

Issued Each Week - Only One Dollar a Year

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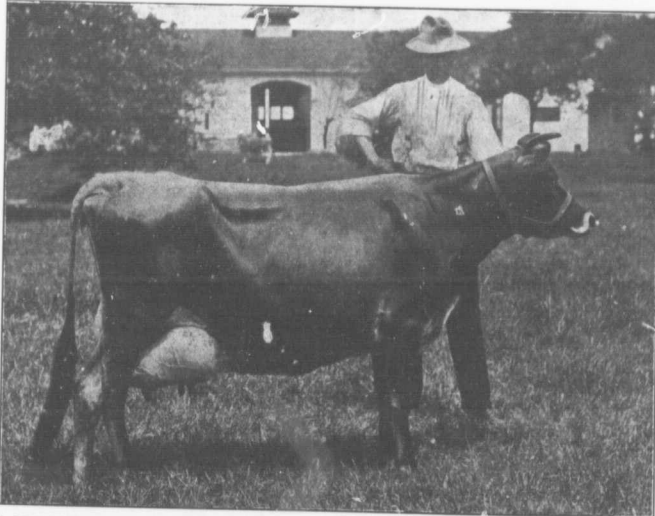
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

DECEMBER 1,

1910.



THE REIGNING JERSEY QUEEN AT THE RECENT NATIONAL DAIRY SHOW, CHICAGO
Good dairy cows of proved worth are selling for prices almost verging on the fabulous. It matters not so much what breed they are. The question is, "what can they produce?" Far-sighted dairymen who took steps some years ago to know their cows and have kept records of their production are now reaping a rich reward. Our illustration shows Bosnian's Anna, the champion Jersey at Chicago. Tested officially by the Storrs (Conn.) Experiment Station, May, 1910, she gave 288 lbs. milk having fat content equivalent to 20 lbs. $7\frac{1}{2}$ ozs. of butter. This cow was imported by C. I. Hudson, from the Island of Jersey, September, 1909, and has since made notable winnings at many State fairs.

DEVOTED TO
**BETTER FARMING AND
CANADIAN COUNTRY LIFE**

—SECOND ANNUAL
BREEDERS' NUMBER
PRICE 10 CENTS

NEVER HAD AN ACCIDENT

You will have to go a long way to find a person who has had an accident with a "SIMPLEX" bowl. And, what's more! A worn out

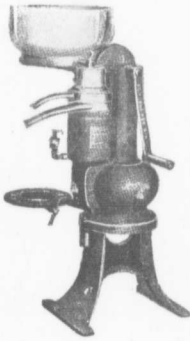
SIMPLEX LINK-BLADE SEPARATOR

is as scarce as hen's teeth. There are several reasons why this Separator has the reputation of being a "no break, no wear!" machine.

The "Simplex" bowls are made of a very ductile grade of seamless steel tubing, that even if it were subjected to an extreme pressure would stretch, but would not fly to pieces. The spindles are made of a special grade of high carbon steel, heat treated, to increase their toughness.

There is no safer or stronger bowl than the low speed "Simplex" bowl, and this is a point that you should think about especially in these days of cheaply built high bowl speed separators.

Our aim is to make a Cream Separator that is stronger than is actually necessary. When you buy a Separator, buy a good one. The safest way is to get in touch with our nearest agent.



D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

A Heart to Heart Chat With Our Readers

By the Editors

"If measure, headed up and running over, and this of quality, has ever been the policy of the management towards the reading matter that goes into *Farm and Dairy*. Material, all well and a yard wide, a farm paper up-to-date in attractive, in illustrations, in timeliness, in fighting the farmer's battles, in keeping him informed of what is going on in the agricultural world—upon these things have the editors of *Farm and Dairy* ever sought to permanently retain the confidence and support of subscribers.

We are grateful for the place that *Farm and Dairy* has won in the hearts of the farmers of Canada. We thank you, each and all, for the support you have given us, and we had made possible the publishing of an absolutely first-class weekly farm paper like *Farm and Dairy* at the low price of only \$1.00 a year.

A "FEAST" NEXT YEAR.

There is going to be a big feast for *Farm and Dairy* readers this coming year. Never in the history of a farm paper have there been such plans and such preparations for a farm paper as we are making for *Farm and Dairy's* audience in 1911. The editors of *Farm and Dairy* wish they could sit down at your table one of these evenings and tell you just what they have in store for you.

This Magazine issue, the Second Annual Breeders' Number, is the eighth of the series of special magazine numbers that during the last year, but in 1909, have gone to *Farm and Dairy* subscribers at no extra cost to them, along with the regular numbers included in their subscriptions for one year, which cost them but \$1.00. more special magazine numbers for 1911. These special issues in which the information they contain will be of the greatest value to our readers.

POULTRY NUMBER, FEB. 2

The first of this series of special issues will be the Third Annual Poultry Number of *Farm and Dairy*, to be published February 2nd. A new interest has been awakened in poultry circles in the development of the co-operative poultry circles. These circles are showing farmers what a money-making proposition Macdonald College, Quebec, will set forth. What Co-operative Poultry Circles Mean to Canadian Farmers. Prof. A. G. Gilbert, of the Central Experimental Farm, Ottawa, Ont., will write from his years of wide and practical experience an article on "Poultry as an Asset on a 100-acre Farm." John I. Brown, a poultry specialist of Montreal, in a practical article, "30 Hens to a Farm," will tell just how others have succeeded with hens and how thousands of other farmers may make poultry the best paying branch of their farm. There will be also many other interesting and instructive practical poultry work.

OTHER MAGAZINE NUMBERS

Following after the Poultry Number will come our Third Annual Orchard and Garden Number, March 2nd. Excellent material by well known authorities, who know from practical experience whereof they speak, is being prepared for you as for the other numbers that follow.

In this Orchard and Garden Number, Prof. J. W. Crow, of the able Apple Cross," Professor Caesar, also of Guelph, will tell "How the Codling Moth and Scab can be Effectually Controlled." His arguments will be backed by the results from his practical work. Special articles will treat of the Farmer's Garden, others will give specific directions on How to Plant, How to Prune, How to Cultivate and How to Fertilize, so as to get the best returns from the horticultural departments of the farm.

April 6th is the date of our Special Dairy Number. The farm Improvement Number will come out May 6th. The Farm Machinery Number 1. Our Fourth Exhibition Number will be certain to delight and inform all who secure a copy of it. Readers and advertisers alike have come to take a special interest in this number. It is to be dated Aug. 31.

Then there will be a Household Number, Oct. 5th; this will be followed by the Third Annual Breeders' Number, Dec. 7th. Through the year, each and every week, *Farm and Dairy* readers will get the benefit of the practical farm experience of scores of men who have made a success of some particular branch of their farm work. Articles, brief and to the point, from actual farmers—men and women who live on the land, will, during 1911, as heretofore, be a feature of *Farm and Dairy*. A large number of the essays written by these farmers who were successful in the Dairy Farms Competition during the past two years, are yet to be published. These will appear from week to week.

ANOTHER FARMERS COMPETITION

Then there is to be another provincial Prize Farms Competition during 1911. This will be enlarged in scope and will include some farms from Quebec province. Every department of *Farm and Dairy* will be strengthened and every part of *Farm and Dairy*, of a truth, will afford the farm people of Canada the greatest dollar's worth ever offered in agricultural periodicals. Canadian farmers are coming into their own, and it is right.

This is but a part of our program for 1911. There will be illustrated supplements, more and better than there have been this year, and there will be many other good and attractive things, which for want of space we cannot mention here. We do no other part. Will you do yours? Will you tell your friends about your paper, *Farm and Dairy*, and induce one and more of them to subscribe and thus enlarge our field of usefulness and place us in a position where we can give you even greater value for your dollar? Commence now to do your part.

THE "B T" FEED AND LITTER CARRIERS

NOW IS THE TIME TO BUY A LITTER CARRIER

Every farmer knows what a dirty and disagreeable job the cleaning of stables is and especially when there is several feet of snow in the barnyard. Don't shove the wheelbarrow another winter, but let us put in a complete outfit for you now.

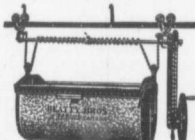
In feeding a large number of Cattle there is no better help you can get than a Feed Carrier. Large quantities of roots or cut feed may be transferred from feed room to the passages without any waste and in far less time than when handled in small quantities.

The feed box shown here is our standard style but we are pleased to make any variation in the size or shape to suit your requirements.

Get our Catalogue and learn why it WILL PAY YOU to install a "BT" FEED AND LITTER CARRIER. In writing let us know how many feet of track you require.

BEATTY BROS., - - - Fergus, Ontario

STEEL STALLS, STANCHIONS AND MAY TOOLS



FARM AND DAIRY

RURAL HOME

THE CANADIAN HOG MARKET—SUGGESTED IMPROVEMENTS

Prof. G. E. Day, O.A.C., Guelph, Ont.

All Hogs Seemingly Look Alike to Canadian Packers—How Quotations are Made in Chicago—Discrimination in Prices Would Create More Confidence Amongst Producers in the Swine Industry.

ONE of the things which strikes a person most forcibly in looking over Canadian market reports, is that in the case of cattle and sheep an effort is made to classify the stock which comes into the market, while in the case of hogs no attempt at classification is made. There can be little doubt that a great deal of the dissatisfaction, which exists in the minds of farmers, is due to this cause. For years the farmer has been complaining that it matters very little whether his hogs are choice bacon hogs, whether they are thick fats, or whether they are somewhere between the two, they all command the same price per pound.

It may be argued that of late there has been a great scarcity of hogs and that there probably has not been enough of any kind of hogs to meet the market demands; but the same argument would not apply a few years ago when hogs were coming to market in large numbers, and when there was practically no more effort made to grade the hogs than there is to-day. The packer tells us that the competition among packers for hogs to keep their factories going tends to break down any attempt at classification, or, in other words, tends to level up prices for all grades. Granting that this is true, the fact still remains that market reports might quote hogs in at least two or three grades, even though the price might be the same for all grades.

THE HEAVY HOGS

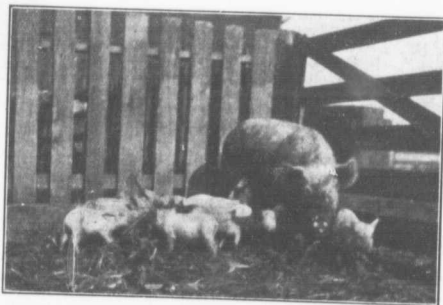
There must be, under normal production, a large number of corn-fed hogs coming from the southwestern counties of this province that could easily be put into a separate class, along with thick fat hogs coming from other sections of the country. If this could be done, it would be a start towards classification, and as time goes on and the demands of the consumer in various sections of this growing country become more clearly defined, no doubt the classification might be amplified.

It may also be argued that even if a classification were made, that sometimes the thicker, fatter hogs might command a premium over the lighter bacon hogs. It is just possible that at certain seasons of the year and under certain peculiar market conditions this might happen, but it does not follow that the farmer has no right to know the relative market value of different grades. If fat hogs and bacon hogs could be quoted separately day after day and week after week, the farmer would be able to study market reports intelligently, and to govern himself accordingly. The mere fact that during certain months one class of hogs commanded a premium over the other should not create false impressions in the mind of any thinking person, because any

man who reads market reports intelligently will study the reports from one end of the year to the other and take yearly averages rather than weekly averages, or averages for short periods.

A PLACE FOR FAT HOGS

There is not the slightest doubt that at the present time there is a strong and growing demand for the products of the bacon hog to be consumed locally, but it does not follow that there is not an important place in this country for the fatter hogs. The market demand for lard which is shown in the high price which lard commands at the present time, is a strong factor in favor of the fatter types of hogs. We also have centres that demand the meat of this class of hog in preference to that of the bacon hog. It follows, therefore, that it would not be desirable to eliminate from our market either the bacon hog or



Valuable Stock for Which There is Always a Cash Market

Notwithstanding the fact that many people are inclined to cry down pigs, there are others who know full well that they are a paying proposition. The pigs in the illustration, photographed by an editor of Farm and Dairy, Oct. 31st, on Mr. A. L. Kitchen's farm, Brent Co., Ont., at six weeks of age, would sell readily on the local market for \$1.00 each. These were raised cheaply in the summer time, and experimental work at a considerably less cost than indicated in recent results of that it cost \$2.39 a piece to raise pigs to 11 weeks of age.

the thicker, heavier, fat type of hog.

There is a very important place for both classes of hog to fill, and the question arises, how are we to regulate the supply of either one or the other of these types? There seems to be only one way. Market prices are the result of supply and demand, and if these two classes of hogs were given separate quotations in market reports, it would tend to regulate the supply of each, and to keep each one in its proper place. If there were too many fat hogs coming forward for the demands of the market and a limited supply of bacon hogs, the price of bacon hogs would naturally soar to a considerable point above that of the fat hog, which would tend to encourage the production of more hogs of that type. On the other hand, if there were a shortage of fat hogs their price might come up on a level, or under certain

conditions, exceed that paid for bacon hogs, which in turn would have a tendency to regulate the supply according to market demands.

THE PUBLIC IN THE DARK

Under present conditions, the public has no means whatever of knowing whether the packer is getting too many fat hogs in proportion to bacon hogs, or vice versa. Of course, the packer will say he is not getting enough of any kind of hogs, but suppose we go back a few years we may still say that at the time when hogs were coming forward plentifully, we had no more information as to the relative numbers of fat hogs and bacon hogs coming to market than we have to-day. If those who supply the consumer and are most familiar with his demands cannot give the farmer any intelligent idea as to whether the stuff which is coming forward is suited to their purposes or not, how can the farmer be blamed if he does not produce a product that is most acceptable to the packer?

As time goes on and this country grows in all probability our markets will give a more satisfactory classification. The Chicago market, for instance, has quite a complicated classification, and it may be of interest to some who are not familiar with that market to have presented the Chicago classification, together with market quotations at four periods during the present year. The table given below is interesting inasmuch as it shows that the relative prices of different grades are not constant, but that they fluctuate from one time to another.

It would occupy rather too much space to describe fully what is meant by the different market terms, but they tend to explain themselves. It might be stated, however, that "pigs" are light hogs weighing usually from 60 to 125 pounds. The selected hogs are not like our bacon hogs and are not used for the same purpose.

They are merely light hogs of the fat type, differing only in that the heavier fat hogs in that they are light in weight and have not been fattened to the same degree. They would be entirely unsuitable for the manufacture of Wiltshire sides. The term "prime" denotes a high degree of finish, that is to say, in order to class as "prime," a hog must be practically a perfect specimen of its grade.

CHICAGO MARKET REPORTS

	Feb. 15,	May 15,	Aug. 17,	Oct. 19,
	1910	1910	1910	1910.
Choice to prime heavy	9.05-9.15	9.70-9.80	8.30-8.45	8.90-9.20
Medium to good heavy	8.95-9.00	9.60-9.70	8.00-8.25	8.40-8.75
Butcher weights	9.00-9.15	9.70-9.80	8.30-8.80	8.85-9.40
Good to prime mixed	8.90-9.05	9.70-9.77	8.15-8.40	8.50-9.00
Rough heavy packing	8.75-8.80	9.00-9.35	7.75-7.90	8.10-8.25
Poor to prime pigs	8.50-8.95	9.00-9.60	7.25-9.00	8.00-9.00
Straight heavy packing	8.95-9.05	9.70-9.75	8.00-8.15	8.25-8.60
Selected hogs	8.95-9.05	9.70-9.80	8.80-9.00	9.25-9.60
Stage	9.50-10.00	10.00-10.80	8.00-9.00	8.75-9.25
Boars	5.50-6.25	3.50-5.00	3.50-6.00	3.50-4.00

(Continued on page 19)

Winter Care of Idle Horses

Dr. H. G. Reed, V.S., Halton Co., Ont.

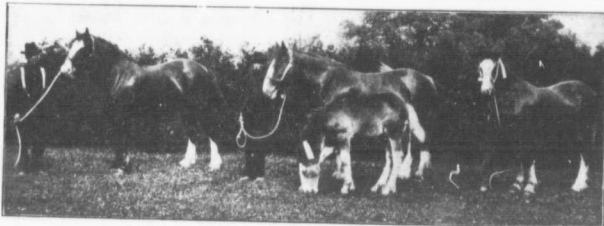
There is no season of the year so trying to a great proportion of farm horses as the late fall and early winter months. In the average case they have just finished a hard summer's work, during which they have been well fed. When the ground freezes their work is done, and they will be comparatively idle till the spring opens. This sudden change from regular work to idleness is in itself somewhat trying on a horse, but when associated (as is too often the case) with a like sudden change from good

grain ration, will do splendidly running around a straw-stack and eating straw during the day. In fact, I can imagine no better way of wintering idle horses, nor one in which less of the labor of the farmer is taken. They do their own exercising during the day, are out in the open getting plenty of fresh air, are sufficiently well fed without being over fed, and will come out in the spring in good flesh, well nourished, healthy and fit, without any special preparation for a heavy summer's work.

Of the two extremes mentioned as between the horse that is over fed and not sufficiently exercised and the one that has to rough it with

I gave for the bulls which I have used to grade up the cattle I now have, and as to whether or not I consider the expenditure for them to be a good investment. The first bull cost me \$50, the second \$60. I paid the same for the third bull, \$100 for the fourth, and \$125 for the fifth. The aged bull was a grand animal. I raised a calf from him, which I sold, but afterwards bought it back when I saw the old bull's stock. It is this calf that I am using now.

Our stock of cows when we started to grade them up did not have any particular breeding in them. It will be noted that the bulls cost me some \$400. This money was most certainly well invested as the cows we now have are making a profit of from \$35 to \$10 a year, whereas our old cows 15 years ago, did not make any profit at all when it takes \$35 to feed a cow for one year, as I believe it does. One can see that the extra money we make in one year now from 12 cows would cover the whole cost of the bulls we have had. The extra amount we realize for our calves would pay for the bulls' feed and we have the earnings of the bull on our neighbor's stock to the good.



Stock That is a Delight to the Owners as well as a Gratifying Source of Profit

Horses such as the ones here illustrated cost little if any more to raise, so far as feed is concerned, than do horses of indifferent type and lack of breeding. The difference in value is greatly in favor of the former. The string here shown are the Clydesdales shown by Fierheller Bros., Oxford Co., Ont., at the London Fair, 1910.

to poor food the result is often decidedly bad. The whole system of the animal becomes deranged, his coat becomes dry, staring and dusty, his legs swell while standing in the stable over night, and he is in just the right condition to yield easily to an attack of any of the ordinary diseases to which horses are liable.

MORE DISEASE IN WINTER

It is a well known fact that farm horses are far more likely to suffer from disease in winter than during the summer months, and this is due to the care (or lack of care) which they receive. The proper management of idle farm horses during the winter is not an easy matter. Many men have many ways of doing it. One man will, when winter comes in, continue to feed his horses well. He will probably not feed so much oats as when his team was working hard, but he will give three grain rations a day, with about all the hay they can eat. The horses stand in the stable with little or no exercise, and the result is generally that the horses treated in this way get sick and the services of a veterinary is needed.

Another man has a different idea on the subject. He believes that an idle horse should have plenty of exercise and should in no case be overfed, consequently he turns his horses out to forage for themselves around the straw-stack or out on the fields, there to nibble frozen grass or what other food comes in their way.

EXTREMES PREDISPOSE TO DISEASE

Both of these extremes are bad and certainly predispose to disease, and the wise man will try and follow a medium course. No horse, after having been worked hard and well fed all summer, should suddenly have conditions changed to comparative starvation. His allowance of grain should be gradually reduced and he should most certainly get regular daily exercise of some kind. If turned out in a yard every day he will exercise himself, and if he has access to straw during the day while turned out he will eat some of it to advantage, for while straw contains very little of the elements of nutrition it is useful even in the case of the horse as a roughage, and helps to fill up and aid in the digestion of richer foods—provided it is fed in moderation.

Horses standing in the stable over night getting some hay night and morning, with a small

plenty of exercise, perhaps the latter has the best chance of escaping disease. But they are both wrong.

DRIVERS AND WORKERS LOOKED AFTER

Most farmers keep one or possibly two horses in the stable which they use for doing the driving and other necessary work about the place. They are kept blanketed, are groomed and well fed, and provided they get the necessary exercise they are certainly in a more comfortable condition and just as likely to escape attacks of disease as they possibly could be. On most farms, however, there are too many horses to make it possible to look after them in this way.

The Good Bulls Paid Well

Geo. A. Robertson, Lanark Co., Ont.

By the time our cows are through milking for the season, they will have made an average per cow of \$70, out of milk alone. Besides this we have their calves. The grade heifer calves we sell for \$10 each; the pure bred calves from \$25 up, according to the value of their dams. This coming season, since we now have the individual records for what each cow has done for the year, we will sell the calves according to what their dams have done this past season.

One of my grade cows, No. 3, as shown in the illustration herewith, and the record of which was given in Farm and Dairy, Oct. 27th, she having given 6,721 lbs. of milk in four months this past summer, had a heifer calf last spring for which I refused \$20. I still have it. A two year old heifer out of this same cow gave 53 lbs. of milk a day this past season. She freshened about the first of June and gave nearly 4,000 lbs. of milk in three months. The grade cow No. 3 as illustrated can I feel sure be made to give a great deal more milk were she given extra care and feed.

I have been asked by Farm and Dairy about the price

The Improvement of Common Stock

Jas. Smith, Russel Co., Ont.

It may be assumed that every intelligent farmer is anxious to improve his live stock. To



James Smith

some farmers in all probability the plan of improvement has never seriously presented itself. His stock, he tells himself, are no worse than those of his neighbors. So he goes on in the same happy-go-lucky way, and if a superior calf or two comes he takes them simply as a slice of good luck, for which he is thankful.

But even then the idea does not come to him that by the use of a pure bred sire of the improved breeds he could build up a herd that would pay the cost of these sires in a very short time; and secure additional income by the patronage his neighbors would avail themselves of.

With the price of beef and milk products, as they are to-day, farmers can not afford to raise scrubs and half starve them. Take a trip to the Winter Fair and note what feed, care, and breeding is doing for the intelligent farmers of this country. Then go home with the determination to discard all inferior stock.



Another Grade that Produces more than Several Ordinary Cows

This cow gave 6,721 pounds of milk in four months this past summer. Read in the adjoining article by George A. Robertson of Lanark Co., Ont., how she and others like her were produced.—Photo by R. S. Hamer.

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SOME AYRSHIRE RECORDS AND HOW THEY WERE MADE

W. F. Stephen, Sec. C.A.B.A., Huntingdon, Que.

The Ayrshires are demonstrating that they are exceedingly useful as Producers of milk in large quantities. Some Record Makers described and an account given of how they were fed and managed

"**Y**OUR pretty Ayrshires make a fine picture in the show ring but are no good as producers." This statement was made to the writer at one of our leading Canadian Exhibitions a few years ago as he stepped to the ring-side after placing the awards on a class of dry two-year-old Ayrshire heifers. Ere I got through with that man he acknowledged ignorance of the possibilities of the breed, and in fact, any other breed of dairy cattle.

Doubtless there were many others with whom we could class this man, who thought the Ayrshire cow was built to fill the eye only. To these she has proved a disappointment in this regard and turns out to be a pail-filler of the most economical kind, as the many splendid records of milk and fat demonstrate, thanks to the Record of Performance Test.

In this article it is not my intention to enter into details of this test or of the many Ayrshire cows and heifers that have qualified with splendid records, further than to mention a few that hold the highest known records of milk and fat among Ayrshire matrons.

ANNIE LAURIE 2ND

The cow "Annie Laurie 2nd," 15588, owned by Emerson Cohoon, Harrietsville, Ont., holds the premier record for milk, having given within the year 15,154 lbs. of milk and 508.4 lbs. of fat. This she excels the American cow "Rena Ross" in milk production by 62 lbs. Her average test was 3.95 per cent. of fat. This cow was seven years of age at the commencement of the test, on January 31st, 1909, one day after freshening. Previous to the test she dropped a calf on Nov. 2nd, 1907, and another after the test was finished on March 23rd, 1910. The test continued throughout 365 days. This cow was bred by H. and J. McKee of Norwich, Ont., from those herd who have gone out so many grand producers.

Annie Laurie 2nd, is true to the older type of Ayrshires. She may not be as stylish or as fine on the top of the shoulder as some of her mates. She is a short-legged, heavy cow, with a deep barrel and a well springing rib. She has a nice head, a clear cut eye and a countenance that denotes much energy as well as comeliness. She is extra good behind the shoulder indicating splendid lung power. Some would fault the udder for being a little fleshy but it is not tight and is of the right shape, well carried and with extra good teats, well set on. In color she is dark brown with white spots. In every respect she is a splendid specimen of an Ayrshire and a true type of a dairy cow.

DETAILS OF MANAGEMENT

The owner gave her a three months' rest before commencing the test, and had her in fine working condition. For a time after freshening she was milked three times a day, at regular intervals, and always by the same milker. As the milk flow lessened she was milked twice a day. Three times a day she was fed when stabled, twice with silage and crotts and with clover hay at noon. During the flow of milk about 16 pounds of grain feed was given. This was a mixture of bran, oat chop, gluten and oil cake, divided into three feeds, with a pinch of salt in each feed. Water was before her all the time and the ventilation of the stable was not neglected. No cold storms blew about her either in summer, fall or winter. She received the best of care and feed but was not forced. In summer when the pasturage was short she was fed a limited amount of grain feed. Whenever her owner noticed a decrease in the milk flow, an investigation to ascertain the cause was made, and if discovered, it was removed. This was this good record made.

Her best month's work was in March when she gave 1,882.7 lbs. milk and 73.98 lbs. of fat equal to 60.73 lbs. milk and 2.38 lbs. of fat a day. Her record for April was 1,746.4 lbs. milk and 69.85 lbs. fat and for May 1,743.5 lbs. milk and 75 lbs. fat—5,372.6 lbs. milk and 218.83 lbs. fat in three months.

HEREDITARY INFLUENCE OF VALUE

This record is significant in demonstrating that hereditary influence is of great value and proves that we should select animals from families that have made good in production; that good type and production are nearly always found together; that the best of care and the right kind of feed and in liberal quantities must be given in order



Some Splendid Young Western Stock

Ayrshires are becoming quite numerous in Alberta, where they are very popular. A group of young bulls belonging to A. H. Trimble, Red Deer, a leading breeder, are here shown.

to get the best results. Along with this, regularity in milking, plenty of water, and fresh air must not be disregarded.

In the three year old and two year old classes Mr. A. S. Turner & Son, Ryckman's Corners, Ont., lead the Ayrshire world in production. Their heifers "Canadian Princess"—20108—three years old and "Speck of Springlank"—29619—two years old, have given within the year, the former 11,377 lbs. of milk and 521.91 lbs. of fat and the latter 10,353 lbs. of milk and 437.4 lbs. fat.

NEW IN THE AYRSHIRE WORLD

Mr. TURNER is a comparatively new man in the Ayrshire world but has set a pace that is enviable and hard to follow. The former heifer was bred by W. M. Smith of Scotland, Ont., whose herd was noted some years ago for their great production, the two year old was bred by the Messrs. Turner. These heifers are true to type, have grand constitutions, and deep full bodies. Their udders, while not fancy, are well shaped, well hung and the teats are large and well placed. Fancy breeders or faddists might fault them because of lack of style and carriage.

These heifers freshened in good condition. The Messrs. Turner believe that a cow to do her best work must be in the best of condition to commence her lactation period. These heifers are of the right form to handle feed and turn it economically into milk, and their owners know just how to feed and care for their stock so as to get big returns.

"Canadian Princess" milked 353 days and dropped her second calf 14 days within a year from the commencement of her test. Freshening on Sept. 28th, 1908, her best months milk was in

November, as she gave 1,267.8 lbs. milk and 53.88 lbs. fat during that month. For the three months commencing Oct. 1st she gave 3,935 lbs. milk and 157.50 lbs. fat, as much as hundreds of cows give during the year. The feed was liberal. In summer pasturage was supplemented except in June with some silage and brewers' grains.

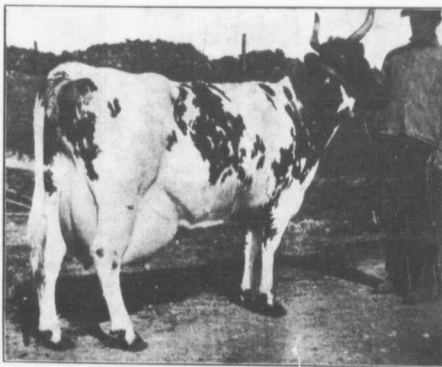
FEED AND OTHER ATTENTIONS

They were also sprayed daily to protect from the horn fly pest. On every wet, cold chilly night they were stabled. They were housed in winter in well ventilated and comfortable quarters and given all the alfalfa, clover, and silage they would eat up clean. Also half bushel of mangels were fed daily in two feeds. There was given also three quarts bran, two quarts mixed chop, composed of peas and barley one part, oats two parts and oil cake half part; this was divided into two feeds and fed morning and evening on top of the silage. Along with this about four quarts of brewers' grains was given each day. Water was before them all the time and they were regularly salted. Milking was done at stated hours, five o'clock, p.m., and six o'clock, a.m., and also by the same persons. No dog is kept by Mr. Turner and every influence that affects the milk flow is cut out.

Thus are Ayrshire records made, which, though not phenomenal, prove that with good breeding behind them, with good care and under ordinary conditions Ayrshires are excellent producers. In another column of Farm and Dairy this week is given further records of Ayrshires.

Composition of Colostrum.—Fully 20 per cent. of colostrum milk of the cow is casein and albumen; normal milk contains only from 2.5 to 4.5 per cent. Colostrum contains less sugar, water and fat than does normal milk, and in consistency is viscous. The colostrum milk seems to have a medicinal effect on the digestive tract of the young calf, and is just what it needs. Therefore it should not be deprived of this first milk—Geo. H. Prout, Extension Service, Minn.

Our cows are turned out of the stable every day in winter unless it is very wet and cold. When the cows are out the doors are opened.



Kirby 5th, a Worthy Representative of a Great Family

This Ayrshire cow belongs to one of the greatest strains of Ayrshires—the Auchinclopp family. She is owned by W. W. Ballantyne, of Stratford, who states that she is one of the best in his herd. Note the prominent milk veins and capacious udder.—Photo by an editor of Farm and Dairy.

stable thoroughly aired and the bedding replaced. It pays to give attention to the ventilation of the stable. Cows will not do their best in a close, stuffy stable, even if it is warm. Pure air is more easily warmed than is foul air.—Crockett Bros., Antigonish Co., N.S.



Farm Life Assumes a New Interest when one has a String of Live Stock of Marked Uniformity in Color and Breeding to work with.
This splendid string of youngsters was bred and raised by G. A. Brethen on the first prize farm in the special Good Farms Competition for Peterboro County, Ont., conducted last year by Farm and Dairy.—Photo by an editor of Farm and Dairy.

Breeder and Buyer, Attention!

Prof. H. S. Arkell, Ottawa, Ont.

One of the straightest reasons that I know of for the comparatively small profits that some of our less well known breeders of pure bred stock are experiencing lies in the fact that their animals are not fitted for sale. The feeling is too prevalent that because an animal is pure bred it should command a correspondingly high price. Such is not the case, and never should be the case. If it is worth while to put a little extra expense and forethought into the breeding of a calf, it is the more worth while to give a little extra care and attention to the feeding of it. It is just the additional forethought in the second that will give it value, and continue to give it value.

I know of breeders who plan to get their surplus or saleable stuff through just as cheaply as possible, thinking that by this means they will save the biggest margin between the actual cost and the price for which they may sell. It's a wrong policy. The best of the effort should be given to the stuff that is to be put upon the market. The market is the testing place of a breeder's labor, and unless he can meet its demands he must fail.

MAKE ANIMALS ATTRACTIVE

A carriage builder thinks more of the "finish" given his vehicles than perhaps of aught else, and the varnish must be flawless before they go into his showrooms. A breeder ought to realize that he must make his animals attractive to be marketable. A reputation is gained and success achieved by what is sent from the farm, not by what remains at home.

At an auction sale, one man presents his herd in beautiful shape. Their coats are right, their ribs are well covered, they are kind at the halter. They command the top prices. Another sends his lot forward out of the pasture field, and they look the part. This man goes home in no very envious mood, and sneering perhaps at his rival's success. To his shame, he is said.

The comparison is true of animals sold by private sale. Nobody wants to buy a colt with burrs in his tail and which acts like a mule at the halter. It doesn't pay to grudge a calf its milk. Sheep look bigger when they carry a good fleece than they would if shearing were delayed till June. A few peas won't do them any harm. Hogs are rarely exported to the next province that chase over a ten-acre field for their provender. Yet they are the better for standing strong on their legs and being good in the wind. When a buyer goes to a place and gets what he wants he will go again. If he doesn't, he won't.

There should be no occasion to seek foreign markets for the pure bred stock bred in Canada. We have need of it at home. It may be

that the local demand will be a surprise to us in the next few years. The man who has the stuff that is wanted may yet find himself fortunate.

There is no better time to prepare for next season's market than during the winter months. The English feeder knows his business, and is never idle. Next year's sale is his great ambition, and he spares no pains to get his animals "fit." When Canadian breeders take equal pains, they may achieve equal success. Not till then.

Facts about Breeds of Sheep

A. Stevenson, Perth Co., Ont.

Any one of the well known breeds of sheep are possibly as good as any. Whatever breed one would fancy is the breed he will be most successful with. A little depends on the accommodation available. For instance, a short-wool breed will endure more cold, wet weather than a long-wool



"Guaranteed Pure Wool"

breed. Snow and rain will not penetrate into the pelt nearly so readily. If it is for mutton purposes sheep are kept, a cross is advisable. A large, early-maturing, good quality lamb, is that bred off a "white-faced" ewe and an Oxford or Shropshire ram. You will get one class of lambs by crossing this way. They will be all gray-faced, and the wool will be all of one grade. By reversing the cross you will not get such a uniform lot. Some will resemble one breed and perhaps the other twin lamb will resemble the other side. But let me caution that by no means keep any of these to breed from. It will not do. The ewes do not seem to be prolific, and they will be of a delicate nature.

I have just visited some of the dairy sections of Eastern Ontario and have come to the conclusion that dairying is not doing as well as it did 15 years ago. I saw some factories closed, while in other cases there were ash heaps where formerly there had been factories.—Prof. W. J. Kennedy, Iowa State Agricultural College.

Plant Selection and Breeding

T. G. Raynor, B.S.A., Seed Branch, Ottawa

The art of breeding is said to be epitomized in the word "selection." Every breeder of live stock who has succeeded in benefiting his generation by improving his stock, knows what it means to select. He first fixes his deal. He photographs it in his mind, and then he keeps selecting until he has accomplished his end; but still he keeps on selecting in order to fix the type and hold it where he wants it. To do that is a work of art, and all honor is due to the men who are faithfully following up this line of work. Success must follow such efforts.

The principle involved is more or less true in plant as in animal life, and some men are now giving a good deal of thought and time to this work, and success which sells dollars and cents is one of their rewards. The name of Luther Burlank, that wizard of plant breeding, who has brought so many different varieties of plants, of more or less commercial value, into being, is a household name. Prof. C. A. Zavitz, too, of the O.A.C., Guelph, is well and favorably known by his work with plants on more than a continent. Another wizard in the person of H. H. Groff, of Simcoe, Ont., of Gladioli fame and working in a private way, has made for himself a name, and is reaping handsome rewards for his skill in producing Gladiolas.

PRODUCING HIGH PRICED SEED

But coming nearer home to the average farmer it may be said that a number of good men are following along the lines of the Canadian Seed Growers' Association, and are doing things. For instance, it was only four or five years ago that Wm. Lewis, of Victoria Co., Ont., started to improve Siberian oats by selecting some of what he thought were the best plants in the field and sowing these on a breeding plot. He has been following up this method now for four years or so, and is now producing registered seed. His success has been quite phenomenal for he now commands \$1.00 to \$1.25 a bushel for all the oats he can grow and fan to the desired standard. He receives more orders than he can fill, and has even filled an order to Aberdeen, Scotland.

The possibilities for crop improvement through plant selection are very great. Our various experimental stations are doing splendid work. Among them is the Central Experimental Farm, Ottawa, where the cerealist, Dr. Chas. Saunders, has done excellent work. Individual farmers in nearly all our provinces are now profiting by making selections from some of the strains sent out from the various experimental stations. There is room for more to take up the work. A farmer should make a reputation by improving at least one kind of crop with which he deals.

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The Trade in Pure Bred Stock

There is an acknowledged lack in various parts of Ontario, and a greater lack in other provinces of the Dominion, of high class breeding animals with which to improve the quality of the grade stock as more generally known on the farms. There are many localities even in our older settled provinces where it is a difficult matter for farmers to obtain satisfactory sires for their herds at reasonable prices. If we will but consider these facts, it becomes apparent that perhaps something can be done to advantage to encourage more interprovincial trade in pure bred live stock and to create a better trade between various sections of a province.

When the better class of individuals of farm stock is not available, farmers persistently continue to use scrub males. The results of their use are well known and are only too apparent at every hand. My experience has been that when really good animals are placed before farmers for purchase they will pay fairly remunerative prices. Is there not some better way than now prevails whereby the pure bred stock that is being produced in this country can be, at a reasonable price, placed before those who would and could use it on their herds to advantage?

DIFFICULTIES OF SMALL BREEDERS

Under prevailing conditions, there is not too much encouragement for any one to embark in the business of producing pure bred live stock. The average man does not understand or appreciate how to sell his stock through advertising. He probably has not the courage to advertise it. Supposing a farmer goes in for Shropshire sheep. At the end of a couple of years he finds himself heavily stocked with pure breeds for which he must have a market. Where is he to sell them at anything better than a local butcher's price? The same thing applies, probably not to so great an extent, in the case of pure bred dairy cattle, Canadian bred Clydesdale colts, and other stock.

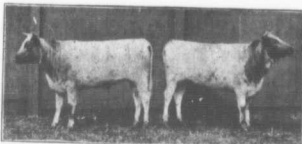
There is a market for this stuff. The trick is to reach it. When we see large sales being conducted and the stock selling at most satisfactory prices, as for instance the sale of Holstein cattle by Mr. J. A. Caskey last March, the recent sale of Mr. Higginson's and others that might be mentioned, I for one am inclined to ask, can sales not be conducted with a fair degree of success by aggregations of smaller breeders? Might not it be possible for a number of breeders to organize, perhaps by co-operative methods, public sales much more generally than has been undertaken in the past? These would afford a more certain market than now prevails for any particular kind of pure

bred stock and they should encourage many more men to embark in the pure bred business.

WELL KNOWN ANNUAL SALES

In England and in Scotland they have the great ram sales during the latter part of August and early in September. Then there is the Birmingham bull sale. These have become annual events and local breeders have learned to depend upon them for their supplies. In Ontario during recent years, sales such as I have in mind have been conducted at Guelph, Ottawa and last spring I believe there was one at Port Perry. These have not been all the success that their promoters would have liked. Perhaps a greater number of sales organized on a smaller scale would be more advantageous. I call to mind in this connection, an annual sale of stock which is held by some local association each year in the town of Lindsay, Ont. This particular event I understand to have been always a success.

Surely something more can be done to en-



Baby Beef

Specialties pay in beef production as they do in other lines. Read Mr. Garbutt's article on this page, in which he tells how he produces baby beef.

couage the more general breeding of pure bred stock and at least place pure bred males at the disposal of the farmers of this country who might be inclined to buy if they could get them at a reasonable price. I should like to see this matter discussed in the columns of your journal by some other readers of Farm and Dairy. If we could encourage by some practical means the development of our own Canadian trade in pure bred live stock, I believe that it would operate toward the development of our breeding industry generally and would at the same time render much assistance to those who are now engaged in the trade.—"Middlesex."

Slow Feed Mangers.—It sounds old fashioned, but the best slow feed manger for horses is easy to make by placing a few smooth round cobble stones in the ordinary manger. These the horse noses about in procuring his feed. Salt for horses is as necessary as it is for human beings. The best way to provide it is by purchasing rock salt in quantities at the feed dealers and placing it in the manger.

Beef Cattle as Revenue Producers*

John H. Garbutt, Peterboro Co., Ont.

A stableful of good beef cattle is as good and as profitable from the standpoint of maintaining the fertility of the soil as would be a stableful of dairy cows. The profits from the two, if we figure all items and especially labor, compare favorably, and this last year even better in favor of the beef, than of milk, figuring the cost of milking.

The matter of labor is a serious handicap when it comes to dairying. I cannot find much profit in the business when I have to pay a man \$30 a month and board him. Besides, nowadays a good man who knows how to milk and likes to milk is almost impossible to get. I have been brought up to beef cattle, and on that account feel quite at home with them.

My methods of handling the cattle reduced the labor item to a minimum. I keep what one might term two sets of cows. The one lot, the pure bred Shorthorns, I never milk, but allow the calves to suck them. The other lot is comprised of grade Shorthorns of a good milking strain. These, numbering six to eight, I milk.

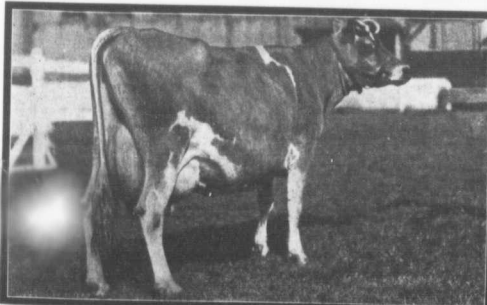
I aim to have the pure bred cows fresh in December and January. The calves run with them until May 1st, when they are weaned. Then two calves are placed with each cow, and these are left with them until September, when the cows are allowed to run dry. Thus we raise three calves to each cow each year in the one lot. These cattle are grazed on a grass farm some miles from home.

SOLD AS BABY BEEF

The first calves of the year are sold for baby beef. These weigh from 850 to 950 pounds, on the average, though some of them have turned the scales at 1,000 pounds. These calves realize, if in proper condition, the topmost price, often from one half to one cent a pound over the ordinary price at the season of the year when marketed. The grade calves, raised on the cows after the first ones are weaned, are kept over until two and a half years old.

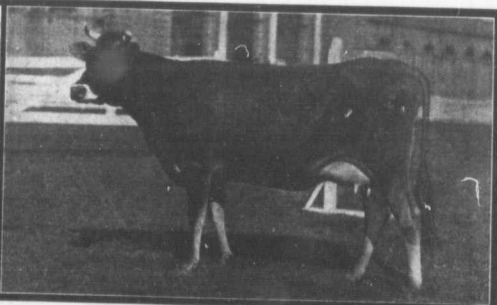
My stock, handled in the way indicated, realizes a good price for beef, often better on the average than if sold as pure breeds for breeding purposes. The baby beef on the average realizes over \$50 a head, and this without any particular extra cost for feed except for a short time. Beef prices, of late months, have been improving. They have been much better this past year than ordinarily, and have gone up 30 per cent. and more. Good butcher cattle will bring six cents now and the baby beef considerably more.

*An article furnished by Mr. Garbutt as required by the rules of the Special Peterboro County Farms Competition in which competition he was a successful competitor.



Lady Primrose, of Don

These two Jerseys are representatives from the noted herd owned by H. Dunan, Don, Ont. The aged cow, Lady Primrose, has given 49 lbs. 15 oz. of milk in a day. She took second prize in Toronto in strong competition this year. Daisy Bell's Darling is a two year old of great promise. She took second and third at Toronto in large classes.



Daisy Bell's Darling

The aged cow, Lady Primrose, is a noted prize winner at leading fairs. She has given 49 lbs. 15 oz. of milk in a day. She took second prize in Toronto in strong competition this year. Daisy Bell's Darling is a two year old of great promise. She took second and third at Toronto in large classes.

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TORONTO AND WINNIPEG

The Feeders' Corner

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

Must Purchase Feed for Cows

We have plenty of mixed hay and corn ensilage to feed to our dairy cows this winter, but will have to purchase most of the grain we feed. At present prices what feeds can be purchased and fed most economically? Most of our cows freshened this fall, so we will be feeding quite heavily—J. M. Oxford Co., Ont.
It is advisable to purchase feeds high in protein. Analysis of milk shows that it contains a very high percentage of nitrogenous materials. The carbonaceous materials that are necessary can be furnished cheaply in the corn ensilage.

Gluten meal, brewers' grains, linseed meal and cotton seed meal as may be seen are very high in protein content. All of these feeds with the exception of dried brewers' grains seem very expensive when compared

with wheat bran. Their extra nutritive value however makes them much cheaper as feed for dairy cows. Cotton seed and linseed meal are the cleanest foods we can get at present for dairy cows but they are too heavy to be fed exclusively in the ration. They should be lightened up with wheat bran or some similar bulky material.

The following table gives the digestible nutrients in 100 pounds of the feeds tabulated:

Feed	Protein	Carbo-hydrates	Fat
Corn	7.9	66.7	4.3
Gluten meal	25.8	45.3	11.6
Gluten feed	30.4	48.4	9.9
Wheat bran	12.2	39.2	2.7
Brewers' grains	15.7	36.3	5.1
Linseed meal	23.2	32.7	7.7
Cotton seed meal	21.2	36.9	12.2

Dry brewers grains make very cheap food, where they can be obtained, but only a small part of the ration can consist of these grains as they are not palatable and unless mixed with other meal will not be eaten by most cows.

Gluten meal is probably the best food for forcing the milk yield of cows. When purchased, gluten meal is sure not to get gluten feed. Gluten feed is poorer in protein and fat than gluten meal and hence has

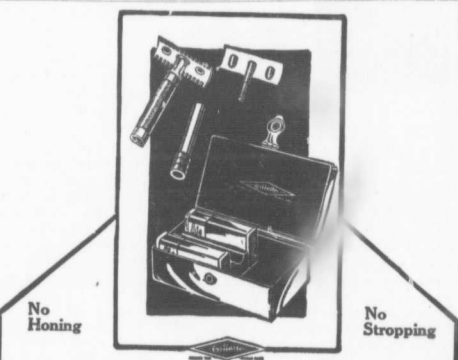
least 300 delegates from Ontario and the Eastern Provinces will be numbered in this monster delegation.

The delegates will meet in the Grand Opera House, Ottawa, on Thursday, Dec. 15th, under the auspices of the "Canadian National Council of Agriculture." Some of the subjects, which will be up at the Conference in Ottawa for discussion will be: Tariff Reduction, Free Trade in Agricultural Implements, Better Trade Relations with the United States in Agricultural Products, Government Ownership of the Proposed Hudson Bay Railway and Government Ownership of Terminal Elevators.

Items of Interest

Pure bred animals for breeding purposes imported into the United States after Jan. 1, 1911, must be accompanied by certificates from the Bureau of Animal Industry, Washington, certifying that they are pure bred and duly registered in the foreign book of records for that breed.

The farmers of Kent and Essex Co., Ont., have won out in the Courts on their claim that they own the gas under their land. Now the Canada Company, from which they



A Product of Brains For Men of Brains

THE keen, quick, business-like directness of the GILLETTE appeals to the man who knows and appreciates a time-saving tool or a clever piece of machinery when he sees it.

With the GILLETTE there's no time wasted in honing, stropping or fussing with a complicated shaving device. You simply pick up the GILLETTE—and shave. And such a shave!

The GILLETTE blade, thin enough to take a perfect temper, yet held absolutely rigid in the handy GILLETTE frame, and adjustable to any beard, shaves as no other razor can shave.

The GILLETTE changes shaving from a time-consuming ordeal, to be endured as seldom as decency will permit, to a pleasant three-minute incident in the toilet. It enables a man to always look and feel his best—and yet preserve his face and temper.

Standard Sets \$5. Pocket Editions \$5. to \$6.
Combination Sets \$6.50 to \$25.

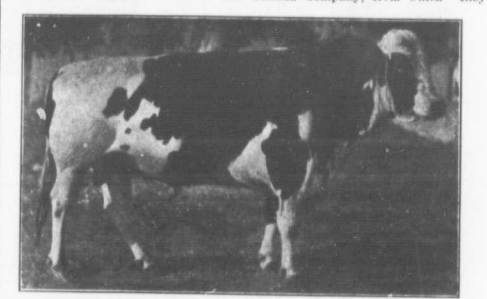
At Hardware, Drug and Jewelry Stores. Look for the big GILLETTE Signs—they show you where to buy.

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KNOWN THE WORLD OVER

It is desirable to mention the name of this publication when writing to Advertisers.



Duchland Sir Hengerveld Maplecroft, No. 5280 (imported)

This richly bred young bull owned by Mr. A. D. Foster, Bloomfield, Ont., is offered for sale by Mr. Foster in order to avoid inbreeding in his herd. The sire of this bull, Pieterie Hengerveld Count De Kol, is the sire of more large milk record cows than any other bull of the breed. See Mr. Foster's advertisement in the live stock columns.

not the same milk producing properties.

One can by study of the composition of the feeds as given and comparing with the prices of the feed decide which food it will be advisable to purchase. A mixture of grains is always better than feeding them singly.

In most parts of Ontario a ration consisting of two parts gluten, two parts cotton seed or linseed meal and three or four parts of bran if all meal must be purchased would give good results. Feed about one pound of this mixture for every five pounds of milk.

Monster Delegation to Ottawa

Full particulars as to the arrangements that are being completed for the monster delegation of farmers to Ottawa, to wait upon the Government in regard to the tariff and other matters of vital importance to the farmers and others of Canada, are set forth elsewhere in this issue under the heading "Grange Notes." The Western Provinces expect to send at least 500 delegates. These will be conveyed to Ottawa by two special trains. A number of Granges, as well as Farmers' Clubs and Cheese Beards in different parts of Ontario have already appointed delegates. Other organizations not already having done so are advised to appoint their delegates forthwith.

It is confidently expected that at

have purchased their property, must account to them for any royalties it has received for gas taken therefrom.

The men picked from the fourth year students in agriculture at the Ontario Agricultural College to represent the College in the judging competition at the International Live Stock Show at Chicago are: H. A. Dorrance, J. E. Smith, R. G. Thomson, W. Toole and J. B. Whaley.

The official prosecutor of the Eastern Ontario Dairymen's Association recently secured convictions against 23 farmers at Plantagenet, Ont., for adulterating their milk. These farmers were fined \$700 by the magistrate who registered the convictions. If factories paid for their milk by test instead of by weight, it would soon do away with this form of fraud.

Homestead Holsteins.

My crops were ruined with hail, so I must sell 10 cows or hens in call to Peter Teake, O.A.C., No. 490.

Two miles from Hazeltonville Station, O. P.R. Visitors met by appointment, or from phone connection with station.

B. R. BARR, Hazeltonville, Ontario
Middlesex Co.

FREE TO TRAPPERS

For News Magazine tells how to trap, hunt, skin, stretch and grade furs; about baits, traps, dead-falls, snares, traps, etc. Also lots of good stories. SPECIAL PRICE for 3 mos. trial subscription and get FREE 64 page Trapper's guide and chart of all game, fur and bounty laws.

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Aim for Good First Litters

C. W. Nash, *Simcoe Co., Ont.*
 One of the greatest mistakes the majority of swine raisers make is in neglecting the young sow with her first litter. If we can get her to raise a good litter the first time, her chances of raising good even litters in after years will be much better than if she raises but three or four of her first litter. This is one of the main causes of uneven litters, and the parts of the mammary glands that are unused will never be as good as those that were used.
 The most of farmers who have had young sows lose the most of their first litters laugh on such occasions and say, "Oh, well, it was her first attempt; she will do better next time." She probably will raise more another time, but they will not be of the same quality as they would have been had she raised a good litter the first time.
 It sometimes happens that young sows do not have enough the first time, and of course in that case it can not be helped, but more often they

tracted this deadly disease is out of the question. The only remedy is a precautionary one, that of inoculation with Anti-Black Leg vaccine. Young cattle once inoculated with this vaccine are immune for a period of about a year. The vaccine is supplied by the Department of Agriculture, Ottawa. It is put up in a form such as any farmer may use. It is supplied at a nominal cost, five cents per head of stock.
 There seems to be a widespread lack of information as to this deadly malady, Black Leg and as to how readily it may be controlled by Anti-Black Leg vaccine if the cattle are inoculated before being attacked by the disease. Quite a number of farmers in this County and I presume elsewhere have lost calves, often all that they had pasturing on low land where the bacteria producing this disease is said to flourish. They evidently believed that the ravages of this disease were quite beyond their

control and have taken it as a matter of course that they should lose these animals.
 It would seem that the Health of Animals Branch of the Department of Agriculture has been grossly negligent in this matter in that they have not informed the breeders of cattle throughout this country of these remedies and how they may be applied.
 From the recent experience of some Peterboro farmers who have lost cattle from Black Leg it would seem that thousands of dollars might be saved to the cattle breeders of this country if they knew more about these measures and took steps to immunize their stock from the disease. —Peterboro".
 Farm and Dairy must commend itself to every farmer, giving as it does the experience of practical men along the different branches of agriculture. —Mr. O. Walker, Perth Co., Ont.

Hydro-Electric Power for the Farmers

Will it be possible for farmers along the Hydro-Electric power lines to make use of this power for lighting and driving machinery?—J. C. N., Oxford Co., Ont.
 It is impossible to supply farmers or small communities off a high voltage line, but farmers living along the route of the low tension lines can be supplied. For instance the line from Woodstock to Ingersoll, Woodstock to Tilsonburg and Norwich, the line from Port Credit to Brampton and many other similar lines will be able to supply power to farmers.
 The Hydro Electric Power Commission in selling power to radial railways will stipulate that power must be sold to the farmers, small communities, villages, and so forth along the line at prices to be fixed by the Commission.—Adam Beck, Chairman of Power Commission.

SHORT WINTER COURSES
 WILL BE HELD AT THE
ONTARIO AGRICULTURAL COLLEGE
GUELPH, CANADA

AS FOLLOWS:

- STOCK AND SEED JUDGING - - JANUARY 10th to 21st, 1911
- POULTRY RAISING - JANUARY 10th to FEBRUARY 4th, 1911
- FRUIT GROWING - - JANUARY 24th to FEBRUARY 4th, 1911
- DAIRYING - - - - JANUARY 2nd to MARCH 24th, 1911

These courses are free and are intended for **FARMERS** and their Sons. Board may be secured near the College at \$4.00 per week. Send **TO-DAY** for a copy of our Illustrated Calendar.

G. C. CREELMAN, President

Not Enough for One Litter

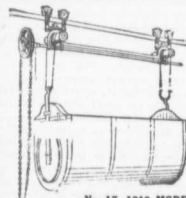
lose a large part of them, and then in after years when their pigs are uneven in size they are condemned as poor breeders, when the truth of the matter is that with a little proper care at first they would quite likely have been good profitable brood sows.

Mysterious Disease of Cattle

Several outbreaks of some mysterious disease, which has carried off several calves, have recently occurred in Peterborough County, Ont. The calves on being attacked show loss of appetite. Rumination ceases. The affected calves draw away from their fellows, become stupid, and apparently suffer little or no pain. On investigation, the disease proved to be none other than Black Leg.
 This disease is confined wholly to the younger animals. Cattle over two years old are said rarely to be affected with it. In a typical case of Black Leg as the disease develops, the animal will show lameness in one quarter. In those cases that came under the writer's observation, this symptom did not appear.

OTHER SYMPTOMS

Other than those symptoms already given, it should be said that respiration increases as the disease progresses in the animal. The temperature rises several degrees above normal and the animal dies usually from six to 24 hours from the first appearance of the disease. Near the termination of the malady in the diseased animal and after death examination of the affected quarter reveals the presence of a frothy material under the skin. When the hand is passed over the skin, a crackling sound may be heard as if bubbles under the skin were being broken.
 A cure for an animal that has con-



No. 17, 1910 MODEL

BEATH'S LOAD AND LITTER CARRIER, illustrated herewith, is in many ways a decided improvement on other styles of hoists and carriers. The load is raised by means of an endless chain—no dog or brake required—and the four flexible steel cables supporting the load are wound on drums projecting both ways from the spiral gear. The mechanism is simplicity itself and for ease of operation, strength and general utility it has no equal. All parts subject to strain are made of Malleable Iron and Steel, and the box is made in the most approved manner, entirely of galvanized iron. Capacity, it cubic feet.

LITTER CARRIER BARGAINS
TAKE YOUR CHOICE
 They're **BOTH** Leaders

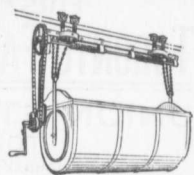
Awarded Medal, Toronto Exhibition, 1909.

Regardless of expense, only the best selected materials are used in their construction, equipped with every improvement and latest 1910 Models only, are offered in this sale. The only Carriers made with all working parts of Malleable Iron and Steel, carefully machined and fitted.

Our President, W. D. BEATH, personally supervises their construction and finally inspects and tests every machine before it leaves the factory.

When you buy a Beath Litter Carrier at the prices we are offering them, you get a rare bargain—absolutely guaranteed—works better and lasts longer than any other carrier on the market—has given greatest satisfaction to hundreds of delighted users, and will do the same for you.

Write us for further information and sale prices on Litter Carriers, Stanchions and Steel Stalls.



No. 19, 1910 MODEL

Plate No. 19 represents Beath's Heaviest Type Feed and Litter Carrier—a machine which will handle the heaviest loads with ease. It is built for heavy work. The wrought steel frame gives it great strength and being fitted with triple purchase hoist and slow gear, any boy can handle heavy loads quite easily.

The machine is also equipped with Beath's Patent Automatic Clutch Break which makes the lowering of the box an extremely simple operation. The box can be stopped at any point in its descent without effort, the clutch working automatically. Box same as No. 17.

W. D. BEATH & SON, Limited, TORONTO, CAN. Live Agents Wanted

The Full Dinner Pail.

Poultry Raising that Pays It All Back—And More

Many a dollar invested in poultry raising and never comes back—for this is the reason that the necessary knowledge has not also been invested. The way to get your money back, and to get more with it, is to know exactly what to do, and how to do it.

You cannot get this practical knowledge from a book. You have to get it from those who have made for money raising poultry through tried methods. The full and complete course of such experts are given you in the Poultry Course of the International Correspondence Schools. With this help at your command, success is certain, for it pays the way for you.

Every phase of successful poultry raising is covered in a clear, concise, practical way. Here are several of the subjects:

How to select most profitable breeds; feeding; marketing eggs and poultry for profit; natural and artificial brooding; natural and artificial incubating; laying hens; combination plants; poultry appliances; diseases of poultry; poultry houses and management; turkey; water fowl; squabs, etc.

Besides all this, the I. C. S. is associated with the largest poultry farm in the world—the Kausen Poultry Farms—where experiments of every kind are made for the benefit of those taking this course.

In time and money it saves, and in the certain success it ensures, this course pays for itself many many times over.

To learn how you can make a success this year, write today for full particulars to:

INTERNATIONAL CORRESPONDENCE SCHOOLS, Box 7911 SCANTON, Pa.

Dairy Cattle in Western Provinces

This past season has been a record breaker so far as exhibits of pure bred dairy animals at the larger western fairs have been concerned. At Calgary, Portage la Prairie, Brandon, Regina, Saskatchewan and Edmonton exhibitions the dairy classes were in each case, stronger than they have ever been before. Not only this, but the interest attached to the placing of the awards was such as to indicate that there was sufficient sympathy with the cause of dairying throughout the country to fully warrant the breeders in acquiring and showing first-class stuff.

AYRSHIRES IN THE LEAD

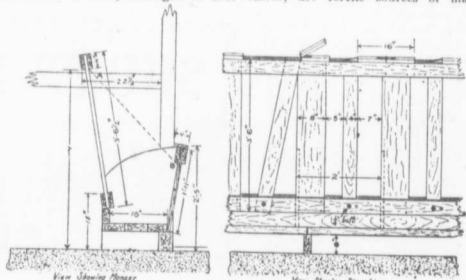
The three breeds, Ayrshires, Holstein and Jersey—were all well to the fore. Perhaps, taking the West as a whole, Ayrshires have the lead. They are followed closely however, by the Holsteins and Jerseys, the popularity of these two breeds apparently being in the order last mentioned. The demand for sensitive Jersey is fast gaining ground with us, especially as a town cow or where only a few are kept. The city man who has a back lot large enough for a barn to stable a cow and a horse in the winter time prefers the Jersey. He likes her rich cream for his porridge and coffee at breakfast while she will also give plenty of milk for drinking. Then she is small and doesn't take so much feed nor space as the larger and more rugged Holstein. The Holsteins and Ayrshires find especial favor with the farmers and city dairymen. The western farmer who makes his own butter likes the Ayrshire equally as well as the Holstein but the man who lives near the city or who is selling to the city wholesalers at so much per quart wants the Holstein and no doubt about it.

HOLSTEINS BECOMING POPULAR

And there is also little doubt but that the Holstein is fast growing in numbers all over the prairie West. We like her here because of her great hardiness, and her big milk flow. The fact that she requires lots of feed makes little difference as the western farmer has roughage in abundance, as a rule. There are very few Guernseys in the West, practically none.

Among Western horsemen the Cheshires is by far the most popular draft breed. At all the shows this is always the one breed of draft horses greatly in the lead. Not so with the dairymen. The three breeds of dairy cattle mentioned are all strong contenders for the premier position. At ce-

fair one breed will be in the lead while the order will be reversed at the next show on the circuit. At Calgary fair this year a person would have to study the situation rather closely to say which breed was in the lead. At Winnipeg the Holsteins greatly outnumbered the other two breeds but these were not up to the quality of the Ayrshires and Jerseys, the Ayrshires being the strongest on the grounds in this respect. At Brandon exhibition the Ayrshires made the best impression also at Regina, Saskatchewan and Edmonton which latter place is fast becoming a stronghold for the dairy cattle. Vancouver's show was not nearly up to the mark set by the fairs on the prairies. Jerseys and Holsteins were the only breeds shown and from what I could find out the former breed has a very strong following in the coast province. The small showing of dairy cattle at Vancouver should not be taken as an indication of dairy strength in that



Stanchions for Calves Greatly Facilitate the Work of Feeding

Calves can be more easily attended to and they will thrive much better where they are fastened in stanchions for a short time while and after feeding. The side of the calf pen may be fitted with stanchions modeled after the design here given. By feeding a little clover hay after the calves have had their milk, they may be untended and allowed to run together when they will not show a tendency to suck one another.

Points about Calf Rearing

N. C. Campbell, Brant Co., Ont. Like the poultry and some other departments of the farm that are often thought to be of little importance, and hence have been assigned to the care of the children, or perhaps the women folks of the farm, the calves and the matter of raising them are not always given the careful consideration of the stockman. This is a mistake. It has been thought that any one could raise a calf. We are beginning to know better. We are finding out that it pays to take the right care of calves. The cow of to-day is but the calf of yesterday, figuratively speaking, hence upon the calf depends the cow.

Cleanliness is an absolute essential if we would raise good calves. Filthy buckets, sour milk, and neglect such as is the common lot of so many calves, are fertile sources of many

calves can be more easily attended to and they will thrive much better where they are fastened in stanchions for a short time while and after feeding. The side of the calf pen may be fitted with stanchions modeled after the design here given. By feeding a little clover hay after the calves have had their milk, they may be untended and allowed to run together when they will not show a tendency to suck one another. calf ailments notable among which might be mentioned scours. Calves should not be allowed to suck one another after being fed they may. Much trouble and many unthrifty calves result from allowing the calves to follow this practice. In the case of bull calves particularly this practice of sucking is unhealthy for they often suck the urine. Calves at feeding time should be secured in small stanchions so that they do not tip over each other's mess or get in the habit of sucking each other. While the milk is still on the nose from drinking, and possibly because nature intended the little fellows to get away from sucking, it seems hard for him to do any thing else. A little alfalfa or clover hay fed immediately after the milk and while the calves are in the stanchions will help them to forget their desire to suck, and when loosened they will go off about their business. The stanchions reproduced herewith and which I have taken from a Michigan Bulletin are well arranged and quite easy to build. These have little mangers in front of them, wide enough to set the feed pails into. These should be kept clean, and, as soon as the calf is strong enough to eat oats and bran, it should receive a small quantity in the manger.

western province. There is great probability that some day British Columbia will be able to show dairymen in other parts of the Dominion some things about the milk and butter business.

STRONG DEMAND FOR CATTLE

The drought in many sections of the West this season has had a stimulating effect on the dairy business. From those districts suitable for dairying that have been more or less affected by dry weather, breeders are receiving numerous enquiries for stock. Cows and heifers sell like the proverbial hot cakes while the demand for bull calves is greater than it has ever been before. Those men who have dairy cows for sale are sought by buyers instead of their having to seek for buyers. We now have a number of western men with considerable sized herds of purebred dairy cattle. The general statement from them all is that the demand for stuff is so strong that it is most difficult to keep up the quality of their herds—the temptation to sell is so great.

City dairymen will buy most anything that will give milk, and at most any price. The dairymen who supply the city trade are having increased demand for milk while the supply of cows is not keeping pace with the increased demand, hence the high prices for milk cows. Western farmers, too, are fast realizing that the most satisfactory kind of farming. It provides an income only once a year and where the drought struck worst this season, there will be no pay-day at all. Dairy cows supply a year-round income and a profitable one at that. Moreover it does not eliminate grain growing but makes it possible to secure a larger and more certain yield.—'Westerner.'

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A pleased subscriber is Mr. Francis H. Wright of Middlesex Co., Ont., who has just won a pure bred pig from Farm and Dairy in return for a club of nine new yearly subscribers to this paper. The pig sent Mr. Wright was bred by Mr. Wright Glendenning, of Manila, and Mr. Wright writes us that it is a fine specimen of the breed. We have several more equally as good pigs we will send to other subscribers on the same terms.

Well DRILLING MACHINES

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on rails. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS. Ithaca, N. Y.

AGENTS WANTED

\$500 a day easy. No experience needed. Sells on sight. Absolute necessity to farmers. Does work of 30 men. Pays for farm in one hour. Write today. MODERN MACHINERY CO., Box 97, Sarnia, Ont.

FIRST ANNUAL TORONTO FAT STOCK SHOW UNION STOCK YARDS TORONTO MONDAY AND TUESDAY DECEMBER 12th & 13th 1910 Grand Display of Live Stock. Auction Sale of Prize Winners \$1,000 IN CASH PRIZES Entry Free. Entries Close December 1st, 1910 Admission Free. Public Invited. Reduced rates on all Railroads. Entry blanks and full particulars on application to J. H. ASHCRAFT, Jr., General Manager UNION STOCK YARDS, - TORONTO

PO Keep B John I. Although No. 1 I could get it in amount of fully 75 placed on tion dairy that second and it can bring third class The poultr a mixture times more in color m has represent not appeal interest c unless we a Unless satisfactory is investigated ene established common in f an enormous For this every farm in any qua breed and We can c lusions on different br to keep. or one in all breeds shut our eye If one breed then we cho and when v the first ste to start pos after our has been p the poultry one kind, br breeds that apply to th care. By v breeds such Orpington ther are r case than th results in a flushing of th son of the y Farmers

POULTRY YARD

Keep But One Breed Only

John I. Brown, Poultry Expert,
Montreal

Although high prices range for No. 1 poultry, it is very difficult to get it in comparison with the large amount of poultry produce offered, fully 75 per cent. of the poultry is placed on the market in such a condition that it can be rated only as second and third class goods—hence it can bring only the second and third class price.

The poultry on so many farms is a mixture of four or five, sometimes more, breeds, and comprises in color more shades than the rainbow represents. Such a flock does not appeal to the eye, and no special interest can be taken in anything unless we are deeply interested in it.

well to look into this matter, and if they are desirous of obtaining the best results for their efforts should endeavor to get a breed that will bring the best market price or in other words that is most in demand. They are perfectly safe in choosing any of the following breeds: Rocks, Orpingtons, Wyandottes or Rhode Island Reds, but after all is said we cannot get away too far, from the farmer's standpoint, from the good old Barred Plymouth Rocks.

Poultry Sold While Alive

Miss C. A. Adamson, Peterboro Co., Ont.

It came as welcome news to us that, in the case of nearly all kinds of poultry, it will realize as much sold alive as if it were dressed and disposed of on the local market. At special seasons of the year particularly is this true. For instance, old hens sold during late June and early July realize us a price fully twice as great or greater than they would



An Annual Event to be Remembered on Many a Farm

Unless one has a real fancy trade which pays prices above the ordinary just as satisfactory returns can be secured from disposing of poultry alive. It is worth while to investigate the matter thoroughly before going to the extra work and inconvenience entailed in dressing a lot of fowl. Improper dressing, scalding and so forth, so common in farm dressed poultry, greatly reduces the price of the produce and causes an enormous loss to producers annually.

For this reason it is advisable on every farm, where poultry is kept in any quantity at all, to have one breed and one breed only.

We can come to one of two conclusions only in reference to the different breeds which we would like to keep. They all must be equal, or one is better than the rest. If all breeds are equal, then we can shut our eyes and pick at random. If one breed is better than the rest, then we choose this particular breed, and when we do so we have taken the first step which should be taken to start poultry raising on a farm, after our accommodation for same has been provided. Not only will the poultry look better if it is all of one kind, but we can hardly get two breeds that the same conditions will apply to in reference to feed and care. By this we mean that two breeds such as the Leghorn and Buff Orpington would not do well together; one requires much more exercise than the other to get the best results in egg production or in the fleshing of the birds during any season of the year.

Farmers and producers would do

bring later on in the fall or now dressed and sold locally.

Before going to the labor and the general inconvenience caused by dressing a lot of poultry for a local market, I would advise anyone to enquire as to prices that can be realized for the stuff if sold alive. The work of the women folk on many a farm this past year has been greatly lightened through the poultry being disposed of alive.

Offered a Premium.—Good stock always sells at a premium, and it is as true of poultry as of any stock. Recently a buyer on learning that a local man was interested in Wyandotte fowl offered this man 36 cents a dozen for all the eggs he would have from November until the first of July next, provided he had good white Wyandottes. The man did not accept the offer. Was he wise? Wouldn't it pay you to get into some first class poultry?

No feed should be given fowls for at least twelve hours previous to killing; and even a fast of 18 to 24 hours is desirable.

LIVE AND DRESSED POULTRY

Ship us your live and dressed **POULTRY**, fresh dairy **BUTTER** and new-laid **EGGS**.

We have unusual facilities for dispatching of both large and small shipments satisfactorily. We have the largest outlet of any house in Canada for farm produce. We have spent years specializing along this line. This valuable experience is at your service when we handle your goods.

We want large quantities of **TURKEYS**, **GEESE**, **DUCKS**, **CHICKENS** and **HENS**, either live or dressed. Personal attention given to each shipment, which means a Square Deal for every shipper. **PAYMENTS DAILY**.

IMPORTANT NOTICE TO FARMERS RE THE SHIPPING OF DRESSED POULTRY

All fowl should be starved at least 24 hours before being killed. Kill by bleeding at the mouth or throat. Dry pick while warm, leaving no feathers on whatever. Leave heads on Chickens and Turkeys, and take them off Ducks and Geese. Hang up until quite cold before packing. If possible, wrap each bird in paper, this will keep them from getting bruised, or sweating if weather is warm, or freezing if too cold.

We are also realizing good prices for fresh Dairy Butter and new laid Eggs.

Egg cases supplied, also crates for live poultry.

Always ship Express.

Write, wire or phone for further information to:

THE WM. DAVIES CO., LTD.

James St., TORONTO - Phone Main 5301

ELM GROVE POULTRY FARM

A choice lot of MAMMOTH BRONZE TURKEYS for sale. Improve your flock by buying a pure bred Tom Turkey. Also good Cockerels for sale, Single Comb Black Minorcas, S. C. White Leghorns, Rose Comb Brown Leghorns and Boston Ducks.

J. H. RUTHERFORD, Box 62, Long Distance Phone, CALEDON EAST, ONTARIO.

NIGHTSIDE FARM FOR SALE

One of the best farms in Western Ontario, beautifully situated in a bend of the River Nich, Elmhurst Township, Oxford Co., in a high state of cultivation. Up-to-date buildings, good fences, fine orchard of all kinds of fruit. One and a half busy town of Paris, one mile from Canterbury farm to invest in a Canadian home, as I will sell stock and implements with farm. Apply to E. K. Martin, Ganning P. O., Oxford Co., Ont.



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS.

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

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter section alongside his homestead. Price \$1.00 per acre. Duties—Must reside upon the homestead or pre-emption six months in each of three years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption, may enter for a purchased homestead in certain districts. Price \$3.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

W. W. COBY,

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

Look up our Pig offer. It will interest you.

Pure Breds in Nova Scotia

M. Cumming, Sec. for Agriculture

Pure bred stock is more appreciated in Nova Scotia to-day than at any previous time. The point of view, however, in regard to this class of stock has, in consequence of the experience and experiments of the past few years, changed. It is not long since even well informed farmers in this province would buy a pure bred bull simply because he was pure bred. The consequence was that many an inferior individual found a market in our province, and for a time, on account of the unsatisfactory results, brought pure bred stock under a ban. Now the most of our farmers realize that individuality is of as great importance in a pure bred animal as in a grade and they are insisting upon this individuality.

CHARACTERISTIC ENQUIRIES

I should say that three out of four letters of enquiry which we receive at the Agricultural College for pure bred dairy sires contain some of the following statements: "We want a good, vigorous, strong animal."

"He need not have all the fancy points, but he must come from a good producing strain." "How much milk or butter does his dam give." This is as it should be, and this demand is having its effect upon the pure bred stock breeders.

Whereas a few years ago very few of the breeders of dairy stock could give you the records of their various cows, now the majority can do so, and there is no doubt that those who are at present more or less ignoring the importance of this feature will, as soon as they can get their stock bred up to it, go in for keeping records too.

So far as the beef breeds are con-

cerned, milk records are, naturally, seldom kept and often not asked for. However, the same relative importance is being attached to the individuality of the beef animal as to the dairy animal. And in passing I should add that there is a greater



M. Cumming, B.A., B.S.A.

Secretary for Agriculture and Principal of the College of Agriculture, Truro, N.S.

demand than ever for a fair milk record even from animals of the beef breeds.

DAIRY BREEDS MAKING PROGRESS

While the beef breeds are about holding their own in the province, the dairy breeds are making marked progress. There is quite an increase in the number of breeders of dairy stock, and dairy bulls are commanding almost as high a price as beef bulls. A noticeable feature is that a number of the smaller farmers are striving to get, along with their grade cows, one or two pure bred

cows upon which to build up a larger pure bred herd. This feature is to be highly commended, for in this way, if he will only wait a few years, a farmer can build up a pure bred herd at a comparatively smaller expenditure than a grade herd.

We need lots more good pure bred dairy cattle in the province and everything that the press attempts in the way of encouraging a further development along this line will be greatly appreciated. Still there is a limit, for, while that limit is far from being reached at the present time, yet we realize that the real hope of the country rests upon the grade stock which, however, needs to be improved and can be improved by the judicious use of pure bred bulls of good producing ancestry.

Doings in British Columbia

A movement in live stock matters, new to British Columbia, is being pushed in that province. Under the direction of the Live Stock Commissioner, M. A. Jull, some short courses will be held this winter. Already one has been arranged to be held at Duncan's, Dec. 14, and one at Comox, Dec. 19 and 20. These short courses will include live stock judging and practical demonstration.

The Commissioner is of the opinion that there has been too much theoretical lecturing and Institute talking in the Province. He proposes that it is quite time that the Department get down to some practical work and do something of a practical nature for the live stock men. The short courses for the most part will be run during January and February and will be made a strong feature.

Have you forgotten to renew your subscription to Farm and Dairy?

HORTICULTURE

is Over-Pro

The fear of the mar many would be going more setting. Man terred from



The Origin This old and tree is said to beintosh apples, no favorably known tarto, descended, and Dairy by a representative for

due to the same in years of ext are low and gr profitably dispo vest. This is du distribution. I kets may be gl markets even where the dema

World's Greatest Separator
Made up to *Standard* Not Down to Price

Points of Excellency

- Low Supply Can
- Centre-balanced Bowl
- Detached Spindle
- Swinging Cream Stand
- Strong Sanitary Base
- Good Material Throughout

Points of Excellency

- Crank Shaft Proper Height
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- Roller Clutch
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"STANDARD"

Closest skimming, easy turning, easy to clean. Everything that goes to make a good Separator is best in the "STANDARD." There is no other machine just as good. PROVE THIS BY A TRIAL. Catalogue will be sent free and explains all about it. Send for it TO-DAY.

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RENFREW, ONT.

MAKE YOUR OWN TILE
at a Cost OF \$3.00 TO \$5.00 PER 1,000 Perfectly Simple Simply Perfect

WRITE FOR ILLUSTRATED CATALOGUE AND PRICE LIST

FARMERS' CEMENT TILE MACHINE CO.
WALKERVILLE, ONT.

HORTICULTURE

Is Over-Production Probable?

The fear of producing more fruit than the market demands has kept many would-be fruit growers from going more extensively into orchard setting. Many more have been deterred from improving old orchards



The Original McIntosh Tree

This old and neglected specimen of a tree is said to be that from which the McIntosh apples, now so generally grown and favorably known throughout Eastern Ontario, descended. Photo furnished to Farm and Dairy by A. D. Campbell, District Representative for Dundas Co., Ont.

due to the same fear. It is true that in years of extra large crops, prices are low and growers have trouble in profitably disposing of the apple harvest. This is due in most cases to poor distribution. While the usual markets may be glutted, there are always markets even in the best of years where the demand is not filled. Those

who have studied this question most closely have the least fear of over-production. The opinions of some of our leading fruit men on the question of overproduction of fruit follow:

"We are not planting enough to keep pace with our markets. In some years of full crop, we do not spread enough to get a market, but the market is there."—Robt. Thompson, St. Catharines, Ont.

"There is no danger of over-production. Our markets are extending every year. The Western market will be largely for Ontario fruit. We are now shipping five cars of fruit into that market to every one from British Columbia."—Harold Jones, Maitland, Ont.

"Where 1,000 trees are planted, 1,000 are becoming unproductive in Ontario. Even if we do have to sell for less in the future, we can even then live and live well. I have made as high as 17 per cent. on apples valuing my orchard at \$1,000 an acre. What we want is more activity in planting and the packing of a better class of fruit."—A. E. Sherrington, Walkerton, Ont.

"The maximum production of apples in Canada and the United States for one year is 67,000,000 barrels. Last year, only 23,000,000 barrels were produced. Plant select varieties, produce high-class apples and they will sell well."—J. G. Mitchell, Clarksburg, Ont.

"Over production is a bug-a-boo. I was warned against over production when I set out 12 1/2 acres in 1882. I now have 170 acres, and the demand is greater than ever and prices are higher."—B. J. Case, President, New York State Fruit Growers' Association.

"There are not as many apples produced in Ontario as there were six or 10 years ago. There is no danger of over production."—Jas

E. Johnson, Simcoe, Ont.
 "There is not the slightest ground for fear of over production. We can get the English market completely and a good share of the apple market of Germany, Sweden and South Africa. There is a great future for fruit growing but the day of the shiftless fruit grower has gone."—Alex. McNeil, Ottawa, Ont.

Pigs That are Winners

It is gratifying to us to know that the premium pigs which have been given away by Farm and Dairy during the past year, are proving popular and satisfactory to their winners.



D. N. Anderson

Mr. D. N. Anderson, of Lambton County, Ont., won four of Farm and Dairy's premium pigs. That he is more than satisfied with his efforts to secure new clubs for Farm and Dairy, is shown by the following letter from him:

"For securing 38 new subscribers to Farm and Dairy I have been sent four pure bred pigs. They are four as fine young pigs as are to be found in these parts. The first one was bred by Wm. Keith & Sons, of Listowel. It was a Tamworth and has been shown seven times and has received seven first prizes. I next received two Hampshires bred by Hastings Bros., of Crosshill, Ont. They are beauties, but have not been shown as there is no class for them. From Mr. Geo. Bennett, of Charing Cross, Ont., Farm and Dairy sent me a pure bred Chester White. This pig was too young for her class, but was shown against others two and three months

older at three different shows, and got 1st, 2nd and 3rd prizes.
 "I am now thinking of working on the \$1,500 offer made by Farm and Dairy and have several new subscribers ready to send in now."

THE ONTARIO PROVINCIAL WINTER FAIR

WILL BE HELD AT
GUELPH
 DECEMBER 5th to 9th, 1910

Magnificent Exhibits
 OF HORSES, CATTLE,
 SHEEP AND SWINE,
 SEEDS AND POULTRY.

Practical Addresses

A special feature of the programme of addresses this year will be ten addresses on the production of feed for live stock. This series will be opened by Mr. C. C. James, Ontario Deputy Minister of Agriculture, with an address on "The Poorest and the Best in Crop Production." Following this there will be an address on "Under-draining," two addresses on roots, four addresses on corn, one on grain growing and one on fodder crops. Other lecture sessions will be devoted to addresses on Poultry, Dairying, Seeds and Horses.

Judging Commences Monday Afternoon.

and Continues Monday Evening with some of the Best Classes of HORSES, BEEF CATTLE, SHEEP, SWINE and POULTRY.

Single Fare Rates on the Railways

For complete programme apply to the Secretary.

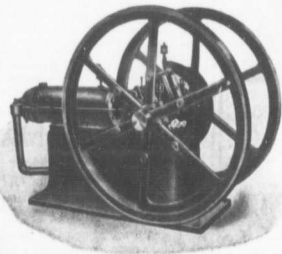
JOHN BRIGHT, Pres., Myrtle Station.
 A. P. WESTERVELL, Sec., Parliament Buildings, Toronto.

WINDMILLS AND GASOLINE ENGINES

We Manufacture the Most Complete Lines of Gasoline Engines and Windmills in Canada.

WE ALSO MAKE

**Grain Grinders,
 Pumps,
 Tanks, Water Boxes,
 Steel Saw Frames,
 Cement Mixers.**



We manufacture Gasoline Engines 1 1/2 to 50 Horse Power Stationary, mounted on skids or trucks and traction.



Our Windmills are scattered all over the world. We galvanize after completion. Towers are girded every 5 feet and double braces.

Our Factory
 SEND FOR CATALOGUES

GOULD SHAPLEY AND MUIR COMPANY, LIMITED
 BRANTFORD ONT. - WINNIPEG, MAN.

50 PURE BRED HOLSTEINS

— WILL BE SOLD AT PUBLIC AUCTION —

ON
WEDNESDAY, DECEMBER 28th, 1910, at
Brown Bros. Lyndale Stock Farm, Lyn, Ont.

The largest butter records for 7 day and 30 day periods, ever made in Canada, were made at Lyndale by Sara Jewel Hengerveld 3rd—30.39 lbs. butter in 7 days, 121.37 lbs. in 30 days. The largest milk record was made by her dam Sara Jewel Hengerveld. The combined butter records of these two cows—30.39 and 29.15 is greater than the combined butter record of any other cow and her daughter in Canada.

The Canadian record for a cow 8 mos. after freshening is held by an individual in the Lyndale herd. The sire and grand dam of Franey 3rd, 29.15 lbs. butter in 7 days, were bred at Lyndale.

COUNT DE KOL PIETERTJE PAUL, the bull which has headed the herd for the past four years, will be sold. See the photo of this bull page 23 of Farm and Dairy this week. He is the sire of Pauline Hengerveld, A.R.O. at 27 mos. of age, 20.33 lbs. butter; also of Inka De Kol Pietertje 4th, 19 lbs. at 25 mos. of age, and 10 other A.R.O. daughters. The record of 19 lbs. butter made by Inka De Kol Pietertje 4th at 25 mos. old is, we believe, the largest record made by a heifer of her age in Canada.

COUNT DE KOL PIETERTJE PAUL'S grand sire, Pieter-Je Hengerveld Count De Kol has 95 A.R.O. daughters, two with records over 32 lbs.; 10 of his daughters average 100 lbs. of milk a day. **COUNT DE KOL PIETERTJE PAUL'S** sire has four sisters with records over 31 lbs. of butter each. His grand dam is the only cow in the world having two daughters with records over 31 lbs. each. His stock are producers and they are winners in the show ring as well, taking first prize on Breeders' Herd, first on two year old bull, first on yearling, first and third on two year old heifers, first and third on two year olds, and first, second and third on yearlings at Ottawa Fair, 1910.

Sara Hengerveld Korndyke, whose dam Sara Jewel Hengerveld 3rd sold for \$2,000, will also be placed in the sale. Our herd having outgrown our stable accommodation, forces us to offer this stock for sale. Included in the offering will be a number of officially tested animals, mature cows with records up to 25 lbs.; 3 year old heifers up to 20 lbs.; two year olds up to 19 lbs.

The best bulls obtainable have always been at **LYNDALE**. The stock offered by Public Auction on December 28th is of the best and choicest breeding.

Watch Farm and Dairy in subsequent issues for fuller particulars.

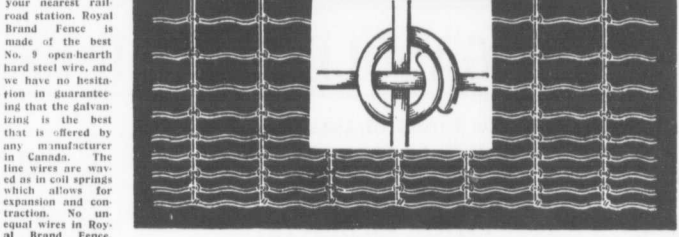
BROWN BROS., - - - LYN, ONT.

ROYAL BRAND FARM FENCING

SOLD DIRECT TO THE FARMER

THE SARNIA FENCE COMPANY, SARNIA, ONT.

No agents' commissions — no dealers' profits to pay. We pay the freight to your nearest railroad station. Royal Brand Fence is made of the best No. 9 open heart hard steel wire, and we have no hesitation in guaranteeing that the galvanizing is the best that is offered by any manufacturer in Canada. The line wires are waved in coil springs which allows for expansion and contraction. No unequal wires in Royal Brand Fence.



THE ABOVE CUT REPRESENTS OUR 10-50 AT 35¢ PER ROD

We guarantee satisfaction or money refunded, and we pay all expenses. Now is the farmer's opportunity to get fencing at prices that were unheard of until the Sarnia Fence Co. came into the Canadian field. Our capacity for the coming season will be enormous, but we expect it will be taxed to the utmost. Don't wait until the day you want to use your fence. Order at the earliest moment. Our policy is to ship all orders the same day they are received. We will adhere as closely to this policy as a factory that can turn out eight carloads every twenty-four hours will permit.

The following styles we carry in stock, and we can ship you a 20-rod bale or a car load.

- | | | | |
|--|-----|--|------|
| 6-40—has 6 line wires, 40 in. high, stays 22 in. apart, all No. 9 hard steel wire. Spacing 7, 7, 8, 9, 9. Price per rod ... | 21¢ | 8-48—8 line wires, 48 in. high, stays 16½ in. apart, all No. 9 hard steel wire. Spacing 4, 5, 6, 7, 8, 9, 9. Price per rod ... | 30¢ |
| 7-40—7 Line Wires, 40 in. high, stays 22 in. apart. All No. 9 hard steel wire. Spacing 5, 6, 6, 7, 7½, 8, 8. Price per rod ... | 24¢ | 9-48—9 line wires, 48 in. high, stays 22 in. apart, all No. 9 steel wire; spacing 3, 4, 5, 6, 8, 8, 9. Price per rod ... | 30¢ |
| 8-40—8 line wires, 40 in. high, stays 16½ in. apart, all No. 9 hard steel wire, spacing 3, 4, 5, 6, 7, 8. Price per rod ... | 29¢ | 9-48—Same as 9-48-0, with stays 16½ in. apart. Price per rod ... | 32½¢ |
| 7-48—7 line wires, 48 in. high, stays 22 in. apart, all No. 9 hard steel wire. Spacing 5, 6, 7, 9, 10, 11. Price per rod ... | 25¢ | 10-50—10 line wires, 50 in. high, stays 16½ in. apart, all No. 9 hard steel wire. Spacing 3, 3¼, 3½, 4¼, 5½, 6, 8, 8, 8. Price per rod ... | 35¢ |

The above prices include freight prepaid to railroad points west of Toronto. East of Toronto add 1¢ per rod to the price. To points in New Ontario, Quebec and the Maritime Provinces a special allowance is made to assist in paying freight. All fence is put up in 20, 30 and 40 rod bales. Remit cash with your order by registered letter, post office or express order to

The Sarnia Fence Company, Sarnia, Ont.

Our Veterinary Adviser

BLIND COLT.—Colt now three years old. He was castrated at two years of age, and during the operation he struggled considerably. He has been blind ever since.—W. B. C.

It is possible that the operation mentioned might cause blindness from a condition of the eye known as amaurosis. Nervous excitement, excessive sweating, hemorrhage and possibly excessive strugging may cause it. It consists in a paralysis of the optic nerve. In some cases the administration of two or three trams tonic three times daily will help, but in most cases blindness is permanent. This is especially so when it is of a year's standing.

TWIN-SICK PIGS.—(1) Would a twin pig be all right to keep for a stock pig?

(2) At two weeks old a litter of pigs became unwell, and took diarrhoea, a wheezing which seems to be in the nostrils. I have checked the diarrhoea but the wheezing continues.—C. O. N., Norfolk Co., Ont.

(3) Yes. The fact that his mother will not affect his breeding qualities.

(2) The symptoms indicate infectious bronchitis and a recovery is doubtful. Put them in close pen and shut windows and so forth. Burn sulphur until you can no longer stand the fumes, then open windows and doors to admit air. If necessary repeat treatment in 10 days.

TUBERCULOSIS.—What are the indications of bovine tuberculosis in a slaughtered animal?—M. E. M., Hastings Co., Ont.

The organ or organs affected will present tubercular nodules varying in size from a millet seed to the size of a soup bowl or larger. When small they appear somewhat gritty when cut. When larger they usually contain yellow cheese-like substance and when still larger they contain pus with gritty particles.

The organ diseased will probably present yellowish spots. This is particularly noticed when the liver is diseased. When the lungs are diseased careful manipulation with the fingers will detect hardened portions which when cut open will present the conditions stated. Portions of the lungs or portions of stomach or intestines are sometimes attached to the walls of their cavities which may present many little elevations or nodules. When the glands of the throat are involved they will be hardened and contain cheesy matter or pus according to the stage of development. As any organ may be diseased a very careful post mortem is sometimes necessary.

Our Legal Adviser

WAGES FOR HOLIDAYS.—A hires B for a month and nothing is said in the agreement about holidays. Can B collect wages for working on the legal holidays?—W. B., Norfolk Co., Ont.

A workman is not necessarily entitled to enjoy the statutory holidays. The nature of his employment has to be taken into consideration. On a farm for instance, there is always a certain amount of work to be done even on a holiday, and in connection with other businesses he may reasonably be expected to perform services on a holiday, if pressure of work so requires. We do not consider that "B" can collect wages for working on the holidays in addition to the monthly salary agreed upon. If called upon to work on a holiday, without good reason he would be justified in refusing, and would not be subject to dismissal on account of such refusal.

Have you forgotten to renew your subscription to Farm and Dairy?

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A Review on Horse Breeding

T. Baker, Durham Co., Ont.
 Good heavy horses are selling much higher than ever before. Foals of the light kind are selling from \$100.00 to \$200.00 each. Good young draft mares, if registered, are selling at \$300.00 and over. Teams sell at \$500.00 and some even higher.

Several yearling colts that I know of have been sold at \$250.00 and more. The writer recently sold a colt under 17 months old, to one of the best judges in Canada for \$300.

BREED THE GOOD MARES

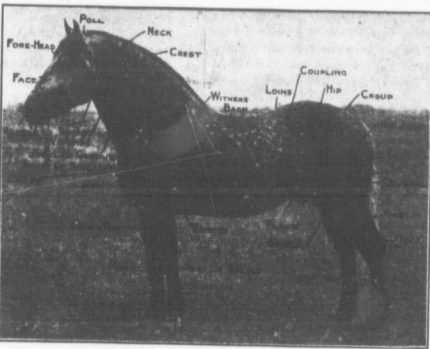
We consider raising heavy horses one of the most profitable lines that farmers can engage in. Any man who has a draft mare that is a regular and safe breeder should breed her to the best draft stallion obtainable if it cost \$20.00 or more. Too many good mares have been sold for the high dollar to go across the line and to the West and many mares are being used for dray purposes that should have been retained for breeding. The fact of farmers selling their good mares, then breeding untried and inferior mares, has been one of the reasons, and most costly mistakes the farmers of this country ever made.

Government appoint the best three judges of heavy horses in Canada, to inspect every horse imported, with power to shoot or castrate all horses that don't measure up to a certain standard of excellence. Then there would be some encouragement to import higher priced and better stallions.

Few Canadians comprehend the development and expansion that is taking place in the agricultural, railway building, mining, and the commercial activities of this country. Unless some misfortune or financial crisis takes place to arrest or check the unparalleled expansion and progress, which Canadians are enjoying, there is bound to be a good market and a strong demand for all the draft horses the farmers of Canada can produce. Motors are displacing horses to some extent, but I believe high prices will be realized for draft horses for several years.

Aneant Bovine Tuberculosis

Editor, Farm and Dairy.—There seems to be abroad amongst farmers a prevailing impression that if a cow should get a cough she is tubercular. And it is true she may be.



The Points of a Draught Horse—First Lessons in Judging

Believing that many of its readers would like to have a chart showing the various points in a draught horse as looked for by expert judges, Farm and Dairy reproduces herewith an illustration giving this information as was published in a bulletin from the Wisconsin Station, "Draught Horse Judging," by Dr. A. S. Alexander.

There are enough draft stallions in the country, but there are not nearly enough good ones. There has been too many cheap draft stallions imported with nothing to commend them but the magic word, "Imported." The coarse trutes are loaded with fat to cover their ugliness, then sold to syndicates, greenhorns, and unprincipled stallioners, who travel them over the country at any kind of fee for their services. They are a detriment to the man that has invested in a good horse and their progeny are often a curse to the man that breeds them. A faulty sire will never produce first class stock unless by accident.

THE GOVERNMENT HORSE COMMISSION
 A few years ago the Ontario government appointed a commission of many men who travelled the whole province. They made a report, which was published. They also made some recommendations. But no action has been taken. The whole cost of the commission and printing their report was money needlessly squandered. To accomplish any good to the heavy horsebreeding industry of this province, measures would have to be adopted so drastic that they would be unpopular, and it is impossible to educate or enlighten many farmers to their best interests. I would suggest that the Dominion

But because a cow has a cough, it is a most irrational thing to do to condemn her for being a victim of tuberculosis until further proof has been found. As a matter of fact, we are told by those in a position to know that very few tubercular animals do have a cough except it be in the later stages of the disease in which lungs are affected, in which case one could, in all probability, diagnose the disease from outward clinical symptoms and from the animal becoming emaciated.

I am prompted to write this little note to caution the readers of Farm and Dairy in this connection on the following account: A neighbor of mine recently took fright and put a beautiful big registered Shorthorn into a hole because she coughed occasionally, and he thought she had tuberculosis. She may have been tubercular, but had she been mine I would have known that she was tubercular before condemning her to an uncalled-for death. It would be far better in such cases to call in a qualified veterinarian, and have him make the tuberculin test. Then should the animal react, she could, under inspection, in all probability be sold for beef.—"Quackist," Halton Co., Ont.

How to Tell Age of Cattle

At 12 months, an animal should have all its milk (calf) incisors in place.

Fifteen months. At this age the central pair of incisors (milk teeth) may be replaced by a pair of permanent incisors (pincers), these being through the gums, but not in wear.

Eighteen months. The middle pair of central incisors at this age should be fully up, and in wear, but the next pair (first intermediary) not yet through the gums.

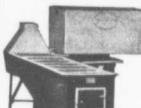
Twenty-four months. The mouth at this age will show two middle (pre-

manent broad) incisors, fully up and in wear.

Thirty months, generally shows six broad permanent incisors, the middle and first intermediary fully up and in wear. The next pair (second intermediary) well up but not in use.

Thirty-six months shows three pairs of broad teeth, which should be fully up and in wear, and the corner milk teeth may be shedding, with the corner permanent just appearing through the gum.

Thirty-nine months. Three pairs of broad teeth will be fully up and in wear; the corner teeth (incisors) through the gum are not in wear.

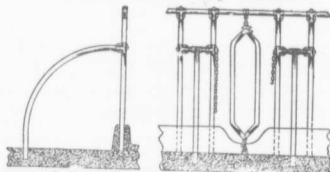


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A first-class evaporator that will make GOOD CREAM the kind you like—strip, with a VERY SMALL quantity of fuel. Price SO LOW the poorest man can buy. Every one GUARANTEED, if not as represented FILL IT BACK at our expense. Sold direct to the farmer. Turns that sugar-bush of yours into a paying business. Don't take our word for it. Send for our new pamphlet. It tells what the fellow who has used it thinks.

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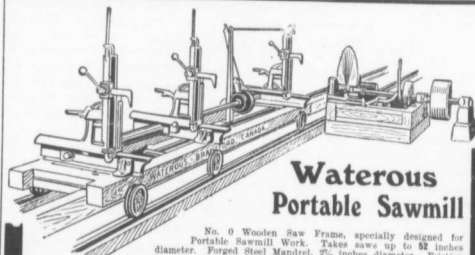


and Louden's Litter Carriers

are used to equip the Dairy Stable. Look at them and then come to us about prices etc. We shall be pleased to answer any inquiries either at our Exhibit in the Building or at our Factory on Crimea Street.

Louden Machinery Co., Guelph, Ont.

Manufacturers of Hay Tools, Litter Carriers, Barn Door Hangers, Cracks, Stalls, & Tranchions, etc.



Waterous Portable Sawmill

No. 0 Woolen Saw Frame, specially designed for Portable Sawmill Work. Takes saws up to 52 inches diameter. Forged Steel Manifold, 2 1/2 inches diameter. Friction bearings. Substantial carriage can be returned or gaged from hard carriage for rack feed is 18 feet 11 inches long; rope feed 17 feet 8 inches long. Frame extra wide, of heavy red pine stringers, edge bound with heavy iron. Log ends have 3-inch heavy incident eye-beams. Knees and rack cast in one piece. Knees have 3-inch heavy incident taper movements, and are fitted with our patent heavy large ratchet wheel, split logs, operated by overhead single-acting ratchet networks, having large ratchet wheel, split inch. Steel-rod shaft 1 1/2 inches diameter and 12 feet long. Carries pinions which split inch. Knees and is fitted with heavy cast iron hand-wheel for hand setting. Track 34 feet long. This is one of the finest portable sawmills made. It will pay you to send for our free catalogue, which describes it, as well as many others, in detail. Drop us a card to-day.

The Waterous Engine Works Co., Limited
 BRANTFORD, ONT. **Ont.**

Renew your subscription now.

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 British Columbia, Manitoba, Eastern and Western Ontario, and Bedford, District, Quebec Dairyman's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeder's Association.

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Single Copies, 15c. \$2.20 a year. For all countries, except Canada and Great Britain, add 50c for postage. 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. On all checks add 20 cents for exchange fee required at the banks.

4. CHANGE OF ADDRESS.—When a change of address is required, both the old and new addresses must be given.

5. ADVERTISING RATES quoted on application. Copy rights run up to Friday preceding the following week's issue.

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

CIRCULATION STATEMENT
The paid subscribers to Farm and Dairy exceed 8,500. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears, and sample copies, varies from 8,000 to 10,000. No subscriptions are accepted at less than the full subscription rate. Thus our circulation does not contain any dead circulation.

Sworn detailed statements of the circulation of the paper and of the distribution by countries and provinces, will be mailed free on request.

OUR PROTECTIVE POLICY
We want the readers of Farm and Dairy to feel that they can and will rely on our advertisements with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should he find reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose the names of the advertisers in the paper. Thus we will not only protect our readers, but our reputable advertisers as well. In order to be entitled to the benefits of our Protective Policy, you need only to include in all letters to advertisers the words, "I saw your advertisement in Farm and Dairy." Complaints must be made to Farm and Dairy within one week from the date of any unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY

PETERBORO, ONT.

THE MARKET FOR MILCH COWS

A few weeks ago an editor of Farm and Dairy accompanied a dairyman from Fort William who was out to buy a car load of milch cattle. Very few cattle of the class wanted were offering and all were priced so high as to be well nigh prohibitive.

The buyer wanted fresh milch cows. After inspecting a herd near Peterboro of twenty-three high grade Holsteins, although only a few of the individuals were fresh or would freshen before next spring, he offered a price averaging \$87 a head. This price did not buy the cattle. The owner wanted something over \$100 a head. The cattle were a grand bunch. The individual records kept of these for the past few years showed them to have averaged nearly 9,000 pounds of milk each.

Seeing that there is and for some time has been a great scarcity of milch cows, it is passing strange that more heifer calves are not raised to maturity to supply the demand that calls so strongly for them. The demand for milch cattle is bound to grow and to continue for years to

come. Those who are in a position to raise good cows are sure to reap their reward if they will but produce them. It is essential that these be raised from good sires. The man who will buy a high-class sire to head his herd of dairy cows has an attractive proposition.

OFFICIAL TESTS OF DAIRY COWS

Champions of the yearly tests, especially since the introduction of the Record of Performance for pure bred dairy cattle, have been given to making light of the seven day and even longer short records. It would be idle to gainsay the contention that the yearly tests as compared with the seven day or even 30 day tests have the advantage. Nevertheless, seven day tests have been of great material benefit to our dairy interests and they have a large place in the estimation of a well-informed dairyman. Seven day tests offer ample opportunity to the feeder for exercising his skill and they demonstrate the dairy qualities of a cow to a great degree.

Some expert authorities in the United States, notable among whom might be mentioned Professor Eckles of the Missouri Agricultural College, have, in a degree, pronounced against the seven day test as conducted by some breeders shortly after their cows have freshened. Their action seems to be warranted inasmuch as lately there has been a tendency on the part of a few breeders in the United States to unduly emphasize the importance of seven day records which has led them to adopt methods which are apt to bring discredit on this form of record and which are detrimental to the long continued production of a dairy cow.

It is contended that an abnormal percentage of fat is found in the milk of cows undergoing the seven day test. It is well known that by giving the cow a long period of rest and getting her into a high condition of flesh and being in the hands of expert feeders an abnormally high percentage of fat can, for a short period afterwards be obtained. Reference to the test of over 60 cows of the Holstein-Friesian breed entered in the Canadian Record of Performance test shows that as a rule, the first test does not run higher than the average for the year. In a few cases, the first tests were high, but in these instances, we are informed, that each of the cows had been prepared by heavy feeding previous to calving.

Notwithstanding the known weaknesses of seven day tests, Farm and Dairy believes in them. These tests have been of great value in interesting farmers in the producing capacities of cows and they have shown up the possibilities of milk production in a manner most favorable to the dairy industry. There is a danger here, however for those breeders who may carry this thing too far. There has been no harm worked yet in Canada from seven day records but there is a possibility of breeders making trouble for themselves and for the breed if undue emphasis is laid upon the seven day test. Now

is the time to act before any damage has been worked. Along with the judicious use of the seven day test breeders should look more and more to, and take greater advantage of, the possibilities of the Record of Performance.

Seven day records to be of most value should be accompanied with information as to feed consumed, period of rest before freshening and other information on those points which are known to be such important factors in influencing a high record of production for a short period after calving. The seven day records made after eight months of lactation are to be commended. This latter test is calculated to show the staying powers of a cow in long periods of production and there can be little if any objection taken to it on the ground of influencing the production of fat by undue earlier preparation, or while the cow is dry. This test might well be more greatly emphasized and be patronized more by the breeders of Holstein cattle. The need of the present day breeding is not so much to develop cows that will milk heavily for a short time but that will produce heavily and be persistent throughout the longer or yearly periods.

THE DISEASE, BLACK LEG

Consequent upon the remarkable freedom from disease that has characterized the ordinary run of stock in this country, outbreaks of such maladies as Black Leg find our breeders without knowledge of the disease and without the means of combating it. Some serious local outbreaks of this malady, Black Leg, as noted elsewhere in this issue, have occurred recently in a few small sections of Eastern Ontario. One of the breeders, whose cattle were affected, on diagnosing the disease wired forthwith to Ottawa for a supply of the Anti-Black Leg vaccine. He inoculated all stock under two years of age but he was too late to save those animals that showed symptoms of the disease, five of which died. Had he been possessed of a knowledge of the deadliness of this malady and its likelihood to attack his herd, he might have saved his stock. As it is, this breeder has profited from his experience and now states that henceforth every calf bred upon, or brought on to his farm will be inoculated as often as necessary with the Anti-Black Leg vaccine, which can be secured from the Veterinary Director-General's Department, Ottawa, at a trifling cost.

It is said that a number of calves on various farms in the neighborhood on different occasions have died from what was believed to be the disease, Black Leg. No effort was made to prevent other animals from being infected. In fact, very little was known about the matter. There seems to have been an air of mystery about the disease. Farmers have accepted their loss as a matter of course and one which could not be prevented. Even the local veterinarians had but the most general conception of the disease. They were wholly unprepared to check its ravages when the outbreak occurred.

Black Leg is a bacterial disease. It affects young cattle of an age under two years. The germ causing the malady is said to lurk and flourish in low lying lands where it may live for years and then cause an outbreak of the disease. The Anti-Black Leg vaccine is recommended as a sure preventative. Breeders who are likely to have stock infected with Black Leg—and all breeders of cattle are liable—should consider the matter of treating their stock so that it will be immune from the disease.

HEALTH OF LIVE STOCK

The matter of the health of live stock has become a great and is yet a growing problem in Canada. It has many divisions. Tuberculosis is the greatest. In this matter it has been charged that the dairymen are the grossest sinners. It is not our purpose here to accept this challenge as being just or unjust but rather to give out a few words of caution.

Fresh air is absolutely essential to the health of any animal. Stables corked up tight, having little or no ventilation, heated, and the cattle being forced under hot house conditions are far from right. It is highly improbable even that big records can be gotten under these conditions unless there be fresh air provided. Any who keep their stables in such a condition are laying up trouble for themselves later on.

The ordinary stable is not such as to favor the general health of an animal, not to mention the manner in which it fosters tuberculosis. It is doubtful if there is any need of having a high temperature in a dairy stable. Rather should there be a uniformity of temperature and as much fresh air as possible.

We need to practise more common sense in dairy stables. We need to beware of fads. Some of our breeders are now advocating no divisions in mangers. Who can say but that in advancing the advantages of such, they may be overlooking many other things of greater importance. Schroeder says that 40 per cent. of tuberculous cattle give off the germs of the disease in their faces. Investigations by the authorities at Washington have warranted the assertion that the excreta is the most dangerous of all sources, which might spread tuberculosis. Might there not be danger of sweeping excreta, tramped there by the boots of the attendant, into the mangers of healthy stock?

As yet, the Government has not been able to satisfy itself on a policy to be followed in dealing with tuberculosis in the herds of this country. The struggle against this disease must largely be individual. Some breeders in the States and quite a sprinkling of stockmen in Canada have undertaken to have their herds tuberculous free and to offer stock for sale guaranteed to be non-reactors to the tuberculin test. The Bang system offers the most acceptable means of ridding herds of tuberculosis but if this is to become general, the Government will have to help. Unless a man be wealthy he cannot clean up

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by practising this system. It would ruin him. Extra help is needed and the labor question is such as to block him in the enterprise.

But notwithstanding these facts, it must be fully realized that the struggle for the most part must ever be largely individual. Much can be accomplished by taking ordinary precautions, and by supplying abundance of fresh air and sunshine. These latter should receive every attention. They cost little to supply and need to be supplied freely.

OUR CANADIAN WINTER FAIRS

Fortunately the winter fairs as we know them in Canada are free from the adverse criticism, as to the management or mismanagement, which applies so generally to fall fairs. The winter fairs provide a real education. A farmer may attend one of them and profit greatly thereby. The prize list and the educational features are of direct benefit, there being not a portion of the time or of the prize money given to features of so little benefit as the race horse, which of late years has characterized the fall fairs throughout Canada.

The winter fairs are worthy of the most ardent support. A day or days spent at one of these can be made of great profit. The farmers of this country in the way they have patronized the winter fairs in previous years show that they appreciate them and there is every probability that the winter fairs this season will go down into history as being the best yet.

PRICE QUOTATIONS FOR HOGS

The old problem of how to improve the Canadian hog market is approached by Professor Day in his article on page three from a different angle. His suggestions appear to be workable.

For years there has been much talk to the effect that packers should discriminate in the prices they pay for the various classes of hogs. Discrimination has not been possible heretofore because there has been no discrimination in quotations offered for the various classes of swine. There can be no paying discriminatingly if there is no discrimination in the prices quoted. There can be discrimination in prices quoted, and, if those who buy the hogs still will it, they need not pay discriminatingly.

The point of the matter as we see it is that if one grade of hogs is worth more to the packers than another, the farmers should know it even if there be no difference in the price paid. Now that local markets have become a greater factor in the bacon trade than the English export market, there is perhaps not the same difference in the value of the various grades of hogs to the packer, the one being worth about as much as the other, although even in Canada the market shows a growing preference for the leaner bacon rather than for pork of the fat heavy type.

At any rate what may prove a workable suggestion is advanced by Professor Day. What will the packers do about it? What do you think they ought to do about it? The col-

lums of Farm and Dairy are open for a full and free discussion of this important question.

THE PROTECTION OF SHEEP

The revised Act for The Protection of Sheep and Taxes on Dogs will be discussed on Wednesday afternoon next week at the Winter Fair, Guelph. Something has been dead wrong with the sheep industry for some years back and in this connection the great decline in the number of sheep on Ontario farms has been attributed most generally to the real nuisance caused by dogs. Heretofore municipalities have had the privilege of collecting or not collecting the dog tax. This privilege is to be taken away this coming year and all municipalities must tax dogs and the tax will be much higher than formerly.

Provision was made under the old Act for a tax on dogs, and out of the money collected in this way, two-thirds of the value of any sheep killed by dogs was to be paid. In the case of those municipalities, which did not collect the tax and there were sheep killed by dogs, an awkward situation arose. The law stated that sheep killed by dogs were to be paid for to the extent of two-thirds of their value, but in case a municipality had not collected the tax what was to be done? Where was the money to come from to pay for sheep?

It will be welcome news to sheep men and those who would keep sheep but for the dogs, to learn that their grievance is about to be alleviated to some extent.

The awakening interest in good seed and the demand that has sprung up in recent years for

Interest in
Good Seed

seed of best quality of the various farm crops have made the production of these a remunerative line of farming to those who are so fortunately situated as to be able to grow them. Clean fields are an essential at the outset. Then if one has an appreciation of the possibilities for improvement that lie in plants of the various farm crops, if he studies the situation, and ultimately places reliable seed upon the market, that man is sure of reward. There is room for many more to enter into the work of producing high class seed.

A Strange Argument

(Hoard's Dairyman)

One of the stock arguments in favor of dual-purpose cattle is that they are better fitted for the service of the average farmer. Some go as far as to say that such cattle are best for farmers who do not know enough to handle dairy bred cattle as they ought to be handled. Now that is not an argument in favor of the cattle but rather it is an argument in favor of ignorance. It is the same as saying that a poor, unfit tool is the best for an ignorant man. Will such a tool ever lead him out of his ignorance? No. Nor will unfit cattle ever lead the average farmer to be anything more than average.

There is an education that comes from associating with good cattle, that are most profitable to their purpose. Also there is a tendency to promote skill if we use good tools. But poor cattle and poor tools educate the farmer down and not up.



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Circulation Manager

FARM AND DAIRY
PETERBORO, ONT.

Cheese Department

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

Notes from New Zealand

J. A. Riddick, Dairy Commissioner, Ottawa

The following extracts from a letter which I have just received from Mr. W. M. Singleton, Assistant Director of the Dairy Produce Division in New Zealand, is of interest to Farm and Dairy readers.

"We are just commencing our dairy season. So far weather conditions have been only fair. We have had the usual rough weather pertaining to this time of year, the Equinox. The ground has become fairly dry and although rain has fallen, it has not been sufficient for the country's demands if Wellington's supply be a criterion."

"We can say yet give no estimate of how our exports are likely to run this season. The prices of cheese and butter do not evidence that disparity which has characterized them during recent years. Whether the pendulum is on the return portion of its swing, I cannot say. However, some of our principal Taranaki factories

made butter during the winter until 1st September, some to 1st October, and some are now considering the advisability of continuing butter throughout the season. A few of these factories make a big variation in the respective figures of cheese and butter exports. Karpokoni and Jolls each ran out about 2,200 tons of cheese last year. Each has about six or seven branches."

"The pasteurization of by-products is gaining ground rapidly. The heating of whey by direct steam is widespread and is extending itself without any push. Farmers like the heated whey for their calves and it keeps the whey tanks clean. We use direct steam."

"The heating of skim milk has thus far been done by means of the pasteurizer. This does very good work and is not very expensive."

"The heating of the cream to pasteurizing temperature has made no little improvement in the average quality of our butter. All butter factories in Taranaki save two are following the principle. The New Zealand Dairy Association in Auckland province is about to adopt the system. This company is making arrangements to absorb their rival company, Ambury and English and the resultant company would do credit to it even the United States so far as hygiene is concerned. When Mr. Spragg speaks now, it will be with no little prestige."

"Our cow testing work is going apace. We have four associations in which are entered some 4,500 cows."

Method of Issuing Certificates

Editor, Farm and Dairy.—In accordance with an Act passed at the last session of the Ontario Legislature, the Department of Agriculture is preparing to grant certificates to cheese and butter makers, good from January 1, 1911. You are already familiar with the provisions of this Act, which provides for the granting of certificates by the two Dairy Schools and by the Minister of Agriculture.

All persons who have been chief makers during the past season, and who do not hold a diploma from one of the Provincial Dairy Schools, will be granted certificates by the Minister of Agriculture. Diplomas granted by either of the Provincial Dairy Schools will entitle the holder to continue as a chief maker. Certificates will, however, be granted to such persons, if they so desire, on condition that they make application to the Dairy School concerned. In granting certificates to those who have not shown a thorough mastery of the business, the certificate will be issued for one season only.

Assistants who have not had entire charge of a factory or creamery, but wish to be employed as such in 1911, should make application to the Director of Dairying, Department of Agriculture, Toronto, when their qualifications will be enquired into, and certificates duly granted if favorably reported upon by the Advisory Board.

Any chief maker who has not been in charge of a cheese factory or creamery for the past one or more seasons should write to the Director of Dairying, Toronto, for a form of application if he wishes to secure a certificate. When such application form has been duly filled out and returned to the Department, the qualification of the applicant will be considered by the Advisory Board, and certificates granted.

Letters and forms of application are being sent only to those persons who have been chief makers in factories and creameries during the manufacturing seasons of 1910. Such persons will please fill out the form of application furnished, and return it to the Director of Dairying, when

certificates will be granted. He will also inform assistants who are desirous of securing a certificate for the season of 1911, to apply to the Department for a special form to be filled out by each person before his application for certificate will be considered by the Advisory Board.

While we cannot make definite announcements at this time regarding the granting of certificates after 1911, we do not hesitate to state that those who take advantage of a Dairy School training will have their claims for a certificate much strengthened. It is desired that makers send in application forms for certificates at an early date, so that the Advisory Board may consider the same and grant certificates promptly, before the beginning of the year. The Advisory Board met in Toronto last week to consider the applications which have been received. The certificates will be issued some time during December.—Geo. A. Putnam, Director of Dairying, Toronto.

About Certificates.—"What do you think about certificates for makers?" asked an editor of Farm and Dairy. Mr. Geo. H. Gentile, the competent cheese maker at the Interman Cheese factory, Dundas Co., Ont. Mr. Ronnie has gained his knowledge of cheese making and has acquired the art from practical work in factories for the past 14 years. He replied, "I think they are all right. I do not know whether or not I shall get my certificate, but I guess there will be a job for me somewhere, if it is nothing else than tending fires. It is only right that makers who know their business should be protected. At present the business is not enough money in cheese making and makers are not half paid."

The cost of installing my whey butter plant was about \$700. This includes everything such as separator, churn, butter worker, tank, pipes, ejector and fittings. The plant is giving perfect satisfaction, and is a profitable addition to the cheese factory.—R. H. Little, Peterboro Co., Ont.

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Do you know that Purity Salt will create a market for all the butter you can produce.

That it will also increase the price from one to two and a half cents per pound and make the buyer want more.

Does this extra profit look good to you? If it does, we will show you how. Write to-day for trial samples and prices of

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held under the auspices of the
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will be continued for the second year, running from the

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The prize awarded is a CHALLENGE CUP, donated by the Provincial Government to the Dairymen's Association.

The Cup must be won three times before becoming the absolute property of the competitor.

Each year a gold, silver and bronze medal will be given to the three high est scoring competitors in the competition for that year.

Entries for second year's competition close January 1, 1911.

Competitors before entering competition must be duly enrolled as members of the B. C. Dairymen's Association, which membership may be obtained on the payment of \$1.00 to the Secretary-Treasurer.

For further particulars apply to:

Sec.-Treas., B. C. Dairymen's Association
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Creamery Department

Butter makers are invited to send contributions to the department to ask questions on matters relating to butter making and to suggest answers.

Canadian Butter Only Third

Editor, Farm and Dairy.—When on a visit to England this autumn, I stayed with a brother near Manchester. As he is a grocer and provision dealer, he has his opinion on Canadian butter. I was surprised to find that on the Manchester market Canadian butter takes only third place.

Swedish butter comes first, its quality being quite in advance of Danish, which comes second. I saw several tubs cut up into different tiers, and there was not a streak in one of the Swedish tubs. My brother informed me that his customers could easily detect the difference between Swedish and Danish butter. I am sorry to say I do not yet use Canadian, as his customers will have nothing but the best. Next time I call around there I hope that Canadian butter will stand at the head as butter of quality instead of where it is to-day.—Thomas Peewest, Jacques Cartier Co., Que.

Fraud Amongst Patrons

"It is wonderful what some patrons will think of in their endeavors to get a little more for their cream than they deserve," said a prominent Eastern Ontario creamery man in conversation with an editor of Farm and Dairy recently. Only lately one of my patrons who had been delivering 35 per cent. cream throughout the whole month delivered a thin 20 per cent. cream on the last day of the month. As we take equal samples each morning, he expected to get credit for more fat than he delivered. I took a separate test of this sample however and gave him credit for what he had actually brought in."

This patron was doing intentionally what many patrons are doing unintentionally all the time. If the composite test is to be a fair method of deciding the amount of fat delivered at the creamery, the test must be uniform for each delivery; otherwise the sample taken should be in proportion to the weight of the cream delivered.

AN EXAMPLE
Suppose a patron delivers 100 lbs. of 40 per cent. cream one week and 200 lbs. of 20 per cent. cream the next week. The composite sample would give a fat reading of 30 per cent. Three hundred pounds of cream at 30 per cent. would be equivalent to 90 lbs. fat while the actual delivery is 80 lbs. fat or (2 x 20) = 80. Another patron may deliver 200 lbs. of 40 per cent. cream and 100 lbs. of 20 per cent. cream. This patron would get credit for just 90 lbs. of fat while he actually delivers 100 lbs., (2 x 40) + 20 = 100. Had samples been taken in proportion to the weight of cream in each case the results would have been as follows:

With one-third of the first sample testing 40 per cent. and two-thirds 20 per cent. the test of the composite sample would have been 26.66 per cent. which would mean 800 x 26.66 = 80 lbs. of fat. In the second case the average test would have been 33.33 per cent. and the patron would have received credit for 100 lbs. fat.

There are two methods in use for taking an aliquot test. The graduated cylinder is recommended by the Wisconsin dairy school. A certain number of c.e.'s is taken for every 100 lbs. of cream delivered. Where the cream of each patron is delivered separately the method adopted by the Benfresh Creamery is quicker and easier. A glass tube is run down to the bottom of the cream in the

can of each patron and sample obtained in this way which is in exact proportion to the amount of cream delivered. If the cream is very thick it is necessary to suck the cream into the tube somewhat.

When we have scales and some means of taking aliquot samples in every creamery we will be in a position to claim that we are paying each patron for exactly what he delivers.

The Canadian Hog Market

(Continued from page 3)

There are several interesting things about these quotations. It will be noted that on February 16 and May 18 the difference between the price of prime and good heavy hogs is only 10 to 15 cents a cwt.; whereas, in August and October the variation was more marked, running as high as 50 cents.

In February and May, butcher's hogs ran practically the same in price as prime heavy hogs, but in August and October the butcher's hogs were slightly higher in price than the prime heavy hogs.

In February, heavy packing hogs were 10 cents lower than prime heavy hogs. In May these classes were practically equal in price. In August, the heavy packing were 30 cents lower than prime heavy hogs, and in October 30 to 65 cents lower.

In February and May, the selected hogs and the heavy packing hogs were practically equal. In August, the Lecons were 80 to 85 cents higher than heavy packing, and 50 to 55 cents higher than prime heavy. In October, the hogs were \$1.00 to \$1.10 higher than heavy packing, and 35 to 40 cents higher than prime heavy.

For some reason, stags commanded a very high price in February and May, but it must be remembered that stags are docked 80 pounds of their weight, so that the price actually received by the seller does not correspond with the market report. For some reason, also, boars commanded a

high price in February, but dropped nearly \$2.00 in May, August and October.

A study of this table is instructive. It shows that the demands of the market are bound to show in the prices paid for different classes. In one month, a certain class may command a premium. In another month it may be at a discount. It shows, also, that the best classes of hogs, namely, the prime heavy, the Lutchers, and the selected hogs, generally receive a recognition.

Chicago market reports are in very marked contrast to our own. In Ontario apparently all pigs look alike to the buyer. In Chicago they are classified and the experienced seller should have a pretty clear idea as to just how his pigs will be graded when they reach the market.

It would be too much to assume that the American farmer is perfectly satisfied and happy under the grading of hogs in Chicago market. In fact, the farmer is complaining quite seriously regarding the treatment he receives at the hands of the packers. In all probability this will always be the case under any system, but still the United States is holding much better than we are. If some means can be devised whereby some sort of classification is established in our market for hogs, the influence of such a classification will do more to create confidence in the business and to stimulate production than all the talking which either packer, farmer, or others can accomplish.

It may be that such classification, desirable though it is, is impossible, but many things have been accomplished of late which were at one time regarded as impossible, and those who control markets will do well to look very carefully into this subject and see whether something cannot be done to give us a market classification of hogs. The present method (or lack of method) in reporting the hog market is doing more for the other than for the one thing to create a lack of confi-

dence in the business on the part of the farmer.

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When you have a Sharples Dairy Tubular Cream Separator you have The Best. You can then say to your friends, "See my Tubular. It is later than, entirely different from, and far in advance of a superior to all others. It produces twice the skimming force of common separators, and skims faster and twice as clean. It makes profits for me which no other separator can make."

My Dairy Tubular contains either disks or other contraptions, because the double skimming force makes such contraptions needless. My Tubular is the simplest, easiest to clean, most durable separator ever made.

Will you not be proud to have your own separator? Can you speak of like that? It is a credit to your judgment.

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ARE GUARANTEED FOREVER by the oldest separator concern in the continent and the largest in the world. The manufacture of Tubulars is one of Canada's leading industries.



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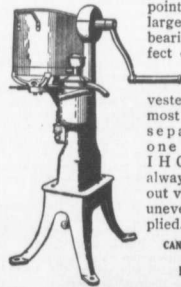
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TWO CENTS A WORD CASH WITH ORDER
WANTED—Married man and woman to do general work on farm. Protestant preferred. Duties to commence at once. Apply with references, stating wages, etc., to Box X, Farm and Dairy, Peterboro, Ont.

I H C Cream Harvester Advantages

**Close Skimming—Lifetime Service—Quality Cream
Easy Turning—Easy Cleaning—Complete Line**

ALMOST any cream separator will skim fairly clean when new. It is its test in time that is the proof of a separator's value. It is the years of service that count. Be sure that the separator you buy is built to work satisfactorily for a lifetime.

If you investigate, you will find that I H C Cream Harvesters are the only separators with dust-proof and milk-proof gears, which are at the same time easily accessible. You will see that the name of an I H C Cream Harvester is entirely protected from wear by phosphor bronze bushings at all points; that the I H C has large shafts, bushings, and bearings; that it has a perfect oiling system; that its flexible top-bearing of I H C Cream Harvesters is the strongest and most effective found in any separator; that it has only one spring. That's why I H C Cream Harvesters are always steady and run without vibration, no matter how unevenly the power is applied. And you will also



note that I H C Cream Harvesters are equipped with a patented dirt-arrester which removes the finest particles of dirt from the milk before the milk is separated. You will see that the crank is placed at the right height for easy turning, and the tank is at an easy height to fill.

There are many other advantages of I H C Cream Harvesters. See the I H C local dealer and let him point them out to you. Let him show you the different I H C styles and sizes so you can select just the machine to meet your requirements. The Bluebell is a gear drive machine like the Dairymaid in skimming power. Each size is made in four sizes, from 350 to 850 pounds capacity. Get catalogues and all facts from the I H C local dealer, or write nearest branch house.

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What is it? A clearing house of agricultural data.

What does it do? Helps farmers to help themselves.

How can it be used? By sending your farm problems and puzzling questions to the Bureau.

We are co-operating with the highest agricultural authorities and every source of information will be made available to solve your difficulties. We shall be pleased to have an opportunity to discuss with you the I H C Service Bureau.

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WHAT do we live for, if it is not to make life less difficult for each other?

—George Eliot.

"In That New World"

BY ZONA GALE

IN the intervals of painting the front fence Mark stepped back to look at his handiwork, and his eyes wandered to the town pump at the corner, from where folk with pails occasionally saluted him. A good location for his house, so near the pump, he was wont to say, and of late he had said it very often. A good fence, a good walk, a fine little house he owned he thought now, and life was altogether comfortable for Mattie and him. Of late he had found himself rather insisting that his sister Mattie and he were altogether comfortable.

"Mattie!" he called now, "come out an' see my fence."

Mattie, in dark blue calico, was polishing a front window—good old Mattie, whose mornings were devoted to doing housework quite furiously, and whose afternoons were given to painting china sedately and without fury, and whose forties were not wholly fascinating. At this moment, Mattie did not miss a stroke on the shining window.

"Can't," she answered. "Bertha'll be here now before this house is fit to live in."

Mark frowned not so much at Mattie's refusal—he was used to Mattie's passion for renunciation—as at the thought of Bertha. That is, Bertha and the child. She had been a village girl, a lifelong friend, now a decade married and coming to Mattie for a first visit.

"How old did you say the boy is?" he inquired.

"Five," said Mattie, "an' curls. Bertha says I'll want to paint a picture of him," she added, polishing. Perhaps she was pretending that her strokes painted the spring picture without.

"Well," said Mark, "maybe you will. But you can't paint like I can paint. This here fence is a dream."

Mattie had hardly moved on to a side window when Mark, stepping back the better to observe his fence, received from the tail of his eye a distinctly grateful sensation of blue. Something blue was approaching the town pump. Not dark blue like Mattie's calico, but pale blue, like the sky of the spring. Mark's look made sure. Then he set his paint-pail on a post and strode to the town pump.

Lydia did not see him—or did she see? But she cannot have seen him, because the lilacs nodding over the fence behind the open flagged town-pump corner were hiding her attention. The pale blue which, like an individual coquette, had signaled to Mark was the merest gingham, but somehow it ruffled over the slim shoulders like a way of encouragement. Of the meagings of these things Mark knew little, but his heart beat somewhat and this, he thought, was because he was shy.

"Why good-morning, Lyddy," he said, and when his hat was off his face was almost Loyalist, and now the lines of his thirties were smiling lines.

"Why, good morning, Mark," said Lydia, but her smile was rather at the lilacs. She pursued the moment, however—and that is the prerogative and charm of a woman: To seem to pursue, not the man, but the moment. "Where are you going?" she asked in magnificent indifference.

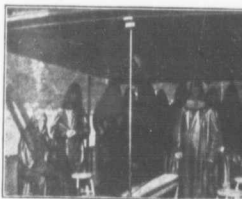
"Oh," said Mark with his masterly air of the casual, "I come by for a drink."

"Pump me one," Queen Lydia commanded.

Slave Mark bent his back to the pump-handle, and Lydia held the cup. And to hold the cup she must needs stoop a little and lean the pale blue gingham slip never so little, she must needs lift the hem. And somehow, though the crops were bad and the mortgage imminent, though she made her own gowns and those returned, Lydia had pretty shoes. Or was it that her feet would have made any shoes.

"Look out!" Lydia commanded, softly enough though. "You're splashing it over."

"So I am," said Mark remorsefully,



Do you Recognize Them?
Some of our Home Club taking a trip on the Maid of the Mist at Niagara Falls on their recent excursion.

and he—and perhaps Lydia—did not realize how charmingly absurd it was to empty the cup entirely, merely because it had previously been filled over the brim.

So Lydia held the cup again. And her wrist was round and brown, and the pale blue gingham sleeve was well above her elbow, and Mark looked down at the little hand, and—

"Lyddy!" he said. She lifted her eyes. And as they met his, the water overflowed on the brown wrist and hand and splashed to her elbow.

"Oh, Mark!" she cried reproachfully, and caught away the cup, and dropped it, clanking on its chain, and when she tried to find her handkerchief, she had none.

"I've got one," said Mark, and produced it, clean and folded, and watched her while she dried her wrist, faintly and with a pretty deliberation. Oh, Mark thought, what a woman she was. And if only—if only—but somehow, whenever he thought of

Lydia with "if only" in his heart, the whole machinery of his fine little house and of his life—so wholly comfortable with Mattie—seemed to rise like a wall between them. To be sure, it was not true of other men; but then, he reflected always, Mattie was different.

"I want a drink o' water," said "somebody" distinctly.

He was suddenly standing almost between them, a little boy of five with curls and a plaid skirt, and other fascinations of babyhood. He was looking expectantly at other men; but he understood that it is the women of this world who administer its drinks of water.

"Why, you little thing!" said Lydia, and stepped for the cup. "Pump, Mark," she commanded, not taking her eyes from the small, grave face. And this time the cup, at the first trying, was decorously filled, and Lydia held it while the child drank deeply.

When he had finished, Lydia dropped the cup again and brought up the child in her strong, capable arms and looked in his face.

"What baby are you?" she demanded gently.

"I nice baby," he replied soberly, staring up unblinkingly.

"Yes, but whose baby?" she laughed.

"I our baby," he answered politely.

"Down. Down. Now down. She set him down and looked at Mark with all her tenderness for the child still in her eyes and, too, something of shyness.

"The little thing?" said Mark factually.

They stood momentarily looking after the child, who they saw, ran to join a lady in a broad dress, walking slowly on the other side of the street.

"Goodness, he's cute," said Lydia.

"My, must hurry up. Who's going to pump my pitcher, I wonder?"

Mark filled the pitcher and walked with Lydia the half block to her gate. For two years now Mark had been walking half blocks with Lydia, or home from church on choir practice, or down-town. And for two years the thought of her had come to him pulsing through the shell of the sense of his sister Mattie and of his burdening consciousness of responsibility to her. And yet there were times as when, at the gate, Lydia moved away with:

"Well, I must be cooking dinner."

Mark lingered a little on that Lydia cooking dinner! But then, he thought remorsefully, what good dinners Mattie cooked. Nobody was a better cook than Mattie.

"I must be getting back to my dinner, too," he said awkwardly. "Well good-by, Lyddy."

"Good-by," said Lydia, quite absently, and went in the house without looking back, and ran in the parson and watched Mark far up the street. Her face had grown a little tired, and its archness and coquetry were no longer there.

And on his return Mark found that his joy in fence painting was abated. Deciding to paint no more that morning, he swung the pail from the fence-sitting squat on to walk on the gate's other side. It was a child of about five years with curls and a plaid skirt.

"Why, Little Thing!" Mark cried in recognition. And then he heard voices at the door, and there on the porch were Mattie and the lady in brown whom the child had run from the pump to join. And she, he saw, would be their guest, Bertha. He was genuinely glad to see her

now that she stood before him—grown matronly and at ease and with a new prettiness. He had always liked Bertha, and his heart warmed still further to the child, for her sake. Also, the child had followed him from the gate close at his heels, and now stood beside him as man with man.

But when Mark, touching awkwardly at the child's curls, would have talked with Bertha, the voice of his sister Mattie in the hall averted every-thing before it.

"Now," said Mattie, "just you go off, Mark. I ain't seen Bertha for



Part of our "Home Club" just after Dinner
Photo taken at Niagara Falls on the recent trip given The Home Club by Farm and Dairy

years, an' I declare if you shall get first say. I want to ask her sixty things I ain't runnin' an' you put me all out. You're as bad as the boy, an' we'd just got rid o' him. I tell you what, Mark," said Mattie, "just you go down to the store an' see if you can find us some first-class butter for our dinner, an' take the child with you. Then Bertha an' I can get some chance at it."

Mark looked from his sister to the child.

"He—he wouldn't go with me," he returned uncertainly.

"I'll will go off wif you," observed the child placidly. "I likes mens."

"There now," said Mattie, "run along, both of you, and see that you get dairy butter whatever you do. Come back in Bertha."

So Bertha laughed and followed her within doors and Mark was left with the child. And immediately the little boy put up his hand to Mark's and gripped two of his big fingers.

"Go down-town," he proposed gently, but with finality.

Mark moved toward the gate, looking down at the little figure trotting confidently at his side. Without his knowing it, it was the child's confidence that touched him most.

"Let me opic gate," the child commanded.

Obediently Mark lifted him until he could touch the gate. And somehow, this baby will exerted over Mark gave him a sudden and prodigious pleasure, or was it the pleasure of lifting the child by his slight little shoulders?

The two set off together down the long street of the village, nearly empty in the half-hour preceding noon, when everybody dined. Under the brick walk the roots of the great overarching maples had pressed their thick roots, heaving up the bricks and making uneven walking for little feet. Now and then the child stumbled and tightened his grasp of Mark's finger, and every time he did that Mark looked down at him and heard himself saying things that sounded curiously to his own ears, as:

"Hi, there, little old man! Hi, little old 'un! Must stand tight on its feet, mustn't it? No slip, now. Up you come! Mind, this time he's up to stay!"

(Continued next week.)

Have you forgotten to renew your subscription to Farm and Dairy?

The Storeroom in the Home

The storeroom for food may be the tiny closet of the flat dweller in a city or the cellar of the village or farm house. In the last case it often has a commercial as well as a household value, since it keeps fruits and vegetables in good condition until marketed, as well as until they are needed for the home table. In any case, it should be cool, dry, clean, and regularly aired.

It may be well to describe a cellar that is badly built and carelessly kept, in order to see what should be exactly

opposite conditions.

Such a cellar may be dug in wet ground, without sufficient drainage fact with open sewers or drains, which have been proved in certain cases to contain specific organisms capable of producing disease. In many cases the cellar built against the earth wall is not protected from dampness by a layer of moisture-proof cement, and the water may stand in drops on its surface. Again it may be dug to such an extent below the surface of the ground that the windows are inade-

quate for lighting and ventilation.

It may have an earthen floor, or one of badly matched boards impossible to keep clean. It will probably have a musty smell, proof positive that mold plants are there and ready to attack any fruit and vegetables stored on its shelves or in its dirty bins.

If, in addition to this faulty construction, the cellar is badly kept, bits of rotting fruits and vegetables, left about, not only will these conditions favor the spoiling of food, but they may prove injurious to the health of the family living above.

Profitable Work for Women

J. A. Corbett, Cumberland Co., N.S. Bee keeping is something that any farmer's wife or daughter can indulge in with profit and pleasure provided they have a love for Nature. It will not take all of one's time either to look after the bees. I have demonstrated this fact in my own experience for each summer L make about a ton of butter besides doing the house work on a large farm having only the help of a sister.

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CHARACTER & REPUTATION

It is the high character of Gourlay Pianos as they are at present built that has earned the appreciation of our best musicians and created a reputation and demand for the instruments.

Their sale does not depend upon a reputation due to the labor and skill of a former generation. This is the buyer's safeguard and assurance of permanent satisfaction with a Gourlay.

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Occasionally you hear a big a rare "singing" quality, so rich and full and withal so sweet that you are at once interested in the make. It is this charm of tone in the Gourlay Piano that has evoked enthusiastic commendation from music-lovers everywhere throughout Canada.

**STANDING
IN TUNE**

Scientifically and carefully planned after years of study and experiment, Gourlay Pianos stand in tune much better than ordinary pianos. The Gourlay non-varying end-wood system of construction provides a bearing from the tuning-pin right to the iron plate that is non-varying, sectional end wood.

**There is
Not a Weak
Link in this Chain**

of reasons why you should have a Gourlay Piano in your home

Gourlay Pianos

are all of one quality—the best. If we took a commission to build a piano for \$1,000 it could be of no better material or workmanship than we regularly use in any one of our simpler, more moderately-priced styles. We could spend more money on ornamentation, but nothing to improve quality.

Gourlay Pianos are to be found in prominent homes in practically every city and town in Canada. The most musical person in your coterie of friends is probably a Gourlay enthusiast.

Booklet Number 6 tells the names of over 2,500 homes where Gourlay Pianos are used. If you contemplate the purchase of a piano this booklet should interest you. Write for it.

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4,000 PIANOS

Nearly 4,000 Gourlay Pianos are now in constant use, not only in all parts of Canada, but in Great Britain, United States, South Africa, China and Japan. How they have stood the extreme test of climatic changes is shown in a letter from Japan on producing a piano that will stand this climate. Ours is in fine order, while others brought here from America are terribly cracked and damaged.

**TOPE
DURABILITY**

That Gourlay Pianos have an enduring tone which does not become "flabby" has been demonstrated after severe tests. This tone durability is secured through an exact knowledge of what to use, how and where to use it, and a vigilant supervision over every smallest detail during construction.

TOUCH

To musicians the touch of a piano is a very important consideration. In Gourlay Pianos, the genius of the builder is demonstrated in what you might almost call individuality—personality in the touch—a direct appeal to the player with real musical taste.

EVERY DOLLAR

invested in a Gourlay piano brings the largest possible dollar's worth in return. Gourlay Pianos may cost more than some others, but they are more than worth the difference.

The price is as low as the high quality of the piano will allow. Their reputation adds nothing to their cost, and even an additional expenditure of money would not improve their character.

**ARTISTIC
DESIGNS**

The beauty and refined appearance of our present models sustain our reputation for leadership in artistic case work, while the richly-figured veneers used are unexcelled and add to our reputation as connoisseurs of rare woods.

SECOND DAY'S SESSION OF RECENT WOMEN'S INSTITUTE CONVENTION

Addresses from several Institute delegates were given on the subject of "The Place of the Girls in the Institute." These delegates told how their Institutes interested the girls in nearly each case, by giving them a prominent part in the program at the meetings. One Institute required its girl members to furnish all the music both vocal and instrumental. Another Institute had established a cooking contest, the girl members being the only participants. Different contests were conducted, one being for breadmaking, another for cake-making, etc. The results of the baking were brought to the meeting and placed on exhibition where they were judged by outside judges who did not know who had baked the different articles in question. In this way all chances for partiality or unfairness were eliminated.

The address on Travelling Libraries by Mr. W. R. Nursey of the Department of Education, Toronto, was most interesting. Mr. Nursey stated that the Travelling Library system first originated in the State of New York, in 1890. It started with a nucleus of 2,500 copies and to-day there are over 400,000 volumes in circulation in this manner in the United States. He ad-

some in," said Dr. MacMurphy, "and inspect the work of the scholar. Let the teacher tell him of the stubbornness and backwardness of the troublesome pupils, and in an indirect way the doctor can easily determine whether or not the child is really stubborn, or John or Mary is really blind, or whether they are nearly blind."

"I have seen," continued Dr. MacMurphy, "a girl in a seweran school who was endowed with a good amount of brain matter, designated as most stubborn because she could not copy a lesson from a blackboard correctly. After three or four hard attempts on the part of the pupil, each one resulting in an almost utter failure, it was discovered the poor girl had scarcely any sight in one eye, and the other eye very nearly as bad. When we realize that there are hundreds of children burdened with defective eyesight or a slight throat affection, which can be easily remedied with little trouble, it is safe to say that medical inspection of school children should be looked after by our women."

THE AFTERNOON SESSION
Dr. Annie Clark of Axminster, Ont., in her usual bright and interesting manner, presided at the afternoon session. The opening discussions were on the subject of securing and expending the funds of Institutes. The questions were taken up by various members of different Institutes, and the different ways of securing and expending the money of Institutes were as varied as there were Institutes represented.

One of the most original ways of securing funds was that described by Mrs. Johnston of Agnew, whose Institute had secured a large fund by entering for a plowing match extending over a period of four days. Committees were appointed from the Institute, a dining tent was erected and each member of the Institute was responsible for a certain part of the work. Over five hundred meals were raised, and a large revenue was realized.

Another Institute has invested a certain part of its funds in buying silver forks, knives and spoons, which they rent at 10 cents a dozen to the local societies and churches in their locality, thus realizing a considerable sum.

The Bloomfield Institute has been progressive enough to purchase a \$25 Vacuum Cleaner, which it rents by the day or hour to the housekeepers in that vicinity, for the purpose of cleaning. This was charged for from \$1 a day, down to 50 cents a day, or a half hour. The cleaner has more than paid for itself, thus proving a profitable investment.

The Burgessville Institute represented was one of the most enthusiastic speakers at the Convention. One could not but help being inspired at her earnestness of manner. Her Institute was unable to work under considerable difficulty to procure a library for their town. Everyone predicted defeat, and the more energetic became the women. From a successful garden party they secured \$381 in a town of less than 50 families. Their County Council gave them a grant of \$30; their Township Council, one of \$25. A shredded wheat banquet gave them \$40. This Institute is in one of the smallest towns in Ontario and realized \$132 net profit towards its library. The library was opened to the public on Saturday, November 19, and it is needless to say that the citizens in the vicinity of Burgessville will all hold in high esteem the Women's Institute of that section.

THE CHILDREN

The principal speaker of the day was Mrs. W. R. Hollowell of North

Carolina, who spoke on the subject of "Children." Mrs. Hollowell has a personality about her that wins for her the attention and admiration of her audience the minute she speaks. "The greatest thing," said Mrs. Hollowell, "in the development of children, is to teach them to have implicit confidence in their mothers. Children have a much more keener sense of justice and right than we give them credit for having. Confidence with the child must be first and foremost of all things. The mother should take an interest in things the children discover." Mrs. Hollowell advocated the exchange of children's magazines and papers, and appealed to the mothers to wish over the child in its earlier years of life. "The claim of motherhood," she said, "has the preference over every other claim in the world. It is a woman's sphere, and should be her aim above all else. Teach the truths of life judiciously to the children exactly as they are prepared to receive the truth. There is no power in all the world that can wipe out the mistakes the mother makes in the first years of her child's life. Teach the children how to play," continued Mrs. Hollowell. "Always take new interest in the things that the children discover. See things from their point of view."

(To be continued)



A Woman's Criticism

By Mrs. M. D., Peel Co., Ont.

The one thing that impressed me most on reading the special Household issue of Farm and Dairy published recently, was that it touched every phase of farm life, and of woman's interest and difficulties. As I read that issue of Farm and Dairy, I thought what a help and a stimulus such a paper is to us busy housewives.

The article by Mrs. Muldrew made me think of the Queen Annes of Society, who have their "Ladies' Home Journal," and "Gentlewoman's Magazine," and I thought the Mary Anne would enjoy a farmer's wife a magazine not dealing with afternoon teas and the latest size and shape of sleeves and disspan hats, but to get nearer to Nature and Nature's God, by studying things on the farm and all the creatures of interest there. Mrs. Muldrew's talk is excellent. She must be in close touch with farm life. Miss Laura Rose speaks with conviction. Farm life is just as varied and different as the streets of a great city.

I would not always blame the men for not getting the labor saving devices for the home. Women are too content and too easy going in some

cases, or they could have what they wanted. To be sure there are many who cannot get just everything they ought to have, but if they are wise and persevering they will win in the long run.

To bake pie crust the nice, delicate brown that is so much desired by all housewives, mix the dough with cold sweet milk instead of water and the result will be satisfactory.

Farm and Dairy Patterns give satisfaction.



At Home with the KODAK

Make Kodak your family historian. Start the history on Christmas day, the day of home gathering, and let it keep for you an intimate pictorial history of the home and all who are in it. Make somebody happy with a Kodak this year—the pictures will serve to make many people happy in the years that follow.

Unless you are already familiar with Kodakery, you will find the making of some portraits much simpler than you imagine—so simple, indeed, that the novice gets the credit of being an expert. To make it still simpler, we are issuing a beautifully illustrated little book that talks about home portraits and is an undeniably true that will prove helpful to any amateur. Whether you already have a Kodak or not we would like you to have a copy of this book.

Ask your dealer or write us for a free copy of "At Home with the Kodak."

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Always Rushing—Always Paving to the Sea
The Falls at Niagara. A view taken by one of the members of The Home Club on their sion recently.

vocated only the very best books circulated by these mediums. The Travelling Library is a feature of rural improvements that has come to stay. The demands upon his department for libraries are increasing rapidly. So popular has it become that calls have been made upon him for libraries for nearly every branch of work and education. Much information on this subject can be secured from the report of this subject which was published by the Department of Education last year.

MEDICAL INSPECTION OF SCHOOL CHILDREN

A most enthusiastic reception was given Dr. Helen MacMurphy, who gave a most able and entertaining address on the above subject. To hear Dr. Helen MacMurphy is a delight that no woman can pass by if she has ever had the opportunity of hearing this speaker once. Dr. MacMurphy is filled with enthusiasm on her subject and is a most fluent and interesting speaker. She drew attention to the fact that there should be medical inspection in rural schools as well as in city schools. What was good for one was of equal good for the other. She mentioned the three principal diseases to which children are subject, those of the eye, the ear, and the throat, and gave several illustrations where lack of medical inspection had proved disastrous in many cases. Had such attention been given to pupils who had defects in the above organs, the tenor of their whole life would have been changed, and their lives would have been made of value to themselves and to the community. "Let the country doctor

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The Upward Look

"Going to the Father"

I go unto my Father.—St. John 14, 12.

The realization that as we journey through this world as we Lut on our way to join "Our Father" gives an inspiring vision of life. In the words of Prof. Henry Drummond, "it explains life, it sustains life, it completes life."

We all feel at times that life needs explaining. When death takes loved ones from us we cry out in our distress and question God's love. We are apt to rebel until we remember that only a part of our journey is over, that our dear ones have but gone before, that we are to join them hereafter. And thus we find that our life here on earth is but a preparation for the life that is to come. Our sense of loss leads us to put forth only so much the greater effort to walk uprightly so that we may join them when we go to be with "Our Father." Sooner or later we find out that life is not a holiday but a discipline. Earlier or later we all discover that the world is not a playground. It is quite clear that God means it for a school.

"The discipline of life," Drummond says, "is a preparation for meeting the Father. When we arrive there to behold His beauty, we must have the educated eye; and that must be trained here. We must become so pure in heart—and it needs much practice—that we shall see God. That explains life—why God puts man in the crucible and makes him pure by fire."

The knowledge that we are but going to the Father sustains life. It helps us to realize "why we do not know why these strange things happen." It is because we are going to our Father. We are only going. We are not there yet. Therefore patience. "What I do thou knowest not now, but thou shalt know. Hereafter, thou shalt know." Thus we are assured that in God's good time the reasons for our earthly discipline will be made clear to us.

Death but completes life for our loved ones. They have reached the Father. And that it will be with us. "It is not departure, it is arrival, not sleep, but waking. For life to those who live like Christ is not a funeral procession. It is a triumphal march to the Father." Let us remember this, let us live simple, uncomplaining, useful, joyful lives that thus we may be permitted to join the Father and those we love.

J.H.N.

OUR HOME CLUB

WOMAN SUFFRAGE

Resolved, "That whereas the home is the foundation of national greatness, and the family is at present not fully represented, the male head of the family having no stronger voice in the nation than the unmarried man, it is the opinion of this Institute that to grant the franchise to the women of Ontario would be to represent more fairly the home as well as to increase the stable, conservative and morally uplifting vote of the province, and also to recognize the inalienable right of every British taxpayer to parliamentary representation.

Moreover, other British colonies have recognized this, and found the results satisfactory, as in the case of New Zealand and Australia. Therefore, the members of this Institute do respectfully and earnestly request their representative, Mr. R. J. Mc-

Cornick M.P.P., to vote in support of Mr. Studholme's bill for the enfranchisement of women, and convey the same request to Sir James Whitney, leader of the government and Premier of Ontario."

The above resolution, passed by the Forest Women's Institute, contains in whole matter. As far as we can learn, it has worked advantageously in New Zealand and Australia. Why not try it in Ontario and, in fact, in the other provinces as well?

On all moral questions, educative interests and matters which pertain

to the highest good of humanity, our women hold advanced views. If given opportunity to exercise the franchise, political graft and corruption would have to go. Advanced legislation for the overthrow of the liquor traffic and immorality would gain a stronger support and finally in the near future be legislated out of existence.

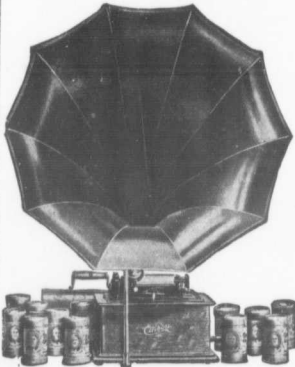
We trust and pray Mr. Studholme's bill may carry.—"Father."

OVER INDULGENCE FOR OUR BOYS

I agree with "Aunt Faithful" on her plan for the boys. Might I add, do not be overindulgent with this boy.

do not give him to understand that he should receive pay for everything he does, or he will find himself coming short in after years. Teach him when he is small the value of money. When he wants a horse or anything of value let him work for it and help and encourage him to get what you think he should have. But do not leave him with the impression, that because he is your boy he should, and can have all his little heart desires.

I have in my mind boys that, through the overindulgence of kind parents do not seem to appreciate what good things mean, and seem to



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Yes, free. I don't ask a cent of your money—I don't want you to keep the phonograph—I just want to give it to you on a free loan—then you may return it at my own expense.

Read the Offer: I will ship you free this grand concert outfit, Fireside Model, with one dozen Gold Moulded and Amberol records. You do not have to pay me a cent C. O. D. or sign any leases or mortgages. I want you to get this free outfit—the masterpiece of Mr. Edison's skill—in your home. Now, the new Fireside Edison Phonograph of our grand outfit, improved Model, is the latest and greatest improved talking machine made by this great inventor. Everybody should hear it; everybody must hear it. If you have only heard other talking machines before, you and has never been heard around the country. We want to convince you we want to prove to you that this outfit is far, far superior to anything ever heard before. Don't miss this wonderfully liberal offer.

MY REASON—My reason for this free loan offer, this extra liberal offer on the finest talking machine ever made—see below.

MR. EDISON Says: "I want to see a Phonograph in Every American Home."



The phonograph is the result of years of experiment; it is Mr. Edison's pet and hobby. He realizes fully its value as no motorist and inventor for the phonograph brings the pleasure of the city right to the village and the farm home. Now, the new Fireside Edison Phonograph of our grand outfit, improved Model, is the latest and greatest improved talking machine made by this great inventor. Everybody should hear it; everybody must hear it. If you have only heard other talking machines before, you and has never been heard around the country. We want to convince you we want to prove to you that this outfit is far, far superior to anything ever heard before. Don't miss this wonderfully liberal offer.

MY REASON I don't want you to buy it—I don't ask you to buy anything, and convince you of its merits, of its absolute superiority, you will be glad to invite your neighbors and friends to your house to let them hear the free concert. Then, perhaps, one or more of your friends will be glad to buy one of these great new outfits. You can tell your friends that they can get an Edison Phonograph outfit complete with records for only \$25.00 a month—no money down, no interest, no payment and, at the same time, a rock-bottom price. Perhaps you, yourself, would want a phonograph and if you ever intend to get a phonograph, now is the chance to get the grand new and most wonderful phonograph ever made, and on a most wonderfully liberal offer. But I don't want you for your friends. I am glad to send it on the free loan offer to have it on a free loan, and perhaps somebody who heard the machine will buy one later. I ask not for one cent of your money. I only say if any of your people want to buy a phonograph, they may get one for \$25 a month, if they want it.

Now, remember, nobody asks for a cent of your money. I want every responsible household in the country, every entertained, every good father, every good husband, to write and get these free concerts for his home. Remember, the loan is absolutely free from us, and we do not even charge you anything C.O.D.

Write today for this interesting catalog. FREE

Write for the FREE Edison Catalog

In this catalog you will find a complete list of music and talking records. You can pick out just the kind of records you want for the entertainment you want on this free loan in your own home. Get this catalog at once, then you can decide whether or not you want a free loan and when you want it. You can also decide just the music you want. Remember, I will send it to you free of charge. It is the best style catalogue—the times at Mr. Edison's office. I will send it to you free of charge. I will appreciate it especially if you send me your name and address so I can send you the catalog on a free loan. SIGN THE COUPON TODAY. Do it right now.

Just sign and mail the coupon at the right, and get this FREE catalog. Write today.

F. K. BARSON, Edison Phonograph Institute
Dept. 338, 315 Portage Ave., Waukegan, Ill.
U. S. Office, Edison Block, Chicago, Ill.

STRENGTH BARSON, Edison Phonograph Institute
315 Portage Ave., Waukegan, Ill.

Address: _____

No letter need be sent with this coupon. It will be mailed to you.

think that this world owes them a rich living with little work.

It is easier for a boy to learn the value of money than it would be if he had all desires granted him, as a boy, and when he becomes a man to find that he was expected to supply his own demands and had not to learn the lesson of, "How to do it." "The Doctor's Wife."

THE MEANEST MAN

Mr. E. W. Beach tells a story of the meanest man he ever knew of, of a nearby farmer, when he was a boy, down in Morris County, N.J.

This farmer had a son who had worked faithfully for the father without pay of any kind beyond his simple board and clothes until he became 21 years of age. Then the young man got married and rented a small place of his own. He had a very hard time getting started, without help of any kind from his father. That he might make a beginning with chickens he succeeded in obtaining a setting of eggs, but was without a hen to hatch them. While his father happened to be away his mother kindly loaned him an old hen with a strong tendency to do some setting.

When he brought the hen back a couple of months later his father charged him 50 cents for the maternal use of her.

There are few fathers as mean as this one let us hope; but how many farmers (fathers) there are who might do much better for their sons by giving them as fair a start as circumstances will permit while they are young! Boys over 15 years of age at home have needs—real needs, many of which are often not met. The father contents himself with building on the large estate he will leave his boys some day when he is dead and gone. It would be better by far to give most young men a start the best possible or absolutely nothing at all, than to keep them building on such houses, real, but nevertheless forlorn. Countless boys there are who might get out and with very limited means far outstrip their sires in point of success in farming or in business.—"The Son."

A Home-made Fireless Cooker

Alice A. Ferguson, York Co., Ont.

My latest device for labor saving and also a fuel economizer, is the fireless cooker, in the form of a hay box or paper box. I have used the principle involved, viz.: that heat when not allowed to escape cooks—or a long time,—but only this summer have I really repented my cooking box.

My fireless cooker is of crude manufacture. I obtained a strong box from the grocery—the inner dimensions being 15 x 12 inches. I packed hay very closely to the depth of about 3 inches, weaving the hay around the corners and around the sides and ends to a height of 7 or 8 inches. I then placed the kettle I proposed using, near the centre of the box, and wove the hay around it, pressing very tightly. I placed a thick piece of brown paper for the bottom of the space, and again placing the kettle, twisted sheets of newspaper around it, filling all the space between the kettle and the sides of the box. Removing the kettle, I placed several sheets of good paper around the cylinder, making it neat. It was then ready for business.

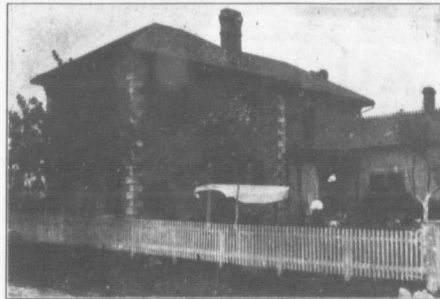


MISS A. FERGUSON, York Co., Ont.

I use this box for cooking our porridge and as I make the porridge in the top part of a double boiler, I made the space in the box slightly at one side of the centre to give room for the saucpan handle.

Into this top part of the double boiler I put three handfuls of rolled oats, added salt, and sufficient boiling water, stirred slightly and set on top of the stove. When boiling, I gave it another stir, then removed it to the space in the fireless cooker, pressing it firmly down. I tucked layers of newspapers well around the top, put several papers over the whole, and a good feather cushion over all. As I make the porridge at tea time it has all night to cook. In the morning it is still warm, but requires to be re-heated, which I do by putting in the bottom part of the double boiler with boiling water. It is perfectly and evenly cooked.

I use an enamelled kettle with straight sides, a movable handle, and



Modern Comforts in this Hastings Co., Ont., Home See description on this page.

a close fitting lid. I use this for cooking soup, and consider the soup unsurpassed for flavor. I prepare the materials for the soup as early as nine o'clock in the morning. These I bring to a boil on the stove, then pack it away snugly in my box. At noon I remove it, add milk, allow to boil up, and serve. It is delicious.

Rice cooks perfectly, every grain separate, as there is no sticking and no stirring required, and it requires no fire and no supervision.

FOR COOKING MEATS

Meats require a longer time if raw to begin with, but hash made and thickened and packed away still need ed a vast improvement on any other method.

I see great possibilities for the fireless cooker. Have in the kettle only the amount of liquid required with the seasoning. No steam escapes, so there is no diminishing of material, and all flavors are retained.

I purpose improving on my present cooker. A box long enough to contain two kettles with a wall three or four inches between them and the two cylindrical spaces lined with sheet asbestos would be much better. I believe newspapers, especially if fast-toned paper would prove closer than the hay. The packing must be very close and a non-conductor of heat. A lid hinged on to the top of the box and the whole cushioned and covered with cretonne makes a comfortable and useful piece of furniture for the kitchen.

Start your dinner after breakfast, pack it away in the fireless cooker, go off to market or to pick fruit, or whatever duty awaits, with the comfortable feeling that dinner needs no stirring, as it will not stick, nor fuel as it needs no extra heat, till dinner time. For those who use gas, or coal-

oil stove or gasoline stove, this is a great fuel saver, for foods which require long cooking.

I demonstrated my cooker at our Women's Institute and it was well received.

Comfort in a Rural Home

A most modern country home is shown in the illustration, the home of Mrs. Geo. Johnson, Hastings Co., Ont. The house is a brick structure with cement corner blocks, which improve the appearance as well as give strength. The main building has two square bay windows, giving more room also extra light on the inside. Although built twenty years ago, the house is quite modern. It is 24 x 30 ft., height of ceiling 10 ft. below 9 ft. on the upper floors. Adjoining this is a 20 by 24 ft. wing attached for use as kitchen and wood-shed, partitioned off, of course, separating the same from pantry. There is a cellar under the whole house.

You Can Do the Weekly Washing in Six Minutes

The 1900 GRAVITY WASHER cuts out labor and saves money. Does a big family washing—and saves time—in short order. The Gravity washes a tubful spotlessly clean in six minutes. Prove it at our expense.



Any Woman Can Have a 1900 GRAVITY WASHER On 30 Days' Free Trial

Don't send one cent. Try it first at our expense—We are responsible. We'll pay the freight. See the wonders it performs. Thousands are in use and every user delighted. We are constant buyers from hosts of satisfied customers. The 1900 Gravity is sold on small payments. Send for our fascinating FREE Book to receive personally P. D. C. BACHMANN, Manager, The 1900 Washer Co., 357 Yonge St., Toronto, Ontario.

This offer is not good in Toronto, Montreal, Winnipeg or Vancouver, and suburbs, as we have branch offices in these places. Special arrangements are made in these districts.

The Famous Rayo

Is the Lamp of Real Beauty

because it gives the best light of all lamps. The Rayo gives a white, soft, mellow, diffused light—easy on the eye because it cannot flicker. You can use your eyes as long as you wish under the Rayo light without strain.

The Rayo Lamp is low-priced, and even though you pay \$5, \$10 or \$20 for other lamps, you may get more expensive decorations but you cannot get a better light than the low-priced Rayo gives. A strong, durable shade-holder holds the shade on firm and true. This season's new burner adds strength and appearance.

Once a Rayo User, Always One.

Dealers Everywhere. If not at yours, write for descriptive circular to the nearest agency of the

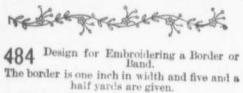
The Queen City Oil Company Limited.



Decorative text and advertisements on the right margin, including 'Em', '484 De', '493 Des', '447', '465 De', and '383 Chrysa'.

Embroidery Designs

Designs illustrated in this column will be furnished for 10 cents each. Readers desiring any special pattern will confer a favor by writing Household Editor, asking for name. They will be published as soon as possible after request is received.



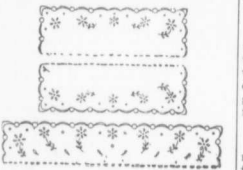
484 Design for Embroidering a Border or Corset Cover with or without Front Closing. The border is one inch in width and five and a half yards are given.



493 Design suitable for Embroidering a Corset Cover with or without Front Closing. For corset cover closing at the front omit centre spray.



447 Design for Embroidering a Baby's Pillow in Heart Shape. The lettering, also the leaves and flowers, are designed to be worked in solid embroidery and the stems to be outlined.



465 Design for Embroidering a High Turned-over Collar and Cuffs. The scallops on the edges are to be padded and buttonholed, and the dots between the scallops are to be worked solidly. The small flowers and leaves may be worked in solid embroidery or as eyeslets; the small round dots also as eyeslets and the stems outlined.



383 Chrysanthemum Design for a Centre-piece measuring 22 x 22 in. The flowers are designed to be worked in solid embroidery or in satin stitch; the leaves in long and short stitch; the stems, veins and lattice work to be outlined. The scrolls outlined with solid ends, and the scalloped edges to be buttonholed.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

Brown Bread No. 1

Ingredients, three teaspoonfuls of corn meal, two cupfuls of boiling sweet milk, one teaspoonful of molasses, one cupful of wheat flour, one cupful of sour milk, one teaspoonful of soda, one half teaspoonful of salt.



Wholesome and Nourishing is Brown Bread. Try Farm and Dairy's Recipes given here.

Take the corn meal, stir into it the boiling sweet milk; when cold, add the molasses, wheat flour, and sour milk; into the sour milk stir well the soda; add also the salt; steam three hours.

BROWN BREAD NO. 2

Ingredients, one cupful of corn meal, one cupful of graham flour, one cupful of sour milk, one cupful of warm water, one half cupful of molasses, one teaspoonful of soda, a little salt. Steam two hours. Serve at table hot.

PLUM CUSTARD

Cut the plums in halves, and stew them in a little water with sugar to taste until they are tender. Put through a sieve, and mix with a boiled custard that has been allowed to get cold before being added to the fruit. Set to cool till ready to serve.

RICE AND BANANA TRIPLE

Slowly boil some thinly-pared lemon rind in milk. When well flavored take out the lemon peel, and pour the hot milk on to some well washed rice in a double saucepan. Add castor sugar to taste. When the rice is quite soft, pour all into a mold to set. Turn on to a glass dish, and cover the top with red jam or jelly. Place some sliced banana carefully on the top of the jam, and serve with cream or custard. Bananas form a pleasing ingredient in fruit salads, and also in blancmanges, always provided that the bananas are in a good and ripe condition.

EGGS A LA Maitre D'Hotel

Make a sauce of half a cupful of melted butter, the juice of half a lemon and a teaspoonful of minced parsley. Cut hard boiled eggs in slices lengthwise, arrange on buttered toast and pour the sauce over the eggs.

HAM TIMBALES

Another delicious way of using remnants of cold boiled ham. Melt two teaspoonfuls of butter in a graniteware sauce pan, and add 1/4 of a cupful of stale bread crumbs taken from the crumb of the loaf. Add gradually 3/4 of a cupful of milk, and cook for 5 minutes, stirring constantly; then add one cupful of chopped cold boiled ham, 1/2 teaspoonful of finely chopped parsley, and 2 eggs slight-

ly beaten. Season to taste with salt and a few grains of pepper. Turn into buttered individual moulds, having the moulds 3/4 full. Set the moulds in a pan of hot water, cover with buttered paper, and bake in a moderate oven until firm, about 20 minutes. Remove from the moulds to a heated serving dish, pour around one cupful of white sauce and garnish with parsley.

Christmas Fruit Cake

Stir a cupful and a half of butter with 3 cupfuls of brown sugar until light and creamy. Add half a grated nutmeg, a tablespoonful of powdered cinnamon, one teaspoonful each of cloves and mace. Dissolve a level teaspoonful of soda in a half cupful of sour cream; stir until it stops purring, then add to it half a cupful of molasses, and add to the other ingredients. Mix well and put in six eggs, beating vigorously between each one. Confectioners and French chefs knead fruit cake with their hands, for it is too stiff to beat easily. Dissolve a level teaspoonful of soda in a wineglassful of grape-juice. Sift four cupfuls of flour, and add to the cake mixture, kneading in all the time. Have ready 1 lb. seeded raisins, 1 lb. washed and dried currants, 1/2 lb. of shredded citron, and 1/2 lb. each of candied orange and lemon peel shredded fine. Sprinkle this fruit with 2 tablespoonfuls flour and mix well together before adding to the cake. Add and knead 10 minutes longer, then put into two brick-shaped tins lined with buttered paper.

For Burns

I once visited an old lady who always kept a small bottle of mucilage on the kitchen shelf, and whenever she burned her arms or hands on the oven door, or in any way from the cooking stove (those horrid little, but aggravating burns), she used to spread a little mucilage over the surface immediately. This soon dries on the burned spot, and keeps the air from the burn, soon stops that smarting sensation which is always so painful. Of course this remedy applies only to small or petty burns, and should in no wise be applied in case of serious burns or scalds from steam. —Miss C. B. Morse, Peterboro Co., Ont.

Buy Farm and Dairy Patterns.

CHRISTMAS FOR MOTHER



FARM AND DAIRY
Peterboro, - - Ontario

Send soon, a good Christmas Gift for Mother.

The Sewing Room

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

BOY'S BLOUSE SUIT, 633

The blouse suit is the prettiest possible for small boys. This can be made with box plait, collar and cuffs of contrasting material or of one as preferred. It is easy to make and it is sure to be becoming and in every way satisfactory.

Material required for boys 4 years, 3 1/2 yds. 24 or 27 in. wide, 3/4 yds. 36 in. or 2 yds. 44 in. wide. The pattern is cut for boys of 2, 4 and 6 yrs., and will be mailed for 10 cts.

THREE PIECE SKIRT, 627.

The close fitting skirt without fullness at the back is a favorite of the season. Here is one that is smart, that is straight and narrow without exaggeration.

Material required for medium size is 4 1/2 yds. 24 or 27, 2 1/2 yds. either 44 or 52 in. wide. The pattern is cut for a 22, 24, 26, 28 and 30 in. waist, and will be mailed for 10 cts.

BLOUSE WAIST, 622

The blouse made with over lapped front portions is pretty and distinctive. This model is trimmed with buttons and loops of braid. It is made of checked material, and the centre portion, collar and cuffs are cut on the bias.

Material required for medium size is 4 1/2 yds. 21 or 24 in. wide, 2 1/2 yds. 36, or 2 yds. 44 in. wide.

The pattern is cut for a 34, 36, 38, 40, 42 in. bust and will be mailed for 10 cts.

CHILD'S PLATED DRESS, 625

Such a dress as this one is adapted both to tiny boys and girls. It can be worn as a frock or as a dress without or without the belt.

Material required for a child (4 yrs.) is 3 1/2 yds. 24 or 27, or 2 1/2 yds. 36 or 44 in. wide, with 3/4 yd. of any width for the belt, collar and cuffs.

The pattern is cut for children of 2, 4 and 6 yrs., and will be mailed for 10 cts.

FANCY WAISTS FOR MESSSES, 633

Simple full waists are much in demand just now for almost all fashionable materials both thin and soft. They are pretty and youthful and especially well liked by young girls.

Material required for 16 yr. size is 2 1/2 yds. 21 or 24 in. wide, 1 1/2 yds. 36 or 1 1/2 yds. 44 in. wide, with 3/4 yds. of all over lace.

The pattern is cut for misses of 14, 16 and 18 yrs., and will be mailed for 10 cts.

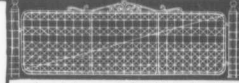


The electrically-welded, solid-piece frame gives strength and stiffness to

Peerless Farm and Ornamental Gates

We build Peerless Gates to last a lifetime—handy, convenient and attractive. They remain staunch and rigid through all kinds of rough usage. The frame is

THE BANWELL HOXIE WIRE FENCE CO., Ltd., Box 11, Hamilton, Ont., Winnipeg, Man.



made of heavy steel tubing electrically welded into one solid piece. The Peerless Gate, like the Peerless Fence, saves expense because it never needs repairs. We also make poultry, lawn and farm fences of exceptional strength. Write for free book.

Hello! Hello! Lend us Your Ear For a Minute or so

We hear that you are going to build a rural 'phone line in your locality and enjoy the benefits of telephone-served districts. We commend you for your enterprise.

But lend us your ear for a minute or so. Listen while we advise you that you'll find the most satisfactory arrangement is an **Independent System**.

With an Independent System you own the telephones and equipment outright, instead of paying an exorbitant yearly rental to the trust. You soon save a great deal of money.

But send for our No. 2 Bulletin, which gives complete information about building and operating a telephone line.

With this No. 2 Bulletin we will, if requested, send you our handsome new book, "Canada and the Telephone." For this book a leading artist has drawn thirty-two pictures illustrating the necessity and benefits of the telephone in rural districts.

If your system is already in operation ask us to send you two or three of our telephones for free trial, so that you can compare them with others. We welcome comparison tests for our 'phones, because we are sure of their superior quality.

We make prompt shipments of all kinds of telephone equipment.

Canadian Independent Telephone COMPANY, LIMITED

24 Duncan Street, Toronto, Ont.



The Machine The Farmer Needs AND THE BEST VALUE FOR THE MONEY OF THEM ALL IS No. 1 DOUBLE ROOT CUTTER

Either for hand or power use, and excels all others for quantity and quality of work. The delivery of the feed into the Box or Basket is perfect when running at either high or low speed. There is money in properly feeding stock and a first-class Root Cutter is a large factor in the case.

POINTS OF MERIT:

- 1st. To change from pulping to slicing is but the work of a moment.
- 2nd. There being two separate wheels, one for pulping and the other for slicing, each is specially adapted for the work it has to do, with the best of knives placed in their respective wheels in a manner to obtain the very best results possible (three for slicing and six for pulping).
- 3rd. The united force of both wheels is always used in doing the work in either capacity. This accounts for it being a steady, easy running and rapid Root Cutter.
- 4th. The Hopper between the wheels and has large perforated lower pockets, which prevent choking and make it perfectly adapted to handle mangels and all sizes and shapes of turnips. The knife wheels are internally shielded which makes it easy to turn.

The only Double Root Cutter manufactured. Fitted with Roller Bearings, Steel Shafting and all that is latest and best in principle, material and construction.

Parties attending the Winter Fair are cordially invited to visit our factory, which is just two blocks south of the new City Hall on the main street, and see where these labor-saving implements are made.

Write today for descriptive circular and prices.

TOLTON BROS., Ltd., Guelph, Ontario

GRANGE NOTES

The 36th annual meeting of the Dominion Grange will be held in Toronto at Victoria Hall, Queen Street East, opposite Metropolitan Church, commencing on Tuesday, the 13th day of December, 1910, at 10 o'clock a.m.

For programmes of the Annual Meeting of the Dominion Grange and other information address the secretary, J. G. Lethbridge, Alliance, Ont.

FARMERS' DELEGATION TO OTTAWA To the Officers and Members of Farmers' Clubs and other Organizations.

Arrangements are now completed for a monster delegation of farmers to Ottawa to wait upon the Government re the tariff and other matters of vital importance to the Agricultural interests of Canada.

This delegation will meet in the Grand Opera House, Ottawa, on Thursday, the 15th day of December, 1910, under the auspices of the "Canadian National Council of Agriculture."

The forenoon session, commencing at 10 a.m., will be devoted to the business of the first annual meeting of the "Canadian National Council of Agriculture." All delegates are cordially invited to attend this meeting.

At 2 p.m., a rally of all the delegates will be held for conference and complete arrangements for waiting on the Government on Friday, the 16th.

The Western farmers are taking hold of this matter with great earnestness and expect to send 530 delegates. The Dominion Grange will send a large contingent. Already a number of Farmers' Clubs, as well as other organizations, have appointed delegates, and prospects are good for the largest delegation of farmers ever visiting the Dominion Capital.

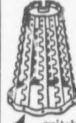
GOSSIP

BROWN BROS. AUCTION SALE OF HOLSTEINS

Holstein breeders will be afforded a grand opportunity to obtain stock of the richest breeding at the public auction sale of Brown Bros., Ltd., Ont., called for Wednesday, Dec. 28th. The best bulls obtainable have always been used at Lyndale. For a number of years the herd was headed by sons of De Kol 2nd's Butter Boy 3rd, sire of the World's Champion two year old heifer, Coptia Hengerveld 2nd's Butter Boy, 849.93 lbs. butter, and 18,493 lbs. milk in 365 days—91 other A.B.O. daughters. Another bull in service for a length of time was a son of Heryo Wayne Paul De Kol, sire of Sara Jewel Hengerveld 3rd, A.B.O. 39.39—36 other A.B.O. daughters. For the past four years Count De Kol Pieterje Paul has stood at the head of the herd assisted by Sara Hengerveld Korndyke, whose three nearest dams averaged 2912 lbs. butter in 7 days. Count Hengerveld De Kol, a son of Sara Jewel Hengerveld 3rd by Count De Kol Pieterje Paul. Withop De Kol Korndyke Wayne grand and son of Belle Korndyke and De Kol Withop Wayne 2nd A.B.O. 28.87.

A number of the descendants of the stock mentioned as well as the great sire Count De Kol Pieterje Paul, as illustrated on page 28, and other stock mentioned in their

This Cylinder Shows Why The "EUREKA" Root Cutter



is the best on the market.

See how it is designed. Grooved knives, with the grooves on one blade opposite the teeth on the next. Instead of slicing or pulping, the "Eureka" turns out roots in shreds—thin narrow strips—

—suitable for any kind of feeding. The "Eureka" shreds from one to two bushels a minute, and turns so easily that a child can operate it.

In the "Eureka" the feed is kept free from dirt, the feeder bottom being made with iron rods, thus allowing all dirt to drop out before it can reach the shredding cylinder.

The sloping form of the cylinder makes the machine a self-cleaner. Write for catalogue which explains fully. The Eureka Feeder Co., Wardsville, Ont.



Land For The Settler

160 acres of land convenient to Railways in Northern Ontario's great Clay Belt for each settler.

The soil is rich and productive and covered with valuable timber. For full information as to terms of sale and homestead regulations, and for special colonization rates to settlers, write to

DONALD SUTHERLAND,

Director of Colonisation,
Toronto, Ontario.

HON. JAMES S. DUFF, Minister of Agriculture, Toronto, Ontario.

advertisement on page 14, will be offered for sale, Dec. 28. Remember the date and attend this sale if you appreciate the best.

One of the greatest problems confronting the farmer to-day is how to get his farm tiled, and to realize that the sooner it is done, the better and more profitable will be his farm. In view of the fact that farmers have been handicapped a great deal by not being able to get tile when they have time to haul it, it often has a tendency to cause this very important item to be put off from time to time. Cement tile is now fast taking the place of the clay product and it has been proven by expert authority, that they are far superior and can be made right at home. The Farmers' Cement Tile Machine Co., of Walkerville, Ont., have a machine on the market for this purpose which sells at a very nominal price. It will save anyone working tile to get in touch with them.

Renew your subscription now.

OUR F

Co

PRINCE

CARDIGAN had two of our of us are work. Ha pork, & to turnip the east most impossible. I are from 4-5 pies are scarce frost to search farmers have H. P.

FR

BELLOCK, en, and farm-plowing Cult going in There seems country. As good prior, t of a promise make a crop are closed and for their own good crop, all rot—W. D.

L

FRANKVILLE have the crops," "poor everything, wh good. This is Farmers ought they can netl prices they got from the public

HAS

CHAPMAN, about complete have closed do winter quarters to the rainy pasture. Our will be somev quite satisfactory, and the finest for all

NORTHU

WARKWORTH tried dairy mem given by R. 7. Ellis, of Farm Stone was nom D. Wealth agreeable, Fall L. M.

VIC

LINDSAY, Y meeting held only being g by Instru ming and F. Mon reported with a larger Cattle, R and wet—8-

E

Curse the Poll Evil, and in the hair of the liver-worm. Mr. R. writes, north a big SORBYNE and W. F. YOUNG Springfield, LYBANS, Ltd.

Imported C Stallion

The winners of Medals at Prices below all breeding consi buyer.

Come to the H

JOHN SIMCOE

OUR FARMERS' CLUB
Contributions Invited.
PRINCE EDWARD ISLAND
KINGS CO., P. E. I.

CARDIGAN HEDGE, Nov. 22.—We have had two or three light snow storms. Most of us are about through with our fall work. Hay is cheap at 88 to 810 a ton; clover \$6 to 80 a lb; potatoes, 40c a bushel; turpentine 15c. There is a very large amount of the north having the roads almost impassable. Horses are hard to buy, as many are from the States. Apples are scarce at 82. There has been a lot of frost to speak of up to date and very few farmers have banked their houses yet.—H. P.

ONTARIO
FRONTENAC CO., ONT.

BELLBOCK, Nov. 19.—The ground is freezing and farmers are through with their fall plowing. Cattle, especially milk cows, are going in for winter in good condition. There seems to be plenty of feed in the country. As country, as usual, with such a good price, the farmers sold all, except of a promising young heifers that would make good milkers. The cheese factories are closed and farmers are making butter for their own use. Potatoes were a fairly good crop, although some complained of rot.—W. W.

LEEDS CO., ONT.

FRANKVILLE, Nov. 23.—Too many farmers have the habit of crying out "poor crops," "poor prices," and in fact "poor everything," when both crops and prices are good. This is only an attempt to deceive. Farmers ought to know, and do long, that they can neither hide their crops nor the prices they get for their farm products from the public.—H. M.

HASTINGS CO., ONT.

CHAPMAN, Nov. 24.—Fall plowing is about completed. Most cheese factories have closed down. Live stock is going into winter quarters in good condition, owing to the rainy weather and resultant good pasture. Our returns from cheese factories will be somewhat below last year but are entirely satisfactory. The root crop has been good, and the supply of fodder will be sufficient for all local demands.—H. S. T.

NORTHUMBERLAND CO., ONT.

WARKWORTH, Nov. 25.—We had the district dairy meeting to-day. Addresses were given by R. T. Grey, George Barr, Ottawa; J. F. Singleton, Kingston; and F. Ellis, of Farm and Dairy, Peterboro. Mr. Stone was nominated director on the E. O. D. A. Weather has been cold and disagreeable. Fall plowing is still going on.—L. M.

VICTORIA CO., ONT.

LINDSAY, Nov. 22.—The annual dairy meeting held today was poorly attended, only 42 being present. Addresses were given by Instructor Cameron, Mr. Glendinning and J. F. Singleton. The crummary men reported a very satisfactory year with a larger business than ever before. Cattle are all staked. The weather is cold and wet.—S. N.

ABSORBINE
Cures Strained Pains, Aches, Lumbago, Headache, Neuralgia, Rheumatism, Sprains, Burns, Scalds, Bruises, Swellings, Lameness, and All the Ailments of the Hair, or Laying the Hoarse up. Pleasant to Use, 60c. Sold Everywhere.
Write, April 8, 1907. "I had a valuable horse with a big leg and used one bottle of A-B and it is now sound and in the best condition."
W. F. YOUNG, P.O.F., 123 Temple St., Springfield, Mass.
LYMANS, Ltd., Montreal, Canadian Agents.

Imported Champion Percheron Stallions for Sale
The winners of all Firsts, Sweepstakes and Medals at Toronto and Ottawa Fairs, and Prices below all competitors, quality and breeding considered. Terms to suit the buyer.
Come to the Home of the Prize Winners
JOHN HAWTHORNE
SIMCOE, ONTARIO

SIMCOE CO., ONT.
COLLINGWOOD, Nov. 25.—We are feeling very pleased with our fruit crop. Our fruit growers at the Ontario Horticultural Exhibition. More orchards will be cared for properly in the future. For the fall work is about done. Winter-covers and we are ready to winter.—N. B.

AYSHIRE NEWS
Farm and Dairy is the official organ of The Canadian Ayrshire Breeders' Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to this column.

AYSHIRE RECORDS OF MILK AND FAT
The following Ayrshire cows have lately registered in the Canadian Record of Performance Test.
MATURE CLASS.
"Highland Lass"—12013—bred and owned by Alex. Hume, Menie, Ont. Nine years of age at commencement of test. From June 7th, 1908, in 358 days she gave 8222 lbs. of milk and 356.87 lbs. of fat. Average per cent. of fat 4.33.
"Nellie Gray of Hickory Hill"—15332—bred and owned by N. Dymont, Clappison, Ont. Seven years old at commencement of test. From March 11th, 1909, in 353 days she gave 12040.2 lbs. of milk and 459.2 lbs. of fat. Average per cent. of fat 3.90.
"Maggie"—14376—bred and owned by Wm. Stroyan, Twynholm, Scotland. Owned by Experimental Farm, Ottawa, Ont. Eleven years old at commencement of test. From May 2nd, 1909, in 334 days she gave 8820 lbs. milk and 321.5 lbs. fat. Average per cent. of fat 3.75.
FOUR YEAR OLD CLASS.
"Glenhamrock Cauty Again"—24826—bred by James Kennedy, Auchincloch, Scotland. Owned by Experimental Farm, Ottawa, Ont. Age at commencement of test, 4 years 10 days. From March 1st, 1909, in 344 days, she gave 7123.75 lbs. of milk and 310.62 lbs. of fat. Average per cent. of fat 4.31.
THREE YEAR OLD CLASS.
"Forget-me-not of Hickory Hill"—77611—bred and owned by George Hume, Menie, Ont. Three years and 113 days old at commencement of test. From December 9th, 1908, in 365 days she gave 6285.5 lbs. of milk and 289.95 lbs. of fat. Average per cent. of fat 4.68.
"Dorothy 4th of Ottawa"—25209—bred and owned by the Central Experimental Farm, Ottawa, Ont. Age at commencement of test, 3 years and 5 days. From April 6th, 1909, she gave 6282.5 lbs. of milk and 312.20 lbs. fat. Average per cent. of fat 4.50.
TWO YEAR OLD CLASS.
"Bonny"—24557—bred by James Clark, Campbellford, Ont. Owned by Jas. Beag, St. Thomas, Ont. Age at commencement of test, 2 years and 43 days. From March 23rd, in 365 days she gave 7226 lbs. of milk, and 322.79 lbs. of fat. Average per cent. of fat 4.43.
"Lady Betty"—23604—bred and owned by James Beag, St. Thomas, Ont. Age at commencement of test, 2 years and 170 days. From March 4th, in 365 days she gave 7122 lbs. of milk and 322.17 lbs. of fat. Average per cent. of fat 4.21.
"Prize Donna"—24454—bred by Alex. Hume & Co., Menie, Ont. Owned by Frank H. Harris, Mount Elgin, Ont. Age at commencement of test, 2 years and 228 days. From April 1st, 1909, in 334 days, she gave 7197.7 lbs. milk and 384.67 lbs. of fat. Average per cent. of fat, 5.39.
"Clara Hillview"—24660—bred by A. Kennedy & Son, Vernon, Ont. Owned by W. L. Centre, Innisfail, Alta. Age at commencement of test, 2 years and 290 days. From June 1st, 1909, in 365 days, she gave 6844.5 lbs. of milk and 275.36 lbs. of fat. Average per cent. of fat 4.02.
"Prize of the Willow"—26279—bred by Daves & Co., Lachine, Que. Owned by P. D. McArthur, North Georgetown, Que. Age at commencement of test, 2 years and 63 days. From June 25th, 1909, in 352 days, she gave 6174.5 lbs. milk, and 274.34 lbs. of fat. Average per cent. of fat 4.18.
"Laura Bell"—27727—bred by William Rennie, Menie, Ont. Owned by W. L. Centre, Innisfail, Alta. Age at commencement of test, 2 years and 80 days. From July 1st, 1909, in 365 days, she gave 6052.5 lbs. of milk and 238.77 lbs. of fat. Average per cent. of fat 3.90.

"Southwick Kirsty 8th"—26538—bred by Sir Mark J. McT. Stewart, Southwick, Dumfries, Scotland. Owned by George Hay, Howick, Que. Age at commencement of test, 2 years and 65 days. From June 15th, 1909, in 365 days she gave 8333.5 lbs. of milk and 229.0025 lbs. of fat. Average per cent. of fat 3.92.
"Southwick Lilly 5th"—25539—bred by Sir Mark J. McT. Stewart, Southwick, Dumfries, Scotland. Owned by George Hay, Howick, Que. Age at commencement of test, 2 years and 60 days. From June 1st, 1909, in 365 days, she gave 5662.25 lbs. of milk and 248.74 lbs. of fat. Average per cent. of fat 4.38.
To Oct. 1st, 1910, 104 cows and heifers have registered in this test: 34 mature cows averaged 10755 lbs. milk and 400.17 lbs. fat, equal to 456.85 lbs. of butter per year; 8 four year old heifers averaged 9315 lbs. milk and 369 lbs. fat, equal to 429 lbs. butter per year; 18 three year old heifers averaged 8064 lbs. milk and 308 lbs. fat, equal to 359.31 lbs. butter per year; 44 two year old heifers averaged 6770 lbs. milk and 291.77 lbs. fat, equal to 340.40 lbs. butter per year.—W. F. Stephen, Sec.-Treas., C. A. B. A., Huntingdon, Que.

FARM FOR SALE

114 acres Clay Loan, beautifully situated, one mile from church and school, eight miles from Pictou, Prince Edward Co., the province; 17 acres of apple orchards, all bearing; 15 acres of pear, plum and cherries; other small fruit of all kinds. The fruit alone has been sold for \$5,000 in one year. Eleven room brick house, good cellar and furnace heated; barn 45 x 34; cement stable under barn, 8 feet wall; good big drive house and cement piggy; good water house and other small buildings. Good land and never-failing. The farm is in a good state of cultivation and is all very fertile. This farm is really worth \$7,000, and its assessed value is \$6,000, an offering this valuable farm for \$3,800, 500 down, balance at 6 per cent. interest. The man who owns this farm situated along the shore of a beautiful lake, gets a beautiful home, I guarantee farm as represented and title perfect, or pay all expense. You are to come and see it.

L. L. CRANDALL, Owner
PICTOU, ONT.

NATURAL HORSE FOOD
The Acknowledged Conditioner
For All Kinds of Stock
Natural Horse Food thoroughly renovates the system and prevents disease. A large number of the Veterinary Surgeons who have tried Natural Horse Food are using it and selling it in large quantities. Ninety per cent of the owners of prize winning horses at the Canadian National Exhibition are users of Natural Horse Food.
Many of our customers started with a 25 pound pail and are now buying in 200 pound lots.
Natural Horse Food is composed of herbs and roots and is free from all injurious ingredients.

OUR OFFER
If you have an animal that is out of condition, doesn't seem to thrive, has poor appetite, doesn't digest its food, blood out of order, needs toning up, use Natural Horse Food; if you are not perfectly satisfied with results obtained we will refund your money without any argument—Is that fair?
We can furnish testimonials from the best stock men in Canada.

Price of food delivered by express, or at your nearest station; 25 lbs. \$3.50; 50 lbs. \$6.50; 100 lbs. \$12.00.
DIRECTIONS:—Tablespoonful twice a day.
Send to-day for a trial pail
Natural Horse Food Co.
PARIS, ONT.

COME AND SEE US AT THE GUELPH WINTER FAIR, DECEMBER 5-9th, 1910
We have arranged to exhibit one of our many sizes of Evaporators and a complete line of most up-to-date Maple Syrup and Sugar-makers Supplies at the Ontario Provincial Winter Fair, to be held at Guelph from December 5th to the 9th, 1910. If you are a maple Syrup maker the "Champion" Evaporator will interest you, as it is the most profitable Evaporator on the market to-day. Made in 22 different sizes. Write for free booklet to
THE GRIMM MFG. CO.
56-58 Wellington St., MONTREAL, QUE.
It is desirable to mention the name of this publication when writing to Advertisers.

AUCTION SALE

Farm, Live Stock and Implements

AT

Irena, Dundas Co., Ontario
5 miles from Iroquois, G. T. Railway

ON

Tuesday, December 6th, 1910

at 1 o'clock P.M., sharp

11 Pure Bred and 12 Grade Holsteins

PURE BRED HOLSTEINS—2 cows, six years old; 2 cows, four years old, 1 cow, three years old; 2 heifers, two years old, (all except the 3 year old cow are due to freshen in Feb. and March); 1 heifer one year old, and 2 heifer calves; 1 bull coming three years, Calamity Prince of Glenwood, sire Prince Posh Calamity 2nd, from Calamity Jane 2nd, and Prince Posh Calamity, Calamity Jane 2nd from Calamity Jane.

FARM contains 88 acres, all cleared and in excellent state of cultivation; 16 acres of young orchard, 600 apple trees and about 100 other fruit trees; excellent garden, underdrained.

HOUSE—Frame, 28 x 34, complete in every detail; recently painted—a real home.

BARN—42 x 76, 8 ft. stone wall; basement, stable, with double doors and windows; well ventilated, cement floor. Power windmill; water piped all through stable.

COTTAGE—14 x 26, built in 1907. Hen house, 12 x 36.

REASON FOR SELLING.—Appointed Superintendent of Jordan Harbor Experimental Fruit Farm.

TERMS

On Farm, 10 per cent. at time of sale; 40 per cent. when due is given; balance to suit purchaser. Farm subject to reserve bid. On Stock and Implements, all amounts of \$10 and under, cash; over that amount eight months on approved joint notes, without interest. Four per cent. discount for cash on credit accounts.

A. D. HARKNESS, Prop. **THOS. IRVINE, Auctioneer**
IRENA, ONT. **WINCHESTER, ONT.**

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

STANDARDS FOR REGISTRATION OF HOLSTEIN-FRIESIANS IN RECORD OF PERFORMANCE

BULLS—Admitted after having four daughters in the Record of Performance, each from a different dam.

COWS—Admitted after fulfilling the following requirements of production and breeding as supervised by the Live Stock Branch of the Department of Agriculture. All cows admitted must equal or exceed both the records specified below.

	Lbs.	Lbs.
	Milk	Milk Butter Fat
Two-year-old class	7,500	255
Three-year-old class	8,500	289
Four-year-old class	9,500	323
Mature class	10,500	357

The per cent. of butter fat shall be determined by Babcock test.

YEAR'S MILK RECORD—If the test be commenced the day the animal is two years old or previous to that day, she must produce within 365 consecutive days from that date 7,500 lbs. of milk. For each day the animal is over two years old at the beginning of her year's test the amount of milk she will be required to produce in the year will be determined by adding 2.75 lbs. for each such day to the 7,500 lbs. required when in the two-year-old class. The ratio is applicable until the animal is five years old, when the required amount will have reached 10,500 lbs., which will be the minimum amount of milk required of all cows five years old or over.

YEAR'S BUTTER FAT RECORD—If the test be commenced the day the animal is two years old or previous to that day, she must produce within 365 consecutive days from that date 255 lbs. of butter fat. For each day the animal is over two years old at the beginning of her year's test, the amount of butter fat she will be required to produce in one year will be determined by adding .0931 of a lb. for each day to the 255 lbs. required when in the two-year-old class. This ratio is applicable until the animal is five years old when the required amount will have reached 357 lbs., which will be the minimum amount of butter fat required of all cows five years old and over.

Every cow accepted for registration of performance must drop a calf within 15

months after the commencement of the test. In the four-year-old class and the mature class, no cow will be accepted for registration of performance if the beginning of her previous lactation period was more than 15 months before the commencement of the test.

All applications for the test must be mailed to G. W. Clemons, St. George, Ont., secretary of the Canadian Holstein-Friesian Breeders' Association.

LAKEVIEW FARM NEWS

Mr. E. F. Oeler, of the Lakeview Stock Farm, writes Farm and Dairy that he has recently sold to the Provincial Prison Farm at Guelp, a yearling bull sired by "Brightest Canary," and out of a cow with a 16 lb. 2 year-old record. This is the second bull that Mr. Oeler has sent to Guelp. The Ontario Agricultural College purchased a calf from Mr. Oeler, it being Hengerveld Fawn De Kol, and out of a two year old heifer that made 15½ lbs. of butter when fresh and 10.92 lbs. of butter eight months after calving. In the yearly test this heifer has made in 10 months over 12,000 lbs. of milk. Mr. J. O. Ottawa Sherman, New York, has purchased a bull by the same sire and out of a Calamity cow with an 18 lb. record. E. I. Twiss of Woodburn, Ont., bought a two months old bull, also sired by Count Hengerveld Fawn De Kol from a 20 lb. dam.

Mr. Oeler has purchased a young bull from the Fred F. Field Co., of Brockton, Mass., to mate with the heifer from his old bull. He is sired by Colantha Johanna Lead, the son of the famous Colantha 4th's Johanna which, according to Mr. Oeler, made 35.22 lbs. of butter in 7 days. The dam of this calf, Mona Pauline De Kol has a 25.93 record and is the dam of a cow with a 27 lb., and another with a 25 lb. record.

A BULL LEADER MADE FOR BUSINESS

The safest, surest device that we have ever seen for leading a bull is the "Never-Fail Simplex Staff". Every man who handles a bull should have one. Real punishment can be meted out to a bull by twisting on his ring with this substantial, light in weight, absolutely safe bull leader. Farm and Dairy readers can make no mistake in ordering one of these staffs advertised by Mr. Brethen in the Live Stock Column this week.

Mr. Brethen has used one of these staffs for some time and is so highly pleased with it, and so firmly believes that every cattle man should have one that he has placed the opportunity to obtain one of these necessities before everyone who reads Farm and Dairy.

Renew your subscription now.

Toronto, M returns of the of trade in condition. T of advertising in the northw sites. This creable activ large am older Provin There is no je in the w terest as hav few days. Call money per cent.

The usual a garding the a gentina. The area is rimed drought and frost. Mr. Agency, who reports the s-try extensiv James Carr, \$1,000 to 80. n surplus of surplus of coupled with are falling in large selling bears have th lie in their o- export trade higher prices by the deval On the loca quoted at 99¢ bushel; No. 2, to 85¢ outside. On the far selling at 87¢ to 85¢ a bushel.

The market. The demand is up, with the grain being low abundant. Local dealers No. 2, 35¢; No. 2, 35¢; No. 2, 35¢; No. 2, 35¢; No. 2, 35¢; No. 2, 35¢; No. 2, 35¢; Montreal wh... ers oats, 40¢; white oats, 38¢ bushel. Feed Business has... toes during th... from 75¢ to 90¢; white oats, 40¢; white oats, 38¢ bushel. Feed Business has... toes during th... from 75¢ to 90¢; white oats, 40¢; white oats, 38¢ bushel. Feed

On the farm... ing at 70¢ to 80¢. Montreal wh... and beans are... Mountains, off... Beans, 81.65... pound price.

Dairy is dull... the demand... supplies are... wants of the... remain firm... ing quotations... 25¢ to 27¢; cho... ator prints, 25¢... 17¢ to 18¢ a lb... On the farm... ing at 70¢ to 80¢. Montreal wh... market is firm... quoted at 25¢ to 28%; and dairy... Locally, there... and dealers... tiers at 12½¢. On the Mon... is quoted at 11½¢ to 11½¢ a... EGGS and prices remain... week. Select lo... siders at 28¢; 35¢ to 27¢ a dozen.

LAND PLASTER

Car Lots or Any Quantity.

WRITE FOR PRICES

TORONTO SALT WORKS

G. J. CLIFF, Manager.

IF COWS COULD TALK

they would ask you for an easy, free

STANCHION

They can't! So we do.

OUR **CHAMPION STANCHIONS** are made of polished steel pipes, will cause no irritation or chafe the neck.

Absolute Freedom for the animal's head.

STRONG AND HANDY

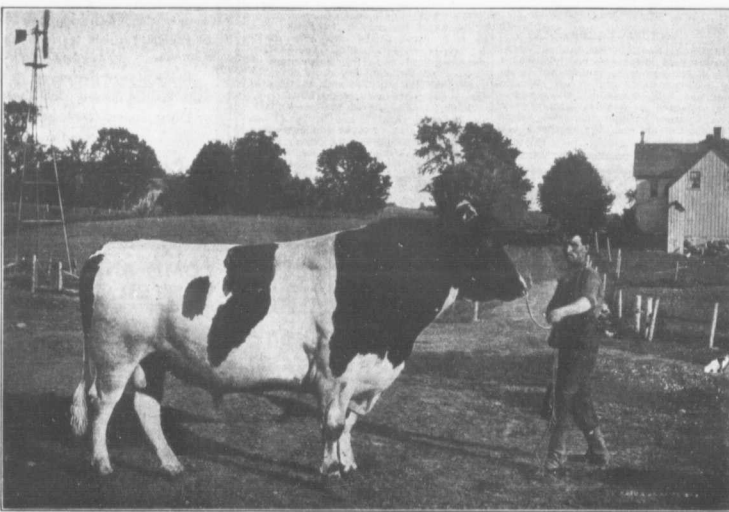
Send for Our Little Leaflet

ONTARIO WIND ENGINE & PUMP CO.

LIMITED - - - - - ONT.

TORONTO

Have you won any of our new premiums? If not, better send in a club at once.



COUNT DE KOL PIETERJE PAUL

Sire of Pauline Hengerveld, 30.33 lbs. butter in 7 days at 36 mos. old. Beauty Hark 2nd A, 15.92 lbs. in 7 days at 37 mos. old and 9 other A. E. O. daughters. Also sire of first prize breeders herd at Ottawa Fair. This bull and a number of his daughters will be offered for sale at Brown Bros.' Auction Sale, Lyndale Farm, Dec. 25th. (Adv.)

40 YEARS PROOF
 You don't need to explain it. It speaks for itself. It is the best medicine for all ailments of the horse, cow, pig, sheep, dog, cat, and all other domestic animals. It is the best medicine for all ailments of the horse, cow, pig, sheep, dog, cat, and all other domestic animals. It is the best medicine for all ailments of the horse, cow, pig, sheep, dog, cat, and all other domestic animals.

KENDALL'S Spavin Cure
 Has been the world-wide remedy for 40 years.
 Johnsville, Ont., Jan. 9, 1908.
 I have used your medicine for nearly forty years, and I take the liberty to ask you to forward me a bottle of your Spavin Cure, and at the end of four weeks to let me know if I feel any better, and if not, I will send you another bottle. I am sure it will be as good as the first.

Your respectfully,
 John Smith.
 At a hotel on the 24th Street, "A Treatise on the Horse" at 40 cents per volume.
Dr. R. J. KENDALL Co., Enochville Falls, Vt.

Wanted To Purchase
 Registered Holstein Heifer Calves and yearlings; only good stock wanted. Address Box No. 11, Farm and Dairy, Peterboro, Ont.

HOLSTEINS
 If you are wanting HOLSTEINS, any age, either sex, write:
GORDON H. MANHARD, Manhard, Ont.

Do you want a first class Cow or Heifer bred to a first class bull? Francy 3rd's Admiral Ormsby heads our herd. Dam, Francy 3rd, Canadian Champion Butter Cow. Sir, Sir Admiral Ormsby, sire of the world's champion 3 year old heifer.
W. J. A. CASKEY, Box 144, Madoc, Ont.

LAKEVIEW HOLSTEINS
 Bull calves sired by Count Hengerveld Payne De Kol, who is brother of the two great ones, Grace Payne and Homestead Creamline, 25 1/2 lbs. butter in 7 days, and 100 lbs. milk; also 10 1/2 lbs. milk in 10 days. These calves are from A. E. O. cows with records of 25 lbs. Telephone
E. F. OSLER, Bronto, Ont.

RIVERSIDE HOLSTEINS
 Eight bulls, 5 to 9 months old, sired by Sir Pieterje Poosh De-Boer and Prince 15 1/2 lbs. milk; latter is the only son of champion cow in dairy test (Grand), 1908 and 1909, and from R. M. dams.
J. W. RICHARDSON, Haldimand Co., Catelodota, Ont.

LYNDALE HOLSTEINS
 We are now offering for sale a 13 month old son of "Count De Kol Pieterje Paul" out a 20 lb. dairy test. His dam, Sara Hengerveld Korudyke, from an 18 lb. cow. Both choices individuals. fit for service.
23-1 BROWN BROOK, LVA, ONT.

EVERGREENS HOLSTEIN HERD
 Offers 8 mos. to 4 yr. old daughters of "Veltra, Triumph (377) (Imp)", the only bull in Canada whose dam and sire are both dairy test. Has each year an over 100 lbs. milk in one day; also cows in calf to this great bull; one of his daughters at 3 yrs. 11 days making 21.36 lbs. butter in 7 days; in 1907 he set all dairy age this has never been beaten in Canada. There are others in our herd from which we are expecting even greater things. Prices right.
GEO. W. ANDERSON, Rosamore

TWO YOUNG HOLSTEIN BULLS FOR SALE
 Record made by one of them for last milk in record period was 13.54 lbs. milk, 550 lbs. butter. Dam of sire of other was Queen's Butter Girl, first bred dairy test, Ottawa, 1909. Terms reasonable.
MOUNT DAIRY, MILTON, ONT.

RIVERVIEW HERD
 Offers Bull Calf born February 14th, 1910. Sire Sir Angie Beets Regis. Six dams in pedigree average 55 lbs. in seven days.
P. J. SALVEY, Lachine Rapids, Que.

HOLSTEIN CATTLE
 THE MOST PROFITABLE DAIRY BREED
 Illustrated Descriptive Booklets Free
HOLSTEIN-FRIESIAN ASSN. OF AMERICA
 NEWARKTON, N.C.T., BOX 148, BRATTLEBORO, V.T.

HOLSTEINS FOR SALE
 All ages, at half their value; the producing kind.
JAS. MOTHERAL, Box 99, DRUMBO, ONT.

THE AYRSHIRE COW
 There was one other point he would like to say a word about. They were in possession of a great agricultural asset in the Ayrshire cow. (Applause.) She was a great asset, because unless they had her to work with in those upland districts it was difficult to see how the land would be worked at all. It had kept farming alive in that district of Scotland. The Ayrshire cow was capable of doing a great deal more in the future. All over the world there was a growing demand for dairy cattle, and among these the Ayrshire was second to none in the production of a quantity of good milk. There was the Jersey cow for butter and the Holstein for quantity, but people wished quality in milk, and it was hardly possible to breed the latter to produce that. For foreign countries there was at present, and there would be in the future, a great demand for dairy cows. That was a demand that Scotland should be ready to meet. (Applause.) It was characteristic of the British farmer, and that he had made this country the stud farm of the world. He was perfectly sure that there was a market in front of the breed compared with which the present so-called breed would be as nothing. (Applause.) Extract from an address delivered before the Ayrshire Dairy Farmers' Association, Scotland, by Mr. C. M. Douglas, of Auchlochran, Scotland.

STANDARDS FOR REGISTRATION OF AYRSHIRES IN RECORD OF PERFORMANCE
BILLS—Admitted after having four daughters in the Record of Performance, each from a different dam.
COWS—Admitted after fulfilling the following requirements of production and breeding as supervised by the Live Stock Branch of the Department of Agriculture.
 All cows admitted must equal or exceed both the records specified below:

	Lbs.	Butter	Lbs.
Two-year-old class	5,500	198	
Three-year-old class	5,500	234	
Four-year-old class	5,500	270	
Mature class	5,500	305	

The per cent. of butter fat should be determined by the method of Agriculture.
YEARS MILK RECORD—If the test he commenced the day the animal is two years old or previous to that day, she must produce within 365 consecutive days from the date, 5,500 pounds of milk. For each day the animal is over two years old at the beginning of her year's test the amount of milk she will be required to produce in the year will be determined by adding 2 1/2 lbs. to each such day to the 5,500 pounds required when the two-year-old class. This ratio is applicable until the animal is five years old, when the required amount of milk reaches 5,500 lbs., which will be the minimum amount of milk required of all cows five years old and over.

YEARS BUTTER FAT RECORD—If test be commenced the day the animal is two years old or previous to that day, she must produce within 365 consecutive days from that date 198 pounds of butter fat. For each day the animal is over two years old at the beginning of her year's test, the amount of butter fat she will be required to produce in one year will be determined by adding 1 (one tenth) of a pound for each such day to the 198 pounds required when in the two-year-old class. This ratio is applicable until the animal is five years old at the required amount will have reached 306 pounds, which will be the minimum amount of butter fat required of all cows five years old and over.

Every cow accepted for registration of performance must drop a calf within 15 months after the commencement of the test. In the four-year-old class and the mature class, no cow will be accepted for registration of performance if her lactation of her previous lactation period was more than 15 months before the commencement of her test.
 All applications for the test must be mailed to W. F. Stephen, Huntingdon, Quebec, Secretary of the Canadian Ayrshire Breeders' Association.

RAILWAY RATES TO GUELPH—From all stations in Ontario, Kingston, Sharbot Lake, Renfrew and west, but not west of Azolda, the railways have granted the rate of single fare for return tickets to the Guelph Winter Fair. These tickets will be on sale each day from Saturday morning, December 3rd until Friday night, December 9th. They are good for the return journey any day up to and including December 12th, 1910.
 Renew your subscription now.

Gombault's Caustic Balm
 The Worlds Greatest and Surest Veterinary Remedy
HAS IMITATORS BUT NO COMPETITORS!

SAFE, SPEEDY AND POSITIVE.
 Suppresses All Caustery or Firing. Invaluable as a CURE FOR:
 FOUNDER, WIND PUFFS, TRUSH, DIPHTHERIA, SKIN DISEASES, RINGBONE, PINK EYE, SWELLEN BONY TUMORS, LAMENESS FROM SPAVIN, SCARTCHES, CRACKS, SCRATCHES, POLL EVIL, PARASITES.
REMOVES
 BUNCHES or GLEISHES, SPLINTS, CAPPED HOCK, STRAINED TENDONS.
SAFE FOR ANYONE TO USE.

We guarantee that one tablespoonful of Caustic Balm will produce more actual results than a whole bottle of any liniment or ointment mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what the most prominent horsemen say of it. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charge paid, with full directions for its use.

The Accepted Standard VETERINARY REMEDY
 Always Reliable. Sure in Results.



See genuine without the signature of The Lawrence-Williams Co. U.S. & CANADA. CLEVELAND, OH.

Finds Caustic Balm to be Reliable.
 I can say that I have for the past three years used GOMBHAULT'S CAUSTIC BALM and have found it to be all that is claimed for it, and have in a great many instances recommended its use to others.—R. D. KILK, Antigonish, N.S.

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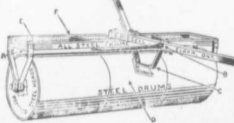
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