

# FARM AND DAIRY

AND

## RURAL HOME

PETERBORO, ONT.

AUGUST 28

1913



LET US NOT OVERLOOK THE UTILITY FACTOR WHEN PURCHASING ANIMALS AT THE FAIR Exhibition purchasers of dairy cattle should not rely too strongly on the decisions of the judge in selecting their animals. Every really desirable dairy cow must qualify in two important particulars, as does the one seen in the foreground of this illustration: she must be of desirable conformation and a proven producer of milk in profitable quantities. If an untested heifer or a male, milking ancestry should be required. Only one of these factors—conformation—is considered in the show ring. It does not, therefore, necessarily follow that the first prize animal is the most desirable individual for the dairy herd. Look up the records.

—Photo taken on farm of R. R. Ness.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

ISSUED  
EACH WEEK  
Only \$1.00 a Year

## Are You

Skimming your milk  
at a loss of

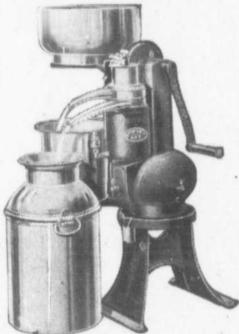
## Money

## Time and Energy?

Are you losing butterfat due to incomplete skimming?

Are you wasting time and energy by using a small-capacity, low-speed, hard-to-turn, hard-to-clean machine?

If so, why stay in the rut? Follow the way of the progressive, and let us tell you why you should use a



The favorite everywhere it goes. Note its beauty and heavy compact construction, with low-down, handy supply-can only 31 ft. from the floor.

## "Simplex"

The 1,100-lb. size "Simplex," when at speed and skimming takes no more power than the ordinary 500-lb. Hand Separator of other makes, and it does the work in half the time.

The "Simplex" with its self-balancing bowl, which always runs true, skims clean. A bowl that runs out of balance will not do good work.

The low-down supply can, only 41 inches from the floor, eliminates all back-breaking lifts.

There are several other splendid features about the "Simplex" that it will be in your best interests to know about. Send a post card for our illustrated booklets.

Bear in mind, too, that we are agents for the B-L-K Mechanical Milkier. Tell us how many cows you milk, and we will give you estimates on what it will cost you to install a B-L-K.

SEE our Exhibit of Milking Machines and Cream Separators at Toronto and Ottawa Exhibitions.

## D. Derbyshire & Co.

Head Office and Works - BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P. Q.  
WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

## Woman's Buying Power

You men with wives and families: Did it ever occur to you how many things you buy for yourself, your home and your children? Do you buy most of these things on your own proposal or does your wife influence you in nearly all of them? Now just stop and think about it.

You buy your jack knife, your own shoes, your own hat, probably your tie and collar, but nine chances out of ten at least your wife has a voice in the purchase of everything for you, your home and your children. Some men won't acknowledge this, but it's true. She is the family purchasing agent.

On our farms, women exercise the same influence and even more. They take an active part in all pertaining to the farm, and they personally supervise and often do the work in departments such as the dairy, the apriary, poultry and pigs.

We recognize woman's interests on the farm by giving them annually a big special Household Number of Farm and Dairy—our Fifth Annual will be out Oct. 5.

For't'll be wise to recognize woman's interests on our farms by being in our October 5, Household Number. Reserve your space early. Place it in your strongest copy. It will appeal to the women in more than 17,000 dairy homes we reach. The kind of people our advertisers want to reach.

Remember our people are dairy farmers—the class that can afford the best. Their income this year will exceed \$5,000,000.00. If you convince our women folk that your goods are good value, she'll sell them to the household, for she is really the buyer for the home.



Why Some Famous Men Have Left the Farm

—Sharpley Salemon

## TAXATION OF LAND VALUES UPHELD BY A FARMER

Chas. S. Brown, Peterboro Co., Ont.

I HAVE read with much interest the articles appearing in Farm and Dairy from time to time on the problems of taxation. In the issue of Aug. 7th, one of your correspondents takes exception to some statements that appeared under the heading of "Easily Secured Wealth."

I am not much of an authority on single tax questions, but would like to reply to one or two remarks made by Mr. Currie.

If at the time Mr. Astor purchased the land on which the Astor hotel stands, the population of the City of New York and of the surrounding states had ceased to increase, and throughout the whole 80 years had remained stationary, would that piece of land be worth 10 times as much to-day as it was at the time of purchase? The obvious answer is, No.

The next question that arises is "Why did the value jump from \$150,000 to \$2,500,000?" The answer is simple enough. The population of New York city and the surrounding states has increased by leaps and bounds in the past 80 years. As population increases the demand for land on which to do business becomes keener and keener. Naturally the price which men are willing to pay for the privilege of doing business on a favorable situation will keep rising. The increase in value goes to the fortunate individual who holds the land. This increase in the value of the bare land is not due to any thing that the owner has done himself. It has been created solely by the increase in population.

Your correspondent states that "when public improvements are made which directly benefit the land the owners of such land should pay the bill." Of course they should. But when new streets are opened up in any city, water works laid, etc., the value of all the vacant lots along that street jumps up in price wonderfully. Why? Because the corporation has been kind enough to spend some of the people's money there. Although these lots may have doubled or tripled in value, the owner still pays taxes on the value, or a percentage of the value, of his unimproved lots while others must pay on both improvements and land value.

When a by-law comes up in any city to raise money for public improvements or to give a free site or bonus to any manufacturing concern, we see the property holders working very hard to get out the vote. Each one knows perfectly well that any measure of this sort will increase the value of his property. But when it comes to paying for it all, the whole

community takes a hand. The ring of the whole thing ought to be apparent to anybody. If all taxes came directly from land values, those who held the land would pay the increased tax and the wealth created by the whole people would go to benefit the whole people.

As far as the farmers are concerned, I do not believe they would suffer much by "such bare faced robbery." The value of farm lands exclusive of improvements is very little. If farm land were taxed at five per cent, the farmer would not pay any more than he is now compelled to pay by indirect taxation, and the other man by which his wealth is siphoned away from him.

Every time a farmer buys an article produced on land, he pays millions of dollars per acre, part of the sum received by the manufacturer must be handed over to the landlord. The higher the land soars in price the greater the toll the landholder is enabled to take. In this way the farmer's money goes to enrich the "lords of the earth." A good deal of tax on land values would mean that some of this toll, would go to the state instead of into the pocket of an individual who never earned it.

The single tax aims a heavy blow at all forms of monopoly. The farmer and laboring man to-day are monopolized by the landholder, who greatly increased prices for what he buys. Large corporations have secured control of many natural resources such as water power, timber, minerals, deposits, etc. and by throttling competition have been enabled to greatly enhance prices to the consumer.

The single tax believes in taxing these things at their full value. It would be rather unprofitable for the monopolist, who in many cases is content to allow the above mentioned sources of wealth to lie idle, waiting for a rise in prices. A strong case would compel him to produce more thereby giving employment to labor and lower prices to the consumer.

The scarcity of clover hulls is a disadvantage in clover seed production. In Quebec the Provincial Government is buying hullers and selling them to farmers. Where government hullers are not available, farmers might well cooperate to buy the hulling can be done, however, on an ordinary machine and can be done best in cold, frosty weather. The man who is growing 25 acres of clover seed can afford to buy a clover huller.—John Fisher, Conservation Commission.

Issued  
Each Week

Vol. XXXII.

## A Friend

PERHAPS after 10 years of coming rather intimately



Chas. C. Nixon

which the editors of Dairy have requested in this Exhibit' list number that I have gotten some from agriculture, and the world of business. I on the old experienced relations with a somewhat objective. Moreover, I free to talk or write subject, as assigned me, Managing Editor's chair Advertising Manager of here I shall be quite far. Comparisons are inevitable the effort shall be to keep far as possible.

Intercourse and visits readers have brought her that they have at least cause of our Canadian has been with me for and greatly last summer or lastive trip through New rating Holstein breeder and equiring into their. Perhaps the difference few words by stating the readers seem to have gone more or less uncertain seems to have grown vew,"—she simply happy many of marked equal of these serve well to readers in general will pose when with greater "building castles in Spain. Great courage to the ideals with sacrifice of fitting suitable foundations and bringing them reality.

Note—For nearly four years the Managing Editor of Farm and Dairy has had his headquarters two months ago in Peterboro to go to Toronto into the publishing business.

# FARM AND DAIRY & RURAL HOME

## A Friendly Criticism of Ontario Live Stock Breeders

PERHAPS after the past six years of coming and going rather intimately amongst the breeders of Ontario and a part of Quebec, my good friends will forgive me for a little well-meant criticism, such the editors of Farm and Dairy have requested me to give in this Exh'lt' number. Now that I have gotten somewhat away from agriculture, and more into the world of business, I look back on the old experiences and observations with a somewhat new perspective. Moreover, I feel much freer to talk or write about this subject, as assigned me, than were I still in the Managing Editor's chair, or even were I still the Advertising Manager of Farm and Dairy. Therefore I shall be quite frank. Here's to it!

From a Friend and Old Acquaintance who has Made Good Use of an Unusually Good Opportunity to Fit Himself to Deliver This Message.

By CHAS. C. NIXON



Chas. C. Nixon

Comparisons are invariably odious. Therefore the effort shall be to keep away from them in so far as possible. Intercourse and visits with United States breeders have brought home to me most forcibly that they have at least a few things well in advance of our Canadian breeders. This conviction has been with me for some years. It was deepened greatly last summer on the occasion of an extensive trip through New York state when I was visiting Holstein breeders, inspecting their stock and enquiring into their methods.

Perhaps the difference may be explained in a few words by stating that many of our own breeders seem to have gotten into the business in a more or less uncertain way. Their business seems to have grown very much "like Topsy grew,"—she simply happened! There are a good many of marked exceptions to this statement, but these serve well to prove the rule. Our breeders in general will make much greater progress when with greater ambition they start in "building castles in Spain." Great ideals are needed. Great courage is necessary to back up the ideals with sacrifice of time and money in setting suitable foundations under the "fair cases" and bringing them into a glorious tangible reality.

Note.—For nearly four years Mr. Nixon was the Managing Editor of Farm and Dairy. During the past two years he has had charge of Farm and Dairy advertising. Two months ago he severed his connection with the publication, where he is now starting into the publishing business on his own account.



### What is the Value of Appearances in Selling Stock?

To put it another way: I have felt on many an occasion how much more greatly our breeders might progress had they even a little more faith in their own breeds and businesses, had they a little more enthusiasm, and much more courage to go ahead to do and buy and breed what they realize full well would bring them big and sure returns. Perhaps I will be forgiven should I say that a little more backbone is needed where now there is merely wishbone!

WHAT DOES IT PROFIT? UNLESS . . . . . I might tell them about how to produce the stock. They know how to feed their stock. A great many of our better dairy cattle breeders know how to produce big records—even world beating records of milk and butter production. But after all what does it profit to produce the stock unless you can sell it and sell it at a profit!

The selling end is the great big end of the breeding business. It has been well said that anyone can manufacture. The difficult thing is to sell. And so it is in the business of breeding pure bred live stock. Quite a lot of it is being produced; and under present conditions quite a bit of it is being sold fairly well. But how much of it might be sold much better,—sold to please the purchasers better,—sold to make the business grow still better and better than ever,—and sold to make a more attractive return to the producer or breeder!

### THOUGHT AND STUDY IN SELLING

While I have visited at scores and scores of breeders' places in Ontario, I can count on one hand all of the breeders who seem to have realized the tremendous possibilities of the selling

end of their business. The others, like most of our average farmers, it would seem, have been content to merely produce. They evidently have given but little thought and study to how to make better (and the best) sales.

For instance, how many breeders do you know who have at their finger tips the details of breeding and the records made by, and back of, each one of their valuable pure bred animals? I have met in with many and many breeders who could not give me the registered names of more than the merest few of their animals. They had the records at the house. They would talk them over when we got in there!

### ADVERSE INFLUENCE ON PROSPECTS

It is this same performance that would have to be gone through every time a buyer might happen along. And frankly, what chance has a man to interest a customer in his stock under such circumstances compared with another breeder, whose stock may be no better or not as good, but who is thoroughly posted on all points of advantage pertaining to each animal in his stable, who knows their names by heart, and who can string off all that is advisable for one to know about how each one of his animals traces back to other animals in his own herd and to noted animals in other herds! And, if you will, to those grand old individuals that have made history for themselves and for their breeds and have passed on to the great beyond!

There are no two ways about it, the man who has all of this vital information at his finger tips will very soon make a prospective customer feel that he simply must have one or more individuals in the herd he is looking over, or is hearing about! The breeder with this information sets psychologically on his prospect even as a salesman would. He makes his prospective customer enthuse over his "stock in trade." And forthwith the prospect becomes "a wanter." It is then easy to arrange the final details as to price, payment, and when to ship or deliver.

### THE "PRICE" THAT MUST BE PAID

But all of this you say will require a lot of time to learn. It will take a lot of study of animals and of the records and pedigrees, even back into the herd books and the blue books. And true it will! But the time and study will pay most handsomely. It will be only the interested breeders who will so equip themselves. As for the rest they will not amount to much as breeders anyway until they develop the necessary interest in their breed. Then they will be glad to "pay the price" demanded here.

I recognize full well that it quite approaches impossibility for our larger breeders, with herds of 50 to 100 and more individual head of pure bred live stock, to get all of this matter and information, that might be desirable, in their heads. This fact, however, does not prevent them from doing the next best thing—and what the really successful big breeders have for long been doing—keeping the information properly tabulated and indexed and readily available, preferably

in one's hip pocket,—at least where it can be had in a moment and in such a manner as to impress favorably an enquiring prospective customer.

#### FUNDAMENTALS OF ART OF SELLING

Let it be recognized once and for all that before you can sell to a man you must make him want your goods. You must also develop his confidence. Anything that you can do in a legitimate way to develop these is sure to be good business.

There is little excuse for any breeder not be-

ing posted on the real big things in the way of advantages pertaining to his breed and to his stock. Without this information and the ability in some effective manner to get it over to the would-be purchaser and the visitor, one is hopelessly handicapped. I would that all our breeders would set out to equal and surpass our best in these respects! Earnest and concentrated effort on the part of any one realizing his need in this

(Continued on page 14.)

## Observations of a Scotch Herdsman

BY WM. RETSON

FROM my earliest recollections I have been associated with dairying. In my comparatively brief experience I have learned a great deal from the doing of things and by study. But I feel that there is still a vast amount yet to be learned about cow keeping. Our methods must yet be improved upon, before we have reached the ideal. I was brought up



Wm. Retson

in Ayrshire, Scotland, the home of the good old Ayrshire cow, where a farmer's "beasts" and their productions form the chief topic of thought and conversation. Reared in such an environment one could scarcely fail of having a keen interest in dairy stock. On my father's farm, which consisted of but 80 acres, with a yearly rental of \$800, some 60 Ayrshires were kept; 25 to 30 cows being in milk all the year round.

Ways and means of obtaining the best results from the stock were carefully studied. With such a high rent to face each year, we could ill afford to raise poor animals. Records of each cow were kept by a man appointed by the Agricultural Board. His business was to visit each farm in his district at least once every 21 days. He weighed each cow's milk, took a sample for testing, and the results were published in book form once a year. The same system of record keeping is still in vogue in Ayrshire.

Climatic conditions are perhaps more favorable

to dairying in Scotland than in Nova Scotia. The pastures are excellent, and there is no excessive feed. Moreover, they have never known the pestiferous horn-fly in my native land. The system of winter feeding also differs greatly. In Ayrshire, most of the farmers believe in feeding



Bonnie Ayrshire Basics on the Farm of Hector Gordon, Chateaugay Co., Que.

the grain, in the form of a thin gruel, with chaff or cut hay added. This gruel is fed hot, each cow receiving a large pailful two or three times a day, according to her production.

Personally I do not approve of this way of feeding, as it entails a great deal of extra labor. In my earlier days, I used to feel like saying things at having to carry those buckets of slop. Another reason that now sets me against the practice is that I do not think the cows get the same benefit from the meal consumed. On my last visit to the old home, we had some lively discussions on dry feeding, but I am afraid I made no converts. Scotchmen are not easily argued out of their beliefs.

Since taking charge of the Nova Scotia College herd, 10 years ago, I have learned a few things about the care and management of dairy cows. I find nothing better than the old motto: "The three essentials in successful dairying are, Breeding, Weeding, Feeding." I am going to take advantage of this opportunity to ventilate a few of my ideas on the application of these three essentials to progress in dairying.

First let us consider breeding. My ideal stock bull is a good, thrifty individual, typical of his breed, and well backed by milk records. Right here let

me emphasize the importance of keeping milk records. Unless the milk be weighed and tested regularly, a cow's production is largely a matter of guess work. It takes but a minute longer to weigh each cow's milk, and one has the satisfaction of knowing where each one stands at the end of the month.

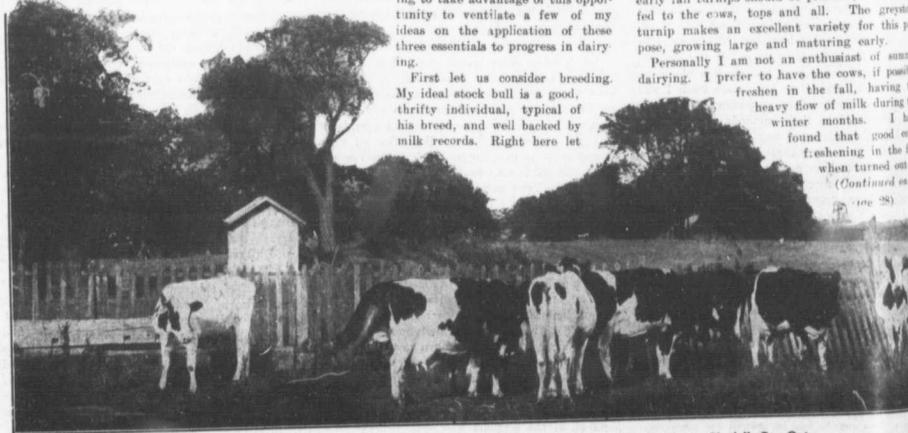
This leads to the second point—weeding. Knowing approximately the cost of feeding each cow, one can soon tell the profitable one. Only by keeping heifer calves from the best cows will a heavy milking herd be established.

Lastly, but by no means of least importance, comes feeding. I hold that a cow must be well fed, or it is useless to expect a good milk yield. I have heard so many men say, "We cannot afford to feed." To anyone who takes the trouble to think it out a bit, that statement sounds very foolish. Those who persist in thinking this, I would advise to give up the dairying business; in such people can never make a success of it. In my experience I have seen many cows go to the butcher, condemned for "not paying for their keep," when it required but a little extra care and judicious feeding to develop them into good producing, and profitable animals. The pastures of Nova Scotia, at least what I have seen of them, are of a poor character, and in order to keep up the milk supply, have to be supplemented by forage crops.

A mixture of peas, oats and vetches, sown at intervals, and cut green, makes an ideal feed for this purpose. The first cut should be ready by the middle of July, when the pastures commence to dry up, especially in a dry summer. Some early fall turnips should be planted; these can be fed to the cows, tops and all. The green turnip makes an excellent variety for this purpose, growing large and maturing early.

Personally I am not an enthusiast of summer dairying. I prefer to have the cows, if possible, freshen in the fall, having the heavy flow of milk during the winter months. I have found that good cow freshening in the fall when turned out

(Continued on page 28)



The Deep, Heavy Milking Kind. A Few of the Money Makers on the Farm of W. E. Mason, Norfolk Co., Ont.

# The

OLD Mother Nature is so very selective.

O gives of her hospital only to such individuals as will flourish on the fare that she offers. When we interpret aright we prosper, woe to the man who runs contrary to her decrees!

This truth is self-evident. It scarcely needs to be repeated. In the interpretation of these decrees applicable to our living from the gross that we should interpret. We have adapted to one just recently have tried to land with a climate of dairying. Many of us trying to produce at sections of Canada can profit. We have felt those other sections of

Had we devoted our lines of farming, we success. The most of carried on a little land, perhaps, a little millinery were fondly young men seemed to years ago there were Scotians in Boston the home. After the Boston Scotia began to contribute to the upbuilding of the said that Nova Scotia "For Sale" signs did try.

Many of us have learned to interpret has been our instructor to the dairy cow.

Perhaps many of my

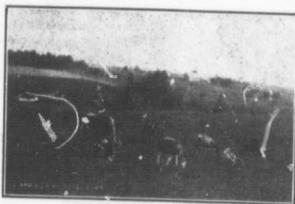


Home of Chas. Hill, of Nova Scotia, agriculturist, fruit growing of our It will be news to many a thriving dairy industry at the present time, according to Mr. Coats, superintendent of the value of our dairy products. The number is the good and sufficient are the only class of dairymen living profit under our

# The Dairy Cow in Nova Scotia

By E. F. EATON

**O**LD Mother Nature is ever-sovereignly selective. She gives of her hospitality only to such industries as will flourish on the fare that she offers. When we interpret her aright we prosper. But woe to the man who runs contrary to her decrees!



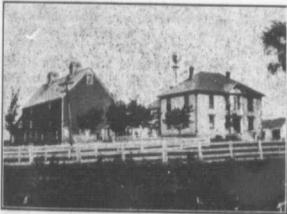
Jerseys are Favored by J. R. Sample

This truth is self-evident. It scarcely needs to be repeated. But the interpretation of those decrees applied to our everyday practical affairs, is not easy. We in Nova Scotia who make our living from the soil have not made the progress that we should because of our mistaken interpretation. We have taken a country admirably adapted to one line of farming, and until just recently have tried to follow another. We have been trying to grow grain and steers in a land with a climate and soil admirably adapted to dairying. Many of us have spent our whole lives trying to produce at a profit produce that other sections of Canada can produce at a much greater profit. We have felt keenly the competition of those other sections on our own home market.

Had we devoted our whole attention to general lines of farming, we might have made a partial success. The most of our farmers, however, have carried on a little lumbering, a little fishing, or, perhaps, a little mining on the side. So unsatisfactory were conditions at one time that our young men seemed to be all leaving us. Twenty years ago there were said to be more Nova Scotians in Boston than in an entire county at home. After the Boston migration ceased Nova Scotia began to contribute much of its best blood to the upbuilding of the Canadian West. It was said that Nova Scotia was for sale, so many "For Sale" signs did one see through the country.

Many of us have learned our lesson. We have tried to interpret nature aright. Necessity has been our instructor. We have at last turned to the dairy cow.

Perhaps many of my readers have never heard



Home of Chas. Hill, who Favors the Holstein

of Nova Scotia agriculture except through the fruit growing of our famous Annapolis Valley. It will be news to many to hear that we now have a thriving dairy industry. There are in our province at the present time about 129,300 milch cows, according to Mr. W. A. MacKay, our efficient dairy superintendent. The estimated yearly value of our dairy products is well over \$5,000,000. The number is continually increasing for the good and sufficient reason that dairy cattle are the only class of cattle that will give us a living profit under our conditions.

Nova Scotia is a land of hills and valleys. The hills grow fine trees; and the more of their area that we devote to tress the better for us, as the hill soil in most cases is too thin to be profitably tilled. The interval lands of the valleys, however, is usually a rich clay loam, and in some cases a sandy loam. We can produce bumper crops of mixed grains and such root crops as I have seen nowhere else in Canada. Yields of 1,200 bushels of turnips to the acre are not unusual. Our pastures are of the best, and our hay crops will compare with any. All of this is accounted for by our abundant rainfall. We have five inches greater annual precipitation than has the province of Ontario.

We do not need to worry about markets. It keeps us busy to supply our own home demand. The city of Halifax calls for ever-increasing supplies of milk and cream. Sydney, Amherst and Truro are only a few of our growing towns. Dairying is probably in the most flourishing condition in the territory between Truro and Halifax where the larger portion of the Halifax milk supply comes from. At Truro also is located one of the

largest condensed milk factories in Canada. In Yarmouth and Pictou counties, dairying has been given a decided impetus by the establishment of creameries, which are flourishing.

The greatest drawback to successful dairying is the low average production of our cows, which Mr. MacKay places at 3,293 lbs. When we take into consideration that this is the average production and that many herds must be far away below this, the reason is plain why some farmers are inclined to find fault even with dairying. The silver lining to the cloud, however, is the ever-increasing number of pure bred dairy herds. We have the finest Guernsey herds in Canada. I make this statement without reserve. I have at-



Splendid Guernseys are Found in the Stables of

H. A. Dickson

—All photos in Colchester Co., N.S.

tended exhibitions in other parts of Canada and have never seen anything to compare with our Guernseys. The herds of Howard Corning in Yarmouth county and H. A. Dickson in Colchester are hard to beat.

In the milk producing districts the Holstein and Ayrshire breeds are making satisfactory progress. (Continued on page 27.)

## Care of the Lamb Crop

By R. H. HARDING

**T**HE lamb crop as we too often find it to-day is very much neglected. In too many cases the sheep get little else to subsist upon than what they can find on the roadside. Consequently the lambs at this season of the year are, to say the least, not too well fleshed, being unable to get from their dams sufficient milk to keep them thriving.



R. H. Harding

They would do much better if weaned and turned on a nice fresh plot of clover; or in the absence of clover, green oats and vetches make a choice early substitute. Rape comes in as the best of all fall feeds for either sheep, lambs or beef cattle. It should, however, have some other pasture adjoining where the lambs could spend part of the time with profit. A combination of grass and rape is a much safer feed than rape alone, as the danger of bloat is greatly lessened by the addition of grass pasture.

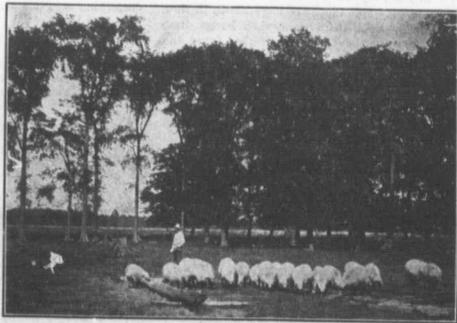
An excellent spot for the lambs at weaning time is the corn field. If about two pounds per acre of Dwarf Essex rape seed is sown on the corn just ahead of the last cultivating, it is surprising how much feed will be forthcoming in a very few weeks, es-

pecially if it receives a shower or two. Apart from the rape there are generally a few weeds that will escape the hoe and cultivator. These the lambs will clean up without any apparent injury to the corn crop. They will also clean up corn suckers, etc., all to the advantage of the lambs.

### FINISHING PAYS

Now, to make the very best possible returns for those lambs, I am satisfied it will pay to finish them. In order to do that it will be necessary to feed them in at least a few months during the coming winter. Of course it would not be advisable to feed any ram lambs, nor would it be advisable to castrate them this late in the season. It would certainly be advisable to attend to this matter early next spring with the next crop.

As dipping is in order at any season I would



"Golden Hoofed" Animals that with Good Care Bring Golden Returns

strongly advise dipping the whole flock any time now with some well established dip. This will clean your flock of lice and ticks, and perhaps be the means of deciding between feeding at a profit or feeding at a loss. It certainly requires considerably more feed to fat a lamb that is in turn feeding an army of ticks (or lice, which is worse), than is required to feed clean healthy lambs.

"But," says someone, who has been in the habit of selling his lambs during the fall, "I couldn't do that; they would eat me out of house

and home." Let us see what would be required and what could reasonably be expected from this new venture.

One and one-half to two lbs. clover or alfalfa a head per day, 1 cent; one lb. oats a head per day, 1 cent; five lbs. roots, preferably turnips per day, 1/2 cent; mixture of peas, corn, oilcake, 1/2 cent. Total cost, 3 cents.

#### WEIGHT GAINED

Now if those lambs are properly started in the early fall on fresh pasture such as has already been mentioned, they should gain at least 40

pounds each from October first to February first. Let us see farther what this would mean in dollars and cents. Taking an estimate of what would be fairly average, October first lambs, weighing 90 pounds, and bringing \$5 each for a trifle over 5 1/2 cents a pound, if fed until February first should weigh 180 pounds each. These should sell at an increase of 2 1/2 cents which would be 8 cents a pound or \$10.40 each. Thus we have realized a gain of practically \$5.40 a head. Our outlay has been, one cent a day from October (Continued on page 17.)

## The Future Market of the Draft Horse

A CROWD of farmers of which I was one assembled recently in front of the Walker House in Toronto. It was a busy hour and traffic was heavy. It was natural that our conversation should turn to horses and the market for horses. We vied with each other in our admiration of the many fine draft teams that passed in front of us. "That is the kind of horse to breed now-a-days," remarked the Clyde fancier from Ontario county.

"Don't be too sure of that," returned another of the company who had an equal fondness for the Scotch draft breed. "I would like to feel your confidence in the future of the heavy horse business, but it looks black to me." Just then a big motor truck rattled by. "That's why," he added by way of explaining his gloomy outlook.

Over 100 years ago Geo. Stephenson demonstrated the utility of steam for propelling vehicles. I suppose that one of the first thoughts that occurred to many of the large audiences that gathered to his demonstration was that here was the end of the horse. Men who had their money locked up in stage coach lines were in a panic. Breeders of coach horses had little love for the new invention. But history does not record that the introduction of steam traffic lowered the price of a single horse. And the number of horses in Great Britain today is far in excess of the number 100 years ago.

Similar fears were entertained when electric power was adapted to the street railway system. Horse breeders and owners seemed to have good grounds for their fears as in the city of New York alone many thousands of horses were sold for "a song." But there are more horses in New York to-day than there were when horses drew the street cars. My own grandfather found the



Is this the Future of the Draft Horse ?

Auto-driven vehicles may go a long way towards displacing the draft horse in the city; but on the farms there is an ever-increasing demand for good heavy drafters. The relative value of these two markets, the city and the farm, for the draft horse is discussed in the article adjoining. This photo is by an editor of Farm and Dairy on the farm of M. S. Schell, Oxford Co., Ont.

tramway company of Halifax one of the best markets for the horses bred on the old farm. I never heard him say that he lost one dollar when this market was no longer open to him.

The bicycle gave rise to similar senseless predictions that horse stock would soon not be worth a dollar. And now it is the automobile, and its co-partner, the auto truck.

I am ready to admit that the automobile has played havoc with the market for high-class carriage and driving horses. The city magnate, the man who once thought nothing of paying a four-figure price for a high class carriage horse and maintained a stable full, now prefers his car. In every city one can find numerous stables remade into garages. Professional men who at one time required horses of the roadster type for their business, find the runabout or small touring car more convenient. For instance, it is on record that in one small city of Eastern Ontario every doctor has sold his horse and bought an automobile.

Farmers have little cause to weep over this

intrusion of the automobile into the light horse market. The breeding of light horses is always a precarious operation and one that is as apt to be attended with loss as with gain. For the last score of years we have been turning more and more to the breeding of heavy draft horses. They are not so subject to disease, they are easier to train, they are ready for market earlier and their selling price is not depressed by a small blemish to the extent that it is in the case of the light horse. Particularly since the automobile has become popular heavy horses have on the average been bringing higher prices. But if the auto truck is now to take the place of the draft horse for city draw purposes, we would surely be poorly advised to invest much money in heavy breeding stock. But is it?

A cartage company in a certain Canadian city recently gave an order for 12 auto trucks. These trucks were purchased for long hauls, all the way from eight to 20 miles. They are being used for new business altogether. They take in territory that the company never before touched.

Those who see in this incident just another evidence of the passing of the horse are overlooking the fact that that company has now more horses than ever before. Their main business, which is in the congested portion of the city, is still handled by horses and the manager recently expressed the opinion that for these short hauls the horse would never be supplanted unless some entirely new method of transportation were to be invented.

The economy of the horse over the auto truck where short hauls are the rule is because relatively more time is taken in loading. In many cases 50 per cent. of the day's time may be taken (Continued on page 27.)

## TUBERCULOUS

public men order. They ground for one of dreaded diseases. with a great weight ment behind their declared war on the some cases millions been spent to eradicate culions from within one state; and some different success. It seems impossible of Let us take a little the road already a dairy industry, an viewing the great accomplished we chances for success of the future, the tuberculosis, in a more op

My experience in extends back just 20 date I was five years gations into the ind of a far-reaching ch ever, quite intimate. dairy produce in the



#### One Factor in

J. J. Tanshall, Hunting ary combined milk and is situated a good dista always clean. It has t are string

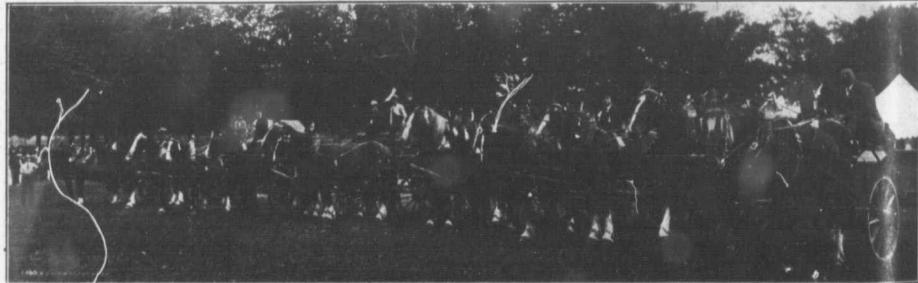
Photo by from the cow, and it and with indifferent s the old Jersey cow t stable door.

At 10 years I consid dairyman. I was wroo, and distinctly s as Punch the evening it night for it was nine cows "all myself."

That stable comes b sidered good then. It or's eye now. The w height of four or five sheet of dried filth. just what was the cons was thoroughly veiled wash there was none.

If the stable was dir was not considered squ member that I always cows over in their pla boys my hands were not were a lot cleaner th that encased the flank and "Molly."

These were the draw had its pleasures. The cts. It was quite a t milk from the cow's



The Growing Popularity of the Heavy Horse for Farm Work is Evidenced by the Type of Farmers' Teams Now Shown at Fall Fairs

# The Evolution of the Dairy Business

F. E. ELLIS, Editor, Farm and Dairy

**T**UBERCULOUS cattle are a public menace of no mean order. They form a breeding ground for one of humanity's most dreaded diseases. Health inspectors with a great weight of public sentiment behind them, have already declared war on the diseased cow. In some cases millions of dollars have been spent to eradicate bovine tuberculosis from within the confines of one state; and sometimes with but indifferent success. To some the task seems impossible of accomplishment. Let us take a little journey back along the road already travelled by the dairy industry, and then, perhaps, viewing the great advances already accomplished, we may view the chances for success in the great fight of the future, the fight with tuberculosis, in a more optimistic light.

My experience in the dairy business extends back just 20 years. At that date I was five years old; so my personal investigations into the industry at that time were not of a far-reaching character. They were, however, quite intimate. I was a daily consumer of dairy produce in the form of warm milk fresh



**Cleanliness such as a City's Regulations Require**

Even as the supplying of our cities with milk has become a factor of ever growing importance in our Canadian dairy industry, so have the demands of consumers for a clean product become more insistent. This photo, taken by an editor of Farm and Dairy in the stable of Mr. Pat. Clark, Ottawa, Ont., shows how clean cows and stables must be kept if the owner would ship his milk to the city of Ottawa. Other cities have similar regulations.

I had some cleanly instincts too. If a hair, a straw or dirt of any kind fell on the nice clean surface of the milk it was speedily put out of sight by a well directed stream, in order that its presence on the top of the pail might not grate on my artistic temperament.

Looking back on those days now I wonder how we were able to drink that milk and eat that butter so contentedly. While not old yet by any means, I am old enough to have seen many remarkable changes in the milk making business, its object the production of milk for the city trade.

Even then all were not as thoughtless as we. Men here and there, mostly city doctors, were preaching the desirability of a cleaner milk supply. Even among the farmers the leaven of enlightened ideas was beginning to get in its work. So great has been the evolution of the dairy business in the last 10 or 15 years, we almost might call it a revolution. Let us look into conditions as we find them to-day.

Two parties have been responsible for the changes that are so noticeable. First, the farmers themselves have awakened and are ever becoming more alive to their responsibility as producers of human food. Perhaps more credit, however, is due to the clean milk "cranks" of our cities. The

agitations started by these public spirited men and women have resulted in awakening the public conscience to the importance of pure milk. So far has the agitation progressed now that every city in our land has regulations governing the production and sale of milk within its limits. A few years ago, four to be exact, the Ontario government appointed a Milk Commission to investigate the milk supply in this country and in the United States. That commission gave the city of Ottawa credit for having the best and purest supply of any community in Canada. Notice what they say about Ottawa's dairy stable:

"A dozen barns chosen indiscriminately in the vicinity of Ottawa were visited when the cows had gone into winter quarters. Every one of these was nicely whitewashed and free from cobwebs, dust or other dirt. Almost all had cement floors which were cleaned out twice a day, the manure in many cases being loaded right on a sleigh and hauled away. A separate milk house was located 25 feet or more from the barns, which were generally well supplied with water, light and ventilation.

"In addition to all this, the cows were kept looking sleek and clean, the hindquarters and the udder being closely clipped in almost every case, and in one barn the operation of clipping the cows was in progress when we called. We were informed that it only required about 10 minutes to go over each animal. The result not only improved the animal's appearance, but made it an easy matter to keep it clean during the winter months, in the stable, and thus greatly minimized the danger of contamination to the milk. This very commendable practice appears to be adopted to a much larger extent around Ottawa than in any other part of the Province, in many portions of which it is entirely unknown."

Last winter I dropped into one of those Ottawa dairy stables. The proprietor was not expecting me, and had not taken any extra care in putting his stable in order. What a contrast it was to the stable in which I first attempted to milk old "Molly." Everything was as "clean as a new" (Continued on page 12.)



**One Factor in Clean Milk Production**

J. J. Tannahill, Huntington Co., Que., owns the sanitary combined milk and ice house here illustrated. It is situated a good distance from the stables and is always clean. It has to be. City health regulations are stringent now-a-days.

—Photo by an editor of Farm and Dairy.

from the cow, and it was then for the first time and with indifferent success that I tried to milk the old Jersey cow that stood just inside the stable door.

At 10 years I considered myself a full-fledged dairymen. I was working (P) on the old homestead, and distinctly remember feeling as proud as Punch the evening (I guess we had better call it night for it was nine p.m.) when I milked three cows "all myself."

That stable comes back to me yet. It was considered good then. It wouldn't pass the inspector's eye now. The walls behind the cattle to a height of four or five feet were encased in a solid sheet of dried filth. I don't know to this day just what was the construction of the ceiling. It was thoroughly veiled with cobwebs. Of white-wash there was none.

If the stable was dirty the cows were worse. I was not considered squeamish, but I distinctly remember that I always used a stool to stand the cows over in their places. As with most farm boys my hands were not unusually clean, but they were a lot cleaner than the home-made armor that encased the flanks and belly of old "Sal" and "Molly."

Those were the drawbacks of milking. It also had its pleasures. There was the feeding of the cubs. It was quite a trick to direct a stream of milk from the cow's teat right into the cat's



**A Herd that Has Done Much to Make the Reputation of Canadian Bred Live Stock**

Breeders of such herds as this one deserve the gratitude of all stockmen. There was a time when the best recommendation that a stockman could give a particular animal was that the animal was an imported one. Canadian bred animals are now just as acceptable. There's a reason. Canadian bred animals are making good. Particularly is this true of dairy cattle. In the herd here illustrated, that of A. S. Turner and Sons, Wentworth Co. Ont., several world's records for milk production have been made with home bred animals. —Photo by an editor of Farm and Dairy.

### Breeder's Directory

Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines nor for less than six months, or 25 insertions during twelve months.

**YORKSHIRE PIGS**, all ages, either sex. Choose Young Bora, B1 for service. Also Sows of all ages, bred and heavy with pig—H. C. Benfield, Woodstock, Ont.

**FOR SALE**—3 Sows of King Fayre Sigs Clubside, from H. O. P. cows, like three Clyde Pillars and 3 Stallions, Yearlings.

### Milk Wanted During Exhibition

If you can ship two cans or more of sweet milk per day (Sunday excepted) write us. We furnish cans. No shipping points under of 80 miles considered.

**City Dairy Co., Limited**  
TORONTO, ONT.

### PUBLISHERS' DESK

This is the sixth annual Exhibition Number of Farm and Dairy, and we know that "Our Folks" will be delighted with it. For weeks we have been looking for the most instructive and interesting articles we could obtain and the best of illustrations to go with them to ensure this issue being equal to the most sanguine expectations of our readers. The Special Exhibition Number we issued six years ago was the first special issue of any kind we had ever issued. It was a very modest issue compared with the one you now hold in your hand. It was in fact an experiment. "Our Folks" were not so numerous then as now; but they were numerous enough to voice their approval of our venture in no uncertain manner. We were encouraged to enlarge our ideas, and each year we have gone a little further along the same line until now we issue eight specials each year.

Farming on paper is very much like farming on land; the longer you stay at it the more you learn about it. You who have been with us so long have noticed this improvement. It has been so gradual, however, that you may not realize just how much we have done about the spur of your praise or kindly criticism. If you look up your old files of Farm and Dairy and compare a special of five or six years ago with the one you now hold, you will be surprised at the difference.

Take the matter of illustrations. Years ago illustrations in farm papers were few and far between. Even to-day some papers fight shy of "pictures." Illustrations cost a lot of money. That's the reason. But we don't think that anything is too good for our folks, and especially in our magazine numbers we spare no expense. Don't you do them? We know you do. We farmers like to see our own papers gotten out as attractively as the finest city journals. And, by the way, may we not all be a little bit proud of the fact that in the United States, with its great farm population and thousands upon thousands of advertisers, there are hardly any farm papers that surpass Farm and Dairy in the quality of the paper and number of illustrations used, or in the average standard of their articles. The truth is, in spite of our more limited field Farm and Dairy compares favorably with the best of them. \*

In this issue we would especially direct the attention of those of you who are in the pure bred live stock business to the article on page three. The writer is a personal acquaintance of many of you. You know just how hard it is to criticize a friend in his face. Most of us would rather milk someone's cows for a week than tell him that his stable is too dirty to take buyers into. Mr. Nixon has noted many of these points on which some of our folks might improve as he visited around among them. We don't think any could be offended at his friendly criticism. If you feel hurt, just ask yourself honestly if it may not be because the shoe pinches? We trust, however, that this will not be the case with you. \*

There are several other articles that we anticipate will please "Our Folks." If you breed heavy horses on the side, you will be interested in the discussion of automobile versus shoe machines? We trust, however, that this will not be the case with you. \*

ences and ideas on page seven. They forecast an interesting time coming in the city milk trade. In addition to these articles of observation on the page four of Billy Retson, the grand Scotch herdman at the Nova Scotia Agricultural College, and the timely remarks of that veteran sheep breeder, James G. McInnes, of Montserrat County, as well as many of the other articles, will be interesting to all of you. \*

It is some time since we told you how the circulation of Farm and Dairy is getting along. Well we are progressing just about as well as we possibly can, and are certain at the same time that our growth in circulation is of the right kind: the kind that stocks. Just two years ago we asked "Our Folks" to help us to increase the circulation to over 15,000. Pretty soon we are going to ask you to help us to increase it to 18,000. We know that you will do it and that in consequence just so many more of you will be helped and delighted by receiving the weekly visits of Farm and Dairy. \*

Just to let you know how well "Our Folks" are doing? You all know we have been offering a pure bred pig for nine new yearly subscriptions to Farm and Dairy. Would you believe that we have actually given away over two hundred of these pigs in the last year? Whom are we going to thank for these 1,800 new subscriptions? Why, "Our Folks," of course! Even you who got a pig was a Farm and Dairy reader. Then also we have given away within the past six months six pure bred calves for free to twenty thirty subscribers each depending upon their breeding and the milking qualities of their animals. Just think what a good work Farm and Dairy, through your cooperation, is accomplishing in this way to encourage the breeding of better stock. We are probably well within the mark when we say that we have distributed during the past twelve months more pure bred animals than all the local live stock breeding societies in the Ontario that receive special provincial government grants for doing just such work in their respective districts. And yet we do not receive any government grants, and do not want them. We would rather stand on our own feet and do our own work our own way. \*

The far-sighted, keen, business men who use the pages of Farm and Dairy to tell "Our Folks" about the goods they manufacture and have for sale, know that it is their best paying method to reach you. They know that "Our Folks" need their products, and are prosperous enough to afford them. They realize that you are dairymen—the men in Ontario to-day who are up-to-date and progressive. You buy the purchase of your goods, and set out to have the best—reliable goods. You need their goods—reliable goods—for the other kind are never introduced to you by us. Just look through the advertisement pages of this issue and see what a fine lot of up-to-date firms are anxious to meet you. \*

As usual Farm and Dairy this year will have a tent on the grounds of the Canadian National Exhibition, just opposite the cattle judging ring. There will be somebody in charge of the tent all the time. Don't you just pay us a visit and have a chat. It will be there just to meet you should you call. \*

I received my pure-bred Berkshire sow from Mr. D. H. Wilson of Cap. Ont., as a premium for securing nine new yearly subscriptions to Farm and Dairy and am highly pleased with it. It is a good size, well shaped, and shows good breeding both in appearance and certificate of breeding—Bricley, Hastings Co., Ont. \*

### BRITISH COL

It is not difficult to find men who are making their business in British Columbia cities faster than are the men several times as fast in cover has a building, not equipped in America, one experiencing an all rapid growth.

This rapid increase of the city population may not be to the advantage of human progress. The crowding of people into cities is never a healthy sign. It is, however, good for business in America. The cities of British Columbia provide the finest market for dairy products to be had in America. In Western Columbia was once all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their attention to the shipping of cream, while the supplies from Eastern Canada, the reareries of Alberta, small portion of it is from New Zealand.

Many British Columbia dairymen find most interesting their experiences in dairy business if they would like to be found everywhere, particularly numerous in the dairy of that

Home Western Columbia all dotted with the remnants of what the streets were—but now directing their

**BRITISH COLUMBIA DAIRYMEN TELL THEIR STORY**

It is not difficult to find dairy farmers who are making a success of their business in British Columbia. The British Columbia cities are growing faster than are the rural districts; several times as fast in fact. Vancouver has a building record that is not equaled in America. Other cities are experiencing an almost equally rapid growth.

This rapid increase of the city population may not be to the advantage of human progress. The crowding of people into cities is never a healthy sign. It is, however, good for dairymen. The cities of British Columbia provide the finest market for dairy products to be had in America.



**Home of a British Columbia Dairymen**  
This is the home of Mr. J. H. Keith, New Westminster, B. C. Mr. Keith has all kinds of faith in the future of the dairy industry in his province.

It is not only the dairy districts, but now dairymen are turning their attention more and more to the shipping of milk and cream, while the supply of butter from the Eastern Canada, from the creameries of Alberta and not a small portion of it is now coming from New Zealand.

Many British Columbia farmers would tell most interesting stories of their experiences in dairying in that province if they would. Fine ones are to be found everywhere, but they are particularly numerous in the Chilliwack Valley. One of the successful dairymen of that valley, Mr.

All of the good farms are not on the mainland, however. On Vancouver Island and on numerous small islands that dot the coast, are also to be found splendid dairy farms. One of these is the farm of A. H. Menzies and Son, well known to Jersey fanciers at least, because of the good work their Jerseys have been doing in R. O. P. Farm and Dairy recently asked Mr. Menzies to tell his readers something of his experiences with dairying in British Columbia and with Jersey cattle. He writes us as follows:

"It is about 12 years since we started in dairying in British Columbia. We first started with common grades and a pure bred Jersey cows eight years ago last February. Both were raising three years old and due to calve in two months, (their second calves). Neither of them were fancy to look at and neither very big milkers, but one of them was a high tester and the other the mother of our best cows. From those two we have raised all our herd but one.

"We have now 12 cows milking, three heifers over a year and six under one year, all very promising. We attribute our success to careful handling, good feeding and obtaining good



**Give her a chance**

A Cow's daily work is to produce milk. If she rests well and breathes pure air—if you make her comfortable—she does more and better work—she gives more and better milk. We had a book printed about this very thing, "The Proper Housing of Cows."

Canadian Potato Machinery Co. Limited, Box F. GALT, ONT.

**O.K. CANADIAN STALLS AND STANCHIONS**

Every farmer interested in the profit end of the dairy business can have a free copy of this book by writing for it.

**For Every Man Who Is Building or Remodeling**

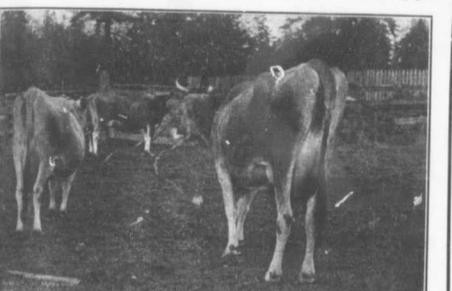
**Here's Help**

How will you arrange your new stable?  
Will the lay out be handy? Handy not only for one thing, but for everything? Handy for milking, feeding, watering the cows and cleaning the stable?  
If you are in any doubt, write us to-day. For years we have had a

**FREE BARN PLAN SERVICE**

We have made a special study of Dairy Barns, not only how they should be equipped, but how they should be designed and arranged so as to be most profitable for the owners.  
Fill in the coupon and we'll make blue print plans for you carefully, solving all your difficulties.  
Our plans will show most convenient lay out, complete measurements, best widths for passage ways, gutters, cattle-stands.  
They will show you how to frame your barn so as to increase storage capacity and save much money over ordinary methods of construction. Also will give exact specifications of materials.  
Our service is free. Send coupon to-day.

**Beatty Bros., Limited, 723 Hill St., Fergus, Ont.**



**Representatives of a Herd that is Making Good in R.O.P. Test**

A. H. Menzies & Son, Nanaimo, B. C., pin their faith to the Jersey. Here are a couple of their best cows. Every cow in the herd so far given a chance has qualified in the Record of Performance Test.

J. H. Keith, in a recent letter to Farm and Dairy tells something of his experiences:

**WAS POOR; NOW COMFORTABLE**  
"I started as a poor man 20 years ago," writes Mr. Keith, "and am in very comfortable circumstances now due to the dairy industry. I have got pure bred Shorthorns, grade Jerseys and Ayrshires and just recently have purchased some pure bred Asteina."

"Dairymen in British Columbia is a money making proposition," continued Mr. Keith. "A few years ago butter was made in large quantities and shipped from this valley, but for the past five years the milk has been shipped to the mountain milk men and to the consumer. I enclose you a postcard of my home it was when I first moved to this farm three years ago."

sires with records behind them. Nine out of our 12 milkers have passed the Canadian Record of Performance, six of them passing in the two-year-old class all with records of 400 pounds of butter-fat or over. Of the remaining three one has just entered the test with good prospects, and the others will be entered before they are three years old if all goes well. We do not intend to keep any cow that will not pass the Canadian Record of Performance, and we aim at something very much higher.

"We have had no trouble in getting rid of our young bulls, generally long before they were fit for service, at fairly good prices. And we have never yet had a word of complaint. Everyone has been well pleased and several have come back the second time.

(Continued on page 28)

Send This Free Plan Coupon To-Day

BEATTY BROS., Limited  
723 Hill St., Fergus, Ont.

Please make me blue print plans for a barn, as per instructions below.

Are you building?.....Or, Remodelling?.....  
If so, when?.....For how many cows?.....  
Any stalls for horses?.....Box Stalls?.....  
State exact inside measurements of barn.....  
Name.....  
P.O. ....Prov. ....

# EATON'S FALL AND WINTER CATALOGUE

"350 PAGES  
Brimful of  
Splendid Buying  
Opportunities  
that mean quite  
a Saving."



"Bigger  
and  
Better  
than  
Ever."

This Book  
is yours  
for the  
asking.

Something  
of Every-  
thing at  
Popular  
Prices.

## To-Day's the DAY you should Write for this Big Helpful Book

**BECAUSE** to-morrow you may forget—and the next day, and so in the end miss much that would be most beneficial to you. We want all who read this announcement, and who have not received our latest Fall and Winter Catalogue No. 108, to send their name and address—quick. On receipt of same we will mail you by return the best **EATON** Catalogue ever published. To begin with there is a beautiful cover design, the subject of which is reproduced above. There are also many color pages illustrating goods in their natural shades. Each and every page bears a message of a great and far-reaching service. In reality it is more than a book—a veritable storehouse within one's own domain where true value predominates and all-round goodness is assured.—And so we say—firstly, secure your catalogue—early, and secondly—USE IT. The rest you may safely leave with us plus the **EATON** Guarantee.

**WE DELIVER FREE ALL \$10.00**

**ORDERS OR OVER**

--All Heavy Goods listed in Catalogue are priced for delivery to your nearest railroad depot. Freight Paid.

The  
**EATON**  
Mail Order  
Way  
Quick, Courteous,  
Careful  
Service

THE **T. EATON** CO. LIMITED  
TORONTO CANADA

The  
**EATON**  
Guarantee.  
Goods satisfactory  
or money refunded,  
including ship-  
ping charges, no  
exceptions

POULT

Size and L

M. A. Jull, Mae

It is a well-  
known fact  
among fowls, th  
times many writ  
a definite type  
selves, was mos  
egg production  
of the Ontario  
and Dr. Pearl of  
ment Station, h  
been engaged in  
lines of increas  
mit that there is  
learns a direct r  
The results of t  
ing competitions  
traia, England r  
no evidence of r  
type and egg yie  
In America the  
has been that m  
ed fowls have be  
not layers and m  
been urged, by  
breeders should  
less in breeding

A Small Issu

The poultry are de  
as he is with his Ho  
Notice the open fro  
me

production. One r  
the major one, for  
against breeding  
was to avoid impar  
tional vigor and vi  
ing stock.

Contrary to this  
however, Mr. G. A.  
Farmer and Stoc  
breds that small be  
bet layers. Some  
formulated a theo  
small races, accord  
small hens were th  
support of his the  
results of some rec  
itions in England,  
with few exceptio  
birds score highest  
was laid, whilst th  
most always the low  
course be an exag  
sider every small hen  
as there are als  
Nevertheless the  
the direction to be f  
is not the heavy h  
A hen after four  
and perfect foedin  
claim, may be co  
considered to be abo  
that the bird will at  
it appears that best  
omptons should n  
wards in weight w  
the White Wyandott  
to five and a half p  
south Rocks the sar  
was three pounds 16  
ounds 12 ounces,  
and Reds four and  
ounds.

### POULTRY YARD

#### Size and Laying Powers

M. A. Jull, Macdonald College, Que. It is a well-established fact that there is no definite "egg" type among fowls, though from time to time writers have claimed that a definite type, as fixed by themselves, was most conducive to heavy egg production. Professor Graham of the Ontario Agricultural College, and Dr. Pearl of the Maine Experiment Station, both of whom have been engaged in breeding work along lines of increased egg production, admit that there is no fixed type which bears a direct relation to egg yield. The results of the numerous egg-laying competitions conducted in Australia, England and America, show no evidence of relationship between type and egg yield.

In America the general conception has been that medium to standard-sized fowls have been among our heaviest layers and more recently it has been urged by authorities that breeders should avoid using small hens in breeding for increased egg

#### Things to Remember

Strong, healthy birds are the most difficult to catch in the run. Corn-meal, pea-meal, or corn and peas fed whole may be used with advantage in cold weather.

The moulting bird should have an abundant supply of nourishing food. It is poor policy to neglect the heavy layer when temporarily out of action.

Get rid of all surplus cockerels. They will give a better return if marketed at five months old than at a later age. Study the cost of production.

If the winter-egg yield has been unsatisfactory this season, now is the time to arrange matters so that winter eggs will be in abundant supply next year. Hatch good stock at the right time.

One breed is enough for most people to deal with, if the flock is to be bred and managed to the best advantage. One breed may be studied successfully, whereas two may be studied but indifferently.

#### Indian Runner Ducks

E. FENNER, Bruce Co., Ont.  
My Indian Runner ducks are very

#### A Small Issue on the Farm But A Profitable One Just The Same

The poultry are deserving attention. G. A. Brethorn, Peterboro Co., Ont., buys as he is with his Holsteins, is also interested in his pure bred White Wyandottes. Notice the open-fronted home of his birds; though cheap, it answers all requirements. Photo by an editor of Farm and Dairy.

production. One reason, though not the major one, for the general advice against breeding from small fowls was to avoid impairing the constitutional vigor and vitality of the laying stock.

Contrary to this general theory, however, Mr. G. A. Palmer, in "The Farmer and Stock-Breeder," contends that small hens are usually the best layers. Some years ago he formulated a theory of energy in small races, according to which the small hens were the best layers. In support of his theory he gives the results of some recent laying competitions in England, and he shows that with few exceptions the lightest birds score highest in the number of eggs laid, whilst the heaviest are almost always the lowest. It would of course be an exaggeration to consider every small hen as a good layer, as there are always exceptions.

It is not the heavy hen that lays most. A hen after four months' laying perfect fooding, Mr. Palmer considers to be about the full weight that the bird will attain. From this it appears that best laying Buff Oringtons should not exceed five pounds in weight when full grown; the White Wyandottes should be five to five and a half pounds; Buff Plymouth Rocks the same; White Legorns three pounds 10 ounces to three pounds 12 ounces, and Rhode Is. Reds four and a half to five pounds.

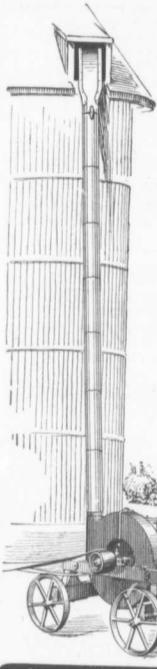
valuable for laying purposes. They average from 200 to 300 eggs in a year. My ducks have been laying since the 30th of January and so far have averaged 66 eggs each. I have learned from experience that ducks do not lay as well the first year as do not lay as well from two years of age and upwards.

I find the Indian Runner duck a great forager. They will roam over a large portion of the old pastures living on grasshoppers. When they can get into ripe grain fields, however, they will help themselves.

A good ration for laying ducks is as follows: Four measures bran and middlings, one measure beef scraps, one measure oil cake and one-half measure sharp sand. Make this wet enough to stick together and feed all they will eat up clean. During the summer months I feed just oats or whole corn.

For young ducklings a good feed is cooked oatmeal with a tablespoonful of sand strewn over every cupful of oatmeal. They should be fed about five times a day for the first two or three weeks. When they are four or five weeks old three times a day will be sufficient. They should have access to water at all times. At four weeks of age a mixture of four parts bran and middlings, one part cornmeal, one-quarter sharp sand, and one part beef scraps is a good ration.

A hard and fast rule in caring for Indian Runner ducks is, that the better the attention they receive the better they will lay.



A NEW

## Corn Cutter and Blower

Combining all the latest ideas and improvements in this class of machinery. If you are going to buy a Silo Filler this year, be sure and see this splendid new machine. We also manufacture all kinds of Corn and Feed Cutters.

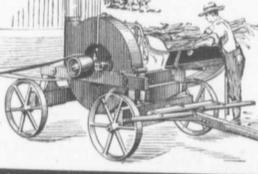
Send for booklet describing them

The Peter Hamilton Co., Ltd.

Sold by

The John Deere Plow Co., Ltd.

Toronto - Ont.



# PROFIT MAKING Dairy Equipment

Up-to-date dairy equipment brings bigger profit to users, because it saves time and insures higher grade products. We carry a very complete line of all requisites for the creamery, cheese factory, dairy and milk dealer, all of the highest grade, because we know it does not pay the dairyman to buy equipment of any other kind.



The De Laval Line of Dairy, Creamery, and Farm Supplies



**VICTOR CHURNS.** The best butter with the least work can be made with the Victor Churn. Both churns the butter and works it. Years of churn building experience back of it. Large sizes for creameries and smaller sizes for farm dairies.

No dairy without a silo is fully equipped. The Ideal Green Feed Silo has been longest on the market. The best and most popular silo made in Canada. All sizes.

**DE LAVAL WHEY SEPARATORS** turn waste into profit. Every cheese factory should install one. Butter made from whey cream brings a good price and the butter-fat recovered from the whey will more than pay for the machine the first year.

Our line of creamery, dairy, cheese factory, milk dealer's and farm equipment is most complete. We shall be pleased to make complete catalog if you will write advising what supplies you require.

**DE LAVAL DAIRY SUPPLY CO., Ltd.**  
LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA  
Exclusive Canadian distributors of the "World Standard" De Laval Cream Separators  
MONTREAL PETERBORO WINNIPEG VANCOUVER

# POTASH

For All Crops

On All Soils

ALL AGRICULTURISTS attending the CANADIAN NATIONAL EXHIBITION are invited to visit the PAVILION OF THE GERMAN POTASH SYNDICATE (next to the Poultry Building) where RESULTS obtained by JUDICIOUS FERTILIZING will be on view.

FARMERS are requested to come and discuss their soil problems. The maintenance of SOIL FERTILITY is a great and growing problem. It is our endeavor to help you in the solution of it.

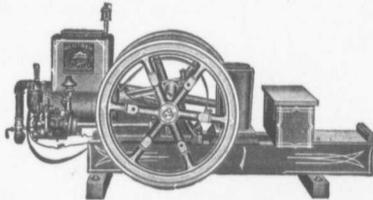
Educative Bulletins on the important subject of FERTILIZATION, including our new publication

## "FALL Application of FERTILIZERS"

will be supplied free to all interested. If you cannot call, mail us a postcard and we will send you the bulletins

**GERMAN POTASH SYNDICATE**

1102-5-6 TEMPLE BUILDING TORONTO



## The Engine Henry McKay Bought

Henry McKay is a shrewd, honest, progressive farmer, and one of the fairest men we ever did business with. His farm is one of the best kept, most profitable in the Dominion. His farm machinery is the most modern. And he was one of the first men in the country to get a Renfrew Standard gasoline engine. When asked why he chose the

**Renfrew Standard**  
It starts without cranking

engine in preference to so many others on the market, he said:

"Well, what impressed me most was the fact that the engine started without cranking. I thought it must be a mighty good engine to be able to do that. Then I liked that fly-ball governor. It controlled the speed of the engine better than I had ever seen an engine controlled before."

"I figured out, too, that the construction of the mixer on the engine was very simple, and unlikely to get out of order, and also would be very economical on gasoline. I was also very strongly impressed with the general appearance of the engine. It looked as though it was made by careful workmen, and seemed very simple."

"There were other things about the Renfrew Standard engine that no doubt influenced me in its favor. But those I mentioned are the ones that really did the business."

Since Mr. McKay bought his Renfrew Standard engine, hundreds of others have followed in his footsteps. Every month the demand for this remarkable engine keeps growing. Every month we send out more booklets and circulars. Will your name be on our mailing list this month? It will if you are a progressive man like Henry McKay.

## The Renfrew Machinery Co., Limited

Head Office and Works: RENFREW, ONT.

Sales Branches at SUSSEX, N.B., SASKATOON, Sask., CALGARY, Alta.

Agencies Everywhere in Canada

## THE EVOLUTION OF THE DAIRY BUSINESS

(Continued from page 5.)

pin." The cement floor had first been cleaned in the ordinary manner and the flushed off with a hose. The walls had been whitewashed until they glistened. A modified King system of ventilation kept the air in the stable almost as pure as the air outside. The cows were groomed every day. Before milking, their flanks, belly and udder were wiped off with a damp cloth. I visited several other stables the same day and all were equally clean.

Why do they do it? Partly because the farmers have found that it pays to market a good article. More because if they didn't produce a good article they would not be allowed to market it in the city of Ottawa. The city has a by-law that makes interesting reading. In addition to providing that stables must be clean, that the cows must be clean, it has other conditions such as the following:

Milk must not be sold from unhealthy cows; water supplied to cows or used for washing utensils must be taken from wells protected from drainage and contamination; all milk must be removed from the stable as soon as drawn and strained through several layers of cheesecloth; the milk shall be covered and kept cold in a refrigerator or ice water vat not higher than 50 degrees F.; the farm dairy must be located a good safe distance from the stable.

How do the city authorities know that dairy farmers are living up to these regulations? Here we are introduced to a comparatively new official, the milk inspector. Dr. J. B. Hollingsworth, Chief Food Inspector of the city of Ottawa, tells me that every dairy farm supplying milk to the city is scored at least twice a year. The inspectors are busy all of the year travelling from farm to farm. Says Dr. Hollingsworth: "We figure getting over all our dairy farms every six weeks, while some places are visited five times in a couple of weeks. The proper kind of help is what is causing considerable anxiety to our milk men as they find it very difficult to procure the right kind of help. However, they are doing their very best to produce such an important food in a cleanly manner."

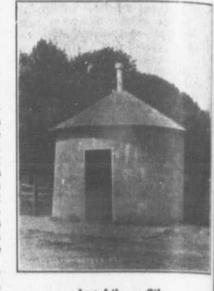
So much for the farm end of it. When it comes to the city dairy companies, inspection at Ottawa is equally rigid. The inspectors also have the privilege of stopping up a milk cart on the street anywhere and taking samples for examination. If those samples contain too much dirt or bacteria in excess of the stipulated number, the driver is warned.

At present Dr. Hollingsworth is paying considerable attention to the sediment test. All of the milk from one farm on its arrival in the city is dumped into a large vat. One pint of this milk is taken and forced through a small round disk of absorbent cotton. All of the dirt is left in the disk. If the amount is excessive, dirt, dirt and all are mailed to the producer. The disk speaks for itself. The dirt is there plain to be seen and the dairymen know that he is not being persecuted by an arbitrary inspector.

The regulations in force at Ottawa, with few variations, are the same as those in force in most of our large cities. Few cities, however, are so thorough in their inspection at the farm end. Vancouver, Toronto and Montreal have made great strides in the improvement of their milk supply in the last three or four years. The two latter cities, however, depending on a much larger territory for supply than does Ottawa, have greater difficulties to overcome in inspecting farms and have paid more attention

to examining milk after it reaches the city. In the vicinity of Toronto the farmers themselves have been responsible for a good part of the progress made. They have organized their own dairy company, the members of which have bound themselves to live up to certain regulations as to cleanliness, whether the city enforces its regulations or not.

The health authorities of Toronto have a unique method of ensuring that milk when condemned by inspectors on its arrival in the city should not be used for human food. A small amount of dye is added to each



Just Like a Silo

Mr. J. L. Outman, Oxford Co., Ont., constructed the circular milking machine in the illustration with the same model that are used in constructing cement silos. The walls are six inches thick, and the door and two windows, it is roofed with prepared shingles.

giving the milk a bright red stain. This makes the milk useless for human consumption because of its color, but at the same time the milk is not spoiled for feeding to animals the dye is never poisonous.

I have pictured the evolution of the milk business so far as I have seen. But the evolution is yet far from being complete and in the near future we may expect to witness the past effort of all, the fight against tuberculosis cow. Several cities, especially in the United States, have already put the ban on untested dairy herds or on herds that are known to contain reactors. Dairy farmers have strenuously opposed this regulation. In many cases it has meant that to continue in a city milk supply business they must slaughter practically all of their herd. Few dairy herds are so large that do not contain a few reactors and their owners too join in the fight against a non-tuberculous regulation.

Like me, however, such opposition adds to a fight against the inevitable. It has been very properly held that tuberculosis may be transferred to the human through milk and city consumers have a right to protect the health of their children.

Many there are who still object to the complete system of inspection practiced by city health authorities. They say that it is interference with individual liberty. The policy of every man for himself, however, is now discarded. Our theory of liberty today is that every man is entitled to the control of his own actions so long as those actions do not interfere with the liberty of others. The thing of others and it is quite in accordance with this definition of liberty that city authorities should have the milk supply problem in the city under municipal control. In the case of municipally owned dairy companies will take the place of the present dairies now found in our cities. This too a start has been made. Several phases of this evolution

have not touched, the certification of certified milk and the pasteurization of milk. The little following quotation which has a very subtle of milk: "Public health is the rest of the people and the power the most beautiful."

## FEEDING

It is advisable for a farmer to consume the stored winter work editor knowing that the practice in time to outline my for the benefit of readers.

I believe that a farmer should consume the stored winter work editor knowing that the practice in time to outline my for the benefit of readers.

I have for a number of years been engaged in the business of feeding a few of the summer milk I sell. I assume the feed given have now almost

## Farm Laborers

\$10 to V

Via Grand Trunk cent per mile of destination, but Lead, Calgary or Winnipeg—\$18 from Lead, Calgary or Winnipeg.

August 22—From Toronto to Sarnia, Toronto, Stratford, and Sarnia.

August 25—From Toronto to Sarnia, Toronto, Stratford, and Sarnia. Toronto and east of Toronto.

September 5—From Toronto to North Bay, west thereof in Ontario.

Farm Laborers' Association of Ontario. Toronto at 22nd, via Hamilton at 2:00 p.m. on August 25th via Grand Trunk. This is the chance for the "opportunities" and farmers and business in Western Canada. The origin of their good "Farm Laborers' route via Chicago one, many large cities, passed on route, monotony of the journey, meeting new to the Grand Trunk the shortest and gotten Winnipeg-Sarnia, with smooth the newest, most rapidly developed Western Canada. Full particulars at Ticket Offices, or writing District Passenger Ry., Toronto.

have not touched, such as the production of certified and homogenized milk and the pasteurization and sterilization of milk produced under less favorable circumstances. I can best give you a little preachment with the following quotation from Disraeli which has a very close bearing on the subject of milk:

"Public health is the foundation on which rests the happiness of the people and the power of the State. Take the most beautiful kingdom, give it

intelligent and laborious citizens, prosperous manufacturers, let architects cover the land with temples and palaces; in order to defend all these riches, have modern weapons and fleets of torpedo boats. If the population remains stationary, if it decreases yearly in vigor and stature, the nation must perish. That is why I consider that the first duty of a statesman is the care of public health."

## FEEDING STEERS AS A SIDE LINE TO DAIRYING

W. A. Patterson, York Co., Ont.

It is advisable for a dairy farmer to buy in a few steers in the fall to consume the surplus feed and afford winter work for the help? The editor knowing that I have followed this practice in the past, has asked me to outline my ideas on the subject for the benefit of Farm and Dairy readers.

I believe that, wherever possible, a farmer should throw either one line or the other. When we feed a few steers during the winter, however, in connection with our dairy herd of Holsteins, we have the advantage of a larger number of cattle to look after at a time when work is not so rushed as it is in the summer months, thus helping to employ labor more continuously the year round.

### A HOME MARKET FOR FEED

I have for a number of years been still feeding a few steers because of the difficulty in securing labor during the summer to milk and look after as many cows as I should keep to consume the feed grown on the farm. I have now almost ceased this practice.

### Farm Laborers Excursions \$10 to Winnipeg

Via Grand Trunk Railway, plus half cent per mile from Winnipeg to destination, but not beyond MacLeod, Calgary or Edmonton. Returning—\$18 from Winnipeg, plus half cent per mile from points east of MacLeod, Calgary or Edmonton to Winnipeg.

### GOING DATES

August 22—From all stations Toronto to Sarnia Tunnel inclusive, via Stratford, and south thereof in Ontario.

August 25—From all stations north of but not including main line, Toronto to Sarnia Tunnel, via Stratford; all stations Toronto and north and east of Toronto to Kingston.

September 3—From all stations Toronto and east, and east of Orillia and Scotts Junction, inclusive.

September 5—From all stations Toronto to North Bay inclusive, and west thereof in Ontario.

Farm Laborers' special trains will leave Toronto at 8:30 a.m. on August 22nd, via Hamilton and London, and at 2:00 p.m. on August 25 and September 5th via Guelph, Berlin and Stratford. This is an exceptional chance to visit the West, which is called the land of "Golden Opportunities" and many prosperous farmers and business men now residing in Western Canada can trace the origin of their good fortune to a "Farm Laborers' Excursion." The route via Chicago is an attractive one, many large cities and towns being passed on route, which breaks the monotony of the journey, there being something new to see all the time. The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton, with smooth roadbed, through the newest, most picturesque and most rapidly developing section of Western Canada.

Full particulars at all Grand Trunk Ticket Offices, or write C. E. Hornung, District Passenger Agent, G. T. Ry., Toronto.

I fed only two last winter; my herd of pure-bred Holsteins, which I started about five years ago, has almost filled my stables.

I have usually employed a local drover to buy steers for me in the fall, on the Toronto market. I found it more satisfactory to have him buy than to go to the market myself. He has the advantage of being on the market almost every day.

I feed corn ensilage, turnips pulped, and cut clover hay. My steers are fed this mixture night and morning with clover hay at noon. Cattle fed in this way do not require much grain, especially if the corn has been well matured before being put into the silo.

### ONE FEEDING EXPERIENCE

During the winter of 1909-1910 I fed 24 steers which came from the No. 12 west. I bought them on October 15th when they weighed 940 lbs. each and cost me \$38.20 apiece. I sold them on May 14th when they weighed 1,300 lbs. each. I received \$87.50 each for them. They gained 360 lbs. in 211 days. They were not fed any grain until about the first of April. They had about three weeks' pasture on rape which I believe was a great help. They were moved out of the stable from the time they were tied in in the fall until they were shipped in May.

If one could get steers to gain in weight and price like this bunch I would say feed steers every time; but one cannot do that. The following one year I fed 26 steers which only made  $7\frac{1}{2}$  c a day per steer, and last year 11 steers and one heifer which made 21c a day per steer.

This year two steers made me 20c a day per steer.

### My Method of Calf Rearing

Parnham Allison, Dundas Co., Ont. When we ship our whole milk to Montreal, I consider that we lose one of the best feeds, skim milk, that a calf can be given from the age of six months to one year. I find, however, that we can raise good calves by feeding new milk entirely until they are a month old, then begin to give them ensilage and clover hay for bulky feed and oil cake, bran, peas and oats for a grain ration. As the calf begins to take more of the other feeds, we decrease the milk allowance until at three months old when we stop feeding milk altogether.

When a calf has reached this age it is old enough to thrive on these other feeds if fed properly. I believe the main thing in raising a dairy calf is to keep it thriving and thus develop lots of capacity and constitution.

About the only difference we make in feeding fall and spring calves is that we turn the fall calves on the grass in the spring, while we keep the spring calves in the stable until the weather begins to get cool and sometimes we do not turn them on the grass at all.

The horses like to have a roll in the evening when the harness is off. Its natural and it does them good.



**Fly Chaser**  
KILLS ALL LIFE STAGES OF FLIES AND MOSQUITOES  
SAFE FOR CATTLE  
PURELY VEGETABLE  
EFFECTIVE

## Pratts

### "Fly Chaser"

is a thoroughly tried and tested fly repellent for use on cows, horses, dogs and cats and birds, barns, stables and poultry houses of all sizes.

Pratts' "Fly Chaser" will keep the flies off your cattle. If it doesn't, it won't cost you a cent. It will relieve your tortured work-horse or your nervous, high-strung driving horse.

Spray your stables and chicken rooms! Try "Fly Chaser" to kill caterpillars frequently. Its disinfecting properties will insure pure, sanitary quarters for your live stock and poultry.

"You Heave Back If It Fails."



PRATT FOOD CO.  
of Canada, Limited, TORONTO 8-6

**FALL WHEAT** The results of 50 years continuous use of Fertilizer on Wheat at the Experimental Station at Rothamsted, England, shows:

Unfertilized .....	11.1 bus. Average yield per acre
Complete Fertilizer .....	37.1 bus. Average yield per acre

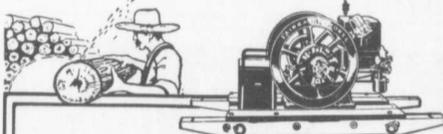
These experiments have been the most exhaustive and reliable in the history of agricultural investigation, and should command the serious attention of every wheat producer.

## STONE'S FERTILIZERS

Every Ontario Farmer should use Stone's "FALL WHEAT SPECIAL" and increase the average yield which is only 19 bu. per acre. Made from the best available Nitrogen, Phosphoric Acid and Potash; mechanically mixed; in perfect cured condition for drilling.

Write for complete catalogue and directions

William Stone Sons, Limited, Woodstock, Ont.



## 28 degrees below zero

Will run on cheap fuels.

"I have run my Fairbanks-Morse Engine when it was 28 degrees below zero. It has given the best satisfaction and is as good repair as when I bought it." —E. C. Bissell, Northloch, Sask.

## Fairbanks-Morse Farm Engines

are reliable under all climatic conditions. Whatever work is required of them is done—done the way it is wanted, when wanted and without balking. The same thorough workmanship, carefully tested materials and exact construction that have made Fairbanks Scales the standard for so many years, are used in the building of Fairbanks-Morse Farm Engines, "the most dependable engine ever designed for farm use."

Every Fairbanks-Morse Farm Engine is guaranteed, and the responsibility of the largest organization of its kind in Canada or the United States stands back of every engine sold. Equipped with Bosch magnets. Any size from 1 to 200 h.p. Will run on kerosene, gasoline or low grade distillate, the cost of the last being less than one-fourth that of gasoline.



Please send me your free book.

Name

Address

The Canadian Fairbanks-Morse Co.

Montreal



and frequently amongst his fellow-breeders and with the big successful fellows who may be at a distance or across the border—the United States. This is the opportunity to broaden out and gain higher ideals and information that will lift one's breeding business to a better and more profitable plane at home.

At least a month or two, at least a month, how hard it is for most of us to pay the price we know that we should pay for a bull good enough to head our herds! Too many of our breeders—sometimes some of our leading ones—seem to reckon that they can get ahead of nature here. Were the situation not so serious it would seem like a right good joke—it is at least absurd—the way some breeders figure and fail to figure, how they can afford to use cheap, indifferent bulls, when better ones are available, although at a rather long price!

Another point—should I put over those breeders who attempt to fool their cattle when it comes to feed? I'll not make further mention of it at this writing.

In my more suggestion I would give in closing: Beware of one's own personal prejudice. It pays much better to breed and to keep what the other fellow wants and demands, and for which he will pay the good prices. We need keen insight here. We can well spend time and study seeking out such information as will set us right on this vital point.

**THE OUTLOOK AND THE OPPORTUNITY**  
Our breeders in general are doing remarkably well. All will admit that there is, however, much room for improvement even along many other lines than those here in this article suggested. The outlook is most favorable. The biggest of opportunities is abroad everywhere in Canada for some special line of pure bred live stock. All we need is to catch the little larger vision of the opportunities, set for ourselves more definite and better ideals—then build for better business in a business way.

Say we all go in to possess the land in this respect! The field of opportunity is before us. Let's to it!—Having in mind of course the definite object in view in so far as possible, for you know when we aim at nothing we are sure to hit it!

**How a Milkman Feeds Calves**

*Geo. Cooper, York Co., Ont.*  
My way of rearing dairy bred calves will look rather expensive to some. I allow them to suck their dam for a few days until the fever is pretty well out of the udder. Then I feed them about 10 pounds of new milk twice a day for about three months. By that time I have them eating other feeds; anything I can get them to eat.

I then gradually reduce the milk to the next month or six weeks. If in the winter I can get them to eat small pieces of mangel very soon, oats, whole or rolled, whatever I have at hand, all the oileaks they will clean up, clover hay or alfalfa—in fact anything I can get them to eat. I always clean the manger out once a day at least.

If I had skim milk I would be inclined to feed some of that, but as I can't get it, I go to Toronto to have some. In summer I keep the calves inside during the day in the fly season.

I once made a mistake and lost a good looking calf by feeding dry oileaks meal in the milk without scalding or boiling. The calf bloated twice and finally died. I have not fed any meal in the milk since.

Don't adopt new and untried methods. There are no get-rich-quick systems of poultry-keeping. Common sense and hard work are the main-springs of success.

**Improve Your Farm**

FARMERS of Canada, whenever you find it necessary to set up new gates on your farm, investigate the "Clay" Steel Farm Gate. This Gate has features not possessed by any other gate. These features have aids and have led to the leading stockmen of Eastern Canada; the Government Experimental Farm at Ottawa; the Model Farm in connection with Macdonald College, Quebec.

**Clay Steel Gates**

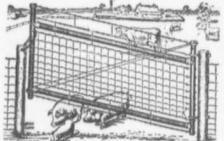
have been bought by some thousands of Canada's best farmers. 30,000 "Clay" Gates were sold in 1912. This extensive appreciation of "Clay" Gates is the



**Guarantee**  
I guarantee every "Clay" Gate to be free from any defects whatsoever in material or workmanship. I will replace FREE any Gate giving out for such reasons.  
**H. RALPH STEELE, Manager**

soundest possible evidence of the immense superiority of this Gate. If it costs a little more than the ordinary gate, it is worth more—much more. Think consider this: Farmers who have had this Gate on trial have never given it up. Read our guarantee.

**THIS GATE**  
WON'T sag, bend, break, burn, blow down or rot. Positively keeps back heavily laden cattle. Can be raised as shown. Will last a life time.



Made of tubular steel of large diameter (far stronger than gas pipe or iron or angle iron), and heavy wire mesh fabric. A gate for every purpose. All sizes. **60 DAYS' FREE TRIAL.** One or a dozen "Clay" Gates will be sent on 60 days' Free Trial. State width of opening. Try them before buying them. Send today for illustrated Price List.

The Canadian Gate Co., Ltd., 29 Morris Street Guelph, Ont.



**ABSORBINE**

TRADE MARK REG. U.S. PAT. OFF.  
Removes Burs, Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain; Stops Spavin Lameness. Always pain. Does not blister, remove the hair or lay up the horse. \$2.00 a bottle, delivered. Book 1 free.

**ABSORBINE, JR.**, the antiseptic liniment for manking. For Synovitis, Strains, Gouty or Rheumatic deposits, Swollen, Painful Varicose Veins. Will tell you more if you write. \$1 and \$2 per bottle at dealers or delivered. Manufactured only by **W. F. YOUNG, P.O.E. 112 Lyman Bldg., Montreal, Can.**

**Wanted**

A Herdsman, who has had experience in tending and caring for a No. 1 herd of Holstein cattle. Honest, reliable and having no bad habits. Apply, giving references to—

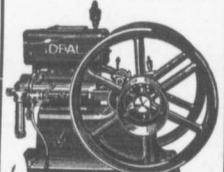
**The Allison Stock Farm**  
CHESTERTVILLE - - - - - ONT.

**The Call of the North**

Do you know of the many advantages that New Ontario, Acra, offers to the prospective settler. Do you know that these rich agricultural lands are available free and at a nominal cost, are already producing grain and vegetable second to none in the world? For literature descriptive of this great territory, and for information as to terms, conditions, regulations, settlers' rates, etc. write to  
**H. A. MACDONELL,**  
Director of Colonization,  
Parliament Buildings,  
Toronto, Ontario

**GASOLINE ENGINES**

11 to 20 H.P.  
Stationary Mounted and Traction



**WINDMILLS**

Grain Grinders, Water Boxes, Steel Saw Frames, Fans, Tanks, Etc.  
**COOLD, SHAPLEY & MUIR CO., LTD.**  
Brandon Winnipeg Calgary

**You need these "LOUDEN" Stable Equipments**

They have been specially invented to make farming easier and profitable. They take half the backache and drudgery out of farm work and save more of the labor-saving money-making side of it. Here are some of those labour problems you want you to know about. They will solve some of those labour problems you have been worrying over lately



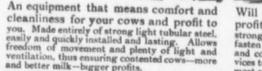
LOUDEN LITTER CARRIER

Simply eats up the drudgery! One simple pull on a chain lifts 40 lbs. in the box—a boy can hoist half a ton and run with ease and speed from the barn to the yard or manure shed. Sanitary, too—all galvanized steel—no wood—and quite water tight. Saves time and labour and makes a clean, tidy barn.

For 47 Years the Leader

Free Barn Plans  
Our Architectural Department will supply you with free barn plans if you are sure you will build or rebuild. No charge for this service.

**SANITARY STEEL STALLS**



An equipment that means comfort and cleanliness for your cows and profit to you. Made entirely of strong light tubular steel, freedom of movement and plenty of light and ventilation, thus ensuring contented cows—more and better milk—bigger profits.

**"LOUDEN" Stable Equipments**

LOUDEN MACHINERY CO. - Dept 2 GUELPH, Ont.



**COW-COMFORT STEEL STANCHIONS**

Will make your cows happy—and profitable. These stanchions—strong and light in construction—simple to fasten and unfasten—giving perfect freedom to the head or feet of cows. Used by the most successful dairies in the country.

You can't beat Louden Goods

Our New Catalogue illustrates and describes ever so many devices for money-making and labour-saving on farms. It will interest you—and it's yours for the asking.

We will exhibit our full line at Toronto, London Ottawa, Sherbrooke and Fredericton.

# FARM AND DAIRY

AND RURAL HOME

Published by the Rural Publishing Company, Limited, Toronto, Ontario.



**1. FARM AND DAIRY** is published every Thursday. It is the official organ of the British Columbia, Eastern and Western Ontario, and Bedford District, Quebec, Dairyman's Associations, and of the Canadian Holstein Cattle Breeders' Association.

**2. SUBSCRIPTION PRICE, \$1.00 a year.** Great Britain, \$1.50 a year. For countries outside Great Britain, add 50c for postage. Notices of the expiration of subscriptions are sent to subscribers, who then continue to receive the paper until they send notice of discontinuation. No subscription is received for more than one year after date of expiration. A year's subscription free for a club of two subscribers.

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

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

**5. ADVERTISING** rates are quoted on application. Copy received up to the Friday preceding the following week's issue.

**6. REPRESENTATIVES**—UNITED STATES—People's Gas Building, Chicago, Ill. CANADA—New York Office—175 West Avenue, New York City. Write us on all agricultural topics. We are always pleased to receive your articles.

**CIRCULATION STATEMENT**

The paid subscriptions to Farm and Dairy exceed 11,900. The actual number of copies of the paper sent to subscribers who are but slightly in arrears, and sample copies, are valued at \$1.50 to \$2.00 copies. No subscriptions are accepted at less than the full subscription rates.

We enclose detailed statements of the circulation of the paper, showing its distribution by counties in each province, which will be mailed free on request.

**OUR GUARANTEE**

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited and protected our readers, we turn over to independent advertisers. Should any advertiser herein deal dishonestly with you as one of our paid subscribers, we will make good the amount repaid, and we will make good the amount of your loss, provided such transactions occur within one year from date of the occurrence of its occurrence, and that we find fault with the advertiser. It is a condition of this contract that in writing to the advertiser in Farm and Dairy, you shall not put your trade at the expense of our readers, who are our customers, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

## FARM AND DAIRY

PETERBORO, ONT.

### WEALTH IN A HERD

A good herd of pure bred dairy cattle is better than a bank account. A bank account increases in value while we sleep. Interest piles up on holidays and Sundays as well as work days. So does the value of a dairy herd; and more. The value of the dairy herd is constantly increasing in value. It is yielding up a good living at the same time. That is more than a bank account will do. Here is a case in point.

Ten years ago the University of Missouri purchased four registered Holstein cows and a bull for \$470. At the present time the descendants from that purchase number 35 head, some of which could not now be purchased for \$1,000 and the entire lot is valued at over \$10,000. In addition to this increased value, bulls have been sold for breeding purposes that leave a substantial margin to credit of the sales account after all

lowing for the occasional purchase of a new herd bull. One thousand dollars a year is what this original investment of \$470 has returned on increasing value alone, to say nothing of the large production of the herd which more than paid running expenses. And then we must consider sales of bull calves.

And still we find cow owners who see no advantage in having pure bred stock. We are glad that a few of "Our Folks" here and there are relieving the banks of their three per cent. deposits and investing the cash in pure bred dairy cattle. Only rich people can afford to have their money earning three per cent. in the bank.

### THE DUAL PURPOSE FOG

That elusive animal, the dual purpose cow, is at last to become a reality in this country. At least, such is the decision of the Ontario Department of Agriculture. The Department has already spent some \$10,000 of the Dominion grant in purchasing a foundation for a special government strain of dairy Shorthorns. Professor Geo. E. Day has spent several weeks recently touring the Old Country to select of the very best for the Ontario herd. His purchases are now safely housed on the college farm at Guelph.

Farm and Dairy wishes the government all success in its dual purpose venture. It may be that under certain conditions an animal that is a fairly good milker and at the same time of such conformation as to produce calves suitable for feeding, would be more desirable than a cow bred specially for beef or specially for milk. At the same time the government would do well to remember that they are not the first experimenters in this field and that many similar experiments on a much more extensive scale have ended very disastrously to the experimenters. Elsewhere in this issue Mr. F. C. Dodge relates the experiences of the farmers of the State of Missouri who are still suffering from a dual purpose craze that started many years ago.

The government will be well advised to be cautious in advocating the dual purpose animal until they have proved thoroughly to their own satisfaction that these animals are more profitable than those of special breeding. Particularly should the department officials be guarded in such statements as will lead dairy farmers to believe that they can improve their herds by the use of dual purpose sires. They can't, as hundreds of farmers have proved to their sorrow.

### WHY THEY DON'T SHOW

How many of the showmen who were prominent 15 to 20 years ago are seen in the show ring to-day? How many who are not in the show ring, but still breeding live stock, have the stock that would win did they come back?

We recently had a talk with a one-time well-known showman, but who is no longer seen in the show ring.

He admitted that he was out of it. We asked him why.

"I sold too much," was the prompt response. "Just when I was at the height of my success as a breeder of show yard winners, men with money who wanted to get where I was by the quick method that money makes possible, came along with tempting offers. I yielded. I sold animals that I could not replace. In some cases the offers were so great that I sold out whole families. Then suddenly I awoke to the fact that I could no longer compete at our leading fairs."

This is a story that many old-time showmen could now tell. For the sake of the immediate dollar they sacrificed their future. We know that the temptation is great, and while it may oft-times be advisable to accept a high figure for a noted animal when one has progeny of that animal to carry on the blood, we doubt if it is ever advisable to sell all of one strain that we have spent years in developing.

### CHEAP MONEY

Of the many and various methods suggested to stem the rush of population from the country citywards, cheaper money probably has as many advocates as any. Many who are working earnestly and wholeheartedly for the good of agriculture believe that if farmers could obtain a capital at three or four per cent. interest, more would be content to remain on their farms and improve them. They contend that many young men would be more willing to stay on the land than is now the case, with the money they must borrow costing them six, seven or even a greater percentage.

In a few countries, among which are numbered New Zealand, Australia and several states of the United States, the government is endeavoring to solve the problem of cheaper money for the farmer by loaning money at a low rate of interest to bona fide farmers. In other countries the farmers themselves are securing cheaper money through their cooperative credit banks. In a recent issue of The Northwest Farmer, a discussion of these various methods of securing cheaper money is closed with the following pertinent paragraph:

"Then of course there is the inevitable outcome that cheap money will cause a rise in values of land and may even cause a land boom so that should we get cheap money we should also adjust our taxing system to discourage or even boldly prevent ownership of land without working it."

How true it is that cheaper money can not be of permanent benefit to the farming population unless accompanied by a changed system of taxation, is well illustrated in the case of Denmark. In Denmark the government supplies prospective farmers with money at three per cent. up to almost the entire value of the farm they intend to purchase. Thousands of young men have availed themselves of this liberal offer. The result has been exactly what one should expect.

Land that was formerly worth \$100 an acre when money was six per cent., gradually climbed up to \$300 an acre. And how much better off is a farmer borrowing money at three per cent. to buy two hundred dollar land, than borrowing money at six per cent to buy one hundred dollar land.

But it is not the cost of money that determines the selling price of land. That is determined by supply and demand. Were the burden of taxation placed on land values, instead of being largely born by improvements as is now the case, land could not profitably be held out of the use, law of supply and demand would work naturally, and cheap money would be of advantage to the farmer. Hence it is that the farmer's organizations of Canada lay greater stress on a change in our system of taxation than they do on the pressing of cheap money.

### OWNED BY HIS FARM

He is a successful man, so his neighbors say. Twenty-five years ago he bought a little farm of 15 acres in the Niagara District. He bought his small farm for very little. The possibilities of the district were not then realized. He had no capital with which to start. To-day he has \$65,000 over and above his farm, which is valued at \$20,000 more.

The subject of this little sketch has not taken a holiday for 15 years. The farm has received his undivided attention winter and summer. He has been so busy that he has never had time to become really acquainted with his children. He has forgotten the pretty speeches that used to bring the blush to the cheek of his wife and the happy light to her eye. The beauties of nature no longer appeal to him. Nothing has value save that which will bring him gold. He is happy only when he is accumulating.

Is that how a man succeeds? We think not. But how many there are who would condemn him who are slowly and surely going the same way. How many farmers there are who have sunk all of the high ideals with which they started their married life in an effort to reach "Easy Street." It is well to strive to better ourselves eventually, but we all must be careful lest the financial ideal supersede all others.

Any system of taxation is a means to successful permanent agriculture.

Prosperous and contented agricultural people are necessary to the best interests of the whole country. Successful agriculture makes business possible.

Ends should be sought to put the farmer under conditions that will make of him an independent efficient citizen and business man. He cannot be such so long as he may continue to be a renter under any system of tenancy, hence means should be worked out whereby he may most easily acquire enough land for a comfortable home.

## THE HYDRO ELE

THE Ontario Hydro Commission are giving the people of Ontario a choice power from Niagara. Unfortunately a bungling commission. I believe that they do not know where they began operating plans were formulated about blind folding. As they were proceeding cheap power their actions are no doubt their motto. As they were proceeding whole, are, to say if not satisfying.

BONTING The towns and cities of Ontario are being Electric Bell from Niagara, including the Hamilton, London numerous towns are being built; alas! at the expense of their own Electric Bell. It is the province bonus along the transmission was a big thing from the Province of Ontario. The equivalent of about 24 hours in round. The result of the favored town ment power at the expense of the other Ontario to ord. are losing the and their population. The towns not favored cannot compete.

## AD. TA

XC  
TO OUR READER

Your farm needs chinery.

Nothing but the best is for you.

The Best is really the end.

If there is some machinery you need—

mine, a corn-cutter, or a windmill—would you see about it while it is in your mind?

Or possibly it is the home! Is it a cleaner, a furnace, a machine? Why not different makes at the time then better get the kind that meets your needs.

Our Canadian Nation to you the opportunity carefully and critically the most efficient make best farm home and the that brains and skill he

We specially invite display of those firms' tisements are to be Special Exhibition No. 28. Farm and strict censorship on i columns and excludes a questionable chara

advertising in this paper the goods exactly as there will be no firms to Industrial more we patronage than those of Farm and Dairy.—

"A Paper Farmers

**THE HYDRO ELECTRIC COMMISSION AND THE RESULTS OF ITS LABORS**

J. A. Macdonald, Carleton Co., Ont.

THE Ontario Hydro-Electric Commission are well intentioned and earnest in their efforts to give the people of Ontario, though so far it is only the manufacturers, cheap power from the great source at Niagara. Unfortunately, they have made a bungling job of it.

I believe that the commission did not know where they were at, when they began operations. No definite plans were formulated. They went along blind folded, feeling their way. As they were pioneers in this work of providing cheap power to the people, their actions are probably excusable. No doubt they meant well. The results, however, of their efforts, as a whole, are, to say the least, painful if not saddening.

**BONUSING THE FEW**

The towns and cities in the Hydro-Electric belt from Toronto to Niagara, including the cities of Toronto, Hamilton, London, Niagara and numerous towns are benefiting hugely, but alas! at the expense of the agricultural towns outside of the Electric belt. It is, as it were, that the province bonused those towns along the transmission line—and that was a big bonus. These towns received from the Provincial Government, the equivalent of thousands of dollars' bonus 24 hours in the day the year round. The result of this bonusing of the favored towns with government power at actual cost, is, that the other Ontario towns, not so favored, are losing their manufacturers and their population.

The towns not favored (not bonused) cannot compete with the "Bon-

used' towns in manufactured goods. Hence, they have to get out. Numerous towns have already lost 25 to 50 per cent of their population, and this will continue so long as one favored section is enjoying government power at cost. Why the citizens of this province, the empire province of Canada, should pay up a huge sum of dollars—some five or more million towns, at the expense of the others not so favored, is the strangest piece of legislation ever attempted by any administration.

It would be interesting to figure what part of the cost of that five million dollar transmission line was paid by the farmers of Ontario for the benefit of Toronto, Hamilton, London and a few other towns. Whose is the cheap power the farmer was to get?

**Care of the Lamb Crop**

(Continued from page 6.)

first to November fifteenth, and three cents a day for two and a half winter months or a total of \$2.70 a head, leaving a net balance of \$2.70 a head. At the same time we have not allowed anything for the fertilizer which is so valuable.

I might say the finishing proposition could not be considered a failure if the fertilizer was all that was received, as the great importance of keeping more stock and keeping them better is something like the American's corn proverb: 'More stock, more fertilizer, more crop.' Or in other words we cannot continue to prosper without this fertilizer.

I don't think anyone can accuse me of painting this picture over-bright. I don't think 10 months a month an unusual gain; indeed I think it is rather small. I am sure many feeders could quote much larger gains. An increase in price of 2½ cents a pound is not nearly up to what has been received during the past two winters.

**START LIGHT WITH GRAIN**

If anyone who intends starting into winter lamb feeding should take my figures as a guide. I would say it would not be advisable to start in feeding grain as heavy as the quantities I have mentioned. Some lambs would not take their share, and other heavier ones would clean it up and you would be almost sure to have some sick lambs. Feeding it gradually should commence very lightly. Gradually increase until you are feeding considerably more than I have mentioned, but which would just about average the amount I have given for the whole feeding period.

Whether lambs shorn in the fall will give better returns than with the wool on. I know if I had to feed and keep them in rather close, warm quarters I would prefer to have them shorn. Lambs or sheep will not do well where this is not sufficient fresh air to keep their wool dry. They also require plenty of exercise, to keep them healthy. In addition they should have salt and sulphur before them at all times, and fresh water to drink.

The sheep's water bucket should be well rinsed out every day. The sheep is one of the most dirty animals we have and would almost starve before it would eat solid food or drink polluted water. In feeding lambs, as in most all other branches of farming, it's the little things that count.

I am sending you \$2 in payment for two new subscriptions to Farm and Dairy. Farm and Dairy is the best dairy worth the bit of land and is pressed full of good sound logic. Success to you.—L. Dickson, Murrayville, B. C.

**DE LAVAL CREAM SEPARATORS**

**THE BEST SUMMER FARM INVESTMENT**

When dairy production is largest waste is greatest and quality poorest without a separator.

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

**BUILD CONCRETE SILOS**

Any size with the London Adjustable Silo Curbs. Send for complete line of Concrete Machinery. Tell us your requirements. **LONDON Concrete Machinery Co., Limited** Dept. B, London, Ont. Largest manufacturers of concrete machinery in Canada.

**GET THIS CATALOGUE**

SAVE MONEY

**The Best Ever**

issued: Guns, Rifles, Ammunition, Fishing, Tackle, Baseball, Golf, Tennis, Lacrosse, Camping Outfits, all Summer and Winter Sports. We want **Every Man** who Hunts, Fishes, or plays any Outdoor Game to get our large free Catalogue. Prices right, satisfaction guaranteed. Immense stock, prompt shipment

You save money by getting Catalogue to-day.

**T.W. Boyd & Son,**  
27 Notre Dame St. West, Montreal

**COCKSHUTT KANGAROO PLOWS**



This is an ideal plow for easy handling and swift work. Onloamy soil, you can plow full width, and then readjust the frame for narrow plowing in clay or hard-baked land. Levers are easy to reach.

**THIS famous Gang Plow** has Cockshutt patents on several unique features. The frame is adjustable. It will plow wide or narrow. It has strength and light draft.

Send for our Catalogue showing the "Kangaroo" family of gang plows. For each type of land and operator, there is a Cockshutt plow specially adapted to individual requirements. The "Kangaroo" styles are famous practical plows, made to handle the plowing problem promptly.

Any "Kangaroo Gang" is a handy plow of its class. The walking gang illustrated above is an exceptional favorite, because it is easy to guide, raise and adjust, while in motion. The operator has little difficulty in swinging it around obstructions. The light draft, wide furrow adjustment, and quick-change feature, mean quick plowing. See nearest agent for details.

**COCKSHUTT PLOW COMPANY LIMITED**  
BRANTFORD, WINNIPEG

Sold in Eastern Ontario, Quebec and Maritime Provinces by  
**THE FROST & WOOD COMPANY LIMITED**  
Montreal SMITHS FALLS St. John, N.B.

**AD. TALK**

XCV

**TO OUR READERS—**

Your farm needs the Best Machinery.

Nothing but the Best should Satisfy you.

The Best is really the cheapest in the end.

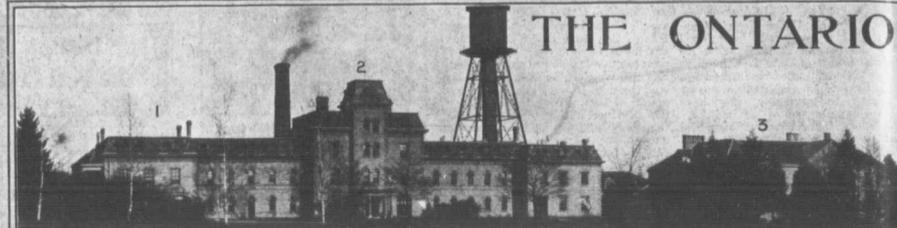
If there is some piece of new machinery you need—a gasoline engine, a corn-cutter, a potato zigger, or a windmill—would it not be well to see about it while at the Exhibition?

Or possibly it is something for the home! Is it a piano, a vacuum cleaner, a furnace, or a washing machine? Why not examine all the different makes at the Fair? You are then better equipped to select the kind that meets your requirements.

Our Canadian National presents to you the opportunity of examining carefully and critically, side by side, the most efficient machinery and the best farm home and barn equipment that brains and skill have produced.

We specially invite you to see the display of those firms whose advertisements are to be found in our Special Exhibition Number of August 28. Farm and Dairy gives a strict censorship on its advertising columns and excludes everything of a questionable character. Firms advertising in this paper must have the goods exactly as represented. There will be no firms at the Toronto Industrial more worthy of your patronage than those advertising in Farm and Dairy,—

"A Paper Farmers Swear By"



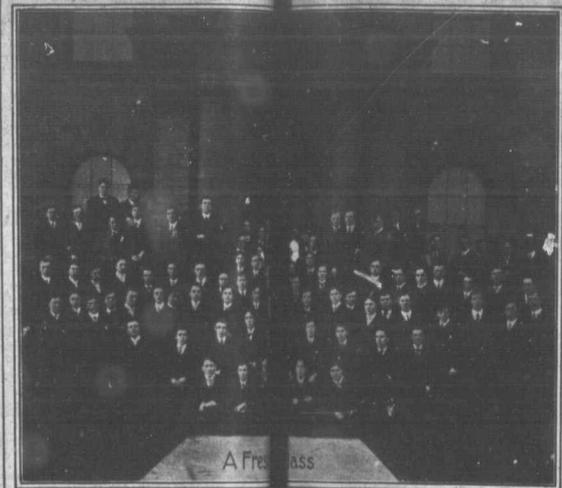
# THE ONTARIO AGRICULTURAL COLLEGE GUELPH, CANADA.

"CAMPUS"

### COURSES

**A Two Years' Course** in General Agriculture specially designed for Young Men who intend to follow Practical Farming.

**A Four Years' Course** leading to the Degree of B.S.A., conferred by Toronto University.



A Freshman Class



Students at Field Work

Send to-day for the 1913-14 Calendar, which gives in detail information regarding curriculum, accommodation, expenses, etc. It will be mailed free on application to

G. C. CREELMAN, B.S.A., LL.D., President

O. A. College, Guelph, Ont.

WILL RE-OPEN SEPTEMBER 19th, 1913



"THE EXPERIMENTAL PLOTS"

G.C. CREELMAN, B.S.A. LL.D. PRESIDENT.



"THE EXPERIMENTAL PLOTS"



Looks Like Home"

A/hany, 7 rooms, \$1,755.60.

A pretty little home always becomes more home-like than an ordinary house—and it need not cost more. We can show you how to build a cozy, attractive home (not a sectional, portable house, designed by clever architects, without a cent of expense to you for designs. And at a price fully 30% less than building in the ordinary way.

The plan is so simple that it is no wonder hundreds of homes are now being erected the Sovereign way. We apply the modern sky-scraper construction idea to home-building.

All expensive finishing is done at our mills by time-saving machinery. The material is cut in exact lengths to fit into place.

Everything needed to complete the house is supplied by us, even to the nails and paint. Everything except the masonry.

With a little inexpensive assistance anyone can erect a beautiful home, warm and substantial, on the modern plan.



**SOVEREIGN**  
Readi-cut  
Not Portable  
HOMES

4 rooms, \$395.00.



YOU should have a copy of our Catalogue showing photographs of a great variety of homes built on the Sovereign plan. Floor plans and full information, price—everything to help you in choosing a home you will be proud of.

**Sovereign Construction Co. LIMITED**  
1314 C.P.R. Building, TORONTO



C  
X  
L

S  
T  
U  
M  
P  
I  
N  
G  
P  
O  
W  
D  
E  
R

**Stumps Minimize Your Profits**

How much of your Fertile land is occupied and wasted by Stumps and Boulders. Why not blast them with

**C X L STUMPING POWDER**

The cheapest, quickest, best method known to-day for clearing land.

Write at once for Free Booklet

**CANADIAN EXPLOSIVES LIMITED**

MONTREAL, QUE.



VICTORIA, B. C.

**Cheese Department**

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

**The Greatest Need**

J. A. Ruddick, Dominion Dairy Commissioner.

I have no hesitation in saying that a clearer conception on the part of the patrons of the cheese factories as to the extent to which their returns and profits are affected in dollars and cents by the quality of the cheese and its condition when it is offered to the consumer, is the one thing which would bring about a greater and more rapid improvement than any other. If the milk producers could only be made to realize that their interest in the product does not cease when they deliver their milk at the factory, many of the improvements that have been advocated for years would be brought about without delay. Some of these reforms may be summarized as follows:

1. All cheeses which would be provided with cool curing rooms. Having due consideration for the future of the industry, no cheese factories would be permitted by the patrons to handle their milk without such equipment.

2. No cheese would be shipped until it was properly ripened. The increased demand which would follow would raise the price of cheese very materially.

3. A higher rate would be paid for manufacturing to enable the owner of the factory to provide first class equipment and to pay reasonable wages to the cheesemaker. The low rate for manufacturing makes it impossible for manufacturers to keep up with the times in providing better buildings and equipment. We are still in the makeshift stage in that respect to a very large extent. The actual cost of manufacturing cheese has advanced very materially in the last few years without a corresponding increase in the rate charged. Patrons should be willing to pay a reasonable rate and then demand the best possible service in return. Many farmers send their milk to certain factories for the sake of saving an eighth or a quarter of a cent a pound in manufacturing charges and lose twice that much through the cheap manner in which the business is conducted.

**The Season in the East**

G. G. Pablon, Chief Dairy Instructor, Kingston, Ont.

The total make of cheese in Eastern Ontario up to July 31st, is about 40,000 boxes short of the make for the same period last season and reports I am now receiving from all the factories show that the average daily make is about one cheese short a day in each factory. As there are 882 cheese factories in operation in Eastern Ontario this year, the shortage in make totals over 800 cheese a day. If this rate of decrease continues for the balance of the season, and we firmly believe it will, there will be a shortage of at least 70,000 boxes added to the present shortage of 40,000 boxes making a total shortage for the season of 110,000 boxes. This is not an estimate but a statement of actual conditions as they exist up to date and the shortage may be due to one or more factors. In the first place there are 13 less factories in operation in Eastern Ontario this year. More butter has been and is being manufactured. Increased quantities of milk and cream are being shipped to the cities.

The actual total production of milk is not very much short of last season up to date, but it has been used in different channels has been responsible for the marked shortage in the cheese output. A shortage of rain has been and is being felt over the entire district and we are hardly justified in even hoping for as big a flow as occurred last year when, owing to the ideal climatic conditions, we had an exceptional fall in this respect.

The quality of the cheese has averaged up well. The early make was of a particularly high standard, but during the past month the effects of the hot weather are plainly noticeable. The same conditions come every year and the results produced are evidenced in the defects in the cheese. The lack of facilities for curing the milk at the farms or the failure to make use of proper facilities, and lack of suitable curing rooms at the cheese factories are the big sources of these defects which cost an annual loss of many thousands of dollars to the dairy farmers of the province.

**Creamery Department**

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

**Creamery Activity**

Frank Herms, Chief Dairy Instructor for Western Ontario.

Several new creameries have been built in Western Ontario this year, and although in 1912 about 13,000 lbs. of butter were produced (which is an increase of 7,900,000 lbs. since 1907) this will likely be exceeded in 1913 as nearly every creamery has up to the time of writing turned out more butter than for the same period last year.

High prices have encouraged an increased output, and stocks are at present accumulating; therefore, the consequent lower prices, if maintained, may affect production for the balance of the season. There appears to be plenty of feed in most sections; corn and roots are above the average, while the after growth of clover is excellent. Dry weather has, however, affected the pastures, and although recent rains will freshen things up the flow of milk is falling off considerably.

The lower price of butter at the present time should bring about greater consumption, which may dispose of surplus stocks and perhaps increase or at least maintain present prices.

The sanitary condition of the creameries is improving especially in connection with the disposal of wash water. A few more creameries have put in septic tanks built of cement, about 16 feet long, five feet deep and five feet wide, with two partitions. In most cases the water from the last compartment is conveyed through tile laid in a filter bed of natural soil, or if the soil is clay or not porous a filter bed is constructed of sand and gravel. The small amount of water coming from the filter bed is conveyed in tile drains and so far is working well.

A large quantity of cream is being shipped from different sections to the large cities for ice cream and butter making purposes. The majority of the patrons are increasing their herds, which accounts to some extent for the increased output, while no doubt a considerable portion of cream which in former years was made into dairy butter is now sent to the creamery.

On the whole 1913 bids fair to be a successful season for the creamery industry.

**CALF RE...**

will profitable...  
buttermilk from...

is always been...  
problem. The...  
small way is to...  
all it as a form...  
can be profitably...  
as there the...  
creamery is a...  
Anshen say is...  
it need to hogs...  
directly from the...  
creamery or to...  
all it to farmers...  
or that purpose...  
Generally when...  
one is selling it...  
to farmers there...  
it'll be times when...  
is not able to...  
buttermilk because...  
of the season, do...  
not take it, and...  
it is allowed to...  
rain the hogs must...  
have an opportunity...  
to have the...  
its atmosphere.

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

For some years I have...  
buttermilk fresh...  
from a good feed...  
have been discouraged...  
if farmers of my acqu...  
thought it could not be...

**CALF REARING AS A CREAMERY SIDE LINE**

Wm. Newman, Victoria Co., Ont.

will profitable handling of the buttermilk from our creameries has always been more or less of a problem. The usual way is to sell it as a form of drink which can be sold profitably in some where the creamery is a town or city. Another way is to feed it to hogs directly from the creamery or to sell it to farmers for that purpose. Generally when one is selling it to farmers there will be times when the creamery is not able to hold all the buttermilk because the farmers, in a busy season, do not take it away readily, and it is allowed to go to waste. Again the hogs must have pens, and it is frequently annoying to the creamery to have the flavor of hogs in its atmosphere.



**In Pastures Green**

For some years I have thought that buttermilk fresh from the churn would be a good feed for calves. I have been discouraged, however, by the farmers of my acquaintance who thought it could not be so used. The

not four weeks old as they are too young to stand the railroad journey well.

This gathering in April seemed to be necessary in order to get the supply, but it is hard to manage the buttermilk from the creamery is limited, while the calves' appetites bawled is very vigorous. I used what milk I had and increased its quantity by a porridge made of low grade flour, oil cake and flax seed meal.

They were all kept in the stable. The first weeks of April were very



**A Market for the Buttermilk By-Product of an Ontario Creamery**

In the adjoining article, Mr. Wm. Newman, Victoria Co., Ont., tells how he has solved the problem of profitably disposing of the buttermilk from his creamery. This summer Mr. Newman is feeding over 100 calves, some of which are here seen at his creamery in Victoria Co., Ont.

calves gradually grew so strong with me that in June, 1912, to give my idea a trial, I bought six calves about eight weeks old. These I placed on good grass. We feed buttermilk in which flax seed meal was used, much the same as farmers now use it with skim milk. We also allowed the calves to eat whole oats. They did not die, were never even sick and grew until at New Year's they weighed 450 to 500 pounds each, and were very healthy.

To further satisfy my curiosity I bought a young calf in August that was only two weeks old. It was fed similarly to the other six, the only difference being in its age in starting on buttermilk. This heifer grew just as well and seemed to enjoy life as well as any. I realized that my calves were paying in money at a very profitable rate, and I determined to feed all my buttermilk during 1913 to calves, doing away with hogs altogether. Of course you will understand we have land enough to give plenty of grass to our calves in connection with each creamery.



**"We All Like Buttermilk"**

In April I began gathering up my calves going for them to the Counties of Leeds, Grenville and Dundas,

warm, and we left all the doors and windows open. Then it suddenly turned cold with a stiff wind blowing. Not realizing the danger we did not guard against it, thinking, I suppose, that fresh air was a good thing. But the sudden change hurt our calves and several took pneumonia. We lost the weaker one and also some very fine calves from this cause.

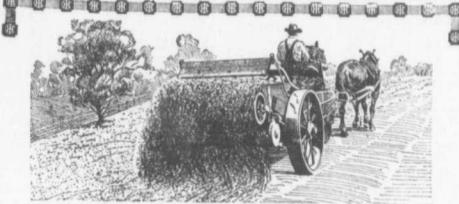
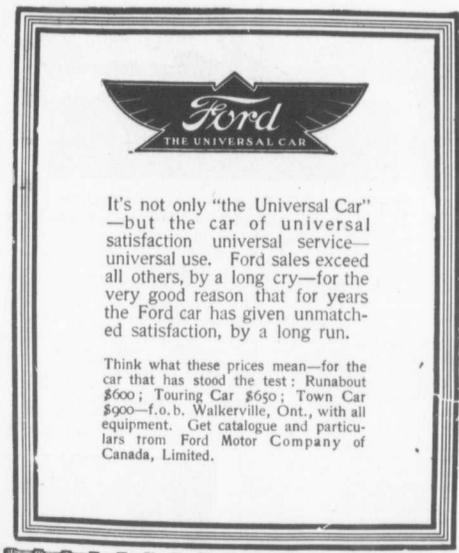
While in the stable we fed all the calves separately. By the middle of May we put them on grass. Our milk now became plentiful and we immediately began to feed them in troughs. We divided the calves in lots of from 25 to 35 calves, giving each lot about 12 acres of meadow. We then, in May, had 165 calves. Now we have 164, having lost one during the summer. Since that time we have not had one sick calf, and on August 28th I weighed what I picked out as an average of the herd which weighed 320 lbs. One of the best weighed 320 lbs. We feed 118 calves the milk from our daily average yield of 1,200 lbs. of butter in this is soaked about 30 pounds of oil cake and about 10 pounds of flax seed meal. One hundred calves would be better on this

(Continued on page 28)



It's not only "the Universal Car"—but the car of universal satisfaction universal service—universal use. Ford sales exceed all others, by a long cry—for the very good reason that for years the Ford car has given unmatched satisfaction, by a long run.

Think what these prices mean—for the car that has stood the test: Runabout \$600; Touring Car \$650; Town Car \$900—f.o.b. Walkerville, Ont., with all equipment. Get catalogue and particulars from Ford Motor Company of Canada, Limited.



**Seven Solid Reasons**

SEVEN solid reasons why each farm needs a manure spreader are these, in the words of a farmer who has devoted much time to correct soil feeding. 1. It saves disagreeable and hard work. 2. It pulverizes and mixes the manure mass. 3. It distributes manure evenly over the field, insuring a good even stand of grain. 4. It prevents loss of nitrogen through fermentation or leaching in the pile when manure is hauled directly from the stable. 5. With it manure can be put on plowed ground in winter to be disked as soon as the ground is fit in spring. 6. It will put manure on meadows as a moisture-preserving mulch and to furnish the grass roots with the liberated plant food. 7. Indirectly, the ease with which it can be handled encourages the owner to care for the manure and place it where it will do most good instead of dumping it anywhere for lack of time or inclination.

**I H C Manure Spreaders**

Deering and McCormick

will do all these things for their owners. They will do them well and satisfactorily. Choose the right machine for your work and conditions from the complete I H C line. You will find them all styles and sizes, high and low, endless apron or reverse.

I H C manure spreaders are exceedingly durable, strong, correctly built to stand all conditions and all strains they may meet. Each feature has its purpose. Uphill or down, or cutting corners, they spread all kinds of manure evenly, in a light or heavy coat at the choice of the driver. The beater drive is strong and simple, beater teeth are square and chisel pointed to pulverize the manure, and the large diameter of the beater prevents winding. The wide-rimmed rear wheels, carrying a large percentage of the load, insure ample tractive power.

But see all these things yourself at your local agent's. He will explain each one, and many more we have not space to mention here. The agent has catalogue for you, or, write the

**International Harvester Company of Canada, Ltd**

EASTERN BRANCH HOUSES

At Hamilton, Ont.; London, Ont.; Montreal, P. Q.; Ottawa, Ont.; St. John, N. B.; Quebec, P. Q.





THE secret of life is not to do what one likes, but to try to like that which one has to do, and one does like it—in time.—*Dinah Mulock Craik.*

## Conquering the Mortgage

(New England Homestead)  
By MARY ALDEN CARVER

THE last stick of cordwood was piled. Albert's contract had been handled so well from start to finish that the long tier of wood before him was an emblem of his honor. The boy sat upon an old log with his ax at his feet and contemplated the visible evidence of his endeavors. "My little college," he had called the woodpile as he watched it grow.

For the wood contract had symbolized his ambition to attempt a course at an agricultural college during the winter term.

"Albert's queer," the neighboring farmers all said. "Can't see why he don't use his money on the old place instead of carrying it away to be squandered in the city!" For Albert had already made his way through the village high school.

"Larmin's all right in its place, Bert," remarked Deacon Cooper, as he paid the young man for cutting the wood. "Larmin's all right, but you've got a plenty ready. An' the of 'farm's needin' work. It's in pretty bad shape, boy! It needs work instead of brains."

"I intend to give it all I can of both," Albert answered cheerfully as he trudged off toward home—"The Old Brooks Place," the neighbors called it familiarly.

He reached home just in time for the evening meal. While the family were gathered about the supper table Albert proudly displayed his money and eagerly talked of his plans for the winter. Herman Brooks, Albert's father, whose face had worn a hunted look all the fall, watched his son proudly. "That's a whole lot of money for a boy to have," he remarked as he arose from the table.

As he passed from the dining room Albert realized that his father was growing older and whiter. This thought haunted him when he was alone in his room counting and recounting his money. He could not forget a conversation he had overheard a few days before—a conversation between his parents.

"—Albert's money," his mother suggested. "That would meet the mortgage nicely this time, and you could—"

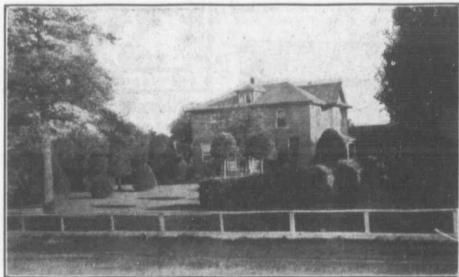
"No," interrupted the father. "Albert's wages are all his. Of course, he is a minor, but he's earned that money and must spend it as he wishes."

"But we'd pay him back," urged the mother.

But Herman Brooks was obstinate in his decision. "The boy worked like a slave on the farm all summer," he said. "He never had any rest, any holidays nor a cent of pay, and he never complained. I haven't had the chance to do for him what I should have done, and if he wants to do something for himself we must not hinder him."

Then Albert had slipped quietly away and knew as he went that his

parents were striving to think of means for satisfying the mortgage on the farm. They had thought earlier in the season that the corn crop would solve the mortgage problem, but an unexpected frost had destroyed that hope. Albert knew what a long, bitter struggle the mortgage had occasioned. He knew of the lit-



A Home that Embodies all that's Best in Country Life

A city home unadorned with trees does not surprise us. We expect it. A country home standing bare and alone is most unattractive. Mr. E. K. McConnell, Norfolk Co., Ont., has taken advantage of the opportunities that the country affords and has made his home truly beautiful.

privations and economies resulting from it.

"There are the horses and cows," he thought impatiently. "Let them sell off some of the stock!" This thought he dismissed as unnecessary, and Albert realized that it would be a disastrous makeshift. His mind reverted to the time when the mortgage was placed upon the old farm—when money was dire necessity because the mother was sick unto death and doctors and hospitals demanded ready cash. Medical science had triumphed and the mother remained with the family—so did the mortgage.

Albert placed his earnings carefully away in a bottom drawer of the dresser and crept into bed.

"I'm going to school," he muttered as his eyes closed wearily. "I'll learn how to take care of the old farm and make it pay, and then I'll buy back all their cattle for them. I'll—" but a vision of his father's patient, rapidly aging figure flitted across his mental vision and he fell into a troubled sleep. He was depressed for several days and finally went to his room one evening with a look of determination upon his face and hastened back downstairs and deposited his little hoard in his mother's lap.

"Take it for the mortgages," he whispered. "I'll soon be due, and I can wait until next winter for my schooling."

"Not yet, Albert," said his father, as he laid a faltering hand upon the

boy's shoulder. "Keep it awhile, for perhaps it won't be necessary. Maybe Morgan White will wait."

But Morgan White, the village banker, was impatient and insistent, so Albert relinquished his hard-earned college fund.

It was a crisp, sparkling day that Morgan White selected for his drive out to "the old Brooks place" to attend to the mortgage. His little son Donald accompanied him. The rubber-tired buggy rolled into the farmyard and the fleet-footed thoroughbred horses clamped their bits impatiently as the farmer and the banker exchanged words of greeting. Albert volunteered to attend to the team.

"Just give them a little hay," said the brusque business man, lighting a cigar and following Albert into the stable.

After Herman Brooks and his creditor had gone to the house, Albert devoted his attention to the banker's little son.

"Where are they?" asked the child eagerly.

"Upstairs in the hay," answered Albert. "Come on and I'll show them to you."

He assisted the little fellow up a dark, narrow stairway into the hay mow, and the boy was in an ecstasy

of joy. His face went white and he sat

backward.

"Donald—the baby!" he gasped. "He's up there in the hay!"

Clouds of smoke and sheets of flame were belching from the doors and windows. Several neighbors hastened to the scene by the way who were in horror to one another.

"White's baby's up there in the hay-mow!"

Sturdy farmers grabbed the fire-sized father as he dashed toward the seething furnace.

"'T would be madness," they grimly, as the fire increased in volume.

Albert stood apart with set teeth and rigid features. He took a hasty review of the situation. Then he dashed into an old store house as came forth a moment later with an immense blanket.

"Hold it," he exclaimed to the about him. "I'm going after the baby. I'll throw him from that window yonder. You'll have to catch him in this blanket. I'll—"

Some one interrupted him. "How—"

But before the interruption could be completed Albert was off on his self-appointed mission.

Some ropes in the barn doors, if they can," he shouted. "Stop the door and hold the fire back!"

He darted to a gigantic willow that grew beside the building. Up he clambered as nimbly as a monkey mounting a flight of stairs. Evermore watched him breathlessly. Well toward the top he selected one of the larger, firmer branches and crawled out upon it. The men cheered lustily as they realized his purpose. The limb grew close to a small wide barn. The end had been saved from under the eaves near the side of the limb. Albert reached the window and shattered the glass and oak. Then he grasped the window sill and drew his body through, clinging for a instant and then dropping lightly down upon the hay. The smoke was beginning to smudge up into the mow now, but Albert could plainly see the child he sought, sitting in a corner playing with the kittens.

"It's getting awful smoky here," the little fellow exclaimed, as he coughed and advanced toward Albert with a kitten under each arm. Before he realized what was happening, Albert had seized him and was clambering up the wooden framework toward the little window. The smoke was growing denser and the heat was maddening. Albert was almost blind, but he succeeded in fighting his way to the exit.

Outside the silence was intense as all riveted their eyes upon the tall window under the eaves. The barn was growing unbearable to the waiters. The entire barn began to heave like an immense soufflé.

A mighty shout arose. Albert and Donald appeared at the window as the men rushed forward with the blanket. Down dropped the little boy through the slender branch of the willow that had miraculously saved so that he alighted safely on the blanket.

"Where are my kittens?" he asked as he recovered his breath.

The willow seen to spring from the window toward the large willow branch. He missed his hold and crashed to the earth. The men for the second time hurried forward with the blanket, but they were too late. A crushed, motionless body lay at their feet. They dragged him back from the cruel heat of the burning structure just as the side of the building crumbled away and with a crash and a spout of a torrent of burning hay belched forth.

A telephone message had brought the village doctor to the scene. A thigh was found to be the

ward, and one of his arms was in the entire body crushed, but there were injuries and by the time the college began its winter term Albert was able to enter the students. For Mr. had seen fit to adjust the details of the

rest room for

Mr. E. Duncan, York

If the majority of myself, they have when in city, town

the case may be, on a shagion, for some place

wait in town for an hour or we have finished out

For instance, we may have the milliner to trim our

perhaps Molly, the dress-maker and we have to wait

about. These examples are a representative of many

to some place where we are perfectly at liberty to rest

Last summer, our Worcester rest room in our neighborhood for the exclusive

coming in from the college institute is a thriving institution, having over 50 members

to look into the matter



Fi  
No

...ared, and one of his arms was broken. The entire body was severely bruised, but there were no internal injuries and by the time the agricultural college began its winter semester Albert was able to enroll with the other students. For Morgan White had seen fit to adjust the mortgage and the details of the college expenses.

\*\*\*

### Rest Room for Shopping Day

Mrs. E. Duncan, York Co., Ont.  
If the majority of women are themselves, they have often wished when in city, town or village as the case may be, on a shopping expedition, for some place where they might go for a few minutes' rest. Oftentimes it is necessary for us to wait in town for an hour or two after we have finished our shopping. For instance, we may have to wait for the milliner to trim our new hat, perhaps Molly, the driver, has lost her shoe and we have to wait until she shoes. These examples are representative of many times when we have to "kill time" and would appreciate some place where we would feel perfectly at liberty to rest.

Last summer, our Women's Institute took up the question of securing a rest room in our neighboring town, for the exclusive use of women coming in from the country. As our institute is a thriving organization, having over 50 members on the roll, we decided to appoint a committee to look into the matter of securing

ing a room that would fill our requirements. The committee selected a good-sized room located in the central part of the town and we set to work to equip it as comfortably as our treasury would allow.

### FURNISHINGS PURCHASED

Our first purchase was linoleum for the floor and curtains for the windows. Then we invested in a table of convenient size and several comfortable chairs. Some of the members of the Institute donated a few good pictures to decorate the walls. We felt that this was all we could afford to invest in at that time as we had to keep up the rent of the room.

A novel idea suggested by one of the members to aid in keeping up this room was to place a penny box having a few spare coins could drop them in the box to show her appreciation of our rest room. This plan has worked very successfully.

We held our annual Garden Party recently and intend making some additional improvements to our rest room with some of the funds received from this social gathering. We plan to purchase a couple of couches and to supply a good magazine available.

Our rest room is kept neat and clean by the woman from whom we rented it and is open every day, except Sunday, for the use of country women. It has proved to be one of the best investments that our Institute has ever made.

\*\*\*\*\*  
**OUR HOME CLUB**  
\*\*\*\*\*

### The Law of Moses

Next to the truths expounded by Jesus Himself in the New Testament and justice than are the sayings and rulings of the wise men who lived, taught and ruled in the early days of the Hebrew nation. Theirs was truly from God. Jesus, Himself, never missed an opportunity of recalling to the minds of his listeners the great truths that they taught.

Of the many law givers of Israel Moses is the peer of them all. Many of the laws that govern us to-day had their origin in the Mosaic law. Some of the perceptions of Moses were so far in advance of his time that we have not yet reached such a stage of development that we are ready for their adoption, such is the wisdom and foresight of one who goes directly to God for his inspiration.

Perhaps in no other particular was the Lawgiver of the Hebrews more in advance of his own generation than in his views of land ownership. The Hebrew people were starting out towards a new land, a land that was to be wholly theirs. It was generally understood that this new land was to be divided among the tribes in proportion to their numbers and that each family in each tribe was to have an equal portion for their use. All

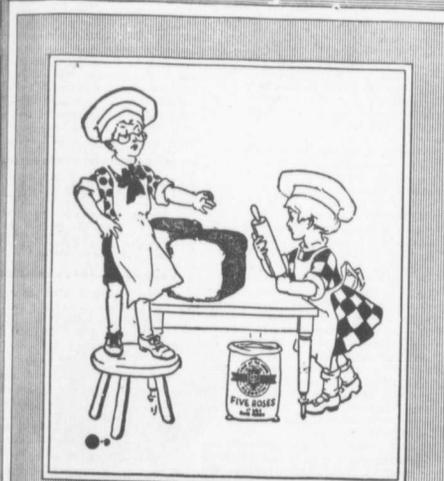
were to be equal. Moses realized that a people divided in two camps, the rich and the poor, could not be a strong people and that in the long run such a race would disappear in so far as moral, mental, spiritual or political superiority was concerned.

The equal division of the land would be a guard against factions at first. But Moses knew that unless checks were applied the land would ultimately become the possession of the few who had greatest business ability, or those who were most unscrupulous. He clearly foresaw that such a centralization of land ownership would inevitably lead to a large portion of the landless element of the population being reduced to the position of serfs. Accordingly he made a provision that at the end of every fifty years the land should be returned to the original owners.

The Jews failed to fulfil the latter provision of the law. The evils that befell the people because of their disobedience is one of the themes of almost all the Jewish prophets. We have not yet fulfilled that provision of the law of Moses. We do not yet recognize the right of every child born into the world to an equal share in this world's heritage. Next week we will start to discuss the application of the Mosaic law, that Jesus endorsed, to present day conditions.—I.H.N.

\*\*\*

When washing black ebony combs, trays, etc., to prevent from getting rusty, wash with a little olive oil on them after washing.



**"What's flour gluten, Bud?"**  
**"It's what makes your dough rise, Rose."**  
**"Yes"—she encouraged.**  
**Added Bud very sagely:**  
**"Makes it rise in the mixer and expand**  
**"in the oven. It's the elastic part of**  
**"flour—absorbs all the water and milk**  
**"—and things."**  
**Rose grew interested.**  
**"FIVE ROSES, said Bud, is exceedingly rich**  
**"in gluten. I s'pose because it's all made**  
**"from Manitoba wheat. Takes up a lot**  
**"more water — makes those fat loaves —**  
**"lasts longer too."**  
**"Saves money, doesn't it?" asked Rose.**  
**Bud is a big voice:**  
**"The fat loaf makes the fat pocketbook."**  
**Use FIVE ROSES always.**  
**And Rose said YES.**

# Five Roses Flour

## Not Bleached



## Not Blended





Lost and Found  
Polly Dane

"Mew! mew! mew!" that was what the boys and girls heard as they went slipping and sliding to school one winter morning of spring. Up the road before them came a small gray and white kitten, stopping now and then as if afraid to go farther.

"Hullo, kit!" cried Peter Eastman, as he and George Wilson raced by. His loud though friendly call frightened the little creature yet more, and she started toward a nearby open lot; but ice-covered snow still lay on the grass, and her smooth paws slipped back to the pavement. On rushed the troop of merry children as if young soldiers, gay in bright red tam-o'-shankers, and armed with slinklike bootstraps with which to charge a foe.

"Ahs, for poor kit! She had been so happy at her birthplace, Mrs. Pring's. Everybody had been ready to pet her and play her on to soft cushions. She could have all the milk she wanted, and nice bits of beefsteak besides. When Mamma Puss was sleeping, Harry Pring was only too glad of a chance to draw his gray cloth mouse across the floor until Kitty rolled over with delight. But now all happiness was gone. One night she had wandered off to play with other cats. They had teased her, some dogs had chased her, she had grown sleepy, but had found no warm resting place. In the morning she had wanted her breakfast, but had not known where to get it. Her beating heart had longed for home, but no home had appeared. She was now scared even by her own slender shadow, and her little cold feet were tired to run. Bed, breakfast, home, love, trust, courage, were lost, and she herself. All she could do was to slip along fearfully and cry, "Mew! mew! mew!"

The Allen girls hurried past; they were to recite a lesson before school began. Tommy Biggs and Harold Colson tried to count down the few dry strips on the roadside, while John Bennett and Wilkie White with difficulty skated toward the bottom of the hill. Then Angus McDuffee caught sight of the little wanderer.

"Just as Chummy as he can be!" Master Blake Osawell, Elgin Co., Ont., thinks his dog is just about the finest chum imaginable.

He stooped and gently stroked the ruffled fur. O, how good his warm kindly hand felt on Kitty Pring's back! There was somebody after all, then, to notice a trembling stranger. A moment later Walter Starr also bent with words of cheer above the shivering wail. O, joy! two good boys still lived-in this cold, lonesome world. But it was almost nine o'clock, and the two hastened away, leaving Kitty Pring once again to say, "Mew!" Just behind, though, was Eleanor Dow, and she indeed pointed the forlorn runaway. For the first time since she strayed from Mrs. Pring's Kitty was lifted by gentle hands. She did not care if it was the school yard

to which she was being carried; she only felt that earth still held for her the possibility of warmth and kindness. Eleanor herself did not know what to wish for the furry pet, and she was not obliged to decide for who she should run toward her but Harry Pring, exclaiming: "Where did you find my kitten? She's been gone since last evening!"

Quickly the little puss was transferred to Harry's back, where she was used to ride around the house. When a heavy cart rumbled near, the boy tucked her into his arms where she would be safe and warm. Then he begged Eleanor to excuse him to his

that have never offered countering influences.

MISTAKEN IDEAS

It has been thought well to make teachers, stenographers or nurses of the brightest girls and to keep the slower ones at home to be the family drudge all day. Later on, when we do to correct this mistake. Now, however, the need for accomplished home-makers is being recognized and also the need of an education that will enable girls to take an intelligent interest in the managing of a household. For this purpose schools have been erected and equipped and here they are doing excellent work in giving girls a good, practical and theoretical education along all lines pertaining to housekeeping. I have received great benefit from one such school; namely, the Macdonald Institute.

This school has courses planned to suit the various needs of all. For the girl who cannot be spared from home very long there are two three-months' courses, one of which is a science course which takes up such subjects as sanitation, laundry, horticulture, physiology and hygiene. The other is a domestic arts course which consists chiefly of sewing and laundry work. For the girls who could be spared from home for nine months a splendid course is given including English. Then for the girl who wishes to take two year courses are given. The one qualifies a girl to teach domestic science. The other, called the housekeepers' course, qualifies a girl to become an institutional housekeeper or dietitian.

SING ITS PRAISES

After taking a three-months' course at the Macdonald Institute I desired to return and take the full course. Sometime elapsed before I was able to do so and now that my desire has been fulfilled and I have graduated I have nothing but praise for the institution. I only regret the fact that such a small proportion of farmers' daughters are taking up this work, especially the longer courses.

When girls have been educated to take their places in the home they will not be attracted by shops or factories and the question, "How shall we keep our girls at home?" will be solved.

Women should be educated. Have them not, under God, the destinies of men and of nations in their power?

Tin Can Flower Pots.—Almost every housewife knows that flowers will grow well in tin cans. We are sometimes rather careless, however, to know just how to decorate these cans in order that they may be presentable on our table or in the window. A good idea is to go to the woods and bark a tree, and cut about the same diameter as the cans. Then cut the bark in lengths the height of the cans, and slip the cans into the round pieces of bark. This will make a rustic effect that goes well with the plants.

Cleaning White Shoes.—The girl who wears white canvas shoes may be glad to learn that soap and water and a good stiff brush will cleanse them equally as well as the whitewash dressing, which, after all, only serves to cover up the dirt that has lodged upon them, and which is bound to show through again as soon as they have been worn a few hours. Dust lodges on this dressing much more readily than upon the washed canvas. After a good scrubbing set the shoes in the sun to dry. The water does not shrink them any more than the dressing, and the shoes retain their shape after innumerable baths.

CRUMB'S IMPROVED WARRIOR STANCHION



WALLACE B. CRUMB, Inc., Forestville, Conn., U.S.A. Canadian agents: The Dominion Agency, Ltd., Toronto, Ont. Sole in British Empire: The Dominion Agency, Ltd., London, E.C.4, England.

SWEET MILK WANTED

Shippers required to send milk daily in eight gallon cans to Toronto. Good prices. Write for particulars to: S. PRICE & SONS, Limited TORONTO, ONT.

Equip Your Old Lamps with a Radia Lamp Burner

POWERFUL WHITE incandescent lighting, no candle power, burns on coal oil. No odor and does not burn the lamp any more than a common burner. Gives better light than gas or electricity of six ordinary one-tenth cent. five year old lamps. Each INEQUALED FOR FINE SEWING OR READING. Sent for four hours. I want one person in each locality to handle my RADIA burners. Samples can be sent by mail anywhere in Canada. Write to-day for descriptive circular. RADIA LAMP BURNERS WANTED

Arg. Gemach, Manufacturer, Sawyerville, P.Q.

CREAM WANTED

We pay the highest city prices for cream delivered sweet or sour at any express office. We supply cans and remit promptly, with an accurate receipt for each shipment. If 15 years' experience counts, ship your cream to the Toronto Creamery. IT PAYS.

If interested you should write us. Toronto Creamery Co., Ltd. TORONTO

SYNOPSIS OF DOMINION LAND REGULATIONS

Any person who is the sole head of a family or an individual who is not a family or a homestead quarter section of any Dominion land in Manitoba, Saskatchewan, or Alberta, or who is not a settler in person at the Dominion entry agency or his daughter, brother, sister, father, mother, brother, or sister of intending homesteader. Duties.—Six months' residence upon the cultivation of the land in each of three years. A homesteader may live within nine miles of the land in a farm of less than 80 acres solely owned and tilled by him or by his father, mother, or sister. In certain districts a homesteader in good standing may preempt a quarter-section alongside his homestead. Price \$10 per acre. Duties.—Must reside upon the homestead or pre-emption six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate every acre 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 fifty acres per acre. Duties.—Must reside six months in each of three years. Price fifty acres and erect a house worth \$200. W. W. COOBY, U.S.—Unauthorized publication of this advertisement will not be tolerated.

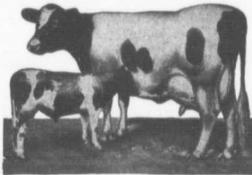
# How Do You Sell Your Surplus Stock?

Hiramfield, March 27, 1913

Farm and Dairy, Peterboro, Ont.

Dear Sirs.—My advertisement in Farm and Dairy is doing good work. When you have the right kind of cattle for sale, and advertise them in the right paper, you get results.

Yours truly,  
A. D. Foster & Sons.



Frankford, March 14, 1913.

Mr. Chas. C. Nixon, Peterboro, Ont.

Dear Mr. Nixon.—From the full page ad you placed in Farm and Dairy for me Monday 5th issue, financial results were very gratifying. It has proved to me that the cheapest way to advertise is to do plenty of it. A cheap buyer looks for a cheap salesman and finds him by his ads.

Yours very sincerely,  
F. R. Mallory.

Does it pay to let your fellow dairymen and breeders know about what you have for sale? are you now convinced that it does. These are dairymen you know. They believe in advertising.

Just think of the number of possible buyers you are talking to when your ad. is in Farm and Dairy! There are 17,000 of them scattered from coast to coast. You speak to them all. Many of them need what you have to offer.

Then too you have the advantage of a large market. If your stock is worthy and you have confidence in it, you secure your own prices.

What these men have done you can do.

Look up Gordon S. Gooderham's large ad, and the others in this issue and in the past few issues. How else could these men get that information to you and to 17,000 other possible buyers as well and at so little cost?

There are scores of other such dairymen over Ontario who to-day need our service in helping them to solve their selling and purchasing problems.

Unionsdale, Feb. 26, 1913.

Farm and Dairy, Peterboro.

Sirs.—Yours to hand. The ad. did the work O.K. The ad. came out Friday, was noticed Saturday and I hired the man I was looking for Monday. He saw the ad. in "Farm and Dairy." Many thanks to your valuable paper.

F. J. Humphrey.

Have you something to sell? Do you need something but do not know just where to locate it? Possibly you need a man for your creamery or other hired help—once this is sure—"It will pay you to let Farm and Dairy" give its service to help you.

If you have stock of superior quality—and desire to make the most of it—to make good sales for it now and in the years to come, why not get in touch with "Farm and Dairy." We can put invaluable service in Farm and Dairy."

Yes, your profits will increase if your live stock is advertised in Farm and Dairy."

**The Rural Publishing Co., Limited**  
PETERBORO, ONT.

## SPECIAL PATTERN SERVICE

We realize the great interest that all of our readers take in the new spring styles, and have therefore made arrangements whereby we will be able to give many more patterns in Farm and Dairy than usual during the next few weeks. These will illustrate many of the attractive spring styles. Should you wish patterns other than you see in Farm and Dairy from week to week write us and we'll do our best to get them for you. When ordering patterns kindly give name and address, size and number and our usual Price List each. Address Pattern Dept., Farm and Dairy, Peterboro, Ont.

### SCARF WITH HOOD, 789



Every woman who likes a pretty, becoming hood will welcome this design. With the hood drawn up over the head as shown in the figure, it is a perfect protection for cool evenings. Worn as a scarf only as shown, it is pretty for any occasion when a soft material is required. Any two colors and any two soft materials can be used, affording a very good opportunity for individual effects. The scarf will require 3/4 yards 27 or 30 inches wide or 1/2 yard 34, with 1/2 yard 27 for the lining. This pattern is cut in one size only.

### SHORT DRAPED COAT, 789



No prettier, more graceful, more attractive summer wrap could be found than this one. It takes the most becoming lines, it drapes the figure with consummate grace and withal it is eminently practical. It requires only two seams. The trimming consists of a ribbon or band which can be easily secured on and, while it is the smartest possible garment for afternoon and evening occasions, it literally can be made "in a jiffy." A very beautiful effect is obtained by the use of plain white crepe de chine, white satin ribbon and lining of flowered silk in light colors.

For the medium size, the coat will require 2 1/2 yards of material. 3 1/2 yards 48, with 2 1/2 yards of ribbon 24 inches wide and 1 1/2 yards 34 inches wide. This pattern is cut in three sizes, small 34 or 36, medium 38 or 40, large 42 or 44 inches bust measure.

### BABY'S SHORT SKIRT, 792



Petticoats and dresses that hang from the shoulders are the only simple ones for the tiny tots and these are pretty in a simple way. The bloomers, too, are practical. They can be worn in place of petticoats and under any kind dress. They are both protective and comfortable. The dress can be made with round, square or high neck and with short or long sleeves.

If worn with a belt, it becomes somewhat different in effect but it is just a straight little slip with the sleeves to it. This pattern is cut in one size only, for a child one year old.

### CHILD'S EMPIRE DRESS, 796



The simple French Empire style is always a good one for the tiny tot and one combines a straight skirt with a plain body portion and the neck can be cut round, square or left high and finished with a frill.

For the year size the dress will require 1/2 yard of material 12 inches wide, 1/2 yard of all-over material 18 inches wide and 1 1/2 yards of heading, or 1 1/2 yards of plain material 18 or 20 inches wide, with 1 1/2 yards of embroidery as shown in the small front view. This pattern is cut in sizes for children of 1, 2 and 4 years.

### SEMI-POINCESS DRESS FOR MISS AND SMALL WOMEN, 797

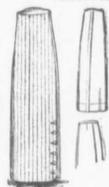


Every girl that gives a slender effect is fashionable. The dress with the same effect at the front and back shows just the long lines that contribute to the result. There is a tuck in each side portion of the skirt that gives the line suggestion of the fashionable dress. The blouse is simple with a tuck over each shoulder, the cocoon-like armholes.

For the 16 year size the dress will require 2 1/2 yards 36, 2 3/4 yards 36 or 38 inches wide, with 1/2 yard 36 for the collar and cuffs.

This pattern is cut in sizes for girls of 16 and 18 years.

### THREE-PIECE SKIRT, 792



The three-piece skirt is a great and fashionable one. This model allows two or three variations. The side edges can be left straight or they can be curved and they can be hitched for entire length or left open for a portion of the way. The side edges can be finished with tucks so they can be smoothed together as indicated in the smaller size.

For the medium size, the skirt will require 4 yards of material 27, 3 1/2 yards 36 or 44 inches wide. The width at the lower edge is 1 1/2 yards. This pattern is cut in sizes from 22 to 34 inches waist measure.

### GIRL'S DRESS IN BALKAN STYLE, 793



Here is a charming little frock that includes the latest newest features and at the same time is quite simple and easy to make. It consists of a blouse in the Balkan style and a three-piece skirt. The blouse can be made with or without the yoke which is joined to at the lower edge. The blouse can be closed on the diagonal line above the front view or on a straight line a little to the left of the front.

For the 12 year size, the dress will require 5 1/2 yards of material 27, 4 yards 36 or 38 inches wide, with 1/2 yard 36 for the collar and cuffs.

This pattern is cut in sizes for girls of 10, 12 and 14 years of age.

### PLAIN BLOUSE OR SKIRT WAIST, 793



The plain tailored waist is a thoroughly smart garment and, at the same time, essentially practical. This one is also without fail one can be worn with a high-necked collar, or with separate collar or stock.

For the medium size the waist will require 2 1/2 yards 36 or 38 inches wide. This pattern is cut in sizes from 34 to 50 inches bust measure.

## The Future of

(Continued from page 977)

up in loading an draft team. A city of Chicago, have to stand as waiting for an opportunity to get certain street corners such as that would auto truck a poor street away hauls, 10 miles, there is an efficiency of the auto.

Other considerations are, the heavy freight, their rapid depreciation of obtaining efficient are also willing to hire expense and the



## Making Good

ills. I feel certain cities the future market draft horse is assured

Even were the city for I would still have in ensuring the horses as a profitable farmer. There is market opening up, that I often wonder how to see it. Doses invention in farm near to the day draft horse will be the farmer as it now

leader. The manure dust hrow, all of this may be handled manually by the heavy horse. If one were aware of the fact that awakening to this need horses. I need only of the increasing weight teams exhibited. Horse importers tell me readily disposing of in sections where stallions have been demanded.

Considering the possibilities Western Canada market that demands heavy horse. Statistics prove it is more land allotted to the Canadian West than under cultivation. As roads become more intensive horses will be demanded than are now used.

that the traction engine over a measure to the horse on the farm. There is no room for the strength of the foot good draft horse.—F.

The Future of the Draft Horse The Dairy Cow in Nova Scotia

(Continued from page 6)

(Continued from page 5)

up in loading and unloading the dray. It is much cheaper to have a horse outfit valued at \$800 or \$1,000 standing idle half a day while a load is being put on than to have a \$5,000 auto truck idle for a similar length of time. As our cities become larger and traffic more congested the advantage is more and more with the draft team. I am told that in the city of Chicago teams frequently have to stand as long as one hour waiting for an opportunity to pass a certain street corner. A few delays such as that would make an expensive auto truck a poor investment. For straight away hauls, however, all over 10 miles, there is no questioning the efficiency of the auto truck.

Other considerations that are inducing city cartage companies to retain and increase their horse staff are the heavy first cost of autos, their rapid depreciation, the difficulty of obtaining efficient drivers who are also willing to handle freight, the tire expense and the excessive repair

expenses. Within a circle of three miles of where I write are seven or eight fine pure bred herds of these breeds. Breeders tell me that they are finding a good market right in Nova Scotia for their surplus stock. In addition, the provincial government is continually bringing shipments of pure bred sires of the dairy breeds from Quebec and Ontario.

A few individual farmers are purchasing these pure bred sires. Much good work has been done, in addition, by the agricultural societies who select one of their members to care for a sire that is the common property of all. What is needed now is some system of exchange so that when one society is done with a bull they could exchange it with some other society.

I could select farm after farm in every section of Nova Scotia that has been redeemed by dairying. The dairy cow has helped many to restore exhausted soil fertility, to lift mortgages, to build better homes, and



Making Good Use of a Perpetual Spring at Tillsonburg, Ont.

hills. I feel certain that even in the cities the future market of the heavy draft horse is assured.

Even were the city market in danger I would still have no hesitation in endorsing the breeding of draft horses as a profitable proposition for the farmer. There is a great new market opening up, one no hero that I often wonder we have been so slow to see it. Does not every new invention in farm machinery bring us nearer to the day when the heavy draft horse will be as popular with the farmer as it now is with the city teamster. The mature spreader, the disc harrow, the gang plow, the wide cut binder, all of these implements may be handled much more satisfactorily by the heavy than by the light horse. If one were to call for evidence of the fact that the farmer is awakening to this necessity for heavy horses, I need only call attention to the increasing weight of the agricultural teams exhibited at fall fairs. Horse importers tell me that they are readily disposing of heavy stallions in sections where standard bred or coach stallions have been heretofore demanded.

Consider the possibilities of the Western Canada market, a market that demands heavy horses almost exclusively. Statistics prove that there is more land allotted to roadways in the Western West than there is yet under cultivation. As farming methods become more intensive many more horses will be demanded per section than are now used. And all admit that the traction engine is not yet even a menace to the place of the horse on the farm.

There is no room for doubt as to the strength of the future market for good draft horses.—F. E. E.

above all, it has given many a farmer more faith in his occupation and in his native province.

We have our share of difficulties too. Owing to the high cost of transportation mill feeds are very high in price, clover meal for instance never coming below the \$10 mark. The fact that our climate is not particularly well adapted to corn is also somewhat of a disadvantage, but the ease with which we can grow great crops of roots somewhat makes up for this. Likewise many parts admirably adapted to dairying are not yet supplied with a ready market for the milk. Creameries are increasing, however, and this difficulty will soon be overcome. And then there is the labor problem; but that problem is common to farmers everywhere.

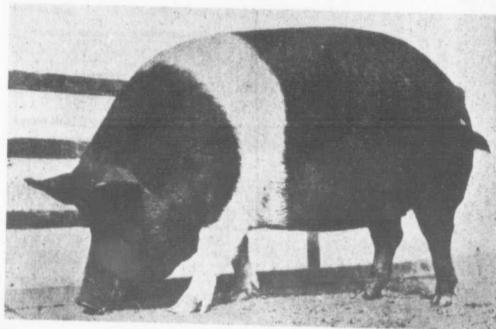
I could not close this little sketch of dairying in Nova Scotia without making some reference to the work being done by our agricultural colleges under the able management of Prof. Cumming. In fact I attribute part to the help that Prof. Cumming has given in interpreting aright the decrees of nature.

Some of us in this little seaside province sometimes have visions. We see in Nova Scotia a second Denmark. Why not? Our soil is as good as that of Denmark or better. Our climate is as good or better. When all of our land suitable to dairying is brought into use we have a greater area than Denmark. In the New England States we have a prospective market that is nearer than the market of the Danes and equally desirable to theirs. All that interferes is the customs duty, which in time we hope will be wiped out. Such is the vision that we have for this part of Old Acadia.

HAMPSHIRE PIGS

My present offering includes the best lot of Hampshires I ever handled. There are males and females, of all ages—also strong growthy youngsters, and the right kind of Brood sows.

Remember I sell at reasonable prices



ONE OF MY YOUNG HERD SOWS

I may say that I will be at Toronto and Ottawa Exhibitions, with a number of Hampshires, and I will be more than pleased to meet any of my customers and intending customers, that will be visiting those fairs. I can give you anything you want in Hampshire pigs, the money makers.

J. H. RUTHERFORD

CALEDON EAST, Box 62 ONTARIO Long District Telephone

Keep The Boy On The Farm

By making home interesting for him. Give him his own interests, and see the change.

Get Him Started Breeding Pure Bred Stock

It not only pays, but has kept thousands of boys at home interested and happy.

Two Of The Many Who Were Satisfied

July 16, 1913  
Farm and Dairy  
Peterboro

Received my pig O. K. It is a dandy, and I am much pleased with it, and it is much larger than I expected.

Thanking you very much for it, I remain as ever,  
W. O. LENT  
P.S. Will send photo of it later on.

Notice the interest displayed by the boys whose letters appear above! Will they be likely to leave the Farm? Are they more interested in the City than the Country?

FATHER—MOTHER

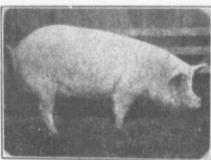
Keep your boy at home by helping him to get Nine New Subscribers to our paper, and a Pure Bred Pig.

Don't fail to take advantage of this opportunity. Fill in the blank now and be sure to get your supplies right away.

Farm and Dairy  
Peterboro

I will try and secure 9 new subscriptions to such a pure bred pig. Please send me sample copies, receipt forms and order blanks.

Signed \_\_\_\_\_  
P.O. \_\_\_\_\_ Prov. \_\_\_\_\_



A Premium Pig

This is a picture of the type of pig that Farm and Dairy are giving away. It is a Yorkshire, splendid for Bacon and for which there is always a good market.

July 17, 1913  
Farm and Dairy  
Peterboro

I received my pig and I am very pleased with it. I do not see how you can give so good a premium for so small an amount of work. I am indeed pleased with it and think she is a dandy. What price do you charge for a male of the same breed. Please let me know and oblige.  
Yours etc,  
ROBT. NEEDHAM

# LOOK LOOK

## Exhibition Visitors

Something Doing      Something Doing  
 Something Doing All The Time

While at the Exhibition call round and see my herd, I have always something that will take your fancy.

I will have catalogues with illustrations and pedigrees of some of my cattle, that are for sale, if you are on the look out for a cow, with an official record, in calf to Canada's Premier Sire, this is your opportunity to secure one or several at reasonable prices.

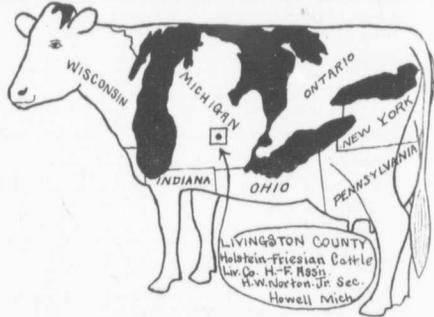
My farm is situated 5 miles from the Exhibition grounds, and I will take great pleasure in motoring you there to see the rest of my stock.

**BE SURE AND COME, YOU  
 ARE ALWAYS WELCOME**

# Manor Farm

GORDON S. GODDERHAM

# LOOK LOOK



### A Unique Idea in Holstein-Friesian Publicity

The Livingston County Holstein-Friesian Association has adopted the illustration shown above as a trade mark for the association. It will be noticed that Livingston County, Mich., is right at the cow's heart. The members announce that it is their intention to make that association the heart of Holstein-Friesian dairying, in fact as well as location. The idea originated in the fertile brain of H. W. Norton, the secretary of the association.

### The Swinging Stanchion

L. Perkins, Peol Co., Ont.

I have recently done away with every rigid stanchion in my stable. I have replaced them with swinging steel stanchions. I have done this for one very good reason. I spent about two minutes trying to imagine myself in the cow's place.

Did you ever have a fly climbing over your face when you were unable to swat the brute? Do you know what it is to be itchy and unable to relieve yourself? Just think these things out and you will see what a horrible institution the rigid stanchion is.

And then add this. In a state of nature the cow lies with her head bent around on her side. That is the one position in which she is comfortable. With a rigid stanchion she must continually hold her head in an unnatural position.

While I changed my stanchions because of a humanitarian impulse, I am getting my reward in two ways. First I have an easy conscience and that is no small recompense. But I am getting my reward in two ways. The cows have been milking better. They are easier to milk because of being more comfortable. They stand quietly. Some day I hope legislation will be invoked to make every man do as I and many others, have done.

### Observations of a Scotch Herdsman

(Continued from page 4.)

the June grass, give almost as much milk, as those freshening but a few months previous. Furthermore the summer is the farmer's busiest time, and with the rush of getting in crops, haying, harvesting, etc., the cows are more or less neglected, and it is hard to handle large quantities of milk. After the first of August, the cows will drop very rapidly in their milk, unless they be fed liberally with some good soiling crop. The fall calves can then be dried off, and allowed the remainder of the summer to rest, before freshening again.

I have found that fall calves are more easily raised than spring calves, for the reason that they get a good start before the hot weather sets in. During the time of hot weather, flies, etc., they should be kept in box stalls in the daytime and turned out to pasture in the evening. Twice a day I feed a light grain ration, a mixture of bran, oats, and oil cake, being my favorite feed for growing calves.

There has been much controversy as to the best age to breed heifers. I

believe many heifers that should have developed into splendid dairy cows have been stunted in growth, and impaired in milk production, by fresh pairing too young. Especially is this true of the smaller breeds. From 28 to 30 months, I find, is the best time to have a heifer drop her first calf, if she is of average growth and development.

Although dairying requires great patience and perseverance (keeping us pegging away Sunday and Monday), I know of no more pleasant or interesting occupation. If run on intelligent lines it is also a highly remunerative one.

### Calf Rearing as a Creamery Side Line

(Continued from page 21)

quantity than 118, yet by adding a little to the milk for way of substitute they are all growing rapidly.

I expect that these calves by the first week in October will average about 325 lbs. They are nearly all heifers of good milking stock, and I expect to call a sale during the first or second week in October and give the farmers of Ontario a good chance to procure the foundation for a herd of fine milking cows.

The profitability of this venture I think is assured, but of this we will speak more definitely after our sale.

### British Columbia Dairymen Tell Their Story

(Continued from page 9)

THE FUTURE FOR DAIRYMEN  
 "In regard to the prospects for the expansion of the dairy industry, they are not very bright at present on account of so many good farms being cut up and subdivided by real estate men and others, all so anxious to make money without having to work for it. We think dairying pays fairly well in British Columbia, and we never get out of work through our wet winters when it is not very nice working out of doors. We don't think British Columbia will be able for a very long time, if ever, to supply her own demands for milk, cream and butter. Prices for dairy products are good the year round, and at though feeds are higher than in Eastern Canada the better prices for milk products more than makes up the difference.

"Just last week we got a letter from our creamery manager saying they can't get nearly enough sweet cream to supply the demand, and the demand is getting greater every year."

## HORTICULTURE

### Speculative

A. McNeil, Chief, Ft. Ottawa

There is a slight surplus in all the apple districts of the world for the shortage is not so general, and under the high prices it will show large the quantity be upon the market. The present market is extremely critical. On occasions we have had to decide somewhat similar in each case varieties have been made fruit upon the market, dealers noting the shortage in the field early in the fairly high prices to the market conditions, extremely low prices to the buyers who knew nothing of let conditions, and in stored the apples, and was all in the hands immediately it was high prices.

### WHAT A SLUMP

A single incident would result in a large retail as eastern city offered per barrel for a very Northern Spy apples, raised about the middle about the first of December a slump in prices market, the dealer offered these apples at a retail price of \$3.50 per bushel refused. Four bushels of apples were sold at \$2.75 to the merchant, them absolutely at any price as his excuse that his cost was calling for apples, them too expensive, and the price were reduced to one, he did not consider for sale good.

Later these apples were sold at auction at \$2.50 per bushel, of course, is only a slight but it is typical of those place during the year, and they declared that it was apple year that they were

### ALL YEAR COMBAT

Apple growers and must not forget that their year-round competition can be bought at the very best prices on the market. These are now impossible to put prices for apples except very choice lots.

Any prices that may be purely speculative, to say that no difference that are likely to take place is an increase or a decrease in the present prospects, change the price either above the normal price or storage over several years.

### Brant Apples to Centrally

Brant County (Ont.) largely sold this year central cooperative association to Mr. J. W. C. the members of the association price of \$3.00 per barrel and the association for fruit.

All of the apples from the area over 100 bushels will be put in central packing and being arranged to have one each at Burford, and, Scotland, Gainsville and one at St. George.

# HORTICULTURE

## Speculative Prices

A. McNeil, Chief, Fruit Division, Ottawa

There is a slight shortage of apples in all the apple growing districts of the world for this year. But the shortage is not by any means a failure, and under the stimulus of high prices it will be extraordinary large the quantity of apples may be upon the market at a later date.

The present market conditions are extremely critical. On two or three occasions we have had within the last decade somewhat similar conditions, and in each case very grave mistakes have been made in placing the fruit upon the market. In 1910 many dealers noting the short crop, went into the field early in the season, paid fairly high prices to those who knew the market conditions, and paid extremely low prices to the large majority who knew nothing about the market conditions, and in all cases they sored the apples, and when the fruit came all in the hands of the dealers, immediately it was held for high prices.

### WHAT A SLUMP MEANT

A single incident will show the results. A large retail merchant in an eastern city offered a dealer \$3.50 per barrel for a very fine line of Northern Spy apples. This was released about the middle of November. About the first of December following a slump in prices in the British market, the dealer offered the merchant these apples at the dealer's original price of \$3.50 a barrel. The dealer refused. Four weeks later, in January, the apples were offered at \$2.75 to the merchant, who refused them absolutely at any price, giving as his excuse that his customers were not calling for apples, considering them too expensive, and even though the price were reduced to a reasonable one, he did not consider the chances for sale good.

Later these apples were sold at public auction at \$2.50 a barrel. This, of course, is only a single incident, but it is typical of thousands that took place during the year, and many buyers declared that it was the worst apple year that they ever knew.

### ALL YEAR CONSEQUENCES

Apple growers and apple dealers must not forget that there is an all-year-round competition in apples. Bunches can be bought at any season of the year. Oranges are always on the market. These alone render it now impossible to secure exorbitant prices for apples except on a few very choice lots.

Any speculation that may be given vent to purely speculative, but it is safe to say that no differences in the crop that are likely to take place, whether it is an increase or a decrease from the present prospects, are likely to change the price either above or below the normal price obtained as an average over several years.

## Brant Apples to be Sold Centrally

Brant County (Ont.) apples will largely be sold this year through a central cooperative association, according to Mr. J. W. Clarke, one of the members of the executive. The price of \$3.00 per barrel has been offered the association for its No. 1 fruit.

All of the apples from the moment now on to 1910, will this season be put in central packing houses. It is being arranged to have these located one each at Burford, Paris, Brantford, Scotland, Cainsville, and probably one at St. George. The apple

will be picked and placed in barrels as they come from the trees, then hauled to the nearest central packing house. Under this method of management a more uniform pack can be put out, and amongst other advantages will be that of having all the culls together where they may be sold to the best advantage.

By the time this note will be in print it is expected that the orchards of the members will all have been inspected and estimates taken by three officers of the association—J. W. Clarke, of Cainsville; J. W. Harvey, of Paris, and Wm. Dickie, Burford, who will make the round in an automobile. The crop is not at all heavy, although some fair yields are expected.

It is anticipated that the cost of selling will not run over 10 cents a barrel, although there is a limit set of 10 per cent. The picking and packing and all costs may run up to 50 cents a barrel.

Conditions of membership in the Brant association require members to abide by the by-laws uniform packing, spray and cultivate their orchards. The membership fee is a nominal one of only \$1.00.—C. C. N. Brant Co., Ont.

## The Fall Web Worm

Those unsightly webs, which at this season of the year are to be seen in the orchard, are so known the presence of the fall web worm. This insect should not be confused with the tent caterpillar which appears earlier in the season.

In habits and life history these two insects are quite dissimilar in many respects. The tent caterpillars, which caused so much damage in some districts this season, are now in the egg stage of their life circle. In the character of the web there is a marked difference. The web worm builds a large web, generally near the ends of the branches, and always remains in the web. As new feeding grounds are required, the web is enlarged. For this reason the web becomes most unsightly because of the cast of skins and excrements of the inmates.

On the other hand, the web of the tent caterpillar is more compact and found usually in the crotch of two or more limbs. The caterpillars remain in it only between feeding periods. When feeding they consume the entire leaf, while the web worm feeds only on the upper surface, giving the leaves a characteristic brown appearance.

The parent moth of the web worm is white in appearance with black markings on the wings. In early summer it emerges from the cocoon in which it has passed the winter. The females lay their eggs in patches on the under side of the leaves. During the latter part of July and the month of August the caterpillars begin to make their appearance. They then proceed to form the web. When full grown—about one inch in length—they spin their cocoons in preparation for the winter.

Because of the season at which this pest makes its appearance, spraying as a means of eradication is hardly practical as few orchardists care to spray so late in the season. Occasional use of the last spray for cooling worm remains on the leaves long enough to be of assistance in combating the web worm.

Usually the only remedial measure necessary is the lookout for the webs and destroy them as soon as noticed. As the webs are nearly always found at the tips of the branches, little damage is done to the trees by removing them.

Which do you prefer—fall or spring plowing of the orchard? Farm and Dairy would like your opinion.

## HOLSTEINS

### Lyndale Holsteins

We are now offering Bull Calves from 1 month to 7 months old. All are from official record dams and sired by some of the greatest bulls in Canada.

Brown Bros., Lyn, Ont.

### Lakeview Holsteins

Bull calves only for sale for the present, sired by Count Hengerveld Payne De Kol or from his daughter and sired by Dutchland Colantha Sir Mous. Write for extended pedigrees of these bulls, or come to Bronte and see the herd. Visitors always welcome.

E. F. OSLER, BRONTE, ONT.

## HOLSTEINS

### HOLSTEIN BULLS

2 Bulls, rising 2 yrs., grandsons of Pontiac Korndyke, and 1 rising 1 yr. old from other sires.

Also Bull and Heifer Calves, Females, all ages. Wm. RIGGINSON, INKERMAR, ONT.

### Ouvrille Holstein Herd

Bull of serviceable age all sold. If you want them from here we would advise you to buy young. Only two calves left. Both are by Dutchland Colantha Sir Abbecker and from 217 and 216 his 4-year-olds. Grand individuals, 4 months old. LAIDLAW BROS., AYLMER, ONT.

## FAIRVIEW FARMS HERD

### Offers

Sons of PONTIAC KORNDYKE, ready for service in the near future or younger, sons and daughter of SIR JOHANNA COLANTHA GLADI, whose three first daughters to be officially tested average better than 30 pounds each as junior two-year-olds, and some of RAG APPLE KORNDYKE and RAG APPLE KORNDYKE #718, the greatest bred KORNDYKE bull in the world. Write me for anything that you want in First-class Holsteins.

E. H. DOLLAR, HEUVELTON, (Near Prescott, Ont.) NEW YORK

# Tavistock District Holsteins

IN THE FAMOUS OXFORD COUNTY



Our Leader—KING LYON'S HENGERVELD

## HAVE YOU SEEN HIS EQUAL?

On both HIS SIRE'S and HIS DAM'S SIDE he has the richest of breeding—BLOOD THAT COUNTS.

On His Dam's Side this great bull traces three (3) times to Johanna De Kol Van Beers—one of the greatest of living Holsteins—a cow with an official record of over 40 lbs. butter in 7 days.

Every ancestor of his sire has one or more 20 to 34 lb. daughters (except the young bull King Hengerveld, who has a 20 lb. 2-year-old).

Stock from this great bull are distinctive for their constitution, great length and depth. Every one shows the qualities of "Our Leader."

Our rich sires produce vigorous animals, Sanitary stables preserve their health. Experienced feeders insure well-developed animals.

This great bull, King Lyons Hengerveld, is owned and controlled by a company of our dairymen. Offspring from him are now offered for sale. Are you starting a new herd. Are you adding to your present one? Then you cannot afford to go without some stock of this breeding.

If you are interested in securing the Best, we can suit you from among our members. Come to Tavistock and save money on your purchases.

An appointment with any one of the following well-known dairymen will take you to all our herds:

C. BOLLERT, J. LEUZLER, E. RUBY, JACOB MOGK, H. BOLLERT

## TAVISTOCK, ONT.











# SPECIAL CUT PRICE

ON ALL STYLES

## SARNIA WIRE FENCE

"DIRECT FROM FACTORY TO FARM"

FREIGHT PREPAID

**THE SARNIA FENCE CO., LIMITED - SARNIA, ONT.**

The enthusiastic support given our "Direct from Factory to Farm" policy of selling wire fence this year has been greater than ever. We have been again compelled to increase the enormous capacity of our plant and today our plant has a capacity equal to that of any other four fence companies in Canada. Increasing our capacity has lowered our cost of manufacturing, and in line with our policy of selling the Farmers of Canada their fence at the lowest possible cost, we are reducing our prices 25 per cent in the face of a large increase in the cost of our raw material. By comparing our present prices with the cost of plain galvanized wire you will see that they would not leave us a living profit under normal conditions. We have on hand just 2000 getting your fence at these special prices.

Remember the agent or dealer wants you to purchase from him a fence on which he can make a commission, and makes claims of quality in an attempt to account for the tremendous difference between his price and ours. Fifty thousand Ontario farmers purchased over one thousand carloads of SARNIA FENCE during 1913, and every one of them stand ready to tell you that it is the most perfectly woven fence they ever used.

We know that our Direct from Factory to Farm method is such a dollar saving proposition that we fearlessly publish our prices which include freight paid by us to your nearest railroad station. Stop for one moment, and think what price you were compelled to pay for fence before the Sarnia Fence Company came into the field, and in recalling the old prices you would not need to draw very much upon your imagination to know where the price of fence would go if the Sarnia Fence Company could be gotten rid of. We want your orders whether for one bale or a carload, and we sell all our fence with the guarantee your money back, and we pay freight both ways if dissatisfied.

**GUARANTEE**--If you find for any reason that the fence received of us is not of the best hard steel wire, the best galvanizing, the most perfectly woven fence you ever purchased at any price, you are at liberty to return it to us. We will pay freight both ways and refund your money.

**The Prices are Special and Not Permanent--Place Your Orders at Once**

WE SET THE PRICE. OTHERS DEVOTE THEIR ENERGY TO TRY TO MEET OUR PRICES.

PRICE Less than Carload in Old Ontario

PRICE Less than Carload in New Ont., Que., Mar., Provinces

PRICE Carload or over in New Ont., Que., Mar., Provinces

CASH WITH THE ORDER SAVES EXPENSE AND YOU GET THE BENEFIT OF THE SAVING IN THE PRICE.

PRICE Less than Carload in Old Ontario

PRICE Less than Carload in New Ont., Que., Mar., Provinces

PRICE Carload or over in New Ont., Que., Mar., Provinces

5-40-0 HORSE AND CATTLE FENCE Has 5 line wires, 48 in. high, 9 stays to the rod, all No. 9 Hard Steel wire, spacing 10, 10, 10. Weight per rod 6 1/2 lbs. Price per rod freight prepaid

17c

19c

18c

9-48 GENERAL STOCK FENCE Has 9 line wires, 48 in. high, 12 stays to the rod, all No. 9 Hard Steel wire, spacing 3, 4, 5, 6, 8, 8, 9. Weight per rod 12 lbs. Price per rod, freight prepaid

29c

33c

32c

6-40-0 HORSE AND CATTLE FENCE Has 6 line wires, 40 in. high, 9 stays to the rod, all No. 9 Hard Steel wire, spacing 7, 7, 8, 9, 9. Weight per rod 7 1/2 lbs. Price per rod freight prepaid

19c

22c

21c

10-50 HORSE, CATTLE, SHEEP AND HOG FENCE Has 10 line wires 50 in. high, 12 stays to the rod, all No. 9 Hard Steel wire, spacing 3, 3 1/2, 3 1/2, 4 1/2, 5, 6, 8, 8. Weight per rod 10 1/2 lbs. Price per rod freight prepaid

31c

35c

34c

7-40-0 HORSE, CATTLE AND SHEEP FENCE Has 7 line wires 40 in. high, 9 stays to the rod, all No. 9 Hard Steel wire, spacing 5, 6, 6, 7, 7 1/2, 8 1/2. Weight per rod 8 1/2 lbs. Price per rod, freight prepaid

21c

24c

23c

7-26 HOG FENCE Has 7 line wires, 26 in. high, 9 stays to the rod, top and bottom No. 9. Filling No. 12 Hard Steel wire, spacing 3, 3 1/2, 4 1/2, 5 1/2, 6 1/2. Weight per rod 6 1/2 lbs. Price per rod freight prepaid

20c

23c

22c

7-48-0 HORSE AND CATTLE FENCE Has 7 line wires, 48 in. high, 9 stays to the rod, all No. 9 Hard Steel wire, spacing 5, 6, 7, 9, 10, 11. Weight per rod, 9 lbs. Price per rod, freight prepaid

22c

25c

24c

15-50-P STOCK AND POULTRY FENCE Has 15 line wires 50 in. high, 24 stays of the rod, top and bottom No. 9. Filling 12 Hard Steel wire, spacing 1 1/2, 1 1/2, 1 1/2, 2, 2, 2, 2, 4, 5, 6, 6. Weight 12 lbs. Price per rod freight paid

35c

38c

37c

8-34 SHEEP AND HOG FENCE Has 8 line wires, 34 in. high, 12 stays to the rod, all No. 9 Hard Steel wire, spacing 3, 3 1/2, 3 1/2, 4 1/2, 5, 6, 8. Weight per rod, 10 lbs. Price per rod, freight prepaid

25c

28c

27c

WALK GATE 3/2 x 48 Freight paid.....

\$2.50

\$2.75

\$2.50

8-40 GENERAL STOCK FENCE Has 8 line wires, 40 in. high, 12 stays to the rod, all No. 9 Hard Steel wire, spacing 3, 3, 5, 6, 7, 7, 8. Weight per rod 10 1/2 lbs. Price per rod freight prepaid

26c

29c

28c

FARM GATE, 12x48. Freight paid.....

3.75

4.00

3.75

FARM GATE, 14x48. Freight paid.....

4.00

4.25

4.00

FARM GATE, 16x48. Freight paid.....

4.25

4.50

4.25

8-48 GENERAL STOCK FENCE Has 8 line wires, 48 in. high, 12 stays to the rod, all No. 9 Hard Steel wire, spacing 4, 5, 6, 7, 8, 9. Weight per rod 11 lbs. Price per rod freight prepaid

27c

30c

29c

STAPLES GALVANIZED 1 1/2 in. per box of 25 lbs. freight paid.....

.75

.80

.75

BRACE WIRE No. 9 Soft, per coil 25 lbs. freight paid.....

.75

.80

.75

BARBED WIRE GALVANIZED, Two point, per spool of 80 rods, freight paid.....

2.25

2.50

2.40

STRETCHER, All iron top and bottom, draw very heavy tested chain, extra single wire stretcher and applicator. The best stretcher made at any price, freight paid

7.50

8.00

7.50

PLEASE NOTE: The first column of prices in the above advertisement is for the fencing and gates, freight paid in less than car loads to all points in Old Ontario; The second column of prices is for fencing, freight paid in less than car loads to all points in New Ontario, Quebec and the Maritime Provinces; The third column is the price, freight prepaid to all less prices are not permanent and will be raised again shortly. Place your orders to-day. Remit by P. O. order, money order, or draft.

# The Sarnia Fence Co., Limited, Sarnia, Ont.

Fence Put Up in 20, 30, 40 Rod Rolls Only

Tack this price list up in a conspicuous place that your neighbors may see it. IT IS A PROTECTION AGAINST COMBINE PRICES

## Better Roads—Better Profits

CONCRETE roads have proved to be the best. Once laid, they are there for a generation, no matter how heavy the traffic. Some so-called "good roads" need so much repairing that the maintenance expense in a few years amounts to as much as the roads cost originally.

The cost of repair and upkeep on a concrete road is practically nothing.

The first cost of a concrete road is not high. In most cases it comes close to that of good macadam.

To gain some idea of just what this kind of real "good road" may mean to you, ask yourself these questions:

**How many pounds can you haul when the roads are good?**

**How many pounds can you haul when they are bad?**

**How long does it take you to make a trip to market over good roads?**

**How long does the trip take over bad roads?**

**How many trips have you made over bad roads this year?**

**How many more trips would you have made, if the roads had been good?**

Have you estimated what poor roads have cost you—in time of men and teams wasted,—in inability to get to town when market prices were high—in trouble and inconvenience—and in actual taxes for repairs that temporarily made a poor road better, but that never gave you a real good road?

Concrete roads mean more profitable marketing for your crops, the saving of your horses, more convenience for your family, increased value for your land, and full value for the money you pay in road taxes.

The story of the concrete road is interesting. Every Canadian farmer ought to know it.

*Write now for free literature on concrete roads.*

**Canada Cement Company Limited**  
Montreal, Que.

