been reading of a United States cheese factory that has gone into the breeding business. The factory is supporting a pure bred dairy sire for the use of its patrons. The patrons I understand are charged a very nominal fee for the service of the bull, just sufficient to maintain the animal.

This seems to me a good plan. The influence of such a sire will be to increase the milk flow of herds in the neighborhood, bring more milk to the factory and hence increase the value



The Home Market

The cheese factory has always had a big place in the rural industry. It has afforded a home market for the milk of farmers in the nearby vicinity and has afforded a great load from the shoulders of the farm at women. The one here illustrated is at Young's Point, Peters Co., Ont.

of the plant. I believe, too, that such a plan would serve to attract patrons of other factories to the one that offered its patrons such unique assistance. Even if financial returns are not forthcoming and the article in the question did state that they are the factory management will at least have the satisfaction of doing their patrons a great service.

### British Cheese Industry

Although Great Britain is a large importer of cheese, its own counties make a substantial contribution to its needs. The annual output of cheese marketed is estimated at 500,000 cwt., of the value of £1,400,000. These figures imply a business of considerable magnitude, and still more striking evidence of its importance is provided at the cheese fairs and shows held during the autumn. Visitors to the dairy show at Islington and the corresponding exhibitions at Frome, Whitechurch, Nantwich, and Kilmarnock, among others, are impressed with the imposing collections of the different cheeses presented, and yet these displays, amounting in the aggregate to hundreds of tons, comprise only representative lots from the principal dairies engaged in the production of standard varieties.

It will be seen therefore, that cheesemaking is an undertaking of considerable significance both as a direct source of revenue and as an accessory to general farming. Yet it is estimated that only about five per cent. of the total milk produced is made into cheese, but this calculation emphasizes the scope and character of the dairy industry at large rather than lessens the importance of cheesemaking. While small in comparison with the huge business in whole milk, however, the cheese trade is of great agricultural and national importance. Cheese is the staple product of some

of the best pasture land and most intelligently farmed districts in the country.

### Disposal of Factory Waste

S. E. Morris, Carleton Co., Ont.

How shall we dispose of cheese factory waste?

I consider one of the greatest mistakes made in this connection is in building cheese factories on the level ground. It is then almost impossible to dispose of the waste properly without considerable expense. If possible at all, a factory should be built on a hillside or near some stream, as it can then easily be disposed of by a tile drain.

Diamond Factory, which I operate, is so situated that we dispose of waste by a tile drain to a gully. The tile is buried about four feet. Where the waste empties into the tile out of the factory, we have a square made, with a screen in it so that nothing can go into it which might cause it to block.

### Why Salaries Increase

By an Instructor

Many cheese makers, particularly assistant cheese makers, believe that their salary is limited by the meanness of their employers. Judging from my own observations I believe that their salary is more often limited by the poor service rendered.

Just a few days ago I was remonstrating with a young maker for the carelessness he exhibited in finishing the cheese. I told him just how the job should be done to make his cheese appeal most strongly to the buyers. "Well, I guess I'm doing all the work I'm paid for," was his sultry retort. "When they pay me more I'll do better work."

A man who is paid \$30 a month, and doing \$30 worth of work will always get \$30 a month. The way to get a better salary is to do \$40 worth of work when you are only being paid \$30. Employers do not advance wages on the assumption that more pay will lead to more efficient service. The efficient service must always precede the increase.

### Factories and Cow Testing

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

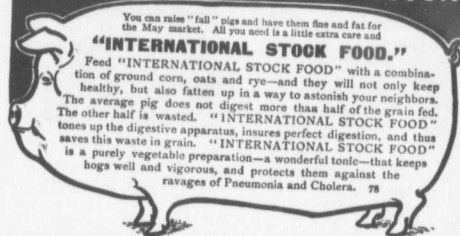
Cow testing is distinctly and immediately of value to every factory owner, for several good reasons. If farmers supply more milk or cream from a given number of cows or a certain number of acres, it means that by receiving more raw material from the same territory there is a lessening in the cost of hauling and a lowering in proportion of the expense of making while a longer factory season is possible as the milking period is extended. Further, directly a patron begins testing each cow individually he commences to register more interest in the herd and is likely to supply not only more, but a far better quality of milk or cream, cared for better.

With the strong probability of having the milk in the vats in far better condition every day, thereby facilitating his work at every step, it is clearly of great importance to every cheese and butter maker to follow this matter up and make it a point to interest every patron in cow testing.

Farmers who may desire to organize cow testing associations are invited to correspond with the Dairy Commissioner regarding the assistance given by the Department in the organization.—Bul. No. 33.

When siring up a cow, look for depth and width of chest, a big barrel and an udder that is shapely and of good quality. Likewise of good size. A cow that lacks these qualities will not make good.

## A Prize Food for Prize Stock



You can raise "fall" pigs and have them fine and fat for the May market. All you need is a little extra care and

**"INTERNATIONAL STOCK FOOD."**

Feed "INTERNATIONAL STOCK FOOD" with a combination of ground corn, oats and rye—and they will not only keep healthy, but also fatten up in a way to astonish your neighbors. The average pig does not digest more than half of the grain fed. The other half is wasted. "INTERNATIONAL STOCK FOOD" tones up the digestive apparatus, insures perfect digestion, and thus saves this waste in grain. "INTERNATIONAL STOCK FOOD" is a purely vegetable preparation—a wonderful tonic—that keeps hogs well and vigorous, and protects them against the ravages of Pneumonia and Cholera. 78

Make a nice profit on your "fall" pigs by feeding "INTERNATIONAL STOCK FOOD." Get a pall to-day from your dealer.

INTERNATIONAL STOCK FOOD CO., LIMITED TORONTO

## CREAM WANTED

Ottawa is one of the best markets for butter in Ontario. That is why we are able to offer such attractive prices for cream.

Cheese factory patrons who have a supply of cream at this season of the year should write us.

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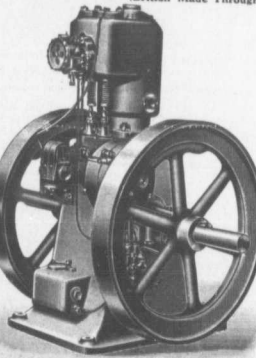
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To reach your own goal is a mark of greatness; to inspire others to reach their goal is a mark of greatness; and he who does both of these is great indeed.—Larson.

## Under the Mistletoe

(Farm and Home)

By MAY C. RINGWALT

IT WAS the day before Christmas in the high Sierra, and "Eagle's Nest," as Alicia had named the doctor's unpainted, ramshackle house, lichening the green of the mountain meadow, was filled from top to toe with holiday disorder and mystery.

All the chairs in the living room heaped with clusters of bright mountain berries; white flakes of pop corn strewn over the rag carpet; a mischievous roly-poly cranberry birdling under the sofa where a broken-nosed doll and a moth-eaten Teddy bear were seated in confidential tete-a-tete.

In the kitchen, the sink stacked with unwashed dishes, while the breakfast table was a confusion of red cardboard, strips of bark and straggling tufts of moss, the gleeful click of the twins' scissors chiming merrily with the song of the teakettle. Upstairs, behind Alicia's closed door, crackling wave sounds of stiff wrapping paper—right in the listening ear that Pink, a silent graven image kneeling outside, had planted at the kercholo.

Suddenly the front door of the house swung open with a bang, followed by a queer swishing noise—a thud.

With a wild clatter of overturned chairs the twins rushed into the hall. In a series of bounding bumps the silent, graven image leaped down the stairs. Then came an Indian war whoop—a shriek of excited delight!

"Children," called a plaintive voice from above, "what have you done now?"

"Done nothing!" yelled the twins in unison.

"It's came, Aunt Allie!" shrieked Pink's excited treble. "Our Kiemus tree!" Santa Taus opened the door and frood it in, and ranned away!"

Alicia Holland, flushed, little brown wisps of hair loosened in pretty disorder from her braids, descended the stairs. Baby Bunting bundled in a red shawl in her arms; Jip, the newest puppy, gurgling a mischievous growl and rolling before her, snapping at the fringe of the trailing shawl, while at the same moment there suddenly appeared in the open doorway, a red snouted against the sunshine outside, the tall, broad-shouldered figure of a man.

"Why, 'Uncle Jack,'" she cried, "is it really you? Who would have suspected that you were anywhere about!"

He answered her with a confidential twinkling of his laughing eyes, then, feigning great astonishment, turned to the youngsters with: "What in the world have you got here?"

"Our Kiemus tree!" breathlessly explained Pink, jumping up and down on a creaking board. "Santa Taus opened the door and frood it in and ranned away!"

Jack Norton gave a low whistle. "I thought I caught a glimpse of a reindeer hiding behind the barn, and now I know—"

"Pshaw!" interrupted Dicky, the eighth-of-an-inch taller twin. "When you took us kids and Aunt Allie awakeing last Sunday afternoon I saw a tree just like this one growing on the Deer Creek road, and—"

"Hush, Dicky, that will do!" laughingly admonished Alicia. "Micky, what have you on your blouse? It's sticky all down the

"What would we do without Uncle Jack!"

He turned impulsively toward her.

"Considering my unripened youth," he smiled, "don't you think Uncle Jack sounds a trifle ridiculous? Couldn't you—"

"Of course it sounds ridiculous!" she interrupted, the hurried kiss that she had given Baby Bunting not quick enough to hide the flush that ran up to the roots of her hair. "But it's the children's fault. You see—you know, I fell into the habit unconsciously, Mr. Norton."

Strong, self-reliant young giant that he was, he stood embarrassed before her, blushing like a school boy. What a blundering idiot he was! She had entirely misunderstood him—was angry—would "Mr. Norton" him to the end of time.

"You didn't get my meaning," he faltered. "Please go on calling me Uncle Jack, in the same old way. I like it's being ridiculous. I like it better than anything else, unless you could—"

"I didn't!"  
"You didn't!"  
"You're a story teller!"  
"You're another!"

Out of a clear sky came the sudden flash of small fists, the clattering crash of an overturned chair, a howl of pain and rage, an awakened wail from Baby Bunting, who resented being laid aside even to give place to first aid to the injured. The day that began in this whirl of excitement whirled excitedly on, and

a mountain lion, too." Alicia, al ready on her feet, took the hint, to the wise and led the way into the kitchen.

"Whatever Mother Hubbard has in her cupboard will do, Peg," said the doctor, following her as soon as he could free himself from Pink's kiss, and Baby Bunting a moist kiss: "Don't go to any bother."

As Alicia hastily made ready the little bedroom meal spread, she cast puzzled glances at her brother pacing the floor—there was a nervous tension, a joyous excitement, about him that baffled her.

"Draw up a chair and have a cup of tea, Peg," he said in a particularly fond, coaxing voice. "I want to have a little talk with you."

Without knowing why, she seated herself at the opposite side of the table, Alicia experienced the same sinking sensation that she always felt in the descent of an elevator.

"Perhaps you think I haven't appreciated all you've done for me and the children these past eighteen months, Peggy?"  
"You did!" doctor began simply.  
"You're right, I have. There isn't one girl in a hundred that would have given up a good position and the city life that she loved to come out here in the wilderness to keep house for a cranky old man and a couple of wretched widdle-spirited kiddies. It's worried me a lot, Peg, to have you make such a sacrifice. But I've got a bully Christmas surprise for you, little girl. You can bring your trunk and go back east as soon after the first as you've a mind to. I'm going to be married again on New Year's Day. What do you say to that?"

For an instant, she sat silent, staring, as she was conscious that bearing a strange, faraway voice quite outside and apart from herself saying: "I'm very glad if it will make you happy, Will."

Mechanically, with woody little jerks of response to the demands laid upon her, Alicia went through the supper that night, like a puppet worked with a string. In the same daze she went upstairs afterwards and helped the children get ready for the Christmas Eve party." She platted Alicia's hair and tucked the ends of Pink's two little pig tails just long enough to be tied together with pink tape. She straightened the zig-zag part in Micky's drenched locks. She inspected each crack and crevice of Dicky's cars. When the noisy trio had clattered down into the living room she put Baby Bunting to bed—with the usual "this little pig went to market, this little pig went to home" accompaniment, and off on the five returned toes. In the habitual, hurried way of making her own toilet she whisked into her new green gown and hastily fastened a bunch of red Christmas berries at her breast and in her hair.

She knew from the shrieks of excitement as she descended the stairs that the surprise that Norton and she had planned was in full swing, like Santa Claus had arrived—to the triumph of Pink's unwavering faith and to the twin's newborn scepticism.

The doctor was lighting the candles on the Christmas tree; the children tumbling over each other in a laughing scramble after bonbons that Santa Claus was tossing out of his bag. For a moment Alicia stood unnoticed in the merry midst. Then there was a rush—Alicia! A mad and joyful cry of "Aunt Allie! Santa Claus is here!—the imprisoning of six clinging arms!

Over the children's bobbing heads she waved her hand to Santa Claus. He waved back—and vanished. Suddenly she was back quite on her own feet, with a sharp and blood woman, with a sharp-edged pain stabbing her



An Auto Enthusiast Nearing the Century Mark  
In Washah, Ont. lives Mrs. Elias Smith, 92 years old. She is a proud owner of a Ford motor car. She makes many summer tours, the machine being driven by her daughter. Mrs. Smith came to Canada from Scotland 55 years ago.

front! Did you get out the mucilage when Aunt Allie told you not to?"  
"No, ma'am. It was on the top shelf. I couldn't reach it even when Dicky boosted."

"So we used 'lasses instead," chimed in Dicky. "We made an awful swell picture frame for you, Aunt Allie, but you mustn't guess, because it's a surprise."

"Might as well take king's leave from any attempt at discipline to-day, Miss Allie," smiled Norton, as he lifted the tree from the floor and stood it in a corner. "Where's Doc?"  
"Gone over to White River," sighed Alicia. "There seems to have been an unusual amount of sickness there this winter, and I do hate to have him take that long, cold drive so often."

Norton answered with a twinkling glance, but Alicia's head was bent, her eyes riveted on Baby Bunting, whom she was now trying to put to sleep, having dropped down with him in the living room rocker.

"I had a hunch that Doc would be over at White River to-day," laughed Norton. "and so I thought I'd stop in and see if I couldn't set up the tree and help decorate."

It was four o'clock in the afternoon when a quiet moment came, when Alicia could throw herself on the living room sofa to rest her tired feet and aching nerves.

Norton had gone back to the ranch. The twins and the puppy had been despatched to the post office. Baby Bunting, tied to the table leg, was playing contentedly with a string of sleighbells. Pink, seated on a hassock in a conspicuous corner of the room, was "doing secrets," an important duty as she hung over a snarl of worsted and a bent hairpin.

In a golden drift of day dreams Alicia lay in the drowsy twilight, a smile in the eyes that rested now on the bright Christmas garlands over the mantel, the flashing flames of the open fireplace, now on the Christmas tree with its strings of cranberries and pop corn and little red, yellow, green and pink candles all ready to light.

"Hello there!" awakened the doctor's jovial greeting, just as she was stepping over the stile into sandman's land. "I didn't get back quite on schedule time for a one o'clock dinner, did I, Peggy? And I'm as hungry as

heart, an ache of fire crushing, ing her. Still moment alone control.

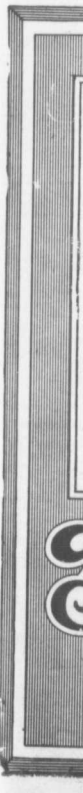
○ A patterring ping Micky's slumping shape of Pink's—Alicia's small shrieking und-melodion Santa Claus said.

Alicia, slipped into the red shawl that had been wrapped started out into

How big and life in the crowded with and love. Slipping trunk sobbed as the door someone stood

"Doc has his simple, direct, guessed, when you mustn't t Allie."

"It's leaving ed Alicia, feral natural for me. I will go out or two they will "Yes?" reled



heart, an ache in her throat, a band of fire crushing her throbbing brow. The happiness of the room was choking her. She must have air—a moment alone to regain her self-control.

A pattering attack of bonbons—bitting Micky's fat, little leg. Dicking the plump shoulder, "ricklishing" the name of Pink's neck—put to rout the Alicia's small captors, who dived shrieking under the table, behind the melodeon stool, back of the sofa, Santa Claus on all fours in hot pursuit.

Alicia, seizing her opportunity, slipped into the hall, snatched up the red shawl that Baby Bunting had been wrapped in that morning, and darted out into the open.

How big and beautiful it all was. How big and beautiful had been her life in the old ramshackle house, crowded with work and responsibility and love. She leaned against the sloping trunk of one of the oaks and sobbed as though her heart would break. A door opened and closed, and someone stood beside her.

"Doe has told me," said Norton in his simple, direct way. "Besides, I guessed, when I saw your face. But you mustn't take it so hard, Miss Alicia."

"It's leaving the children," answered Alicia, fiercely. "Surely, it is natural for me to be upset over that. I will go out of their lives. In a year or two they will forget me!"

"Yes," relentlessly agreed Norton,

"You can't expect anything else if they never see you, if you go 'way off back east. But if you stay on at Pine Ridge," he continued in a pleading hurry of words. "My ranch, you the kiddies there half the time and—Oh, won't you stay on with me—Allie?"

She gave a shy start, womanwise, tried to draw back, to loosen her little hands from his tightening love-hold, but in the starshine he looked down and saw the happy surrender in her eyes.

He put his arms about her and kissed her tear-wet cheek.

"What do you mean?" she cried, anger, resentment, joy, all in her voice as her face flamed to the touch of his lips. "You have no right to—"

"Yes, I have!" he cried rapturously back kissing her again. "It is Christ mas eve and you are standing right under the mistletoe!"

"It's on account of the children that I care so much—only on account of the children!"

There was the sound of a closing door, a flash of a hurriedly approaching red figure under the light of the stars—then her drooping little hands were caught up and held in Santa Claus' own.

Should eggs get boiled too hard, they may be softened by quickly putting them in cold water. The sudden shock of the cold water has a curious effect of softening the yolks.

OUR HOME CLUB

Why?

A few days ago I had a conversation with a very gifted woman. She was well educated and she had reared and sent out into the world well-educated children. As I talked with her I found that she was well read on all public questions of the day, that she could express herself on economic problems with more fluency and knowledge than could her husband or any of her neighbors of the male sex with whom I had talked. She had all of the qualities that go to make a good wife and mother, and I should say a good citizen.

And yet that woman is muzzled. She cannot say a word effectively about the affairs of the nation in which she is so much interested. She could vote intelligently on the great questions of the day and yet the state says that she shall not. The state prefers the vote of the ignorant foreigner who has no knowledge of our problems, or interest in them either, to the vote of this intelligent mother, who is one of a large class.

Why is this so? In one of the first meetings of the Home Club this year, "Dream" expressed herself forcibly on Woman Suffrage. I agreed with "Dream" then. I am much more emphatically with her now. I was thinking of "Dream's" letter all the

time I was conversing with that excellent woman to whom I have referred. Now, why can't that woman vote? I ask Home Club readers why?  
"Another Hired Man."

Our National Welfare

"In the October 'American Magazine' there is told the story of an average western village of one thousand people. It is not pleasant reading. For instance, out of a total of 220 families 37 have cases of feeble-mindedness. There are 36 cases of alcoholism. And in the analysis of village conditions given by the author of the article, A. L. Geesli, it is shown that feeble-mindedness and insanity connect with the use of liquor in not less than 13 out of the 36 cases. Thirteen saloons helped forward this work of social destruction. One family in every 10 has insanity as a spectre at its feast. And one in every four has either an insane or a feeble-minded member. Of those who might be called 'queer' there were out of the 220 families, 34 so classed; there were three vagrants; several 'went wrong' in ways of which the law took notice; several were 'shiftless.' Altogether, the direct and indirect effects of alcohol are seen stamped indelibly upon the life of the community.

"And as though to make the facts sink deeper, there is another story—one of right living, and clean thinking. It is too short. One wishes that

(Concluded on page 33)



**Dainty, Disappearing Doughnuts.**  
Devoured near as fast as you make 'em.  
Golden—tooth-teasing—able-bodied nuts of dough.  
Made from dough that *Tastes Like Nuts*, you know.  
Use **FIVE ROSES** flour.  
Get that *individual toothsome*ness of *Manitoba* wheat kernels.  
Doughnuts with a *Palate-Pleasing Personality*.  
See 'em bob up in the rich deep fat—swallowing, soft-textured.  
A hole entirely circled with *Light Digestible Food*.  
Fat without being fat—for **FIVE ROSES** is the sturdy *glutinous* flour that *resists fat* absorption.  
Just enough to *brown* deliciously, to *crisp* quickly.  
No greasiness, heaviness, sogginess.  
Filling a *vacant place* so pleasantly with *new* as *outraged* stomach.  
Like these make **YOURS**.  
Use **FIVE ROSES**.

Five Roses Flour

Not Bleached



Not Blended

# A Tea Set For "Our Women Folk"



PHOTO OF SET

When entertaining some of your friends to tea, have you ever felt that your table did not look as nice as it should have, that your tea service was old and out of date.

So many of "our women folk" are in that position that we have gone into the matter, and are making it possible for every woman reader of Farm and Dairy, who so desires, to get a beautiful new set.

A large order we have placed with a well known Firm of Importers of China, has enabled us to obtain these at a great reduction.

Get us only Four New Subscribers to Farm and Dairy at \$1.00 each, send the four dollars to us, and we will express to you, charges prepaid, this beautiful semi-porcelain tea set.

Here is a wonderful opportunity for "our women folk," some have already taken advantage of it. **You Should.**

**Farm and Dairy**  
PETERBORO, ONT.

## AMUSEMENTS

Conducted by MARION DALLAS

### Yule-tide Parties

Christmas brings its customs from many lands and centuries: the use of the mistletoe is a legacy from the



Marion Dallas

Druids of pagan days, stocking hanging is said to be of Italian origin. Our tree came from Germany. England has contributed the plum pudding and Santa Claus comes from Holland, where the children place their wooden shoes instead of stockings as receptacles for their gifts. Scattered all over our fair Dominion are the sons and daughters of these lands, and what is more natural than that many of these customs and festivities have become incorporated into our Canadian Folk Lore.

### DISLODGE THE CORK

This is a simple form of amusement. An empty bottle is placed upon a small table, the cork being loosely set in the top of it, in such a way that the least touch will dislodge it. The members of the party are lined up some distance away, and with right arms extended horizontally, walk rapidly past the table on tip toe. They endeavor as they pass to dislodge the cork by a snap of the finger. No one must stop or slow up as he reaches the table, nor may the bottle be touched or turned over. This trick never fails to excite merriment.

### IDEAS FOR A CHRISTMAS DINNER

If you are going to entertain at dinner on Christmas, write these lines on a holly card instead of the usual conventional invitation:

"O come around on Christmas Day

And share our turkey feast,

By living o'er the good old times,

Our joy will be increased."

For guests' cards, use holly cards

with pencil attached. Have written

on each card the guest's name and

some subject to be sketched, for instance,

"Santa Claus filling a stocking,"

or "Santa coming down the chimney."

The drawing can be done while the turkey is being carved, and will cause a lot of fun and also relieve the host of the usual kindly (?) suggestions as to how he should carve.

A simple pretty decoration for the

Christmas table is to have two

strands of white satin ribbon running

diagonally across the table—with little

snap shots of winter scenes posted on,

several inches apart. Around the

edge of the pictures put a thin paste

of mullage and sprinkle with diamond

dust. In the centre of the

table have bunches of holly. If the

holly is dipped in a strong solution of

alum water and dried in the sun, it

will have the effect of being frosted.

### TO DISTRIBUTE YOUR GIFTS

A clothes line is a most prosaic

thing (especially on Monday), but

when it is stretched back and forth

across a room and each clothes pin

used is decorated with a piece of holly

and fastens to the line a Christmas

gift, it becomes a thing of beauty.

The heavier gifts may be packed in a

clothes basket lined with red paper.

Some one dressed as a housemaid

should "take down the clothes" and

deliver the gifts. Where it is not

possible to have a tree this will please

the kiddies, and not cost very much.

(Continued on page 31)

## FROM PANTRY TO FRONT- PORCH

CLEAR THROUGH  
THE HOUSE THERE  
ARE A HUNDRED  
USES  
FOR

# Old Dutch Cleanser

Many Uses  
and Full Directions  
on Large Silver Can 10c



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Send for our Booklet of Gifts for the whole family—

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Sweater Coats  
Dolls, Teddy Bears, Etc.

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and 5 lb. and 2 lb. cans.

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**A Quebec Farm Home**

The farm home of J. W. Logan, of Sunnyside Farm, would measure up to the ideals of most men as to what a farm home should be. It is truly a combination of farm and home. The



**A Glance into the Bathroom**

farm is well worked and profitable. The home, not the bank account, solely, derives the benefit thereof.

Sunnyside Farm was described in the May 29th issue of Farm and Dairy by an editor who visited the farm a year ago. There is an additional chapter needed. When Mr. Logan's homestead was visited last year there was an old-fashioned but comfortable farm home, one and one-half stories high. The home, however, lacked in modern conveniences, and for that reason Mr. Logan came lower in the Inter-Provincial Good Farms Competition than he otherwise would have.

When we visited Mr. Logan this year we found the old farm house transformed into one of the most up-to-date homes we have ever been in. The second story has light, high-ceilinged, airy bedrooms, is the most prominent addition to the home. A great wide verandah, on which the family could almost live in the summer time, extends across the whole front of the house. Mr. Logan had not yet had time to get the grounds in order, but intends to have the outside surroundings match his improved home and the beautiful situation that he has right beside the Chateauguay river.

**MODEL KITCHEN ARRANGEMENT**

It was the interior changes that most attracted us, and with which Mrs. Logan was best pleased. The kitchen arrangement has many fine points to commend it. The hot water boiler is connected with the range in both the winter and summer kitchens, and hence there is hot water the year round. The sinks in both kitchens are supplied with cold hard water and hot and cold soft water on tap. Right next to the sink in the winter kitchen is the cupboard and pantry arrangement shown in an illustration on this page. As Mrs. Logan pointed out, she has her stove, sink and pantry arrangement all close together, thus reducing steps to a minimum.

The water arrangement in the Logan home is very complete. In the second story is a soft water tank holding several hundred gallons supplied from the eaves. The overflow from this tank runs into a large cement tank in the basement, and the overflow from the basement cistern runs into the river. A supply may be pumped from the basement cistern to

the upper tank by means of a small hand power force pump. The storage capacity is so large that Mrs. Logan never runs out of a supply of soft water. Mr. Logan has run a pipe for hard water from the over-head tank in the barn. This hard water is used to flush the closet. The home is thus abundantly supplied with both hard and soft water.

The bathroom particularly appealed to us. It was evident that when Mr. Logan purchased the equipment for it that he had his eye on quality and not cheapness; it is all of the best. The woodwork is finished in white enamel. The linoleum on the floor resembles inlaid tile work. Right over the wash basin a medicine cabinet has been built into the wall, the door taking the form of a beveled mirror. In another corner clothes chests and shelves are built in.

We predict that this remodelled, up-to-date home will be a decided asset to Mr. Logan in the next Priso Farms Competition in which he intends to enter.



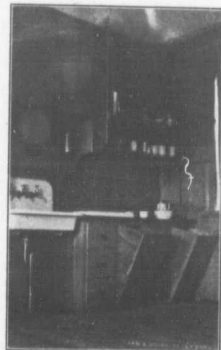
A celebrated lawyer once tried to get a Boston witness to give his ideas of absent-mindedness. "Well," said the witness, who was a typical New



**Mrs. Logan in her Well Equipped Summer Kitchen**

The summer kitchen in the model home at Sunnyside Farm is almost as convenient as the winter kitchen, being equipped with running water, hot and cold, a sink and convenient cupboards.

England Yankee, "I should say that a man who thought he'd left his watch to hum, and took it out in his pocket to see if he'd time to go home and get it, was a leetle absent-minded."



**A Corner in a Model Kitchen**

Mrs. J. W. Logan, whose home is described in the article adjoining, has eliminated the unnecessary running between kitchen and pantry, by having in her new home a combined kitchen and pantry. The stove is just on the left hand side of the sink. — Photo by an editor of Farm and Dairy.



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Use this on the Farm and in the Home

NO wasting time over a lantern. Wherever you want a powerful light—indoors—outdoors—in any weather—you can get it instantly if you have

**"NINE LIVES"  
ELECTRIC FLASHLIGHT**

Just press the button and get a bright, powerful gleam of light in a jiffy. Handy on hundred occasions. No trouble. No danger. Weighs only 4 lbs. Always ready. "Nine Lives" is four times as strong as any other and costs but a trifle to recharge. You cannot be without it. Can re-charge and the baby can handle it. Safe in a powder bag.

Mail your order today to—  
CANADIAN CARBON CO. Ltd., 92 West King St., Toronto



Only \$2.00 prepaid

**NEW COAL OIL LIGHT BEATS ELECTRIC OR GASOLINE**

**10 Days FREE—Send No Money**

We don't ask you to pay us a cent until you have used the wonderful modern light in your own home for ten days, then you may return it at our expense if not perfectly satisfied. We want you to prove for yourself that it gives five to fifteen times as much light as the ordinary oil lamp, beats electric, gasoline or acetylene. Lights and is put out just like the old oil lamp.

**BURNS 70 HOURS ON 1 GALLON OIL**

Give us a month's trial and we will refund you \$1000.00 if you are not satisfied. No other, smoke or noise, stings, stings, won't explode, guaranteed.

**\$1000.00 Reward**

Will be given to the person who shows us an oil lamp equal to the Addin in every way (beats all other gives in our circles). We will make you a challenge to the world if there was the slightest doubt as to the merits of the lamp. We want one person in each locality who can see our customer. Write quick to whom we refer absolutely Free Trial Program. Get our literature, samples and more details on page 2.

**AGENTS WANTED**

To demonstrate in territory where oil lamps are in use. Experience unnecessary. Many agents in use. Experience not necessary. Many agents in use. Experience not necessary. Many agents in use. Experience not necessary.



MANTLE LAMP CO., 724 Main Bldg., Montreal & Winnipeg

# BRITISH COLUMBIA

Canada's Most Productive and Progressive Province

## THE WESTERN OUTPOST OF EMPIRE



Millions of acres of fertile land open to settlers.  
Twenty million acres of wheat land.  
Five million acres of fruit land.  
Thousands of free pre-emptions of 160 acres.  
Splendid chances for mixed farming, dairying,  
fruit growing, stock and poultry raising.

Home markets for everything produced.  
Rapidly extending foreign markets.  
Most extensive coal-fields in America.  
Largest stand of merchantable timber in Canada.  
Inexhaustible fisheries, gold, silver, copper, lead  
and iron in profusion.

**GOOD ROADS**  
**EXTENSIVE RAILWAY**  
**DEVELOPMENT**  
**FREE UNDENOMINATIONAL**  
**SCHOOLS**

In 1912, the people of British Columbia,  
500,000 (including Indians and  
Asiatics) produced:

Minerals .....	\$32,440,000
Lumber .....	23,750,000
Fish .....	13,577,000
Fruit and Farm Produce ..	21,441,000
Manufactures .....	45,000,000

**THE SPORTSMAN'S PARADISE**

**UNRIVALLED SCENIC**  
**ATTRACTIONS**

**SPLENDID HEALTHFUL**  
**CLIMATE**

For Further Information Regarding British Columbia, Apply to

**The Secretary, Bureau of Provincial Information, Victoria**

Mr. Gesell has  
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**Our National Welfare**

*Continued from page 21*

Mr. Gesell had given us more than a glimpse of the better homes, where men and women live and thrive and their children who realize their own fulfilled dreams.

"But ever through the picture rises that other—pauperism, crime, mental deficiency,—and the leering open doors of the saloon, sordid and sinister."

I have just read the above comment on an article, "A Village of a Thousand Souls." I have also reviewed (mentally of course) some of the villages and towns of my acquaintance, both in the East and West, and am inclined to side with A. L. Gesell, the writer of the article.

Of course as the critic has stated, it is not pleasant reading. Nevertheless, it is one of the problems of the age, and should we close eyes and ears against these facts simply because we would like to believe that such conditions are not true? Or will we try to smooth them over to the public and press for the benefit of the inhuman few who may profit by these conditions? No, decidedly no! Let us face these conditions, study their cause and try to root them out like we would some noxious weed from our seed crops.

This is the age for Canada and the national welfare depends upon our citizens. And how much can a feeble-minded, insane, or incompetent citizen contribute towards an ideal nationality? We are very particular about the mating of our stock, using only the best. Why then should we lower our ideals and lose sight of perfection in the human race? Is the man who has dominion over the beast of less importance to his country than the beast itself?

How then must we face this great problem? Eugenics are all right in their place, but where will you draw the line when it comes to issuing a permit to marry? Because a man has failed in business will he be classed feeble-minded and not allowed to marry? For instance, here is a young fellow bright, healthy, clever looking, and the family favorite. His parents think of him as a lawyer or doctor and from his earliest childhood this boy has had over held before him this parental ambition. Perhaps the boy's natural tendencies ran along different lines altogether; but whatever they were they were discouraged; literally smothered out and the boy with filial obedience gives over to the selfish pleasure of his parents with what result? His heart is not in his work, he cannot be a success, and when, instead of bringing credit to the family, he is called a wastrel, a ne'er-do-well, or a failure, would we call him feeble-minded? Perhaps as a mechanic, or a tradesman, he would have excelled.

**DRAW THE LINE—WHERE?**

Would we class as feeble-minded a man who spends his life as a laborer instead of going into some kind of business for himself? There are many apheres in life and there must be men in every class in order to keep things moving. So how can we know where to draw the line between normal and feeble-mindedness?

There are some things, however, that we can do to better the village and town conditions and to eliminate to a great degree the sordid conditions of this picture. We can fight the liquor traffic, we can fight human misery; we can educate young Canadians in the methods of valuation and teach them how to put first things first. But we cannot do any of these things if we only publish such stories of clean living and right thinking. We cannot fight a wrong by trying to make our-

selves believe that that wrong does not exist. To my mind, Mr. Gesell has taken the proper method, that of making impression by way of contrast.

I would say, be optimistic, but at the same time look at things fairly, and let us try to get the thing started right. The child of to-day is the man of to-morrow, and he it is who will have the shaping of our national welfare.—"Uncle Dick."

**The Upward Look**

**Courage**

Be strong, and of a good courage.  
—Joshua 1, 9.

This quotation will be at once recognized by many as the text of the International Sunday School Lesson a couple of weeks ago. It is God's admonition to Joshua as he stands on Jordan's bank and sees on the further shore the Promised Land, with its strongly walled cities and fierce warriors. These must be overcome before his people can claim any country as their own.

It is a great task. But God never asks any man to perform a task beyond our strength. Joshua of himself cannot accomplish such a great work. But God and Joshua, working together, can. That is to be the secret of Joshua's power. He is in tune with the Infinite. He may find many obstacles that to him alone are impossible. But with God all things are possible.

What a source of strength and encouragement! God's promise must have been to Joshua in the dark hours of his life. And the most blessed part of that promise is that it has been extended to every one of us who truly love God. It is the motive force behind every great evangelist and our greatest statesmen. Those of us in humbler walks of life, too, have often felt the uplifting power of the divine promise.

Let us ever then be brave and strong. When trouble and discouragement come just stop and repeat, as I have often done, "God is with me." Realize what this means—that the infinite power of God is on your side. Let us get in tune with the Infinite. It means courage, strength, success.—I.H.N.

**Yule Tide Parties**

*Continued from page 31*

Another game is as follows:

Provide each guest with a card on which is written a list of questions, the answers to each of which must begin with the syllable "Cat."

1. The library cat? CATALOGUE.
2. The healthy cat? CATARRH.
3. The pouncing cat? CATARACT.
4. The roadside cat? CATYUP.
5. The unfortunate cat? CATASTROPHE.
6. The religious cat? CATECHISM.
7. The crawling cat? CATERPILLAR.
8. The noisy cat? CATYWAULING.
9. The little cat? CATKIN.
10. The dangerous cat? CATAPULT.
11. The ancient cat? CATACOMBS.
12. The dining-room cat? CATSUP.

For "grown ups" here is another game: Have a large wreath of frosted holly leaves suspended by silver cords. In the centre have a cluster of little bells. Give each guest three white rubber balls and have them throw three times at the bells. If awarded, they have a favor to be offered.

Another game with a twist: Place a wreath flat on the table, stand up a number of white candles. Blindfold the guests and the one who succeeds in blowing out the largest number of candles at a single sitting, the prize, which could be a box with the words written on the outside, "For a Blower." Put a handkerchief in the box.

**Farm and Domestic Help**

With a view to securing the best available wherewith to supply the demand for the above class of workers



Lump Rock Salt, \$10 for ton lots, f.o.b. Toronto  
Toronto Salt Works, 128 Adelaide St. E.  
G. J. O'Leary, Manager Toronto, Ont.

**The Salvation Army**

**Immigration Department**

has already several CANADIAN OFFICERS at work in the RURAL DISTRICTS of THE BRITISH ISLES Among the newcomers there will be a few

SPECIALY SELECTED WIDOWS, with one child above three years, open for engagement, as Housekeepers or DOMESTICS. Also a number of YOUNG CHILDREN, some for adoption, and others to be placed as "helpers" in desirable homes.

**Immigration Secretary**  
20 Albert St., TORONTO, Ont.

**Cream Wanted**

Highest prices—unlimited markets  
Toronto consumes daily the milk and cream from over 14,000 cows and the butter from over 78,000 cows. We want your cream and your neighbor's. Write Toronto Creamery Co., Ltd. TORONTO

**Phone** 2 or 3 of your friends and neighbors right now while you are thinking about it ask them to become subscribers to up a club in this way, and 9 new subscribers you know will enable you to one of Farm and Dairy's Pure-Bred Page

**Freder's Directory**  
Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines nor insertions during twelve months.  
FOR SALE—3 Bona of King Farnes Regis Clothide, from B. O. P. cows. Also three Clyde Pillars and 3 Stallions, Yearlings—B. M. Holtby, Manchester, Ont.

**Big Ben**



**Hitch Your Sleeping Schedule to Big Ben**

Big Ben will wake you early enough for profitable before-breakfast action. His gentle get-up call starts the day with a flying start on thousands of farms.

For your accommodation he rings TWO WAYS. He'll get you up by degrees or in a hurry. Set him either way you wish—to give one long five-minute ring, or ten short rings at one-half-minute intervals, until you're wide awake.

He stands 7 inches tall, is triple-clocked and over a tested independent steel case, the hand-moved has big bold numerals and hands that show the time plainly at a glance, large keys that anyone can wind easily, and such a pleasant tone that you are glad to get up when he calls.

Big Ben makes early rising easy. He's the leader of the early morning brigade. His cheerful

"good morning" he calls millions of lives into action. Thousands of successful farms are run on a Big Ben schedule. He starts and sets right in the morning and keeps you right all day. From 7:00 a.m. to 11:00 p.m. he regulates your day. He'll work for 16 hours at a stretch and overtime, necessary. The only pay he asks is one drop of oil a week.

He is sturdy and strong—built to last a lifetime. Yet under his dust-proof steel case is the most delicate "make good" work. He stands for success—that's why you'll like him for a friend.

Big Ben's wonderful ads are due to his having "made good." His biggest hit has been with folks with the "make good" habit. He stands for success—that's why you'll like him for a friend.

When 1 million families find Big Ben a good clock to buy and 20,000 dealers that show the clock to sell, it's evidence that he is worth \$10.00 of your money. Suppose you trade \$10.00 for Big Ben.

A community of clockmakers stands back of him. Their imprint, Made in La Salle, Illinois, is his. And, it's the best alarm-clock industry you can buy.

## PERCHERONS

Prize  
Winners  
at  
London  
and  
Detroit



Come and See  
the Horses

Dark  
Greys  
Dapple  
Greys  
Blacks

All Warranted  
Brooders

\$1400 Buys this Good 5-years-old Dark Grey Horse, 1960 lbs.

Don't wait to write for prices—\$1000 to \$1500 buys a Good, Young, Sound, Serviceable Horse.

Fully Guaranteed Mares, \$400 to \$600. No need of you paying more.

Send for Circular. It tells Why I can Sell Cheaper than All the Rest.

F. J. SULLIVAN WINDSOR, ONT.

### Lyndale Offering

One Yearling Bull—tuberculin tested—3 of his nearest dams average 27 lbs. butter each in 7 days. Two granddaughters of "KING OF THE PONTIACS," one 19 mos. old, from a 20-lb. Jr. 3-year-old; another 5 mos. from a 20-lb. 3-year-old grand-daughter of same Janet Henswood.

BROWN BROS. - LYN, ONT.

### RIVERVIEW HERD

3 Young Bulls, from 9 to 13 months, sired by King Isabella Walker, whose sister, 3 years old, officially tested dams, a sire average for the eight 30.54 lbs. from E. O. M. and R. O. P. dams.

F. J. SALLEY, LACHINE RAPIDS, QUE.

### KING PONTIAC ARTIS CANADA

SON OF KING OF THE PONTIACS

Arundale Farm offers sons of this great bull:

1. From a 154 lb. two-year-old daughter of Countess Regis (28.30 lbs. at 3 years), born May 10th, 1914. —\$275.
2. Born March 2nd, 1913, from a 24 lb. cow, all her dams having official records. —\$275.
3. Born March 26th, 1913, from a 19 lb. daughter of Homestead Girl De Kol Sarcasite Lad. —\$150.
4. Born May 19th, from a 14.40 lb. yearling daughter of Prince Hengervald Pieterje, records of six nearest dams' average 27.68 lbs. —\$275.

All more white than black, well marked and grown

A. C. HARDY, BROCKVILLE, ONT.

## Encourage Home Industry

### DO YOU KNOW THE OFFICAL STANDING OF YOUR HERD

If not, you are losing money. Write us; our experience will help you. We are now in a position to make up extended pedigrees on the best quality paper, with diagram on back, at the following rate:

- One original and two carbon copies showing 14 ancestors with records from last year's Year Book, ..... 75c
- One original and two carbon copies, showing 14 ancestors (up to date) ..... \$1.00
- Extra carbon copies can be had for 15c each.

When ordering give name and number of Sire and Dam of Animals not registered, and those having numbers above 18961 in cows and 12336 in bulls Canadian Herd Book; and those above 178946 in cows and 95236 in bulls American Herd Books.

For special rate on more than 10 Pedigrees and Sale Catalogues, Address:

Canadian Holstein Pedigree Co.  
BEDFORD PARK, ONT.

Holstein Advertising

## FARM MANAGEMENT

### Making the Most of Manure

R. C. Campbell, Middlesex Co., Ont.

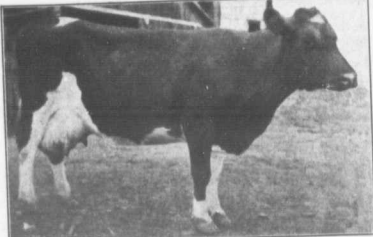
I am fully convinced that the best place to preserve the fertility of farmyard manure is in the soil or on the soil. Drying does not cause loss of fertilizer, merely loss of moisture. It is the action of bacteria that decomposes manure, causing loss of nitrogen. Manure, therefore, that is

directly to the field, my ideal method of preservation would be an outside manure pit made of concrete three or four feet deep, and slanting up to one side so that a wagon could be backed into it. This makes leeching impossible and the manure would benefit the rain falling on it. Of course the main part here would be to keep the manure well packed to keep out the air.

### Fall Fairs in Nova Scotia

(Continued from page 10)

what might be called the Annapolis



Here's "An Udder" Cow for the Big Woodstock Sale

One of the choicest, Queen Natsy, has a two-year record of 450 lbs. butter from 11,664 lbs. milk. Note her tremendous well balanced udder and deep hump. Her manure record is 31.22 lbs. butter, udder and deep hump. A half sister with a record of 14,124 lbs. milk will also figure in the sale on December 17.

spread on the field and dries there, does not form a good medium for the action of bacteria. Of course if I have my manure worked into the soil bacteria may work as fast as they like for the fertilizer that is absorbed by the soil is there and ready for plants to use. Hence in my farm practice I aim to draw the manure directly from the stable to the field and spread it.

There are times, however, when I cannot get to the field. Sometimes there is too much mud and at other times too much snow. Likewise I do

not consider it advisable to spread manure on steep hillsides unless it can be immediately worked into the soil. It is then necessary to store the manure for a while, and the following method I have found to be a good one.

I have quite a few horses on my farm, and horse manure firm in a pile, and ready for use.

This reason I would not think of storing the manure under a shed. A short distance from the barn I select a level piece of ground and the manure is stored in the open, care being taken to pack it down solidly in the pile, the manure from horse and cow barns being thoroughly mixed. If rain happens to fall on the manure it does not do it any harm and tends to prevent heating. As the stack is not on the side of a hill there is no leeching. In any case the manure is not left in the stack for more than a month at a time, hence there is no serious waste.

If I were so situated that I could not draw the most of the manure

Experimental Fruit Farm at Kentville attracted wide attention, showing proper packing in barrels and boxes, effect of spraying with the different sprays, etc.

The other exhibitions were Digby and Shelburne, which were quite similar to the other ones, each doing its part in its own county.

The last one of the season was at Little Brook in Digby County, along the shore of the Bay of Fundy, where for long distances the country is entirely settled by the French people.



A Sire Whose Calves Will Be Valuable

Many of the cows at the big Woodstock Sale will be bred to King Lyons Colantha, the Junior herd sire. He is a choice son of King Lyons and out of Regis Boets, with a record of 27.10 at four years.

The dam of King Lyons Colantha is a 24-lb. daughter of King Walker, out of a 24-lb. daughter of King Sagar.

descendants of the Acadians. This was their first show, and they made a success of it, and they no doubt are a people that more will be heard of along agricultural lines.

All these exhibitions received aid from the Government by way of money grants, and the Department of Agriculture furnished the judges for all the live stock and farm produce, and sometimes for the ladies' work as well.

Well-rotted manure put on the lawn last fall will help to hold the snow and make a much better lawn next year.

Can We

(C) buy? Stopped, and a ward sold he did not the price breeders a list of sire daughter I heard on "You may \$250. He ters. At the extra may say herd worth of that sire sands if h himself. "On the bull of fa long price he has no performance. than a scr

This Jersey land. She breeding fo producing a

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It matter big or litt expect gra not have th situation in that big bo weight will largely dep strength of breeders mo of producing perience is a strong c her dam. weeks' or milking. that no m may be, if

Can We Improve Dairy Queen?

(Continued from page 15)

buy? Stockwell was imported, boomed, and sold for \$12,000, then afterward sold for \$600. Why? Because he did not prove himself worthy of the price paid for him. All stock breeders agree that the sire is half of the herd. If we take a glance at the list of sires with their list of tested daughters, it will answer for itself. I heard one of our best breeders say, "You may pick up a young bull for \$250. He produces 20 tested daughters. At six years of age one-half of the extra value of those cows, or we may say \$50 each, would make the herd worth \$1,000 more. The value of that sire at six years is in the thousands if his blood lines are equal to himself."

"On the other hand, we may buy a bull of fashionable breeding, pay a long price for him, and at six years he has no daughters worth anything. He is of no more value than a scrub, and has lost thousands

flow of milk until her calf is born, as some Jerseys will do, the calf is a weak one and the best place for it is in veal, no matter what the breeding may be.

A FERTILE SOURCE OF MANURE. We may be on the right track in blood line, and then spoil our good work and degenerate our animals by bringing heifers into milk too early. I have had experience right here. I thought it would be something of which to blow to have a 18-month-old cow. We have had three or four of these young heifers, and they were no good, and their calves were no good.

Where weak, the effect of breeding with a young bull will degenerate the herd. Did you ever hear of a young bull producing a world's record cow?

Two years and a half of age is early enough for a heifer to drop her first calf, and then milk her for a year and a half before dropping her second calf. During this time we must not forget to feed. Feeds high in protein and ash do not fatten her,

and give her a good milk. The idea of the ap means to that disr, there are exhibi at the other s. The ex of the at Kention, show- barrels and with the

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of dollars for the breeder. Thus we see the value of using a tried sire." Records show us that the dam of a bull has a great deal to do with the reproduction of his daughters. The young bull inherits from his dam; the daughters from their sire. This fact was proved on our own farm. My father used to keep pure bred Durhams. One cow in particular, Augustina Buckingham, was a great milker, and her milk was rich in butter fat. She had such a large udder at freshening that her calf could easily have been put inside of it. You talk about your milking Durhams! If she was alive to-day money would be no object. She did not produce one milking daughter. They went more to beef because we used a beef bred bull, but we sold three young bulls from her which produced milking grades that would give 60 lbs. of milk a day, and all three bulls were noted for their milking daughters.

It matters not whether the cow be big or little, it is unreasonable to expect great performances if we do not have the basic strength of constitution in her. It is foolish to say that big bones, long legs, and great weight will make butter fat. This is largely dependent on the activity and strength of the digestive organs. All breeders may not have the same way of producing this strong cow. Experience is a great teacher. To raise a strong cow we have to start with her dam. The dam should have six weeks' or two months' rest from milking. Our experience has been that no matter how strong the dam may be, if she is producing a large

but keep her in good milking condition. With such a machine as the Jersey cow, that will turn the pasture, silage, hay fodder, and meal, over that required to maintain her normal flesh, so milk and butter we should not consider her ornamental and forget that she cannot do much without proper feed.

CANADIAN BREEDERS SHOULD TEST. I am sorry to say that we breeders in Canada are much behind our neighbors across the line. I have all my herd tabulated for eight generations. The American numbers are full of tested cows. When Canadian breeders go in for more testing we Jersey breeders must keep up with the times; the Jersey will stand the test with any other dairy breed.

I have here the figures of the 10 best records of each of the four dairy breeds. The average Holstein leads with 1,117 lbs. of butter; Jerseys next with 1,045 lbs. butter; Guernsey close with 1,040 lbs. butter; and Ayrshires, 880 lbs. butter.

THE ADVANTAGES OF RICH MILK. In comparing the value of Jersey milk with other milk, we find that the average of each of the four breeds butter fat in milk taken from the National Record are as follows: Jersey, 5.3; Guernsey, 5; Ayrshire, 4; and Holstein, 3.1. 100 lbs. of 5 per cent. milk make 11.77 lbs. cheese, at 15 cents, \$1.76. 100 lbs. of 3 per cent. milk make 8.76 lbs. cheese, at 15 cents, \$1.30. 100 lbs. of 5 per cent. milk make 6 lbs. butter, at 30 cents, \$1.80. 100 lbs. of 3 per cent. milk make 3 1/2 lbs. butter, at 30 cents, \$1.05.

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GET YOUR MONEY'S WORTH

If you have any money to spend on your home, let us tell you where to buy the things that count. We know what is in all the shops, and can make you \$1.00 as far for you, as you can for yourself. Try us. Send us \$1.00 for each room you want to fix up and we will send you ideas for color and samples of material with information as to where the stuffs can be bought and at what price. Anything you want to know about fixing up your own ask.

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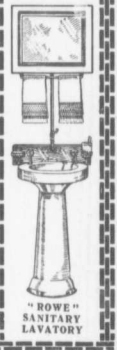
City Conveniences in Your Home

inexpensively and easily obtained by installing the "TWEED" SANITARY CLOSET and the "ROWE" THE "TWEED" LAVATORY.

Requires no plumbing or sewage—only connection with stove-pipe to chimney for ventilation. Ideal for use anywhere. Try one for 30 days free. THE "ROWE" LAVATORY insures running water at all times in your home. Takes up less room than the old style washstand, and is a positive ornament in any room.

Hotels should be equipped with the "Rowe" Sanitary Lavatory and the "Tweed" Sanitary Closet where there is no water supply. Get our price list for hotel equipment. Satisfaction guaranteed or your money back. It is running water without plumbing.

Our descriptive booklet free for the asking. Send for it to-day. "TWEED" THE STEEL TROUGH & MACHINE CO., LTD. 133 James St., WEEDE, ONT.



Are You Ready To Skate



Only one new subscription at a dollar to get a beautiful pair of Skates. Just show Farm and Dairy to one of your neighbors and we will send you the skates.

Hockey Skates—the kind most girls and boys are wearing—on Lever Cast Skates to put on ordinary skates. They are Heavy Nickel Plated and of Good Steel. Write to-day.

Farm and Dairy, Peterboro



## I DOUBLED MY CROPS—

This story could be told by many Canadian farmers who have used a high grade POTASH fertilizer. One farmer in Cape Breton, N.S., doubled his crop of potatoes, in fact has just harvested a yield of 735 bushels to the acre. If he can get such a yield, why can't YOU.

You surely ought to have plenty of barnyard manure to use. If so, use it in quantities in connection with 400 lbs. Basic Slag and 100 lbs. Sulfate of Potash to the acre; cultivate well and you can get a yield similar to his. This is what he did.

Another farmer in Cowansville, Que., obtained a yield of 1,666 bushels of mangels to the acre by using 150 lbs. Nitrate of Soda, 400 lbs. of Acid Phosphate and 150 lbs. Muriate of POTASH, increasing his yield 896 bushels over the plot fertilized with only Acid Phosphate and Nitrate of Soda.

IT COST THIS FARMER JUST \$8.45 TO GET 896 BUSHELS MORE OF MANGELS.

If you want to do likewise on your farm, write us and we will tell you how.

## Potash Pays

Every crop removes from the soil so much Nitrogen, Phosphoric Acid and POTASH. This is the food that the plant consumes. If you wish to raise bigger crops, you must put back into the soil the plant food that the plant takes up in its natural growth.

You probably understand this, and very likely you use some sort of fertilizer, but if you are NOT using a fertilizer containing 6 per cent. to 10 per cent. of POTASH, you cannot get bigger yields of better quality. This is because a plant removes from the soil more POTASH than Phosphoric Acid.

Ordinarily, low grade fertilizers contain from 6 per cent. to 8 per cent. Phosphoric Acid, and approximately 2 per cent. of POTASH. Certainly this is not more POTASH than Phosphoric Acid. You must increase this percentage to 6 per cent. to 10 per cent. POTASH. If you want to raise a bumper crop next year do this.

Insist that your dealer provide you with a 6 per cent. to 10 per cent. POTASH fertilizer you buy, add 200 to 300 lbs. Muriate or Sulfate of POTASH, and this will bring it up to a high grade fertilizer.

You can mix your own fertilizer at home if you want to. Our Agricultural Experts will tell you FREE how to do this. Get in touch with your fertilizer dealer NOW, so that he will be sure to have POTASH on hand for you when you need it. Send us your dealer's name and we will send you FREE booklets on how to increase your yield. These booklets we know are instructive and are the best on the subject, being written by experts. Write us telling the kind of crops you raise, giving us the name of your dealer, and we will see that you get a fertilizer high in POTASH.

You will have plenty of time this winter to study this all-important question, and how to proceed another year to get bigger yields of better quality from your farm. Write us today.

## GERMAN KALI WORKS, Inc.

TEMPLE BUILDING

TORONTO

Having Muriate and Sulfate of POTASH in store at St. John, N.B., Montreal and Toronto, makes it easy for you to get your POTASH from us.

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**Advice to Ayrshire Breeders**

(Continued from Page 5)

and have entirely overlooked type and constitution in the animal. Many of these great record cows have been ruined in making their record and stock afterwards bred from them have been of a very inferior character, lacking constitution and precocity, and also being in a very undesirable type."

**HIGH PRESSURE TESTS CONDEMNED**

I was very much pleased to see the remarks made by Prof. Barton at the Menin last summer regarding the very injurious effect upon the cow's future and usefulness, both as a milker and a breeder, from this high pressure test work. His remarks were not based on hearsay, but were the result of his own personal observation. Fortunately, perhaps, for the Ayrshire breed, we have never taken up with short test work, which is so largely carried on under such abnormal conditions as to be no real index of the cow's actual dairy ability.

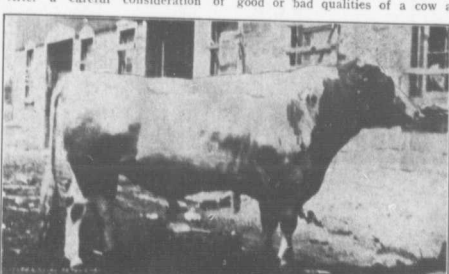
After a careful consideration of

color, leaving other just as valuable characteristics out of consideration. Hoard's Dairyman in a recent issue says: "The question of breeding farm animals is such a deep and complex one if we work to any definite results, that but few men after all are real students and skillful workers in this field."

**A BULL OF RIGHT TYPE**

To my mind the most prepotent force in the improvement of the dairy herd is the quality of the stock bull. A splendid type of an Ayrshire bull is shown in cut No. 3 in this article. Here you see splendid constitution, type, and size, all typified in one animal. His dam was a most magnificent specimen of an Ayrshire cow, with a big milk record in Scotland. The bull weighs 1,700 lbs. in good breeding condition.

It is very important indeed to see that our stock bulls possess the ideal type, size and quality that we are aiming at. As has been well said, "the sire more than the dam is the foundation-stone to believe also that the good or bad qualities of a cow are



**No. 3—Garclaugh Prince Fortune (Imp.). A Splendid Type of Dairy Bull**

Scottish and American systems of testing, our Canadian Ayrshire Breeders' Association adopted the system known as the "Record of Performance" test. This we consider the most valuable, as it is carried out under more normal conditions, and gives a truer indication of the actual milk-yielding and staying qualities of the cow. She must also be a regular breeder as well. It is to be regretted, however, that more of our breeders have not entered into this yearly test work. I am persuaded that no movement undertaken by our association in many years has done so much to popularize the Ayrshire breed among practical dairy farmers as the R. O. P. test.

**THE OLD IDEAL JUSTIFIED**

Over and over again in years gone by, we have heard the assertion made that Canadian Ayrshire breeders were not breeding for utility, but for show ring purposes. Our R. O. P. work today is demonstrating to the public that the ideal type, which our Ayrshire breeders of a generation ago had in view, was not very far astray for the reason that the great majority of the cows with the best yearly records trace directly back to the old show ring herds of Jardines, Guys, Drummonds, McCormacks, or Mortons. Here is a lesson for the breeders of to-day to take to heart, that in the craze for large records it is not at all necessary to lose sight of good type. There is a great danger. I believe that the splendid uniformity of type shown by the Ayrshires in the show ring to-day may be greatly marred through careless breeding for records alone.

Many of our breeders can see that to-day in the nature of the inquiries received from parties wishing to purchase stock, that about all many people ask for is records and white

more generally transmitted through the son than the daughter; hence it is very essential if one is going to do any intelligent breeding, that we know something about the type and general characteristics of his dam, and also further back if possible. If the dam has a deep, pendulous udder or has an udder naturally weak or defective in one or more quarters, or has the objectionable tight level udder and small teat, these defects will be almost sure to crop out in the progeny of the bull.

**Unique Dairy Judging**

Editor, Farm and Dairy.—I saw some funny judging at our fall fair at Norway recently. A special prize was being awarded for the best herd on the grounds. The judge in the beef cattle sections favored a Short-horn herd for the prize, while the judge of dairy cattle was equally certain that a Holstein herd was more than a worthy of first place. There was a deadlock. The chicken judge (an expert) was called in to decide the matter.

True to his chicken training he gave his decision by scoring the whole eight head, the Holstein winning by three and one-half points. The two herds were scored in about five minutes by the expert chicken man without even requiring to handle them for indications of good circulation and so forth.

What a farce! He did not even require paper and pencil to tabulate his discredit. It was all done in the head. That chicken man certainly beat any professor I ever saw at work scoring dairy cattle.—Dairyman, Peterboro Co., Ont.

The most important feed given to dairy stock is that given to the heifer calf.

**HOLSTEINS**



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**REGISTERED High-class Holsteins**

Descendants of such sires as Johanna King's 4th Ltd, Sir Johanna Mercedes, Count Felt's De Kol, etc., being our entire herd. Registered Clevelands, Stallions, 2 and 1 Mares to be sold aged 3 and 5. TUESDAY, DEC. 30TH, MORMONT (Ill.) Farm, 2 miles north of Hoards (Bellville-Peterboro, branch G.T.R.).

Intending purchasers will be met at Station. If sold or stormy day, sale will be held under cover.

Write for catalogue to J. A. STEWART, Sr., MENIE, ONT.

**Ourvilla Holstein Herd**

CONSIDER A FEW FACTS

We developed the first 31-lb. cow in Canada. Also the first 128-lb., 30-day cow. We developed the only 4 half-sisters in Canada averaging 14,241 lbs. milk, 595.76 lbs. butter in R.O.P. at average age of 2 years 95 months—the only herd that has developed 4 cows over 100 lbs. butter in 30 days. The only herd that has developed in the past 4 years 14 two-year-olds with first calves that average 16.68 lbs. butter in 7 days. If you want a herd like this buy a bull or bull calf from this kind of breeding and sired by sires of the best blood lines of the breed. Easy driving distance from Tillsonburg.

**LIDLAW BROS.**

AYLMER - - ONTARIO

**FAIRVIEW FARMS HERD**

is the only place on earth that you can secure a young bull that is a brother to the sire of the cow holding the championship of Canada as well as the United States. Both of these records are held by cows that were sired by some of the best HOLSTEIN Sires. We can offer you a few of his sons at reasonable prices; also some of the greatest Koryndke bull siring to-day. RAG APPLE KORYNDKE 2TH, 7941, out of daughters of Pontiac Koryndke with large official record. Write, or come and see this herd.

E. H. DOLLAR, HEUVELTON, NEW YORK, NEAR PRESCOTT, ONT.

**RIVERSIDE HOLSTEINS** Herd headed by King Johanna Pontiac Koryndke bull, Butcher in 7 days. His sister, Pontiac Lady Koryndke, with 38.02 lbs. butter in 7 days, 1612 lbs. in 30 days, world's records when made. We are offering several fine cows. J. W. RICHARDSON, - - R. R. No. 2, CALEDONIA, ONT.

**BIG DISPERSION SALE**

AT WILLOW GROVE STOCK FARM  
**WEDNESDAY, DECEMBER 10th, 1913**  
**30 REGISTERED HOLSTEINS**

and a few high grades, 14 Cows in milk, 4 promising 2-year-olds, 4 splendid yearlings, 7 Calves, half-sister to the 21st record to none.

All are descendants of such noted sires as Pterier's Heugerveld Count de Kol, Pterier Heugerveld Paul De Kol, Lyrie, Colantuaus Abbecker, Prince Paul de Kol, Sir, Heugerveld's Tomb, all from high official bull siring to-day.

This is an exceptional fine lot of cows and heifers—all heavy producers—bred and kept for profitable milk production. Every animal in the herd bred and raised at "Willow Grove".

Colantua Hatter Baron a promising young sire 25 months old, present herd bull, record cow Colantua 14th Johanna.

Owner retiring—everything goes—well equipped set of Farm Machinery, Lot 21, Con. S. Hlenheim Township. Farm is easily 100 miles west of Drumbo. All trains, both C.P.R. and G.T.R., met at Drumbo station on morning of sale.

Lunch at noon. *Send for Catalogue*  
**C. C. FRY, R. R. No. 1, DRUMBO, ONT.**

Auctioneers: COL. WELBY ALMAS, Brantford; W. PULLEN, Woodstock; Princetown and Drumbo Telephone

**HOLSTEINS**

**Allison Stock Farm**

THE HOME OF SIR LYONS SEGIS

His six first dams average 30.50 lbs. butter in seven days. In the first three generations his six cows that average 30 lbs. in seven days.

We have some beauties of full Calves, 4 to 12 mos. old, from 1500 days Canadian record, 726 lbs. milk and 34 lbs. butter in seven days.

No. 2-Dam, Netherby Queen Jane, Canadian Record, 11 1/2 lbs. milk in one day, 74 1/2 lbs. milk and 25 5/8 lbs. butter in seven days.

No. 3-Dam, Queen Pieterie of the Pontiacs. This heifer sired by King of the Pontiacs, is half-sister to Pontiac Lass, 42 lbs. butter in seven days, a world's record.

We have also a few obsoles ones from sires that we did not see last year, but intend to this year.

We have four from cows with seven day records, that we imported, and two of them are sired by a bull with a 27 1/2 lb. dam and sired by a bull whose dam is A and G Inka M. Kinley, seven day record 29.02. King Segis, dam.

Come and see them. We have a name to pick from.

**ALLISON STOCK FARM**  
CHENEVERVILLE - - ONT.

**LAKESIDE DAIRY AND STOCK FARM**

Present offering, Bull Calves from Record or Performance dam; also a few females.  
W. F. BELL, BRITANNIA HEIGHTS, ONT.  
Ottawa, Ont. Phone.

**Burnside Holsteins**

I am overstocked and must sell Young Cows, Heifers and Bull. Cows are with calf to King Heugerveld Koryndke, and the young stuff sired by King or come and see them. Address JNO. B. WYLER, ALMONTE, QUE.

**SENIOR HERD SIRE**  
Prince Hengerveld of the Pontiacs

By King of the Pontiacs, the greatest sire of the breed. He is sire of 13 daughters that hold or have held world's records

**16**

of his daughters have records that average 766.01 lbs. of butter and 16.459 lbs. of milk in one year. This includes all that have been tested and all with first calf.

Prince Hengerveld of the Pontiac's first daughter to freshen has made 16.56 lbs. butter as a 2-yr.-old. He is making good.

His dam is by Pieterje Hengerveld Count De Kol, who was one of the first sires to have 3 30 lb. daughters, 13 of his daughters have made better than 100 lbs. milk in one day, a showing approached by no other sire.



**JUNIOR HERD SIRE**  
King Segis Pontiac Posch

The only Bull in Canada to-day whose dam holds a world's record.

The records of his Dam and Sire's Dam (both as 3 yr. olds) average 31.83.

The records of his dam and three nearest dams of his sire, averages 32.24.

The records of his 6 nearest dams (including 3 three yr. olds) average 30.30.

The records of his 10 nearest dams average 29.20.

The records of his 19 nearest dams average 27.12.

His sire, King Segis Pontiac Alcatraz, the \$10,000 sire. He is by a son of King Segis and Pontiac Clothilde De Kol II, the 1st 37 lb. cow, and from a former world's champion 3 yr. old.

King Segis Pontiac Posch will make good.

**MANOR FARM**



Home of Prince Hengerveld's Offspring

**BEDFORD PARK**  
ONTARIO

**As I Have Sold My Farm I Will Hold a Sale on May the 26th, 1914**  
GORDON S. GOODERHAM, BEDFORD PARK, ONT.

**Conta**  
C. J. Reakes

The cause of the action which is found after aborting the 'cleansing' which come a fully matured calf, of Cope this particular body was able experimentally by the committee Britain has found it will be worth to the next while the possibility of responsible sight of there which may prevent further enumerated that national weakness of one of organs, acute picture of weakness and emaciation was not blamed, but fluence is doubtless.

When abortion occurs in a cow, the symptoms sufficient are as follows: sionally evident attempts to aborting may be usually the event of the ovulation to the ovary.

1. Whenever search immediately (i.e., the abortifacient) destroy it by being where it lies, usually, as an aid to destruction. If the fetus should be buried, a fungus when filling in the soil removal surface.

2. Thoroughly on which the fetus with an area of every side of it, face with a liberal poisonous sheep-infectant.

3. Isolate the calf for four weeks, if necessary, or a yard or milking.

4. Where severe abort, or keep it in order to prevent trouble and to eradication, that but every cow in this applied to the entire time.

5. In all cases treated.

6. No newly purchased cow allowed access to the herd, or to until she has been out with one of the cows described.

**MATERIAL**  
A treatment routine consisted of 100 mg of mercuric chlorinate, and thereafter as to its efficacy. the excessive irritant the time of application has shown that of other antiseptics. Lysol, Jeyes' fluid has given

### Contagious Abortion

C. J. Reakes, V. S., N. Z. Dept. of Agr.

The cause of contagious abortion is the action of a specific organism which is found in the womb of cows after aborting, and is also present on the "cleansing" and in the discharges which come away with the imperfectly matured calf and afterwards. Dr. Bang, of Copenhagen, first discovered this particular germ, and by cultivating it artificially outside the animal body was able to produce the disease experimentally. The later work done by the committee appointed in Great Britain has fully confirmed this.

It will be well here to draw attention to the necessity of contagion being responsible should never be lost sight of there are many other causes which may produce abortion in individual cows. Among these may be enumerated the following: Constitutional weakness, anemia, serious disease of one or more of the internal organs, acute indigestion, undue exposure of weak-constituted cows to inclement weather, etc. Ergot is often blamed, but the extent of its influence is doubtful.

When abortion proper is about to occur in a cow far gone in calf no symptoms sufficient to attract attention are as a rule exhibited. Occasionally evidences of uneasiness and attempts to apparently prepare for calving may be observed, but generally the event occurs with no premonition to the owner.

#### TREATMENT

1. Whenever a cow actually aborts, search immediately for the fetus (i.e., the aborted immature calf), and destroy it by burning it on the spot where it lies, using kerosene, if necessary, as an aid to ensure complete destruction. If this is not feasible the fetus should be buried deeply. When burying a fetus should be taken, when filling in the hole, to first throw in the soil removed from the ground surface.

2. Thoroughly dig up the ground on which the fetus has lain, together with an area of say, three yards on every side of it, and saturate the surface with a liberal quantity of non-poisonous sheep-dip or other safe disinfectant.

3. Isolate the cow and keep her isolated for four weeks, using a temporary bail, if necessary, for milking purposes. Meanwhile apply treatment by irrigation as described herein. Never allow a recently aborted cow to enter a yard or milking-shed.

4. Where several cows in a herd abort, or keep returning to the bull, it is found to be absolutely necessary, in order to prevent the spread of the trouble and to ensure its complete eradication, that not only these cows but every cow in the herd should be treated, and this treatment should be applied to the entire herd at the one time.

5. In all cases the bull should be treated.

6. No newly purchased bull which has done previous service should be allowed access to the cows until he has been properly irrigated; and no newly purchased cow should be admitted to the herd, or to service by the bull, until she has been thoroughly washed out with one of the antiseptic solutions described.

#### MATERIALS REQUIRED

A treatment recommended at one time consisted of the use of a solution of mercuric chloride (corrosive sublimate), and there can be no question as to its efficacy. Its one drawback is the excessive irritation it produces at the time of application, and experience has shown that the substitution of other antiseptics—for instance, Lysol, Jeyes' fluid, Laves' fluid, or bal—has given good results, and



One Form of Advertising that is Well Worth While?

Who ever heard of a merchant who did not take his place of business known by vantage to learn a lesson from this time-honored custom of the merchant. Not a few of them are making themselves known on the face of their sign. Among these is Mr. M. H. Haley, of Orford Co., Ont., whose farm buildings may be seen in the illustration herewith.

—Photo by an editor of Farm and Dairy.

These preparations are certainly far less irritating than is mercury chloride, though their relative value as germ-killers is less. But the one thing to be remembered and acted upon is that whatever material is used the irrigation must be carried out thoroughly and properly in every detail. If care be taken to ensure this, any of the preparations mentioned above will prove effective. In using mercuric chloride the most convenient form in which to obtain the drug is to get it in so-called "solsoids"—flat circular pellets, each containing a given quantity (8.75 grains). The strength of the solution of mercuric chloride to be used is as follows:

(a.) For cows which are repeatedly returning to the bull or are apparently sterile, 1 in 2,500. This can be conveniently prepared by dissolving one pellet in a quart of water, which has been boiled and allowed to cool to about blood-heat.

(b.) For a bull a solution of the same strength (1 in 2,500) should be used.

(c.) For cows which have just aborted a weaker solution (1 in 5,000) should be used, and applied daily for three successive days, and at weekly intervals afterwards if there be any discharge from the vagina. This solution can be made by dissolving the pellet in two quarts of water.

(d.) For in-calf cows more than three months pregnant which are to be treated as a preventive measure, the solution 1 in 5,000 should be used. Unless in the case of an actually aborted cow, one application only of

the mercuric chloride solution is necessary if properly carried out. Lysol should be used in a solution of 1 part in 80 of water, and Izal, Jeyes' or Laves' fluids in a 1-in-60 solution.

In order to carry out irrigation it is necessary to provide a three feet length of thick indiarubber tubing of one-half inch diameter, and a small funnel, which, if intended to be used with a mercuric chloride solution, must be made either of glass or enameled metal. Neither the mercuric chloride nor its solution must on any account be allowed to come into contact with plain metal, by reason of its strong chemical action on such material. Also, for use in the treatment of the bull, an ordinary enema syringe with vulcanite fittings should be obtained.

#### THE METHOD OF PROCEDURE

1. Boil for five minutes the tube with the funnel inserted into one end, and then apply to the outside of the tube a dressing of salad-oil, good lard, or vaseline.

2. Wash the hands and arms thoroughly in hot water to which a disinfectant has been added.

3. In the case of a newly aborted cow, pass the free end of the piping by means of the hand gently into the womb, or, if treating an in-calf or sterile cow, as far up the vagina as possible, without undue force being used—taking care not to injure the lining membranes. During insertion the curve of the tubing is better turned downwards.

4. Hold the outer end of the tubing with the funnel about 6 inches

above the root of the cow's tail. 5. Pour the solution, as described, gently into the funnel, and so thoroughly irrigate the parts. If the fluid does not run fairly freely from the tube, the inner end need only be moved gently to and fro to secure a free flow. The intention is to thoroughly irrigate every portion with the solution.

6. Thoroughly wash down the parts from the root of the tail to the bottom of the uterus, also the underside of the tail, with some of the same solution as that used for irrigation.

7. If the cow is rugged, thoroughly cleanse the hinder border of the rug, also the straps attached to it, using the same solution for this purpose.

Place the animal in a crush-pen, or otherwise secure him in such a manner that he may be readily handled without danger. Then grasp the propiece (or sheath) by the left hand and pass the nozzle of the syringe inside the sheath, afterward holding it in position with the same hand. Then with the right hand pump into the sheath a quantity of the solution sufficient to thoroughly irrigate the parts.

Note—In using mercuric chloride be certain that the whole of the pellet is thoroughly dissolved before using the solution, as any undissolved particles lodging on the lining membrane of the vagina or womb will cause intense irritation.

The only means a breeder has of suspecting infectious abortion is the fact that several of his cows abort and continue to abort without apparent cause. We do not think that the food given these cows is at all better than there may have been accidents of different kinds that escaped notice. The only definite means of ascertaining whether it be infectious is to send some of the vaginal discharges to a post-mortem of the afterbirth of a freshly aborted cow to a bacteriologist for examination.

A cow may have infectious abortion germs and still carry her calf to full term, and at the same time infect other pregnant cows, which may abort at any period. In many cases a cow after aborting two or more times appears to become immune, and still is liable to infect others, although she herself does not abort.

### Pleased with Milking Machine

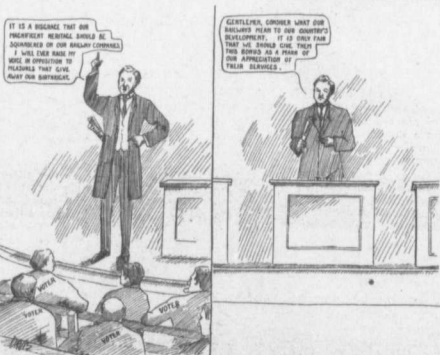
J. B. Carr, Huntingdon Co., Que.

I have installed a mechanical milking machine in June, 1911, and since that time it ever since with the exception of about five months last summer, when I was milking only seven or eight cows.

This machine gave me a little trouble at first until I understood it, but it is now very easy to operate. The cows take to it at once. It does not matter how nervous a cow may be if one is careful the first few times the machine is used. One can adjust the machine and go about their work, and the cows will not move.

I am at present milking 16 cows. I can milk the cows, pump water, and separate the milk in 45 minutes with ease. This makes one and a half hour's work a day. I use about five gallons of gasoline a week, pumping all the water I require for the stock during the time the milks is running. As for the price of installing, the company installed my machine, and I paid the catalogue price.

I do not hesitate to recommend this machine to anyone who is short of help. The longer I use it the better I like it. I do not strip my cows at all, as the machine milks them as dry as I can and does not irritate the udder in any way. I would be pleased to let anyone see my machine in operation.



Is This Your Representative?

FARM AND DAIRY

Farm Labor in Ontario

By "Fair Play." Having read an article on the above subject in your issue of September 28th, in your permission I would like to make a few comments upon the same. I quite agree with the writer that the silver lining has appeared, but I don't agree with him as to the cause...

While we must admit that there are such farmers, I don't think it can be successfully contracted that is more than in any other country of its kind in the world. Almost any farm size which tries to do what is right...

SEPARATE HOUSE ENDORSED. I believe it is true that a small home for the hired man would practically solve the problem and engaging help by the year instead of for seven or eight months would also have a beneficial effect.

I don't wish to be misunderstood here. I don't wish to class all farmers as many men who do the square by their boss. But what I must say is this: A large percentage of the farm help that is brought in from Ontario today is not earning nearly all of the wages they are getting, and as long as the farmer (out of necessity) has to put up with that class of help, he will naturally make the term as short as possible.

Possibly enough men of the right stamp cannot be secured, or possibly other countries to a doubt or less degree. When I say I saw many vacant houses, I do not mean vacant or unworked farms, for in a few cases the owner was not, but the thing that was most noticeable was the empty houses, many of which were going to ruin.

A great many people (not farmers) as look upon the current farm papers being only a trifles. But such people never consider that man is getting his living besides. And further, they have no idea of the other expenses that the farmer has to meet. Besides, he has a right to some profit on his investment.

is not the progressive farmer who reads one or more agricultural papers; consequently he does not get the advice that is intended for him, while the progressive farmer's help reads all such advice, and if they are not of the right stamp, they immediately get disgruntled and independent. Hence I always consider that more harm than good is done by such articles. If I am wrong, please excuse me.

Eyes Opened to Depopulation

Harold Lees, Peterboro Co., Ont. Recently, while making a motor cycle trip through the counties of Northumberland and Prince Edward in Ontario, I was struck by the many vacant houses along the road. In all Ontario we have few countries that are considered much more fertile and productive than these two. Nor are there many that can boast of better and wealthier farmers than we have in these counties. What is true of



A Splendid Representative of a Breed Not Widely Known in Canada.

Guernsey milk is noted for its rich color. Colchester Co., N.S., whose herd bull may Dickson's milk rose to the retail trade prize-winner at Maritime fairs and other representative of the herd have distinguished themselves in Maritime dairy tests. It is popular in Canada. Just why it

This is one reason why H. A. Dickson, who here seen, favors this breed. Mr. The individual illustrated is a proven cow of one of my neighbors, whose stable is continually above 60. In fact, they do better. Even did they not, I would put healthy cows and normal returns above abnormal.

more in demand by the attendants on the cattle than by the cattle themselves. I know that my cows milk just as well in a stable that ranges around 45 degrees' temperature as do the cows of one of my neighbors, whose stable is continually above 60. In fact, they do better. Even did they not, I would put healthy cows and normal returns above abnormal.

Another thing that came forcibly to my attention was the few people a, but many times I went miles out of my way before I would meet a person from whom to ask directions. True, I could have stopped my machine and gone into a house, and in many cases I did. But here again I got a surprise. I should say in more than 50 per cent. of the houses I stopped at, I was unable to get a reply when I knocked at the door.

Having always lived in the city, I was curious to know why this should be the case, and on inquiry found that either the women—for I would not expect to find a man at the house in the daytime—were away, or else the owner was a bachelor or widower. The latter was true in a remarkably large number of cases. A man was trying to farm without a partner.

The thing, however, that made the deepest impression on me in covering about a thousand miles in these two counties, was the many, many houses falling to pieces by the roadside, while the neighboring farmer worked two farms.

Is Warmth Desirable?

Arthur M. Tavish, Alberta. One of the many foolish ideas that farmers here and there insist on adhering to is that warmth is one of the essentials in winter quarters for dairy cattle. When driving home from town recently, I noticed one dairyman banking his barn and putting in double windows. I may have foolish ideas in other departments of farm work, but this is one that I have got away from.

The great trouble is that in preparing for warmth in the stable, ventilation is neglected, the air is continually foul, the walls are dripping with moisture, and the prevalence of tuberculosis and other diseases. I would not so object to a warm stable if it was a well ventilated stable, but in my observation that in preparing it was my very few farmers prepare for ventilation as well.

I believe, too, that warm stables are

in these days of high prices. But if poor cows with only low yields are kept, where would be this necessary and universally appreciated food supply?

Fortunately, through systematic cow testing, there comparisons are possible, so that an incentive is furnished to report every cow, to keep cows that keep more worthy the name of dairy cows. Simple records, easily kept, give definite information, acting as guide posts to herds bred and fed for large yields.

Publishers' Desk

(Continued from page 10)

our leading cattle breeders. These men are tried and true, or else their advertisements could not appear in Farm and Dairy. They have spent large sums to provide attractive and well illustrated advertisements, and we feel they will be sent them by "Our Folks."

This issue is intended to be of special interest to those of "Our Folks" who are breeders of pure bred stock. No matter what kind of stock you may have, you will find something of interest for you in this number. On page three Mr. Geo. Laidlaw, well known as a Holstein breeder, emphasizes the necessity of an ideal. Mr. McKee's article on page five will appeal to everyone who is of the Domestic Scots bossey. So will the article by G. D. Mode on page 17. Both of these men have made names for themselves as breeders of high producing stock, and they speak with authority. "Our Folks" who breed the black and whites, will appreciate the friendly advice given on page seven by Mr. A. C. Hallman, one of the fathers of the standard Holstein breeders' association. Mr. Geo. Laitwhave, who fancies the Jersey, has an article on page six that will afford much profitable reading. There are many other articles of interest which we like to call the special attention of "Our Folks," such as that of Mr. G. W. Clemons on page four, but this talk is already getting too long.

We are making big plans for the coming year. Full measure, heaped up, and running over with the quality of the best is what we are aiming at for 1914. In addition to our eight special magazine numbers, which will be still further improved, we are aiming to have in every one of our weekly issues ideas that will be worth dollars to "Our Folks." As a starter in making our editions more attractive, as well as more readable, we are ordering two new and attractive front cover plates in addition to the one that appears on this issue. Our women folk will be especially pleased with the same readers with it can be made in the Household Department. Not only is this department to be enlarged, but the matter contained therein is to be made so helpful that our women readers should feel they cannot afford to miss a single issue of Farm and Dairy. Depend on it, we have big things in store for "Our Folks."

The ninth annual convention of the Ontario Vegetable Growers' Association was held in the Parliament Building, Toronto, on Thursday, Nov. 14. The president, Mr. C. J. Baker, London, Ont., was in the chair. Cooperation in buying and selling, irrigation, transportation problems, greenhouse construction, and vegetable growing experiments were some of the topics discussed. The following men gave addresses on the above subjects: Mr. J. J. Davis, London; Robert Thompson, St. Catharines; W. J. Kerr, Woodroffe; J. C. Johnston, S.S.A.; A. M. MacLennan, Guelph; and W. R. Cobb, New York.

OUR FA... CORRESPONDENTS... PRICE

KING CHARLOTTE... FINANCIAL DEPARTMENT... RETURN FOR... INFORMATION... ON ACCOUNT OF... FAILURE AND THE... ABOVE ARE... APPLIES ARE LIGHT... OATS AND POTATOES...

MISSISSAUGA PRELIMINARY... IS NEARLY COM... ABLE WORK IS WE... FINANCIAL DEPARTMENT... RETURN FOR... INFORMATION... ON ACCOUNT OF... FAILURE AND THE... ABOVE ARE... APPLIES ARE LIGHT... OATS AND POTATOES...

RICHMOND DANVILLE, N.C. Of fine fill, just the work. Flowing, three shilling and half finished. Young of the pasture. Well. Poultry are 4000 eggs, 380

WORTHAMPTON, N. H. beginning to... INCREASED IN... VERY FINE CO...

MORE money... should m... and prosperity... ers, but for all... society. Instead... farmer as little... be sold and econom... promote the wellfa... the farmer gener... Prof. H. H. D.

cattle are bought... for stockers in... to be no scarcity... of the milk they... by dogs. Fall plowing... E. H. H.

HASTING TRENTON, N. J. Fine at home. Pa... Oves are fine top... fed. Ploughing in... about five stoms... of the damag... J. K.

WELLINGTON FERGUS, N. Y. quite milk lately... Great deal of rain... Ping is pretty w... good for the ab... is cheap. Lamb... runs 18 cents... 15c to 15c; but... W. A. M.

BRUCE WALKMEKTON, N. Y. very wet and rainy... bet. with it being... days at a time. W... storm Sunday, Nov... in the morning... potatoes are all up... and turning, altho... bet. and take adv... days at the beginn... is nearly an ave... and turning in fa... stop is up to the... 18 inches. The aver... way from 25 to 40... dry crop was not up... very low. Cattle a... batcher cattle to... bran 7c; corn 3... sh. 35c to 40c; eggs... 15c. There are... age of plowing to be... fall was too dry. E...

WOODSTOCK, N. Y. of snow fell last week... of the wind and... hday did a great...



OUR FARMERS' CLUB

Correspondence Invited
PRINCE EDWARD ISLAND
KINGS CO., P. E. I.

CHARLOTTETOWN, Nov. 25.—According to a report recently issued by the Provincial Department of Agriculture, the financial returns for the hay crop are better than average, and excellent conditions. Also are above average, but out of the whole crop. Fifteen to 20 per cent on account of weather conditions. Barley does not put up the average, corn is a little below average, as are also roots. Apples and Apples are light, but the crop of sweet potatoes and potatoes next year are predicted.

QUEBEC

MISSISSOUI CO., QUE.
FRELIGHIERE, Nov. 24.—Fall plowing is nearly completed, and other seasonable work is well under way. Fine weather has prevailed, and cattle are out nearly every day. The apple crop was a failure, and hundreds of barrels are being shipped in from the points for laying material.

RICHMONT CO., QUE.

DANVILLE, Nov. 15.—We have had a fine fall, just the weather for all outdoor work. Plowing is well advanced and the crops are in the pasture. Cattle are almost finished. Young cattle find plenty of feed in the pasture. Cattle are all looking well. Poultry are selling from 40c to 45c; eggs, 30c; butter, 30c; milk, 7c to 8c.

ONTARIO

NORTHUMBERLAND CO., ONT.
WYCKLOW, Nov. 14.—Many wells were beginning to flow. Recent rains have increased the water supply. Stock appears to be coming into winter quarters in very fine condition. Many young

MORE money for the farmer should mean greater happiness and prosperity, not only among farmers, but for all classes and grades of society. Instead of allowing the farmer as little as possible, it would be sound economy, and tend to promote the welfare of Canada, to treat the farmer generously.
—Prof. H. H. Dean, O.A.C., Guelph

cially to the fruit trees. Apples are lying on the ground, there was great difficulty in securing them to get apples picked before frost. The apple crop is good, especially where they have been sprayed. Price of hogs has raised a few cents, beef firm at 25c, eggs are at a fair count, but firm at 18c, sheep are at 18c, butchers' stock all been housed, and very few are left, despite the dry weather of summer.—C. P.

MIDDLESEX CO., ONT.

APPIN, Nov. 24.—Farmers are taking advantage of the fine days following the advent of the 9th to gather up the fall and other work almost all day long. A part of an occasional field of corn is still in the field, but it is yielding well, and we might have a goodly quantity of seed corn to dispose of if it were saved for the purpose. However, most of those who huck corn use the grain mixed with oats and barley and shorts for hog feed.—C. M. M.

ABOUT MY AYRSHIRES

W. C. Gully, Athelstan, Que.
Daisy Geraldine, 2575, whose illustration appears in this issue, held the world's Ayrshire record in milk and butter. Her four-year-old class from March 2nd, 1913, to September 24th, 1913, her official record being 15,554 lbs. milk and 590 lbs. butter fat.

This season she has produced in six months 10,691 lbs. milk, making a total for the 19 months of 26,245 lbs. So far as I can trace it is the highest on record. Her highest month's milk was 2,944 lbs., an average of over 7 1/2 lbs. for each day. Her average for six months is over 5 1/2 lbs. daily. Daisy is to freshen within 12 months of her calving, when she broke her record in the States was not bred until she was 12 years old. Her average you can readily see that the two tests are not at all parallel.

Daisy is in bred, being the offspring of mother and son. Her breeding traces in Scotland and New Brunswick, the old Columbian champion of 1893. I have Carl B. 2565, also illustrated in this issue. Her official record is 14,341 lbs. milk, 581 lbs. butter-fat in 365 days. Carrie is again under official test, from June 2nd, the date of her test, and to the end of October has produced 7,660 lbs. of milk. Her record is for the 30th of April 1914, so you can see that these cows are not only milkers but are sound breeders as well. Carl's breeding also traces back to Silver King, Ladis Sterling, Traveller in Scotland. Nellie Osborn and many other noted and male which space will not permit to insert.

LARGEST LIVE STOCK EXHIBIT

The largest exhibit of fat stock ever shown at one time in Canada will be the exhibit at the Fourth annual Fat Stock Show to be held at Union Stock Yards on Saturday and Sunday, December 6th and 7th, 1913. The entries comprise:

- 25 Head of single cattle.
42 Carloads of cattle, 15 head each.
25 Carloads of cattle, 20 head each.
42 Carloads of cattle, 30 head each.
4 Carloads of sheep, 50 head each.
12 Pens of sheep, 3 head each.
12 Carloads of swine, 50 head each.
3 Pens swine, 1 head each.
A total of 319 head of show stock.

The annual sale of Christmas stock at the Union Stock Yards has become the great event of the winter trade. The sale on Monday, December 8th will be the most important in the history of the event. This show is conducted solely for educational purposes. The railroads are making special passenger fares. The large stock yards are kept open, and the public generally are invited to attend the show.

A tourist, calling at an Irish cottage, noticed a glass shade under which was a brick and a faded rose. Naturally he inquired why the owner of a shabby shop should cherish two such dissimilar objects. "Sure," said the man, "the motto is 'I had to die for the name of my head?' Well, it was the brick that made it." "But the rose?" said the visitor. "The rose is the grave of the man who had thrown the brick," replied the host.

A month-old Jersey cow was nibbling at the grass in the yard, and the summer girl eyed it doubtfully. "Tell me," she said, tugging impatiently to her hostess, "does it really pay to keep as small a cow as that?"

Dispersion Sale OF FARM STOCK, IMPLEMENTS, ETC.

On the Premises, Lot 13, Con. 5 West Hamboro, 1 Mile West of Millgrove, Ont.
Tuesday, Dec. 16th, 1913
20 HEAD REGISTERED HOLSTEINS

Herf Bull, two years old, Laxview Hengerveld Pouch II. COWS — Polly Abbecker, No. 4908. Quee: Abbecker Wayne, 7776. Cornelia Mercador, 1245. Abbecker Schullin, 6423. Queen Netherlands By Koi, 6421. Abbecker Wayne Celaninity, 5662. Polly Abbecker, Banks, 56120. Two calf, four Bull Calves. Three one-year-old Heifers. One Heifer GRADES

Twenty-six Milch Cows, mostly Holstein grades, about half of which are fresh or will be about time of sale, the remainder all due in good time.

HORSES

One span of brown matched work horses, rising four and eight years old, about 1,800 lbs. each, good in all harness. One span of bay work horses, 9 and 10 years old, about 1,500 lbs. each, good in all harness. One span of bay work horses, 10 and 12 years old, about 1,300 lbs. each, good in all harness.

PIGS

2 Brood Sows, 14 Young Pigs
HAY AND ROOTS
About 15 tons of first-class Hay. About 700 bushels of Turnips. IMPLEMENTS, ETC.

All nearly new. Two Massey Harris Mowers. Deering Binder. Double-furrow Plough. Disc Cultivator. Pair Iron Harrows. Two Root Pulpers. Disc Drill. Massey Harris Two sets Double Harrows. Hay Rack. 15-hoop. Two Buggy. Two Stock Backs, one new. Stikney Gasoline Engine. 7-horse-power, in good working order, nearly new. Bell Cutting Box No. 50. Massey Harris, Two Outlets. Circular Saw. Spring-tongue Cultivator. J. Walking Plough. Daisie Churn. Magnet Cream Separator. Full set of Blacksmith's Tools. Domestic Wagon.

As the farm has been disposed of everything will be sold without reserve. Trains will be met at Waterdown by appointment.

Sale commences at 9 a.m. sharp. Lunch at noon.
Write For Catalogues

TERMS: Sums of \$10 and under cash; over that amount 10 months time on approved joint notes, at 6 per cent. per annum.
D. R. W. WATSON, Prop. F. FRANK SMITH & SON, Auctioneers

WE present you herewith "Our Sixth Annual Breeder's and Xmas Number."
If it pleases you, we ask you to pass the good news along. Our best efforts are being brought into play in making our publication Canada's most up-to-date and spicy farm paper. Our editors are gleamed from the live dairymen of the Dominion who are qualified successes in their business. Their opinions and experiences are the practical, valuable kind. As the recognized exponent of dairying we go to the homes of our best farm people.
Your interest in FARM AND DAIRY is asked because it reaches people who have money to spend—because it offers sales opportunities—not that it is the biggest national farm paper, but the one to first guarantee its advertising—thus securing the confidence of its reader—"Our People," and making our publication "A Paper Farmers Swear By."

Farm and Dairy

RURAL PUBLISHING CO.
PETERBORO, ONT.

"GRISELDA"



1 day, 105 lbs. milk.  
365 days, 27,881 lbs.  
milk.  
365 days, 875.5 lbs.  
butter.

"Buy the Best"

"K Duke Griselda," No. 17567

Born April 23d, 1913

(His 2 gr. dams over 105½ lbs. milk in 1 day (a record un-  
equaled) by any Canadian bred bull)

"NETHERBY QUEEN  
JANE"



1 day, 111.5 lbs. milk  
7 days, 755.1 lbs.  
milk (Both Can. Records)  
1 Milking 37 lbs.  
(World's Record)

SIRE—"King Netherby," the highest priced Holstein bull ever imported from Canada, whose dam is Netherby Queen Jane.

DAM—"Heroine Pouch," whose dam, Griselda, was the first and only Holstein cow ever sold in Canada for \$4,000,000. She was the 1912 champion in the R.O.P. test, finishing her test May 10th, 1913, and dropped a 95 lb. better calf on June 25th. Heroine Pouch is the model of her dam, only a little larger. She was sold for \$1,000,000, and looks good enough for a 30-lb. junior three-year-old (barring accident).

Our herd sire, King Netherby, was, two years old last March; he has a great future ahead of him besides having a daughter from Griselda. He

**HUMPHREY & WINTER, Adirondack Valley Stock Farms, Chateaugay, Franklin Co., N.Y.**

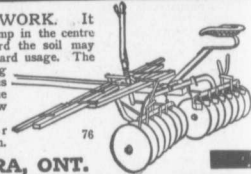
PHONE 11575

Compare the "BISSELL" with other disks

Thousands of Farmers have tested the "Bissell" Disk Harrow in the same field with other makes and found that the "Bissell" HAS THE GREAT-EST CAPACITY. The plates are the correct shape. They cut, turn and pulverize the soil where others

only scrape the ground and set it on edge. The "Bissell" Scrapers meet the plates chisel fashion and keep the plates clean. Movable Clod Irons—an exclusive feature—keep the space between the plates clear. The "Bissell" stays RIGHT

DOWN TO ITS WORK. It won't bind, buckle or lump in the centre no matter how stiff or hard the soil may be. It is built to stand hard usage. The simple method of balancing the driver's weight removes neck weight. It is the Harrow you should know more about. Write to Dept. R for catalogue with description.



T. E. BISSELL CO., LTD., ELORA, ONT.

KING SEGIS WALKER

The greatest transmitting family of the breed, holding the world's records for 3, 1 and 3 generations.

I have for sale one of this bull from high record daughters of Pontiac Kordyke making the greatest and most valuable combination possible to get in the whole Holstein breed. Photo and Pedigree sent on application.

A. A. FAREWELL - OSHAWA, ONT.

HET LOO STOCK FARM

New arrivals at Het Loo Farm—a son of twenty-seven-lb. cow, sire of a son of Pontiac Kordyke. Also one from a twenty-six-lb. cow will be sold for less than half their value if taken soon. Write to

Dr. L. de L. HARWOOD, Proprietor GORDON H. MANHARD, Manager  
HET LOO FARM, VAUDREUIL, QUE.

THAT BIG SALE

OF

In offering the 20 head of Holsteins at this sale I do not wish to be understood that this is just a consignment. With the exception of the heifers sired by my former herd bull, Veeman Beauty Hartog, every animal in my herd will be knocked down to the highest bidder positively without reserve.

ELIAS RUBY.

Big Heavy-Milking Holsteins

As we are dissolving partnership we have decided to sell the entire herd and positively every animal we own will be sold to the highest bidder. We wish to thank those who have been our customers in the past and trust our offering at this sale will meet with their approval.

BOLLERT & LEUSZLER

AT

Wednesday 90 Woodstock 90 Wednesday  
Dec. 17 Dec. 17



Sire—RING PIETER, a son of King Hengerveld and Blanche Lyons—35.31 butter in 7 days  
Dam—BLANCHE LYONS JOHANNA, 29.92, a daughter of Netherland Johanna De Kol 2nd Boy and Blanche Lyons Netherland—34.26  
Five nearest dams average 31.20 in 7 days.  
The females offered should prove attractive to buyers from every part of Eastern Canada. They are large, straight, heavy milkers—mature ones up to 28.38, 3 year olds 27.29 and 2 year olds up to 20 lbs. R.O.P. records up to 17,674 milk and 807 lbs. butter as mature. Note the official records of each of these animals in the catalogue. Nearly all of them will be bred to or freshening from the above herd sires.

YOU WHO KNOW GOOD DAIRY CATTLE, NOTE THESE  
HERD SIRES



KING LYONS COLANTHA  
Sire—King Lyons, a son of Colantha Johanna Champion and Segis Beta—27.10 at 4 years.  
Dam—PRINCESS WALKER SEGIS, 21.19 at 2 years. She is a daughter of King Walker and Princess Segis, 30.45.  
Point nearest dams average 29.68 in 7 days  
The males offered should prove attractive to buyers from every part of Eastern Canada. They are large, straight, heavy milkers—mature ones up to 15.65—in fact all mature females, but 2 have records over 20 lbs. R.O.P. records up to 17,674 milk and 807 lbs. butter as mature. Note the official records of each of these animals in the catalogue. Nearly all of them will be bred to or freshening from the above herd sires.

Come to This Sale and set your price on animals that will do for you what they have done for us!  
Note the Cuts of some of these on other pages in this issue.

A Post Card will bring your copy of the Official Catalogue. It gives you all particulars and pedigrees

LEUSZLER & BOLLERT

Crescent Ridge Stock Farms  
Anticosti: COL. R. E. HAEGAR, COL. B. V. KELLEY

TAVISTOCK, ONT.

Catalogues from JACOB LEUSZLER, Secretary of Sale, R. R. No. 1, Bright, Ont.

ELIAS RUBY

Graceland Farm

Sales Manager: E. M. HASTINGS

THAT YOU There is a great choice of Holsteins among our Ontario. E. M. Hager, of V. Kelly, of Syracuse, N.Y., is the result of a partnership of those Jacob Leuzler and Tavistock. Those cow readers know, number of years having dissolved their partnership 17th. In addition sale will be supplied with a copy of putting in every

In Good Condition Breeders who love their liking—a big and the appetite of ter with milk of 4 Kordyke and one stock Disperser

cept a couple of m herd sire, Veeman his stable will con choice a lot to us. There are seven olds, two two-year and several bull of his cows are bred gerveld, the blood breeder will recog Three of these cow date of the sale. 4 the spring.

The first impres and Dairy received stable was the big male that he keep roomy kind that milk factories. They prove it me too, as Mr. Ruby's milk cheque averages over \$90 a cow for the year at cheese factory.

Louy De Witt, a cow of 7 years, and the one which has formed the basis of his herd, has a yearly record of 87 lbs. butter and a weekly one of 23.12. Her lines are all you could ask, and she is low set and long with a good deep chest, and an excellent udder. In fact, every animal in the entire herd is good.

Another big, strong, growthy cow that looks so well as Belle Mercedes Pouch type, long quarters as a straight color. Methilde Pouch, a monthling bred to Glen Side Pouch O.J.C. bull. She has a look like a breeder's constitution and is another big, smooth will be heard from code. On her sire's two-year-old brother to Count O. sire of the first Ontario male 20 lbs.  
The oldest cow in the Col Calanthy. E. M. Hager's mature Pouch little plainer than a but is a production of a close descendance. He is of better in

### THAT WOODSTOCK SALE

There is a great big bunch of the choicest of Holsteins distributed among our Ontario breeders. It was the result of the mammoth Woodstock sale of the 15th and 16th of December 1912. This sale was the result of the disassociation of partnership of those two popular breeders, Jacob Leuzler and Clara Hartog, of Tavistock. Those two men, as most of our readers know, combined their herds a number of years ago for mutual benefit. Having dissolved this partnership, all of the 100 head will go up at auction on the 15th. In addition to this big array, the sale will be supplemented by the Grand Sale of Miss Ruby M. Ruby, putting in every one of his animals ex-

The younger staff in the stable is the same growthy, thrifty kind that have a good start for mature animals. There is one bull calf that will make a particularly good sire. He is a son of the Lord Hengervold, and out of a 15 lb. yearling daughter of Prince Albertkeer. Moreover, this latter bull being grand champion at Toronto and Ottawa this year. Note the out of him in the December 4th issue of Farm and Dairy.

Although Mr. Ruby is a young breeder, yet the excellent herd he has gathered around him and the care he gives it, would do credit to many of our older fellows. Every one of his animals show excellent traits and blood. He is a good feeder, in addition to being an expert breeder.

Prospective buyers will find it to their advantage to learn more about the class of animals he keeps before the date of the sale.

Leuzler's and Botter's Herds

dirty day found Mr. Leuzler doing some repairing for winter in a stable and at the same time sleeping at the eye on Queen Natsy, who had just dropped a fine, big calf.

By his Kifer, Hengervold, a tremendous udder, and is clean, strong and straight in every way. Her world's record cow of Natsy, a daughter of Tyrnina, who has an official record of 29 lbs.

Tyrnina, a six-year-old, is possibly the choicest of the whole stable. She has a seven-day record of 27.30 of butter and 569.08 of milk in 30 days of 113.07 butter and 2,270 of milk. On the record 27th, three months after calving, she had a foetus, an excellent handler and will be one of the ones to big upon. Her lowest record sister had 23 lbs. butter week.

dropped will also be in the sale and in addition, two other heifers. Queen Natsy is a grand-daughter of Natsy, a daughter of Tyrnina, who has an official record of 29 lbs.

Her sire is a regular milk factory. They prove it too, as Mr. Ruby's milk checks average over \$90 a cow for the year at cheese factory. Lucy De Witt, a cow of 7 years and the one which has earned the best price of his herd, has a yearly record of 87 lbs. butter, 2,200 lbs. of milk and a weekly one of 23.12. Her lines are all you could ask, and she is low set and long with a good deep chest, and an excellent udder. In fact, every udder in the entire herd is good.

Another big, smooth, open heifer that will be heard from is Flossie Wayne Marcode. On her sire's side she has a 14-lb. two-year-old sister. Her sire being a brother to Count Calamity Marcode, the sire of the first Canadian two-year-old to make 21 lbs.

The oldest cow in the herd is Duchess De Kol Calamity. She is nine years, and has a mature record of 23.29. She is a little plainer than some of the other cows, but is a producer of the right kind. She is a close descendant of Calamity Jane, 24 lbs. of butter in a week.

The biggest and showiest cow in the stable is Daisy Anna De Kol, a young grand-daughter of Pontiac Korynkie. In good condition at freshening she should weigh 4,200 lbs. As a four-year-old she gave 21 lbs. butter, her milk averaging nearly four per cent fat. She is also a great big milk factory with a snug, well-balanced udder and an appetite that cannot be satisfied. She will make a good candidate for a 30-lb. record when she freshens.

Maple Grove Tidy Abbecker is also one of the big roomy kind, nearly white, a straight back, long quarters and very deep. She is a three teater, but will form an excellent addition to any breeding herd.

A pair of heifers at the far end of the stable are just the kind that the best breeders are looking for. One of them is indeed a dairy. She is good and will make a monstrous cow in addition

(Continued on page 4)

## AYRSHIRES

**SUNNYSIDE AYRSHIRES**  
Imported and Home-bred, are of the choicest breeding of good type and have been selected for production. THREE Young Bulls dropped this fall, sired by "Nether Hall Good-families" - 2664 - (Imp.), as well as a few females of various ages, for sale. Write or come and see.  
J. W. LOGAN, Howick Station  
(Phone in house.) 164

## Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes, Imported or Canadian bred, for sale.  
Long distance 'Phone in house.  
R. R. NESS - HOWICK, QUE.

## First Prize Ayrshires THOROUGHRED

Some freshened and some due to freshen within a month. Also Thoroughbred Heifers of all ages. Prices reasonable.  
JERRY O'CONNOR,  
CAMPELLEFORD, ONT. - R.R. No. 4  
'Phone 148.

## 4 Pure-bred Ayrshire BULL CALVES 4

For Sale. Write  
W. C. TULLY, ATHELSTAN, QUE.

FARM FOR SALE—60 Acres in Smith Township; 110 acres workable heavy clay loam, balance pasture and wood. Good barn and house, wells, good orchard, 2 1/2 miles from Corporation of Peterboro. Price \$30,000. Terms to suit. Ap'o's Box 1841, Farm and Dairy, Peterboro Ont.

**BULL CALF—SIR FINIS PIETERTJE ABBEKER—FOR SALE**  
His sire's aunt, Tidy Abbecker the Kol gave 28.31 lbs. butter in 7 days; 107 lbs. milk in 4 days. His grand dam at 2 years gave 18.60 lbs. butter under unfavorable conditions. On his dam's side he is closely related to Canary Starlight, Louise B., A.R.O., 30 lbs. butter in 7 days at 4 years, average 330 lbs. fat, and Canary Starlight at 4 years, 21 lb. butter in 7 days, average 4.57% fat. Calf is beautifully finished, very deep milking and high test.

## Keep The Boy On The Farm

By making home interesting for him. Give him his own interests, and in due the change.

It not him started Breeding Pure Bred Stock  
Get only Pays, but has kept thousands of boys at home interested and happy.

Two Of The Many Who Were Satisfied

July 16, 1913

Farm and Dairy  
Peterboro

Received my pig O. K. It is a dandy, and I am much pleased with it, and it is much larger than I expected.

Thanking you very much for it, I remain as ever,

W. Q. LINT

P.S. Will send photo of it later on.

A Premium Pig

This is a picture of the type of Pig that Farm and Dairy are giving away. It is a Yorkshire, splendid for Bacon and for which there is always a good market.

Notice the interest displayed by the boys whose letters appear above! They will be likely to leave the Farm? Are they more interested in the City than the Country?

## FATHER—MOTHER

Keep your boy at home by helping him to get Nine New Subscribers to our paper, and a Pure Bred Pig.

Don't fail to take advantage of this opportunity. Fill in the blank now and be sure to get your supplies right away.

Farm and Dairy

I will try and secure 9 new subscriptions to earn a pure bred pig. Please send me sample copies, receipt forms and order blanks.  
Signed.....  
P.O..... Prov.....

## TANGLEWYLD AYRSHIRES

The High-Testing herd Average test—22 cows—4.44 per cent. butter-fat. Globely bred Young and adult and Bull Calves by Royal Star of Bonus breed, a son of the champion B.O.P. butter-fat cow, Eileen, 105.50 lbs. fat, and from R.O.P. dams.  
If you want high-class Ayrshires write or come and see.  
WOODSIDE BROS., ROTHWAY, ONT.  
O. T. R. Sta. and 'Phone con. Drayton

## MISCELLANEOUS

Holstein-Friesian Association of Canada Applications for registry, and membership, as well as requests for blank forms and all information regarding The Farmer's Best Friesian Cow, should be sent to the Secretary of the Association, W. A. CLEMENS, ST. GEORGE, ONT.

FOR SALE—13 Young Registered Oldworld Twins Bred for \$50.00 Write to Fred Comerford, Eldersburg, Ont.

GREY HORSE OR MARE WANTED. Mare preferred. Must be saddle type and exceptionally good in conformation and appearance. Not less than 15.2, nor over 16 hands. Weight, 1,300 lbs. Send description and price to D. G. Loomis & Sons, 1117 St. Patrick Street, Montreal.

## HOLSTEINS

## Cows Wanted

Give best prices on fifty head Milking Shorthorns and fifty head Holsteins. Average age, six years. Tuberculin tested.

THE DUNROBIN FARMS,  
BEAVERTON - ONTARIO

ELGINBURG, ONT.

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### Do You Want High Record Backing

#### For Your Bull?

The best blood of the Pontiac and Segis families is combined in our Herd Sire.

We offer one of his Bull Calves out of a cow that tested 16.46 Butter at 2 yrs. and whose sire is full brother to King of the Pontiacs.

Write for Pedigree and see if you can beat his breeding.

Price \$125.00 delivered anywhere in Ontario.

**D. B. TRACY**  
Hamilton House Dairy Farm  
Cobourg - Ontario

### OXFORD DISTRICT

The Holland of North America  
is the piece to buy Holsteins of quality. The Third Annual Sale will be held in the city of Woodstock on March 26th, 1916. Full list of breeders in the Oxford District with post office and station addresses sent on application to R. J. KELLY, SECY., TILLSBURG, ONT.

### Anything in Holstein Faeles

From 1 week to 8 yrs. old, 75 head to choose from.  
SPECIAL OFFER: 10 Heifers rising 2 yrs., bred and Bulla from 7 to 10 years.  
My herd bull is Count Hengervold De Kol, No. 8092; dam, Sara Lewel Hengervold De Kol, first cow in Canada to make over 30 lbs. butter in 7 days—record 38.4. Sold for \$2,000.  
Write me or come and see what we have that you think it would pay you to buy.  
Wm. HIGGINSON - INKERMANN, ONT.

### A Clean-up Day

—Hugh Andrews, Victoria Co., N. B.  
It is a caution how much trash will accumulate around the farmyard and farm buildings in the course of a year. We can see evidences of its accumulation around almost every farm we pass on our way to market. I know it is easy to criticize people for not keeping their premises spick and span, and I also know that when you get up against the real thing with short labor and a continual rush to get necessary work done, the cleaning up process is not an easy one.

At "Lone Spruce Farm" we have got around the difficulty by selecting one specific day on which to clean up each spring and fall, and then we get at it with a will. All refuse, such as discarded machinery, tin cans, loose stones, etc., is picked up and carried to the dump in the back pasture. The most of the refuse that accumulates around the farm, however, is of a kind that can be very profitably converted into kindling to keep the wife supplied and satisfied for the next six months. Another important item in the work of our clean-up day is the straightening up of fences and making various little repairs around the buildings.

Our two clean-up days are the most satisfactory days in the whole year. We really feel that we have accomplished something. Likewise, they are an aid to efficient work all through the year. To have slovenly surroundings makes a man slovenly in his work.

### Farm Tenancy in Ontario

The number of farm tenants in rural Ontario as a whole decreased from 32,366 in 1901 to 30,634 in 1911. The proportion of tenants to owners



### The Type of Holstein That Breeders Are Keen To Secure

Tyrantia Netherland 3rd, a six-year-old, has not only the finest of conformation but greatest capacity as well. Her seven-day record is 27.38 of butter and 549.03 of milk. In 30 days she gave 112.07 butter and 2,570 of milk. Her lowest record sister has 21.2 lbs. butter per week. See both at Woodstock, December 17.

in the whole Province is about one in seven.

The number of tenants in the new districts is naturally small, while in some of the older districts it is quite disturbing. In the county of Durham over a fourth of the land is in the hands of tenants. In South Ontario the proportion is but little less while in Centre York well over a third of the occupants are leaseholders.—Weekly Sun.

### Ridgedale Holsteins

Young stock for sale, both sexes. Also two or three Young Cows, bred to Imperial Pauline De Kol. Write or come R. W. WALKER, UTICA, ONT. Myrtle, C.P.R., and Manchester, G.T.R. Bell Phone.

### Lakeview Holsteins

Bull calves only for sale for the present, bred by Count Hengervold Fayne De Kol or from his daughters and sired by Dutchland Gouantha Bir Mona. Write for extended pedigree of these bulls, or come to Bronte and see the herd. Visitors always welcome.

E. F. OSLER, BRONTE, ONT.

### Lyndenwood Holsteins

Among the Young Bulls we are now offering is a full brother to Netherland Favorit, his having the 5yr-old 30-day butter record. Also a son of this heifer, both fit for service, and some nice Calves nearly fit for service, from high-testing dams. A few Cows and Heifers for sale, either tested or from tested dams.

W. J. BAILEY  
Hagersville Station, Naber P.O., Ont.

### Forest Ridge Holsteins

HERD "KING SEGIS PIETERTAE" SIRE "FINDERNE KING MAY FAYNE"  
The dams of these two sires average over 23 lbs. butter in 7 days.  
Get your next young bull from my herd. Best by test.

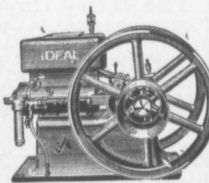
Presently offering a few young bulls nearly fit for service, sired by R. S. P., and a few choice young cows bred to him.  
Farm 46 rods from station.

L. H. LIPSIT, Prop.  
Stratfordville - Elgin Co., Ont.

# BRANTFORD GASOLINE ENGINES AND BRANTFORD WINDMILLS ARE LEADERS IN THEIR LINE

We Manufacture the Most Complete Line of each in Canada, as well as

GRAIN GRINDERS, Eight Sizes  
TANKS, WATER BOXES  
STEEL FRAME POLE AND CORDWOOD SAWS  
IRON PUMPS, CONCRETE MIXERS  
POWER SPRAYING OUTFITS



The Robson Co. at Brantford have one of our Engines running one of our 12-inch grinders doing Custom Grinding for fourteen years, and they say it is running as good as ever and giving the best of satisfaction.

Fred Vickert at Princeton has been running one for thirteen years and says it is good for another thirteen.

When buying a Gasoline Engine you are not buying an Agricultural implement, but a Machine. Our Engines are made as good as the Machinery that make them. Ask the man who has a BRANTFORD.



OUR FACTORY

We have Separate Catalogues describing  
Windmills and Accessories, Gas and Gasoline Engines  
Grain Grinders, Power Spraying Outfits

Write if Interested

We build the best line of Windmills in the world. Her new mill comes in three different trials.

All Mills Galvanized after completion and all Towers Girted every five feet and Double Braced.

## GOULD, SHAPLEY & MUR CO., Limited, BRANTFORD, Ont.

BRANCHES: WINNIPEG REGINA CALGARY

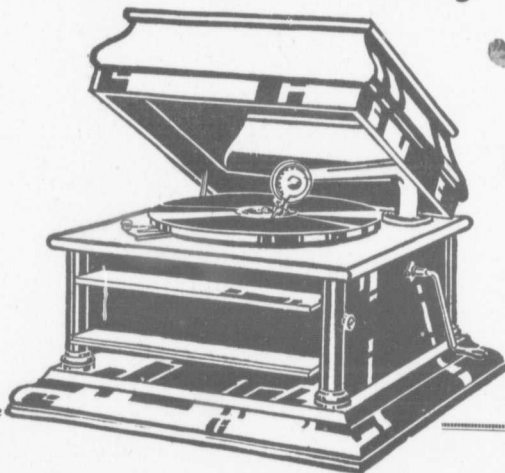
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# Placed in Your Home for Xmas on Payment of only \$10

Including the Ten  
most popular  
Columbia Record  
Selections

Very newest model  
Complete cabinet  
**COLUMBIA  
GRAFONOLA**



## Only a Limited Number Obtainable So Be Quick to Order Yours

Hundreds of music-hungry readers of Farm and Dairy have been wanting a high-grade Grafonola—"if only they could afford it."

NOW—on payment of only \$10—you can get this superb fully-enclosed-cabinet Columbia Grafonola, together with the 10 most popular record selections—and if you act quickly the instrument and records will be delivered in your home before Christmas. The balance you can pay in convenient payments of only \$5.00 a month for nine months.

### No Wonder Nearly Everybody's Buying Grafonolas

Think what a pleasure it would be to spend your evenings at home listening to the best music the best artists in the world can provide—to entertain the children with songs, recitations, bands—when friends call to give them a whole evening of solid fun and enjoyment.

Until you have had a Grafonola in your own home you cannot fully appreciate the inexhaustible pleasure and happiness it provides. In no other way could you invest a few dollars that would mean so many hours of incomparable entertainment for yourself and friends. Money spent for entertainment in the theatre, opera house, concert hall, buys only temporary entertainment. With a Grafonola in the home you draw on the world's entertainment centres for what you enjoy most—and you enjoy it over and over again at no additional cost.

Other models \$17.50 to \$650 Complete catalogues of instruments and Columbia Double-Disc Records sent free on request.

## MUSIC SUPPLY COMPANY

Wholesale Distributors of Columbia Graphophones,  
Grafonolas and Records

88 West Wellington Street Toronto

Dealers are reminded that the present demand for Columbia Grafonolas instruments desired for Christmas delivery. Dealers wanted where not already represented.

This is the first time an up-to-date cabinet instrument has ever been offered for less than \$65.00 cash. Remember, it is not the old-fashioned cylinder horn machine—but a strictly up-to-date cabinet hornless instrument, capable of all the tonal quality of \$250 instruments.

Plays all flat disc records—both Columbia and Victor. Guaranteed satisfactory in every particular—or we will return your money.

If you ever hope to own a high-grade instrument, do not neglect this opportunity to get one—and get it RIGHT AWAY. The instrument offered is such big value and the demand for it so great that more people want it than can be immediately supplied. So send your order at once. Instrument will be delivered through the nearest dealer.

**You Must Order Immediately** if you wish to accept this offer and have the instrument in your home for Christmas

MUSIC SUPPLY COMPANY  
88 W. Wellington St., Toronto.

I accept the offer of a Columbia Grafonola and the 10 most popular record selections, made in Farm and Dairy. I enclose \$10 as first payment. If satisfactory, I agree to pay \$5 each month for the next 9 months. If not satisfactory, it is understood the instrument may be returned—when my money, \$10, will be refunded.

Name .....  
Address .....  
Nearest Express Office .....

# Write for FREE Catalogues

## Progressive Jones Says: "It Pays Big To Fertilize The Harab Way"



THIS year I have seen scores upon scores of proofs that it pays big to fertilize the Harab way. I've seen worn out soils made to yield bumper crops and make pocket books bulge with profits. I've read oceans of letters from my farmer friends giving evidences of their success with Harab Fertilizers. What better proofs could you want, friends, than the proofs of what the Harab way has done for others.

I think you will agree with me that the Harab way is the sensible method of fertilizing. You see, there are 25 different

# Harab FERTILIZERS

prepared from tested, absolutely reliable formulae. Among these twenty-five different fertilizers is to be found exactly what is needed for your particular locality and for the crop you wish to raise. Harab experts give each inquiry individual attention and advice as to what fertilizer is required, based on actual tests and reports from your own district.

Harab Fertilizers are being used all over Canada and are producing big results. I know the results you will get will be equally as good as the successes some of my farmer friends tell about on this page.

Harab Fertilizers are mechanically mixed in exact proportions and are of the highest quality in every way. I've seen them made and I ought to know. They are manufactured from blood, bones, tankage, etc., from the big Harris slaughter-houses. In addition, they have Potash and just enough quick-acting Nitrates and Superphosphates to produce well-balanced Fertilizers which feed the plant as required and develop it to early maturity in a natural way. Their beneficial effect upon the soil can be felt for years after the application is made.

But, friend, what you want right now is the Harab Fertilizer booklet. It gives complete information about fertilizing the Harab way. The Harris people have promised me to mail a copy promptly to every friend of mine who writes for a copy, and to give personal advice to each inquirer. Just you drop a post card to them right away.

*Shows for bumper crops  
Progressive Jones*

## Read What My Farmer Friends Say

Nanticoke, Ont., Oct. 18, 1913.  
The Harris Abattoir Co., Toronto.

Dear Sirs:  
Last spring we tried your Farmer's Special Fertilizer on 8 acres of Oats, and were very well satisfied with the results. It raised the average yield 10 bushels per acre over any former crop that we had raised on that field for the last eight years, and we take great pleasure in recommending it for run down land.

(Signed) FRANK FLEMING.

### Doubled the Corn Yield

Canard River, Ont., Sept. 8, 1913.  
The Harris Abattoir Co., Toronto.

Dear Sirs:  
I have used your fertilizers of all kinds ordered and they have proven satisfactory in every case, especially on the sweet corn, of which the yield was about double that on which there were no fertilizers. I think next season I will use double of what I used last season.

(Signed) DOLPHIS VIGNEUX.

### Largest Celery Farm in Canada

Theofoord, Ont., Sept. 3, 1913.  
The Harris Abattoir Co., Toronto.

Dear Sirs:  
Having used fertilizer on celery for the past seventeen years, wish to state that the brand we received from you last year and this spring has given us the best results of any fertilizer we have ever used. We would suggest that any gardener, who has not been fortunate enough to try your good stuff, see us at that opportunity, and get the best. Wishing you every success and you can feel assured that we will be back for more fertilizer next spring, we remain,

(Signed) THEDFORD CELERY CO.

### Cheaper Than Horse Manure

Walkerton, Ont., Aug. 25, 1913.  
The Harris Abattoir Co., Toronto.

Dear Sirs:  
Your Mr. Green called here and looked over our Strawberry bed, which is beginning to show the results of your Fertilizer.

We have been experimenting with an acre of Berries fertilized with 500 lbs Harab to the acre, cost \$25.00. Also an acre alongside of it with 20 loads of Horse Manure at a cost of \$25.00 per load delivered, \$50.00. The plants where the Harab was used are larger and more healthy than where the manure was used, convincing us that it is much cheaper, allowing for a crop of Rape or any green crop to supply the humus which is all the Fertilizer does not supply; to say nothing of saving of labor in loading the crop and keeping it clean, as we find the acre with manure requires more work on account of the weed seeds, which rot always as a manure. (Signed) J. E. MCGREGOR.

### The Only Good Corn Crop

Port Hope, Aug. 23, 1913.  
The Harris Abattoir Co., Toronto.

Dear Sirs:  
In answer to yours of the 15th instant, I am sending you by express a sample of Oats grown by us this year. The soil is a gravelly loam, considered one of the poorest fields in the neighborhood.

Last year's crop was silo corn fertilized with your fertilizer at a cost of about \$100 per acre in the drill. It was the only good corn crop in this part last year. We sowed it this spring with our own seed. We entered them for the county prize in field crops. There were 15 entries from all the best farms within 20 miles. They got third place out of seven prizes, being only five points behind number one and three behind number two. We fertilized the acre with 200 lbs Harab per acre and sown oats at a cost of \$4.50 per acre and sown the cure we added 20 or 25% to the crops. We are prepared to furnish seed up to about 200 bushels at one dollar per bushel, bags free. Hope to be able to see you at the Fair.

(Signed) R. L. HOLDSWORTH & SONS.

THE HARRIS ABATTOIR CO. Limited FERTILIZER DEPT. Strachan Ave.  
TORONTO CANADA