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FARM AND DAIRY

RURAL HOME

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Dec 12 1912

PETERBORO, ONT.

MARCH 21

1912.



THE PRODUCTION END OF AN IMPORTANT NATURAL CANADIAN INDUSTRY

In matters pertaining to the Maple industry, as indeed to other natural, or agricultural industries, we farmers have given our whole attention to production, and have not given thought sufficiently to the selling. Serious handicaps to the industry have developed owing to glutted markets in congested districts and to the wide-spread sale of adulterated, and so-called Maple products, which never came from the Maple tree, yet because of our present pure-food laws, or lack of laws, are sold as genuine products of the Maple, and because of the less cost of manufacture are displacing the natural products. We Maple producers should look alive in regard to these matters, and as urged in recent issues of Farm and Dairy attend to the matter of advising members of parliament to support the legislation now being sought to protect from fraud the important Canadian Maple industry.

—Scene showing sugar camp on Jos. Mountain's farm, Perth Co., Ont.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

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Saves Time, Saves Wear, Saves Work

These all spell MONEY to any farmer, and are big points worth considering. There is a growing demand for Cream Separators of larger capacity.



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600-lb. Machines are coming to be the favorites. Quite a number favor our 1,100-lb. Hand Machines.

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SIMPLEX Cream Separators are noted for their ease of Running, ease of Cleaning, Simplicity and Durability—they'll last a lifetime.

SIMPLEX Cream Separators skim their catalogue capacity under most adverse conditions, and under good conditions they over-run the rated capacity.

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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

"WILL we get a good price for cheese this year?" "How'll butter pay?" "Are more farmers going in for Dairying?"

"How have the cows wintered?" "What is the condition of the feed supply?"

In a word "How About Dairying in 1912?"

These questions will be answered so far as is humanly possible, April 4.

The purpose of our Great Dairy Annual, set April 4th, is to give these answers from the recognized leading authorities in a position to know where they speak.

A British and Canadian industry is looking for this information—looking for it to be in Farm and Dairy, April 4th, and we'll have it.

Much of the matter is already in our hands, so your advertising copy ought to be. Better get your copy to us now for FARM AND DAIRY connecting up with our prosperous Dairy people, April 4th. **Peterboro, Ont.**

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



The Farmers Talk Politics with Each Other

The "Big Interests" do their Talking with the Farmers' Member

Experience with a Grade Sire

Melvin H. Gardiner, DeLans, Wis. In Farm and Dairy of February 20, I made some remarks on the value of the official tests, and indeed any kind of tests, to the plain farmer-dairyman in patching up those holes in his intellect that allow the bulk of the profit he might get from his work to slip away and escape his grasp, and I intimated that the only way to successful, money-making dairy farming was through a selective process and the grading up with pure bred dairy blood. A man may argue that with the aid of some system of testing he has discovered and got rid of all the cows in the herd that fell below the herd average in production, he can by saving the heifer calves from the remaining cows soon have a herd as good as the best; but if he tries it without the use of a bull with fixed dairy qualities he would be apt to meet with some disappointment. I know, for I have travelled that path myself, and found it pretty thoroughly beset with thorns.

In looking backward men do not as a rule speak of their failures; they prefer to dwell on their successes. My life has been what men call successful but it has been so because I have kept a sharp lookout for my own mistakes and have never been pigheaded in pursuing what I felt to be a wrong course. The man who happens to get hold of the hot end of the poker and then holds on shows grit, but he does not show good judgment. In the hope that it will serve as a warning to such men as want to improve their dairy herds but think they can best do it by the use of grade or cross-bred bulls, I am going to tell of one of my own early mistakes.

MY OWN EXPERIENCE

When as a young man, urged on by ambition I overtaxed my strength and suddenly found myself with shattered health, I turned to the land and outdoor exercise as the only means for recovery. I knew little or nothing of good farming, but read everything I could get hold of, and tried to sort out that which seemed to be reasonable and to fit my circumstances. The farm was a grain farm, heavily mortgaged and showing little profit. I saw that it must be changed into a stock farm, and chose dairy farming, stocking with the best cows and heifers of common blood. I could pick up by paying 25 per cent. more than the market price.

They were a good lot, largely of Short-horn blood but good milkers for the kind, and I wanted to improve the herd as a dairy herd. I did not then know that the bull was such an important factor in a dairy herd, and I had spent all the money I could raise for the cows. I had read about black-and-white Dutch cattle that were just beginning to appear in the Middle West, and had heard of the folly of a man about 10 miles from the folk who had about 18 months before paid \$150 for a yearling bull; but while I thought the price beyond reason, as

far as I could learn the breed was just what we needed.

MY FIRST MISTAKE

A neighbor of this man with a herd largely of Short-horn blood had bred his best cow to the pure bred Holstein bull, and the cow had a fine bull calf. A neighbor of mine proposed that we buy this calf in partnership, and as the dam was certainly a fine dairy cow I agreed, and we bought the calf for \$40. He was certainly as fine a Holstein (?) calf as one would wish to see, becoming as he grew much more attractive than his sire, and I was very proud of him—a fine time. In due time his first calves were dropped, nice calves all of them, and nearly one-half showing the black-and-white markings; and the cows were again bred to him. My neighbor was much pleased, but I had been reading, studying and thinking during the 18 months and had begun to fear I had made a mistake.

I went to my neighbor, told him my conclusions, and proposed that we sell the bull and buy a pure bred animal in his place; but he assured me that he was satisfied with the animal, and quickly accepted the price I made on a give or take basis for my half interest. I have not the space to tell here of my purchase of a pure bred bull but will go on with my story. In time the two crops of heifer calves came into milk; but in no case did I find them better dairy animals than their dams at like ages, while in most cases they were inferior, and my neighbor's experience was the same, only he had four crops of calves to my two. He sold the bull for beef at considerably above \$100 and had no use for any black-and-white animal from that time on. I got rid of the heifers as fast as possible; but I lost two years of time and my small amount of money by mistake and my ignorance of the laws of heredity.

WHY WE WERE WRONG

Here was our mistake. Because his dam was a good dairy cow individually, and because he had the best of my breeding on his sire's side, we expected the get of this bull to show high dairy quality; entirely failing to consider that we were expecting the one fourth of Holstein blood in the progeny to do the office of three-fourths of largely non-dairy blood. The tail cannot wag the dog. My friend showed the courage of his convictions in regard to the other heifers. But two years ago he was surprised me by coming to consult me in regard to getting his son-in-law started with pure bred Holstein-Friesians, and they now have a nice little herd.

I have on my farm rough land on which no other crop than alfalfa can be conveniently grown. It, however, yields splendid crops of the best of feed and also leaves land in better condition than before.—John Beemer, Brent Co., Ont.

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FOR WEEK ENDING MARCH 21, 1912.

No. 12

MORE TESTIMONY TO THE VALUE OF COMMERCIAL FERTILIZERS

J. Egbert McQuat, Three Rivers, Que.

Where Mr. Cottingham Failed to Give Commercial Fertilizers a Fair Trial. Personal Experience with Fertilizers on Corn. Fertilizers Were Tried on Oats Also.

SOME time ago a very interesting article entitled "Do Fertilizers Pay?" appeared in the columns of Farm and Dairy, in which their use was condemned. I cannot agree with Mr. Cottingham's opinion of fertilizers in general, although what he says of his own results are undoubtedly true. In taking up this discussion I am not endeavouring to champion fertilizers unconditionally, because my experience with them has not been very great, and therefore I must write conservatively. Instead of making any sweeping statements, I shall only endeavour to show that the writer is hardly in a position to render a final judgment of "uselessness" upon fertilizers.

Mr. Cottingham does not state where he purchased his fertilizer. Perhaps it was from a good firm, but it would have been fairer to the honest concerns, who are not afraid to own their products, if he had mentioned that fact. It is a well known fact that many fertilizers are useless, and are made up of filler and low-grade fertilizing materials.

THE SAME FOODS, DIFFERING AMOUNTS

It is well known that three different elements, nitrogen, potash and phosphoric acid, constitute the three principal foods of plants and crops. These are all found in a varying degree in all soils. Different crops absorb all these materials, but in different amounts. A fertilizer is supposed to contain these elements in concentrated and readily available form. A reliable fertilizer is one which contains the plant food in that proportion demanded by one particular crop. No one fertilizer can thus be made to apply unconditionally to all crops.

This leads us to notice a weak point in Mr. Cottingham's test of fertilizer. In his letter, he says: "I purchased two tons of fertilizer specially recommended for wheat and corn for use on three arpents of hoed corn, viz.: Fodder corn, roots, potatoes and Indian corn." Every one of the crops mentioned, demands the three plant foods, but in varying amounts. This grain requires much less potash than corn or potatoes, while potatoes consume more potash than either corn or grain. All of these crops require their plant food in different proportions. It therefore puzzles me to see how a fair test could be given to determine the fate of fertilizers upon the farm, when only one general fertilizer was used upon crops varying in their food demands.

THE SOIL COUNTS TOO

Again, the fertilizer should be chosen with regard to the soil. A sandy soil requires more nitrogen in the fertilizer applied to it than a heavy loam, while a peaty soil needs no foreign nitrogen whatever. A fertilizer therefore must be applied, first, with due regard to the special crop upon which it is to be used, and, second, with regard to the nature of the soil. As far as

one can judge from the article, both these points were neglected to at least some extent. Since these conditions were not fulfilled, it is hardly fair to pass judgment.

MY OWN EXPERIENCE

Last spring I wished to apply some fertilizer to our field of western corn, owing to a scarcity of manure. I first wrote to Macdonald College (Chemistry Department), asking them what would



Is Any Other Crop Harvested With Such Ease?

In this illustration Mr. Jos. Mountain, Perth Co., Ont., is seen taping his trees to get the sap that feeds the boiling plant shown on the front cover of Farm and Dairy this week. Notice that the poles are covered; also that some of them are painted white. A nail this color keeps the sap much cooler than the ordinary tin nail.

be a proper fertilizer to apply to western corn in a field composed of a heavy loam with a little clay in it. I promptly received a reply from H. S. Hammond, B.S.A., telling me the proper amounts of each of the three plant foods to use upon this field. Having received this analysis, I sent to the German Potash Syndicate, Toronto, ordering these materials, each in separate bags. On their arrival I mixed them up myself and thus knew exactly what I was doing. I did not have the advantage of a fertilizer attachment, but spread the material along the rows by hand on about two acres of corn, leaving six or seven rows at one side unfertilized.

RESULTS WERE BENEFICIAL

The season was a very unfavorable one, yet I think I can safely say that the results were beneficial. Besides a very dry June, which hindered the action of the fertilizer, a hail storm did a great deal of damage on July 21st. Up till this time the corn made a very strong and vigorous growth. No manure had been applied in this field for a great many years, and still the fertil-

izer gave the corn as good an appearance as corn grown in previous years, where manure had been used. The hail storm gave the corn a severe setback, and so I would not pretend to compare it on height.

One thing that was very noticeable was the large number of ears on the corn as compared with previous years; the same strain of corn was used for three or four years. Another feature was that those rows unfertilized were not so good in color or in height as those fertilized. I have that much faith in fertilizer that we intend trying it again in the spring, because it showed up under adverse circumstances.

GOOD ON CORN AND OATS

I have a letter from a Mr. Boyd, of Mount Flats, Que., in which I received an answer to some questions I asked him. This gentleman has had good results from the use of fertilizer upon both corn and oats. He also states that there was a slight beneficial after-effect upon the ground on which the corn had been grown. It has been used considerably in his neighborhood, and he says that as far as his experience goes he has had good results.

In writing this article I have only attempted to show the necessity of knowing the exact conditions and of following them, if we would give fertilizers a fair trial. Even then we cannot judge them for conditions over which we have no control often interfere with our first attempts, such as I have mentioned in my own case.

Selection and Breeding of Dairy Cows

By Prof. W. J. Kennedy

In selecting dairy cattle it is always difficult to judge accurately with the eye. The real test must be the weigh scales and the Babcock tester. The cow is a machine to convert food into milk, thus she must have a large middle and a strong constitution to insure best results. She must also have a large udder, large milk wells, large crooked milk veins and good sized teats. Her head should be lean and angular in appearance, with the eyes standing out prominently. The neck should be rather long and lean in appearance, the shoulders pointed and the back-bone rather prominent. The skin should be loose and soft to the touch.

In selecting herd bulls, either mature animals which have already demonstrated their worth as sires or younger animals from high-testing dams and sires, only the best should be used. Remember that the best and surest results will always follow the use of a mature sire that has sired heifers with good records. A good dairy bull should be kept until he is 12 or 15 years old, in fact as long as he is a sire. Real good sires are so rare that when we do find one, he should die only of old age.

All breeders of dairy cattle should secure yearly tests on each and every cow in the herd. Shorter tests do not really mean very much. It is the cow that stays by her job that is really valuable.

INDIRECT TAXATION--HOW THE RAILWAYS APPLY IT

ARTICLE 15.

If our township taxes were to be increased five to ten dollars a year without apparent reason, most of us would raise a vigorous protest. Why? Because we know what our taxes are usually and about what we feel they ought to be and we object to paying more except for services rendered. When, however, five or ten dollars a year, and possibly more, is added by the railway companies to the cost of the goods we buy we do not say anything. Why? Because we do not know how it is done. In fact, we do not realize that it is done. Great, therefore, is the power of indirect taxation.

We, the people of Canada, have been very good to our great railway corporations. We have given them hundreds of millions of dollars in direct money grants and millions of acres of land. In addition we tax our railways less than railways are taxed anywhere else on this continent, and we pay higher railway and express rates than people pay in many other communities.

In return for all this our great railway magnates continue to exploit us in order that they may squeeze a few million dollars a year more out of our pockets into theirs.

"MELON CUTTING"—A SIMPLE PROCEDURE

"Melon cutting" is a comparatively new method of defrauding the public. It is a method our great financial magnates are becoming very fond of. The men who control the Canadian Pacific are some who have been using it quite extensively. It is well, therefore, that we should know just how it is done.

OUR UNDERSTANDING WITH THE C. P. R.

The people of Canada have an understanding with the Canadian Pacific Railway Company, in fact it is embodied in its charter, that when it is able to pay more than ten per cent. each year, on its capitalization its rates shall become subject to government regulation, or in other words be reduced. Such a reduction in rates would be of benefit to every man, woman and child in Canada. We should have had a reduction in rates long ago, in fact several of them. We have not as yet had even one. This is the simple way in which the company is getting ahead of us.

Suppose this is a period in the company's history when its capital stock is \$225,000,000. Suppose it is paying seven per cent. on that capital, or \$15,750,000, in dividends each year. Because this stock is paying such good dividends, and because the Canadian Pacific Railway Company is known to possess great assets, a \$100 share of stock in the company (par value) is really worth much more than \$100, and people would pay more than \$100 for it. Now suppose the Canadian Pacific Railway desires to build a new branch line that will cost \$25,000,000. To raise this money the company desires to sell more stock. Instead, however, of selling only \$25,000,000 worth of stock, it sells \$75,000,000 worth. This stock, also, is not offered for sale to the public. It is distributed among the present shareholders of the company in proportion to their present stock holdings. Perhaps each holder of C. P. R. stock will be given an allotment of one share of new stock (at par value, although it is usually worth more) for every nine shares of stock already possessed, and for every share of the new stock thus purchased a bonus of two shares is given free. Or the new stock may be issued at 33 1/3 cents on the dollar in the proportion of a new share to each three C. P. R. shares already held. At any rate, \$75,000,000 of new stock will be issued to the shareholders of the C. P. R. for only \$25,000,000, and we, the people of Canada, will be called on hereafter to pay railway rates that will enable the C. P. R. to pay dividends each year on that \$50,000,000 of watered stock, or if its dividend rate is seven per cent., \$3,500,000 a year. This \$3,500,000 a year represents just that amount of indirect taxation, which we, the people of Canada, will have to pay each year to the shareholders of the Canadian Pacific Railway Company. As some of the shareholders of the C. P. R. hold several million dollars worth of stock in that company the bonus in new stock which they thus receive is equal to a gift of several hundred thousand dollars. A shareholder of the C. P. R. who receives \$100,000 of this watered stock, expects us to pay him at least \$7,000 a year dividends on it hereafter.

Now, why does the C. P. R. sell \$75,000,000 of stock in this way instead of only \$25,000,000? For two reasons. First, in order that it may increase its capital stock to such an extent that it will never have to pay over 10 per cent. on it, and thus give the government the right to lower its rates, and second in order that it may in this indirect way pay its shareholders really much more than ten per cent. on their stock.

HOW WE ARE AFFECTED

How does this affect us? Very directly. Suppose we happen to be shipping milk or cream or poultry or eggs to some city—and every farmer does ship his farm products in some form either directly or through a buyer—and we begin to feel that our freight bills are unduly high and make complaint accordingly. "Why," says the C. P. R. in answer, "we are only earning seven per cent. on our capitalization. We can show our books to prove it." And, hitherto, we farmers have been content to let it go at that. In consequence, the extra freight we thus are forced to pay is maintained not only on all those products of our farms that we ship but it is added also to the cost of the goods we buy, including our farm implements, clothes, tea, sugar and boots, and we wonder why the cost of living is so high.

One of Canada's chief railway authorities, an ex-minister of Canada, has declared that the C. P. R. to-day is paying something like 60 per cent. on its original expenditures. In consequence we are all paying more in freight rates than we should and as usual the burden falls mainly on us farmers because we form the greater part of the population of Canada. This, in its way, is one of the factors which is helping to promote rural depopulation. A farmer who waters his milk, if detected, is hauled into court by the government and heavily fined and ever after that is held in suspicion by his neighbors. A railway company which waters its capital stock by millions of dollars, does it with government assistance, and the millionaires who are thus created are called financial geniuses. Some are given titles.

If we but realized it, we have the power to stop all this. We could bring such pressure to bear upon our members of parliament they would refuse to give the C. P. R. power to increase its capital stock. In addition, we could secure power to tax the roadbed of the company in accordance with its value. There are many other ways in which we can protect ourselves when once we realize what it all means. We have a great power that we can use through united action. It is time we used it, as we have never done before.

Milk Fever Preventable

C. E. Smith, Brant Co., Ont.

During the last eight years we have not had a case of milk fever in our herd. We have always tried to avoid it, thinking that prevention is better than cure.

In the first place our cows have daily exercise, weather permitting. We always try to have our cows quite loose in their bowels. We try and feed plenty of roots and ensilage, and if these fail to have the desired effect we give a pound of salt about a week or 10 days before freshening and repeat with half-pound doses as often as we think advisable. Careful observation will direct as to the time the dose is required.

After freshening we do not milk the cow dry for two days, taking only what is needed to feed the calf. The cow is kept as quiet as possible and given plenty of water. We do not consider the heavy producing cows as any more subject to milk fever if properly handled and fed for at least two weeks before freshening than is the ordinary 3,000-pound cow.

A Successful Corn Grower's Method

A. E. Wimer, Essex Co., Ont.

The first essential of successful corn growing is the selection of good seed. I have made it a practice annually when husking to pick out the choicest ears. These are placed in a room that is heated, and left there until thoroughly dried. If the corn freezes before it is dried it will not germinate. I never shell it until I am ready for planting. I have found that from 96 to 98 per cent of corn so treated will germinate and rapidly continue in its growth. Those who did not select their seed corn last fall and those who live in sections where corn does not mature should buy their seed corn on the ear from the best grower they can find, and test its germinating powers before planting.

I have also followed the practice of rotating my crops. I prefer to top dress a meadow, then plow it and use it for corn. I have found through experience it is better to plow the land in the fall. It then holds the moisture during the following year better than if plowed in the spring. Early in the spring I work the soil, let it rest for a time, work it again, cross work it, drag it and then plant.

METHODS OF PLANTING

I plant the seed in hills three feet six inches each way for husking and for feed in drills three feet apart, and the stalks from four inches to six inches in the drill. By using the hill method one can cultivate both ways. Cultivation is work that makes our crops a success. I cultivate at least once a week until the ears have grown to be a good size.

I have found that Small White Cap or Wisconsin No. 7 can be grown successfully in our district. Both varieties yield a large amount of corn, and are especially good for the silo, the Wisconsin being preferable to the White Cap, as the foliage grows very close to the ground.

For several years I have been successful in winning prizes offered for both fields of corn and for corn on the ear. This year 47 entered for the prize offered by the Essex Agricultural Society for the best field of standing corn. I won first place; and at the Tilbury Corn Show I took the first prize for the Small White Cap taken from the same field. Hence my methods have been successful with me on my farm.

Modern utensils are required in the production of maple syrup just as much as in any other branch of farming, if a first class article is to be produced at a profit.—C. A. Westover, Missisquoi Co., Ont.

Should Cows Face Each Other?

C. P. Blanchard, Colchester Co., N.S.

Yes, by all means. It is decidedly the most healthful, convenient and economical way in which to build cow barns. I was amused at the arguments used by your correspondent, N. C. Campbell, Brant Co., Ont., in Farm and Dairy, with reference to the danger of infection in the case of tuberculosis animals when they stood in rows facing each other. It would seem as though he was having one row of cows tuberculosis and the other row healthy, because your diseased cow is much more likely to infect the cow alongside her than the one across the passage.

First, let us see about the ease of attendance. From our experience of over 40 years I would say that in attending a barn of 30 cows you will save at least 30 minutes each day, which means

The syrup is finished (boiled down to 13 lbs. 2 ozs. per imperial gallon) in the evaporator, strained through felt strainer and when cool put up in one-gallon cans and labelled.

The secret of good syrup and sugar making is to get the sap into syrup as quickly as possible after it seeps into the bucket. This necessitates a modern evaporator and clean metal utensils. The evaporator should be large enough to handle the sap as fast as gathered, and to do this with any machine the best of dry wood is necessary. Shallow boiling is also essential. I do not use covered buckets, but in a very stormy season they would be a great help.

More Ideas on Freshening Cows

C. W. Thompson, Hastings Co., Ont.

Our cows that are going to freshen soon are

Artificial Brooding of Chickens

Chas. G. Golding, Assiniboia E., Sask.

The best time to prepare a brooder for chickens is about the time we place the eggs in the incubator. Having gotten our incubator nicely under way we take time to thoroughly overhaul our brooders, although we have, of course, cleaned them at the end of the previous season and replaced any worn-out or damaged parts. In using outdoor brooders we place them outside in a dry sunny place, and open them wide to receive the cleansing effects of the sun. We mix some hot whitewash and carefully go over the whole interior. This is, with some brooders, rather an undertaking, but will well repay the trouble, as so much depends on the condition of the brooder, especially during the first few days of the chicks' life.

Having cleaned and whitewashed the brooder we take a look at the lamp. Right here is where the first step in economy comes in. A dull, dirty lamp throws less heat than a clean, bright one. We take the whole lamp burner to pieces, and, after cleaning of all the dust from it, take a piece of fine sandpaper and scour all the brass parts till they shine and all that black accumulation is removed. We put a clean wick into the burner, and put the lamp back into place. Our brooder is now all ready for lighting.

GETTING UNDER WAY

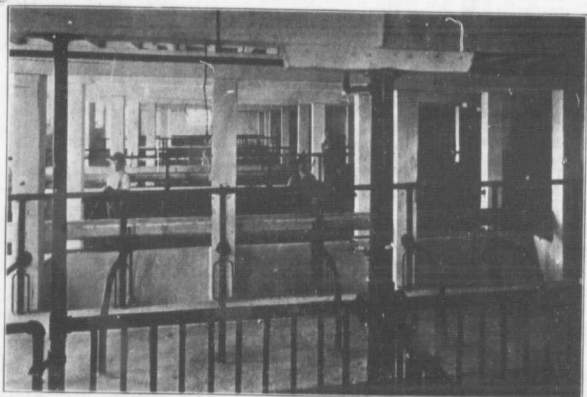
On the morning of the 21st day of incubation we fill the brooder lamp two-thirds full of good, clean oil and light up, closing the brooder door and ventilators. We don't turn the lamp too high till things get warmed up a bit. By the morning of the 22nd day the brooder is ready for the chicks. We remove the chicks carefully from the incubator and cover them over with a light blanket to protect them from draughts, as many a chick receives its death blow between the incubator and brooder. It is well to remember that the chick has been accustomed to a temperature of 102 to 105 degrees, and that the change from that to the chill outside air in spring is too violent for any chick to encounter with safety. We place all the chicks under the hover (unless we notice a deformed one, which we think it better to dispose of at once) and leave them there.

SAND AND OAT HULLS IN BROODER

When we first lighted the lamp we covered the floor of the brooder with a light sprinkling of fine sand, and on top of that about half an inch of chaff. We use oat hulls for this purpose. How do we get them? When we fatten our cockerels in the fall and early winter, we feed them on oatmeal made by getting oats chopped fine and then run through the fanning mill, turning the crank backwards. The fine meal comes out under the mill and the cracked oats and hulls come down where the grain usually runs. We pile this up in an out of the way corner for the time, as at this time it is the meal we want. Later on we put all this chaff through the mill again. This time we turn the crank slowly the proper way. We put no sieve in the bottom, and the light chaff is blown out and the cracked and hulled oats fall under the machine. The chaff is used for bedding for the chicks, and the hulled and cracked oats mixed with cracked wheat and barley and any other grain we can get makes fine chick feed.

Having gotten our chicks under the hover we leave them alone for about 24 hours. You may or may not open the ventilators at this time; we always open somewhat, generally those on the side of the brooder, away from the prevailing wind. If the wind changes we close them and open the others. After 24 hours we find our chicks busy. They have found out that there is more to that brooder than the hover, and in the spirit of ad-

(Concluded on page 9)



Fittings Such as These are Possible to the Small Stable Too

Convenient, sanitary, up-to-date in every particular are the interior arrangements of the dairy stables at the Hamilton Asylum Farm. Notice the steel partitions and stanchions, chain fasteners, and continuous watering trough. All of these conveniences can be adapted as well to the small stable as to the large.

fully 100 hours during the stabling season by feeding from a central passage. We have our feed passage nine feet wide from stanchion to stanchion, with hay chutes in the centre, which also act as ventilators and take away all draught from the heads of cattle, which is a most important thing. We advise having a feed carrier for short feed, with track in centre of passage, and never to hire a man to milk whom you have to watch because he will ruin your cows under any circumstances.

We don't know much down here in out-of-the-way Nova Scotia, but one thing we do know, and that is to kick any man out of the stable in short order who will ill-treat a milk cow in any way, and also that it is possible to have a herd of Ayshire cows that will make an average of 10,000 lbs. of milk a year and produce a sound, healthy calf at the same time in 12 months.

Experience in Syrup Making

H. H. Brown, Stamstead Co., Que.

I tap 1,800 trees, using 14-quart tin buckets. Most of these are painted white outside to preserve the tin from rust and to reflect the rays of the sun, thus assisting in keeping the sap cool. My evaporator is a five by six-foot Champion. My gathering tank and storage tank are of galvanized iron. The sap flows by gravity from the gathering tank to the storage and thence to evaporator.

I strain the sap twice and skim the foam from the evaporator frequently to remove impurities.

being fed on good, wholesome food, so that when they freshen they will be in as good condition as they were when they ceased milking. Our young heifers that are going to milk we feed better than the mature cows, as the heifers have to grow physically as well as nourish their calves.

As the critical time approaches the cow needs better feed than she required in the fore part of the winter. All grain rations are discontinued one week before the cow freshens in our stable and kept away from her for about 10 days after she has freshened, or until all sign of fever has disappeared from the udder. The grain ration, however, is replaced by bran or roots to keep up the strength of the cow and at the same time keep the blood cool. I do not think it well to allow a cow to stand around the yard during the winter, especially if the wind is blowing. I think this is one of the reasons why so many cows retain the afterbirth.

Just before a cow freshens I give her a pail of water fresh from the well, and as soon as she freshens I give her another half pail and every half hour until she refuses to take it. I keep the cow as warm as I can and free from draughts, and I have had very little, if any, trouble with freshening cows since I began this method of treatment about eight years ago.

On a heavy soil the poultry house should be floored. Anything is preferable to boards. Have eight inches of gravel under the cement. On sandy soils no floor in the house is required.

IF YOU
are at all interested in
Home-Mixed Fertilizers

I would like to send you my book on the subject. It contains full information, formulas and lots of information to farmers who want to get the most and the best for their money. The book will be sent free upon request by post card from you.

Dr. WM. S. MYERS, Director of Propaganda
17 MADISON AVENUE, NEW YORK
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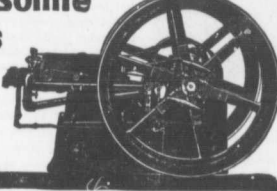
NEW IDEA Manure Spreader
Full of New Ideas

Yes, sir, full of them—24 points of exclusive merit over any other spreader. Note these—carries twice the load—lighter draft—wider, even spreading—no choking—yet it tracks with standard wagon.



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Our catalogue is a book you ought to read to find out how the New Idea Spreader has gone ahead while others stand still. Ever hear of the great Hartman contest? You never will—from others. Let us tell you. Write for complete literature today.
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An IHC Gasoline Engine Has Been Built Especially For You



No matter what kind of work you want your engine to do. Whether you need 1-H. P. or 45-H. P.—whether you want a vertical or horizontal engine, one that is portable, or of the stationary type—there is an IHC that will just meet your requirements. Also a line of Traction Engines in 12, 15, 20, 25, and 45-H. P. sizes—varied types.

The IHC line of Gasoline Engines has been developed to cover every farm power need. The men who are responsible for their design and construction know conditions on the farm, and they know what is required to do all farm work efficiently and economically.

The next time you are in town call on the IHC local dealer—explain the work you want your engine to do, whether operating cream separator, feed grinder, fanning mill, thrasher, sprayer, turning grind-stone, sawing wood, etc., and he'll show you the engine to do it—do it quickly—efficiently—and economically—just as others like it are doing for thousands of other farmers.

He'll show you, too, the many advantages of IHC construction—points you ought to know about if you want the most satisfactory farm power you can buy. Or, if you prefer, write nearest branch house for further information.

CANADIAN BRANCHES—International Harvester Company of America at Brandon, Calgary, Edmonton, La. Millon, Lethbridge, London, Montreal, North Bayfield, Ottawa, Regina, Saskatoon, St. John, Yorkton, Winnipeg, Yukon.

International Harvester Company of America

Chicago (Incorporated) U.S.A.



IHC Service Bureau
The purpose of this Bureau is to furnish farmers with information on better farming. If you have any worthy questions concerning milks, crops, pests, fertilizers, etc., write to the IHC Service Bureau, Chicago, and learn what our experts and others have found out concerning those subjects.

FARM MANAGEMENT

Fertilizers for Corn

How should fertilizers be applied to corn, broadcast or in hills? In what proportions should they be mixed?—P. A. Dundas Co., Ont.

While it is a common practice to apply fertilizers to corn in the hill, I would advise broadcasting them for the following reasons: The wider distribution of the fertilizers through the soil encourages a more extensive development of the root system, which results in the crop being able to draw its nourishment from a much wider area. Fertilizers concentrated in the hill tend to restrict the root system, as the plant finds a readily available supply of plant food directly within its reach. The advantages of the wider root system are many. The plants stand more firmly in the soil, leaves more humus in the soil and, besides the fertilizers, which it absorbs, it secures greater supplies of available plant foods from the soil's original stock of these.

P. A. ought to obtain good results by using the following: 10 tons barn manure per acre, 120 lbs. nitrate of soda, 120 lbs. muriatic potash, 400 lbs. acid phosphate per acre.

If no barn yard manure is used, then the following fertilizer mixture might be applied: 150 lbs. nitrate of soda, 140 lbs. muriatic potash, 400 lbs. acid phosphate per acre. If the soil is to follow a good clover sod the first prescription without the manure would probably suffice.—W. S.

Cement for Wall

How much cement will it take for a wall one foot thick for a barn 50 by 30, with eight foot walls, with three doors four feet wide; how many cords of stone? Siling, and how many yards of gravel? Is one foot thick enough?—J. H. Peterboro Co., Ont.

A barn 50 by 30, with walls eight feet high and one foot thick, including footings, would require 48 yards of gravel and, if made in a proportion of one to seven, 48 barrels of cement. If H. has any field stones, they could be worked into the wall during construction. The quantity of stone that would be used would all depend upon the kind of gravel that was used, the finer the gravel the more stone that could be worked into it. With the uniform gravel one would be able to use five cords of stone. This would save the same quantity of gravel and about 4-2 barrels of cement to each cord of stone used.—H. Poocek, Mgr., London Concrete Machinery Co.

Roots or Corn, Which?

I have been following with interest the arguments put forward in Farm and Dairy for the silo and have just about decided to build one this summer. There is one point on which I am not clear. How does the dry matter, which I suppose is the only part worth considering in roots and corn, compare in value in the two?—A. L. Dundas Co., Ont.

Experiments to determine the feeding value of the dry matter in silage and mangels have been carried on at several experimental stations, and the results would indicate that while the dry matter in roots is more digestible than that in corn silage, dairy cows whose feed rations consist largely of beets or silage, yield somewhat better returns for the dry matter in the silage. The difference in favor of the silage is not large, about three per cent on the average. When we consider the relative cost of dry matter in these two feeds, however, there is no doubt as to which is the most economical. The dry matter in silage can be produced for one-third the cost of producing the same feed in the roots.



BIBBY'S CREAM EQUIVALENT

CALF MEAL

No other food except fresh milk itself contains so much nutriment for calves and young pigs as this meal. The Government test shows a much higher percentage of real (fat) value than others. Not a "drip," but an extremely wholesome food. Made in England by an honorable firm, the largest manufacturers of Calf Meal in the world.

10-lb. bags, 60 cts. at all dealers.
CANADIAN REPRESENTATIVE:
WM. RENNIE CO., Limited, TORONTO

Valuable Book on Barn Building FREE



Write at once for this valuable book. It contains information that every farmer should have regarding the essential fundamentals of correct construction and gives proper headings and arrangements. It describes lighting, ventilation, stable floors, and their construction and outlines suggestions about silos, alleys, exposures, apparatus, drains, bridges, etc. Write for this book a number of practical hints and other information that may help you the way so you saving many a dollar. We have designed many of the finest and most modern dairy barns in this country and this book is based on our long experience and expert knowledge in dairy barn construction. The book is written in concise, clear and condensed form, information necessary to any farmer who is planning to build or remodel. Understand, we send you this book absolutely free without any obligation on your part—just for answering these few questions: Do you intend to build or rebuild? How soon? How many cows have you? Will you want a litter easier? Will you want a bay fork-cum? Send today!
BEATTY BROS. BOX C FERROS, ONTARIO

DYER THE FENCE MAN

Sells direct to buyers at factory prices. Iron and Wire Fence in all styles; Gates, Barbed, hooked and plain wire; Staples; Fence, Collars; Tools. Special prices car-loads.
I have you big money, give you best fencing and quick service. Here are sample prices: All No. 9 Fence 9 strands, 20¢; 8 strands, 16¢; 7 strands, 16¢ per rod, etc. If ready in quantity, fence business. My printed matter explains my methods. Get It. Write to-day.
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CREAMERY MANAGER WANTED

For Southwestern Creamery. Duties to commence April 1st. A thoroughly competent, practical man required; permanent position twelve months - of the year. Cream gathered system. Buttermaker kept. Make for 1911, 170,847 lbs., and good chance for large increase. Manager required to look after the entire business, under approval of the Board of Directors, apply with references, experience, etc., with full particulars in first letter, and stating salary expected, to

THE SCOTTSBURGH CREAMERY CO., Ltd
SCOTTSBURGH, NOVA SCOTIA.

RUSH Your copy to Farm and Dairy before Saturday. This week we had a record and then hold out two pages of commercial advertising, which came out late on Monday morning.

SITUATION WANTED

Steady man seeks situation on farm (by the year). Life experience among stock. Two sons good milkers. Apply, with full particulars.

EDWARD PAVEY, HALLS BRIDGE, ONT.

BABY CHICKS

Now is the time to order. Get the very best laying strain of Single Comb Buff and Single Comb White Lethorans from "UTILITY" POULTRY FARM, Stratford, Ont.
T. G. Delamere, Proprietor.



37

Prize Winning
Milk Record



175
Head

Mostly
Females



175
Head

Mostly
Females

HOLSTEINS

will be sold by
Public Auction

Tues., March 26

Being the entire noted herd
of S. Macklin, Weston, Ont.

All Holstein Breeders and other good dairymen will recall how these cattle have been always successful at the great Toronto Exhibition. They have made attractive records as well as winning premier honors in the show ring.

The offering includes eight heifers by that famous Bull, **Schuling Sir Posch**, twice Grand Champion at Toronto.

These are of the low down blocky and straight type that can win anywhere in the show ring.

They are splendid producers milking up over 60 lbs. a day as 2-year-olds. (See catalogue for full particulars of 7 day and other records.)

BELLE POSCH, one of these heifers, was Jr. Champion at Toronto as a yearling.

MURIEL POSCH, another, as a 3-year-old last year was first at Toronto. She milked 60 lbs. a day last year in August.

There will be 21 milking cows in sale, also the stock bull **CORA'S BRIGHTEST CANARY**—four nearest dams average over 27.5 lbs. of Butter in 7 days.

Have been offered \$5,000 cash for this lot, but preferred to sell them by auction and let all have the opportunity to get this richly bred, high producing and prize winning stock.

WRITE AT ONCE FOR CATALOGUE

TERMS OF SALE—Cash or 7 month's credit with interest at 5 per cent.

Rigs will be at Central Hotel at noon on day of sale to convey those coming from a distance.

S. MACKLIN, Weston, Ont.

Elmdale Stock Farm

J. K. McEWEN, Auctioneer.

The Holstein Breeders

OF THE

Belleville District

"Where they breed and sell" CHAMPIONS

Will Hold **SECOND ANNUAL SALE**
At Belleville, April 3rd and 4th

In quality and numbers nothing like it ever happened in Canada before

THINK OF IT!

65 Two - Year - Old Heifers

(By or bred to the great sires of the Belleville District)

Lulu Keyes, the 19,250 lb. 2-year-old, in type and individuality as attractive as her record.

Not one, but several Cows and Heifers that have milked from 80 to 90 lbs. per day, and from 16,000 to 19,000 per year (official).

Come to the Sale where you have a Choice

Not One—but Scores of Good Ones

With such a large offering there will sure be good young cattle at prices to suit every pocket-book.

In last year's sales were several animals that have been re-sold at big advance.

WE WON'T WEARY YOU

Watching the auctioneer wearing his life out trying to sell—

A huge surplus of bull calves
Three loaded or used cows

These nerve-racking, interest-killing accessories of almost every public sale, will be as scarce as the proverbial hen's teeth at Belleville.

WE BELIEVE

A satisfied customer is the greatest asset of any business.

This is our Second Sale. The kind words of appreciation encourage us to believe the First Annual Consignment Sale of the Belleville District gave general satisfaction and the buying public appreciate the stand we took of Giving every man a Square Deal, selling every animal catalogued without complaint or quibble.

We are more determined than ever to not only retain the golden opinions of our friends, but by perfecting some minor details, to give to the buying public the best opportunity to buy right and buy satisfied.

Others have advertised theirs as the greatest sale.

We Can Deliver The Goods

WAIT!

If you want One or a Carload, it will pay you to wait for the Belleville Sale

Be sure and send for Catalogue to:

F. R. MALLORY
Frankford, Ont.



Peerless Poultry Protects

We built Peerless Poultry Fence strong enough to keep marauding animals out and sufficiently close to keep small fowl in.

A Real Fence That Gives Real Service

Built same as farm fence of good galvanized wire, protecting it against rust. Top and bottom No. 9 heavy, hard steel wire—intermediate horizontal wires No. 13—suitable for turning all classes of stock.

Agents nearly everywhere. Live agents wanted in unoccupied territory.

The Barwell Hozzie Wire Fence Co., Ltd., Winnipeg, Manitoba, Hamilton, Ont.

POULTRY YARD

Room for More Poultry

A. P. Elliott, Glenagry Co., Ont.

A feature of the market reports all over Canada for the past month has been "Canadian eggs almost unobtainable." It is certain that we poultry men need not fear over production. Practically all of the eggs used in Montreal and Toronto during February came from the United States. Even the cold storage stocks were exhausted. These eggs were not imported because dealers or consumers prefer eggs from the States, but because the Canadian product simply could not be obtained at any price. We are not producing it. Dealers are willing to pay two to five cents a dozen more for our eggs than for imported ones, but even with that inducement we are not supplying the market.

Professor Graham has estimated that it costs only a little over 10 cents a dozen to produce eggs in the winter. It costs us a trifle more than that to produce eggs in winter, but we know that there is a great big profit in

winter eggs at 40 cents a dozen. We have had no trouble in obtaining 45 cents and 50 cents a dozen for our eggs delivered direct to customers.

Why not?

The condition of the egg market this winter makes it an unsolvable problem to me why we farmers are not going into poultry more extensively. Several of my friends have told me that they "cannot be bothered." They would not be so indifferent did they appreciate the large profits that can be made from a well-conducted flock of poultry.

With the greatly extending market for our products, both east and west, we farmers can go into the poultry keeping on almost any scale we will and still be sure of a profitable market. With early hatched pullets, well fed and kept in the right type of house, the fresh air kind, there is no reason why we farmers should not supply the home market in the winter months, and there is a big profit in it for us.



Caldwell's Molasses Meal

is a Milk Producing Food

palatable, nutritious and economical. Feed it and your cows will yield more milk than they are now doing and put on flesh. Contains no spices or drugs. Write for booklet and direct from the mill prices.

Caldwell Feed Co., Ltd. Dundas, Ont.

"Here is my Letter to You. It is Worth One Thousand Dollars"

DEAR FRIEND:

If you're going to buy a horse, you look at his feet. But if you buy a building, you look at the ROOF last. A horse isn't worth more than his feet, and a building isn't better than its roof.

I want you to roof right. I want you to get the right stuff from me at the right price. I want to make your roof a good deal better than your building, because then you'll get everything out of the building that it can give in shelter, protection and proper storage. The right roof does more than anything else for any building.

My Oshawa Shingles have taken 50 years of my thought and time and invention. It was hard work. I tried to get just the right kind of I worked for years to get just the right kind of metal to last longest. I worked to get a roof and best lookout that it couldn't pry open. I worked and estimated hard to get a roof neither too heavy nor too light. I worked for a time-roof shingling. I have got it for you. It will last 100 years.

When you use this Oshawa Shingle of mine what do you get? First, you get a shingle so good to-day, that it gives perfect service. It suits any building. It meets every kind of need for a roof at low cost and with long service. Second, you pay a moderate price. This is because many buyers unite on using my Oshawa Steel Shingle. The Canadian Government Bernier Arctic Expedition used my shingle against Arctic ice and bizzards. The North-



West Mounted Police use it, another Government against Arctic snow on permanent construction. The West Indies use it against terrific heat and rain. You find it in Japan because it stands earthquakes. My Oshawa roofing is one of the farms of South Africa. Here is ONE roof that is perfect in every climate in the world from Arctics to Tropics. World sales are my reward for high quality. Third, you have a roof that is easy to lay and lay right. It will not leak or burn. It is lightning-proof. But I want you to pry into every detail of my proposition first. I want you to know it is right. I will send you this book of mine. "ROOFING RIGHT" if you send me a post-card. The book is worth millions of them out, for they have useful hints on planning barns and houses. The book is worth millions to you, and if it leads you to use my Oshawa Shingles, the roof will be protecting your barn one hundred years from now.

Send for this book of mine now, to my nearest address below. If you are about to build a barn, it may have a hint or new idea worth \$1,000 easily to you, even if you do not buy a roof. If you do get a Pedlar Roof from me, you get double or triple service from the building. I will be looking for your enquiry.

Yours truly,
(Sgd.) *G. A. Pedlar*

Care for the Chickens

Jos. Shakespeare, England

The lice-infected brood hen is at the root of more sickness among chickens than all other causes put together. The nest and the sitter may be treated for lice before the eggs are set, but, as often as not, the latter is neglected at the time the eggs are due to hatch, with the result that no sooner do the chicks enter the world than they begin to cater for the lice that become attached to them and feed upon them by drawing from them their very vitality. In a little while the chicks become bloodless, refuse to take food, droop their wings, and present a ruffled and dejected appearance, and if they are the produce of eggs secured from specialist breeders, such breeders generally get the blame in the form of abusive letters relating to lack of vitality on the part of their stock birds.

CLEAN THE BROODERS

The same remarks to a very great extent apply to chicks placed in unclean brooders. Thousands of chicks annually succumb to the ravages of insect vermin through being placed in brooders that have received no overhauling prior to being tenanted. If the brooder is cleaned, disinfected, lime-washed and thoroughly dried before the chicks enter it, lice may not be troublesome, but if the structure has been lying idle since the previous rearing season, and is put into use without due regard being paid to its interior condition, it is likely that its inmates will soon be infested with insect pests.

When chicks are to be artificially or naturally brooded, the hens, brood coops, brooders and the chickens themselves should be thoroughly treated for lice before rearing operations begin. One who gives the chicks a clean start in life and you give them a strong safeguard against illness. Once then become debilitated through the ravages of lice and you fit them for the reception of disease.

To be Exact

"What's that sign you're making there?" asked the grocer.

"Fresh eggs," replied the now clerk.

"H'm! Make it read, 'Fresh-laid eggs' while you're about it."

"What for?" Everybody knows the eggs were fresh when they were laid.

"Just so and that's all it's safe for us to say about them."—Catholic Standard and Times.

A strong chick a month the younger, will go ahead of the month older chick, before fall comes, and will be of some good when it is grown.

The PEDLAR PEOPLE Limited, of Oshawa Established 1861

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- Address our nearest warehouse. We want agents in some sections. Write for details. Mention this paper.

Artificial Brooding of Chickens

(Continued from page 5)

venture and exploration, first one and then another have poked their little heads under the protecting curtain and taken a look round; now is the time to start feeding, but very carefully.

FIRST FEEDING

A few crumbs of bread may be dropped so they can see them falling, and soon they will be flinging chaff and sand round in a manner that reminds us of their mothers, in an anxious hunt for crumbs. We give them the clean water they can drink, and change it often; it soon gets warm and dirty. We take an ordinary tin that will hold water, punch a nail hole about one inch from the open end, fill with water, with just a pinch of roup powder in, invert in a saucer, and we have an ideal drinking fountain for our chicks.

For the first few days we feed little, very little and often, if we have the time; if not we feed three times a day. Be as usual and don't feed too much; a very good plan is to measure into a cup one pinch of feed for each chick. This we find plenty for a start and gradually increase as they grow. In this period the chicks' life a great deal depends on the attendant using his own powers of observation. The methods one person finds successful may be fatal for another.

FEED FOR WEEK OLD CHICKS

After the chicks are about a week old we place a trough about four inches wide and with one and a half inch sides in the brooder, or in the run outside if the weather is such that the youngsters can be out, and put their feed in this, keeping some feed in the trough all the time and scattering the changes of feed—choice morsels—in the litter to keep their feet going. Of course in nice warm weather we aim to get the chicks outside the brooder as soon as possible, because contact with mother earth is very good for them.

We get some liver, and let them go at it. They cannot get much of, but they are always trying. During the winter we take every opportunity to secure livers when the neighbors are killing. We boil them till they will crumble up, dry them in a pan till they are quite dry, crush them up fine, and we have good meat meal. We put it away in a dry place and we can keep it as long as we like.

BOILED EGGS FOR CHICKS

The eggs tested out of the incubator, boiled half an hour and mixed with six times their bulk of grain or bread crumbs are also good. We have even seen them out in halves and placed where the chicks can peck at them. But we have to confess that we are seldom successful with feeding eggs. Perhaps we feed too much, but we are apt to be troubled with bowel trouble when we start on the eggs; yet we have often seen them fed in what appears to us to be a wholesale manner with the best results.

For the first two weeks we keep the room temperature round 90 degrees. If the chicks find too warm they soon come out, but we rely more on the action of the chicks than on the thermometer after the first week; if they huddle the cover close we think a little more heat is good. We like to see them spread out, with their heads sticking out from under the curtain. For the run we place 12-inch boards on edge in front of the brooder. When they can fly over these, they are removed and the chicks are allowed free range. At three weeks they are gradually weaned off artificial heat, and at six weeks they are put into colony houses, which may be dry goods boxes covered with tar paper to

keep out the wind or rain or any of the colony houses advertised by poultry supply companies, according to the means of the operator.

HOW COLONY HOUSES ARE BUILT

Our colony houses are built after the pattern of the cyphers colony house, and cost us about \$1 each for material and half a day's work. They are three feet by six feet, two and a half feet high at back, three and a half feet in front; frame of three-inch by one-inch stuff, sheathed with half-inch lumber, and covered all over with tar paper, fastened on with laths. The door is a frame covered with cotton, and the twelve-inch by 24-inch window has no glass, but a cotton curtain to let down if required; otherwise it is left open to get lots of fresh air. Two boards, four inches wide, five feet eight inches long, are nailed to eight-inch supports and placed on the ground inside the coops for roosts.

These birds are all hopped fed on whole grain, mainly wheat screenings. We give them free range, plenty of water, grit and table scraps, and, if possible, cut bone or scrap. At four o'clock every afternoon we mix a mash of ground oats, wheat, barley, bran and shorts, and if we could get it we would add corn meal. This is all mixed together and scalded, then mixed into a very stiff mash. We never make the mash sloppy, and don't feed too much of it. We feed it so that by the time the pail is empty the chickens have it just about finished. Of course we are referring to birds intended for breeding and laying stock. The birds intended for marketing may be fed the same, but if it is the intention to hurry them along they must be separated from the rest of the flock and fed much more generously on mash foods.



Better Cultivation Gives Bigger Crops

and the PETER HAMILTON CULTIVATOR does more perfect work than any other machine you can place on your farm because the different groups of three rows of teeth are sub-divided again, and the front teeth are attached to one tooth frame and the back row to a different tooth frame, and consequently all the teeth cultivate to the same depth and work up every inch of ground.

The Whiffle Trees are attached in line with the sections. The draft is light, and there is no chafing of the horses' necks.

The Sections are made out of heavy extra stiff steel, and will not bend, and the teeth are reinforced with an exceptionally good helper, and will stand all kinds of rough usage.

For "RESULTS" buy a Peter Hamilton Cultivator. It means Dollars in your pocket.

The Peter Hamilton Co., Limited
Peterborough, Ont.

MONEY IN POTATOES



You Bet There's Money In Potatoes When You Get 60c. A Bushel For Them

Last year, the average selling price all over Canada, was 60c. a bushel, compared with 45c. a bushel in 1910. Last year, Canada's potato crop increased in value OVER SIX MILLION DOLLARS.

In February, Potatoes were quoted in Toronto at \$1.60 a bag in carload lots. You bet there's money in Potatoes.

Here's a hint that will bring you in a bag of money

Plant Potatoes on your summer fallows, instead of letting the land lie idle. By growing a potato crop, the necessary cultivation will destroy the weeds as effectively as any summer fallow.

And the best hint of all is this—

Write for our big free book—"Money in Potatoes." Of course you grow enough Potatoes for the table. But grow more of them for the big money there is in them.

This book shows just what there is in potato growing for you.

It tells you what the most successful potato growers in Canada and the

United States have learned about planting, cultivating, fertilizing, spraying, digging and marketing Potatoes. It tells what soils are best—which potatoes are best payers—and gives a host of hints that a man of your ability will quickly turn into money, this summer.

Make up your mind that you are going to make money out of Potatoes. Sit right down—clip out and fill in the coupon—and send it off to us to-day.

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GALT, ONT.

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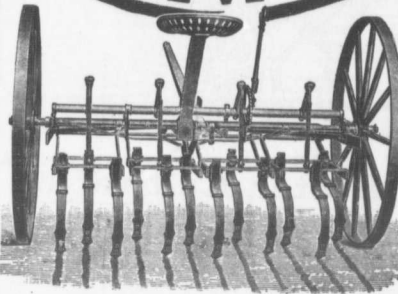
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Please send me free copy of your book—"Money in Potatoes."

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FROST & WOOD CHAMPION CULTIVATOR



It Does the Work!!!

EVERY farm paper tells you to "cultivate." It is good advice. The great question with you is, "What machine?" We say right here that this is one of the very best Spring Tooth Cultivators on the market. Why? Because the "Champion" has a frame of best heavy steel, braced with strong steel braces securely riveted in part to art—making substantial. And these sections on Frost & Wood "Champion" Cultivators are properly designed. Each section can work independent of others, when uneven ground is encountered. They adapt themselves to all inequalities of the land. That means every bit of your field cultivated—nothing missed—Next the pressure. This is applied by that convenient lever in front and put on all teeth at once. See the heavy springs above each section—they keep the "Champion" down to its work. Teeth are made of best quality working hard land. The 2-inch narrow points on "Champion" Cultivators are reversible—which means double wear. For weed or thistle cutting wide points are applied—change can be quickly made. You should get this "Champion" Cultivator. It will prove a valuable asset to any farm.

Ask us for Booklet on Seeding and Cultivating Implements. A post card will do.

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SMITH'S FALLS, ONTARIO 97
For Sale in Western Ontario and Western Canada by
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All you require to do is to send us a post card asking for our handsomely illustrated 112 page Catalogue of Seeds, Plants, Bulbs, Implements and Poultry Supplies, which we will mail free of charge, and no receipt of same need be returned. Write for it now to

John A. Bruce & Co., Ltd., Hamilton, Canada.
The Pioneer Seed House of Ontario.

HORTICULTURE

Advocates Mulching Trees

Samuel Armstrong, Peterboro Co., Ont.

Is this theory any good? There are large sections in Ontario where farms can be had very cheaply that are admirably suited so far as soil and climate is concerned to produce the highest quality of apples. They are, however, so worn out with constant cropping and so full of quack, sow thistle, mustard, and so forth that the cost of manuring and cleaning the land makes the cost of getting an orchard into bearing on such land almost prohibitive. Here is my idea of how such land could be made to grow good orchard at a minimum of expense.

Plant trees in rows 50 feet apart and 30 feet apart in the row. Cultivate the first year, then about July sow a strip of alfalfa about 35 feet in width down the wide rows. The mower would be run over this before the weed seeds are allowed to mature, and everything raked over around the trees. In succeeding years the only thing to do would be to run the mower over the whole orchard three or four times a year, and fork everything near the trees.

My experience in mulching fruit has been somewhat limited, but where tried I have found results always good. Now, Mr. Editor, I would be pleased if some of the readers of Farm and Dairy would give their experience or opinion of this method of orchard treatment. One thing I am sure of and that is that the cost of this system would only be a fraction of the expense of any other plan of getting moisture and fertilizer at the same time.

Best Varieties of Potatoes

What is the earliest variety or varieties of potatoes, and also which are the best quality and best producers?—N. R. Trials made at the Central Experimental Farm, Ottawa, would indicate that the best varieties of early potatoes are Rochester Rose, Early Ohio, Irish Cobler, Eureka Extra Early and Boyce.

In the same trials the most productive variety of early potatoes is the Rochester Rose, the average yield per acre for four years being 171 bushels. The most productive varieties of all were the medium white sort, Dalmey Beauty leading with an average production of 276 bushels. Carman No. 1 being second with 145 bushels. All of the varieties tested are of good quality.

How Many to the Acre

The number of trees or bushes necessary in order to set out an acre of land often trouble the would-be planter. In the following table the trees or bushes required per acre for both the square and hexagonal method of planting are given and will save much calculation:

Distance	Triangular Square
4 1/2 feet apart	31 27
7 1/2 " "	65 55
10 " "	89 83
12 1/2 " "	105 110
15 " "	121 137
17 1/2 " "	137 164
20 " "	153 191
22 1/2 " "	169 218
25 " "	185 245
27 1/2 " "	201 272
30 " "	217 299
32 1/2 " "	233 326
35 " "	249 353
37 1/2 " "	265 380
40 " "	281 407
42 1/2 " "	297 434
45 " "	313 461
47 1/2 " "	329 488
50 " "	345 515
52 1/2 " "	361 542
55 " "	377 569
57 1/2 " "	393 596
60 " "	409 623
62 1/2 " "	425 650
65 " "	441 677
67 1/2 " "	457 704
70 " "	473 731
72 1/2 " "	489 758
75 " "	505 785
77 1/2 " "	521 812
80 " "	537 839
82 1/2 " "	553 866
85 " "	569 893
87 1/2 " "	585 920
90 " "	601 947
92 1/2 " "	617 974
95 " "	633 1001
97 1/2 " "	649 1028
100 " "	665 1055

If you have poor varieties, top graft. It is not hard work.—J. W. Clark, Bant Co., Ont.

ABSORBINE

Cures Strained, Puffy Ankles, Swollen Feet, Corns, Bunions, Sprains, Bruises, Wounds, Cuts, Burns, Scalds, Itchiness, Eruptions, Swellings, Rheumatism, Without Blistering, No Pain, No Dangers, No Disfigurement. The only medicine that cures the above ailments. Describe your case for special instructions. Price 25¢ per bottle. **ABSORBINE** is a preparation of the finest medicinal plants. For Sale Everywhere. Price 25¢ per bottle at druggists or direct from **W. J. Young, P.O. Box 123 Lyons Bldg., Montreal, Ca.**

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Kenneth McDonald & Sons, Ltd.
Ottawa, Ontario
Write under Dept. 3

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Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on rollers. With engines or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalogue. **WILLIAMS BROS., ITHACA, N.Y.**

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CHOICE O.A.C. No. 21

BARLEY

I have 400 bushels of choice seed of this great barley. Samples and particulars on application. Price: \$1.25 a bush. Buds included.

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No matter how thick or scraggly the hair

THE "BURMAN" HORSE CLIPPER

will clip it in thirty minutes.

Always ready for use, easy to manipulate, it will save you time and money. It is so simple and clipper clean, friendly and as close as you wish.

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Comes packed ready for use—clipping plates and shaft hooks for holding clipper steady and hand supplied.

Ask your dealer or write direct.

B. & S. H. Thompson & Co., Ltd.
MONTREAL

Announcement Of Special Interest to Holstein Breeders

And to all Good Breeders of good Dairy Cattle

Two Wonderful Young Bulls for Sale

Ready for Spring Service



MAY ECHO **NETHERBY QUEEN JANE**
These Noted Dams of the Two Bulls we offer have each
UNBROKEN CANADIAN RECORDS

If you have only one good animal on your farm, let that one be your herd bull.

If you have many good animals, let your herd bull be the best animal on the farm.

He will earn more than his purchase price every year in extra value of calves and service fees, besides the usual good advertisement he brings to your farm.

When we purchased **SIR LYONS SEGIS** as our herd bull, although a very big price was paid for him, it was the best investment we have ever made.

Men have come hundreds of miles to see him, and after looking into his pedigree have secured his services for their best cows, and are shipping hundreds of miles for the purpose.

Bull No. 1—**SIR ECHO** (No. 12,982), born May 4, 1911—a beautiful, straight, deep calf, mostly white, and certainly a breed-looking animal. (Price \$500.00.)

DAM, MAY ECHO (No. 3372.) Record, 23,707 lbs. milk, 1,042 lbs. butter, in one year, freshening inside of 15 months.

A record not equaled by any other cow in Canada, dead or living, and it is doubtful if such a record has been made by any cow in the world under similar conditions. Three or four cows have given more milk, but they did not freshen in time to qualify them for Record of Performance, and, of course, it is needless to say that there is a considerable difference between the amount of milk given by a cow if she is carrying a calf, during such a record, or not.

May Echo made this record under the care of a very young, inexperienced man—in fact, almost a boy.

Sire, **INKA SYLVIA BEETS POSCH** (No. 3669), sire of May Echo Sylvia—record 21 lbs. butter 7 days as a senior yearling, and sold for \$1,000.00 as a heifer.

Bull No. 2—**KING NETHERBY** (No. 12981), born March 23rd, 1911. A beautiful type, straight and bred, with a wonderful constitution. (Price, \$350.00.)

Sire, Comet Johanna (No. 11657).

DAM, NETHERBY QUEEN JANE (No. 4336).

This Cow also holds two Canadian Records—Milk in one day, 11 1/2 lbs.; milk in 7 days, 753 lbs.; butter in 7 days, 28.55 lbs.

The above record was made under very unfavourable conditions, she having freshened at 10 months and 2 days. She was giving 40 lbs. of milk a day 2 1/2 months

SIR LYONS SEGIS (No. 11,495)

Born Nov. 9, 1910. Sir Lyons Segis is a beautiful, straight bred, looking bull and a really bred one.

1. His two grand dams average 34.01 butter in seven days and 129.5 lbs. butter in 30 days.

2. His 2 grand dams average 30.56 butter in seven days.

3. His 2 grand dams and four gr. gr. dams average 26.10 butter in seven days and his 2 grand dams and 207 his grand gr. dams the four average 133.15 lbs. butter in 30 days.

4. Four of his dams in the first four generations have each produced a 30 lb. daughter averaging 32.30 and 3 of these dams have 30 lb. records of their own and the three 30 lb. dams with their three 30 lb. daughters average 32.49.

5. Four of his sires in the first 4 generations have 11.30 lb. daughters averaging 32.36 and the daughters of 2 of his sires are not yet old enough to make records.

6. Sir Lyons Segis not only comes from high butter record families on both sides but his dams and sires are producers of high records through their daughters, as seen from the above and further proven by the fact that his dams and sires in the first 4 generations are dams and sires of 15 daughters with over 30 lbs. butter which average over 32 lbs. and 30 daughters which average over 30 lbs. Remember this only includes his sires, grand sires and grand dams. There are absolutely no weak spots in his pedigree and crossed with a reasonably good dam the offspring must of necessity be large producers that is if breeding and marks count for anything. It is doubtful if any other bull in the world can equal this showing except a calf with 100 pct. of the same breeding owned by H. A. Meyer, Syracuse, and not for sale.

7. His dam's record as a 7 yr. old is 30.62 butter in 7 days fat 3.52. She will be tested again after freshening and barring accident ought to make better than 20 lb. cow as she has a (Blanche Lyons Netherlands) who held the world's record of 144.18 butter in 30 days, making these two the greatest mother and daughter of the breed. The dam of Sir Lyons Segis is sired by the great King Segis whose dam has 29.62. This gives an average of 29.60 for her dam and her 2 grand dams.

8. The only low testing cow in the 4 generations is his grand-dam Blanche Lyons 17.25, but this cow has proved to be one of the greatest, if not the greatest, transmitting cow of the breed as she is dam of 2 1/2 lbs. cows, one of which has proved a 30 lb. daughter, and she has a son who has sired 2 1/2 lb. cows, one of which has a 31 lb. daughter. No other cow of any breed has a similar record.

9. In the breeding of Sir Lyons Segis we combine the blood of three of the greatest sires of the breed, viz: Hengerveld, De Kol, Pieteric Hengerveld Count De Kol and King Segis with 27.0, R. O. daughters.

10. And last but not the least the individual make up of Sir Lyons Segis is everything that can be desired, as he has the general appearance and all the marks of a sire that any breeder would be proud to have at the head of his herd.

before freshening, and in order to get her dry it was necessary to feed her nothing but straw for nearly a month, the result being that she was so thin at time of freshening we had no idea of putting her in the test. She gave 57 lbs. milk at her first milking (which we believe to be another unbroken record), and even then she was not milked dry, as it was considered dangerous.

We hope to increase her 7-day record to over 30 lbs. at next freshening.

Our readers must remember that these two great cows have never had the same chance as those owned by American breeders. Men who have visited Allison Stock Farm after seeing the only 37 lbs. cows, viz: **Pontiac Pet** and **Pontiac Clothilde De Kol 2nd**, have stated that neither of these cows show the wonderful marks and capacity of either **May Echo** or **Netherby Queen Jane**.

Remember, these bulls are low priced, and if you don't think so, just visit some of the American breeders and you will be asked from \$1,000 to \$5,000 each for young sires from dams not as good as these.

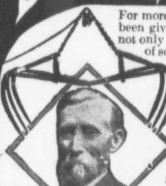
We have also some extra nice young bull calves, one from a three-year-old heifer with a record of nearly 27 lbs. of butter and sired by **Sir Admiral Ormsby**, and others with similar records.

Come and see these bulls and get your choice and at same time we will show you some good cows and our herd bull, **Sir Lyons Segis**, which we think is the best bred bull in Canada. Note the few facts regarding him given in the panel herewith.

We would be delighted to show these to you.

ALLISON STOCK FARM **H. J. ALLISON, Proprietor**
CHESTERTVILLE, ONTARIO (Dundas County) 25 miles east of Smith Falls, on main line of C.P.R. between Montreal and Smith Falls

Perfect Barn Equipments STOP WASTE



For more than 45 years our best thought and energies have been given to the problem of stopping waste on the farm—only economy of time and labor, but also conservation of soil fertility.

Our first patented device was a crude wooden yarder produced in 1867. From this beginning there has been development and perfection.

The Great Louden Line of Barn Tools

the most perfect, efficient, and economical ever devised—KNOWN AND USED ALL OVER THE WORLD.

Louden Flexible Tubular Steel Cow Stanchions keep the cows lined up but allow perfect freedom of movement and comfort. Can be hung on homemade wooden frames.

Louden Sanitary Steel Stalls are made of tubular steel, easy to clean, keep the barn light, perfectly ventilated and sanitary, the gutter and keep them in line; patented adjustable stanchion holders; built and cast in one, self-cleaning steel mangers, etc.

Also patented **WILLIAMS LOUDEN** Adjustable Rails which align cows of unequal length on the gutter and keep them in line; patented adjustable stanchion holders; built and cast in one, self-cleaning steel mangers, etc.

Louden Feed and Litter Carriers of galvanized sheet steel, running on overhead tracks. Reduce the time and labor of close work one-half to three-fourths. The Louden Line includes also, **Louden Hay Tools**; Louden's Bird Proof Barn Door Hangers; and all fittings and accessories for completely equipped barns of every size.

Let them make you money by making your cows give more and richer milk, and by saving time and labor—every kind, hand, sack, means \$60.00 or more per year, which is 8% interest on \$750.00. And they will last longer and give better service than any other Barn Tools made.

Patents—All Louden Tools are built under original patents covering all essential features. We guarantee our tools to be free of infringement on any patent owned by others. We guarantee to hold each and every purchaser of Louden goods safe at all barns or damage from infringement claims.

Send orders of your Barn Tools and we will advise you what equipment you need. We shall also tell you what makes our tools so good. Write for our Catalogue "Everything for the Barn." Write to **Louden Machinery Co., Dept. 402 Guelph, Ontario.**



"WAKE UP" FOR SALE
N. B. Seed Potatoes
All Varieties

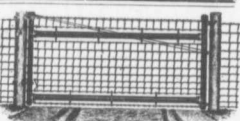
"WE NEED"
50 Cars Carrots, Parsnips, Potatoes
Beets, Turnips, Cabbages
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NEUVERMIFUGE

The best and most effective remedy for Bots and other worms in horses. (Guaranteed by the Farmers' Horse Remedy Co. under the Pure Food and Drug Act, June 30, 1906, Serial No. 3137.) It is guaranteed to kill and bring from the body dead in from 18 to 24 hours all pin worms and bots.

It is absolutely harmless and can be given to mares in foal before the eighth month. Practical horse owners have written us Neuvermifuge has removed from a single horse. An entire horse's stomach is full of worms cannot get fat or help being obtained. Send your order today. Beware of imitations.

Composition, 91 lbs. in cans, \$1.00
Farmers' Horse Remedy Co., Dept. A-1
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Clay Steel Farm Gate are the strongest and best farm gates made. 20,000 sold in 24 years. Every gate fully guaranteed. 60 days free trial allowed. Send for catalogue.

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The Best Built Roller

Is the "Bissell," with DRUMS of heavy steel plate, hard in temper, riveted up close, having pressed steel heads.

With AXLES of 2 inch solid steel revolving on cold rolled Roller Bearings.

With the MALLEABLE CAGE in one piece, holding the Roller Bearings in line on the axle.

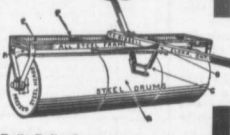
With DRAW BRACKET under the Pole, making the draught down low.

With the FRAME all of steel and the improved steel plate bottom.

You may be told that other Rollers are like the Bissell—but there is only one original Bissell

Roller and to solve our customers' disappointment, we put our name on every Roller we build. Look for the name "Bissell" and ask Dept. R. for catalogue describing the "Best Built Roller."

Several styles and a variety of widths to choose from, 6 ft. up to 12 ft. Grass Seeder Attachment also furnished if required.



T. E. BISSELL CO., LTD., ELORA, ONT.

The Hamilton Asylum Farm

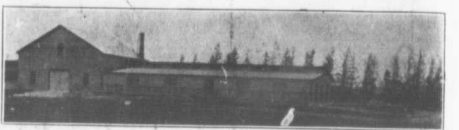
One of the enthusiastic farmers and breeders of Canada is Dr. English, superintendent of the Inasue Asylum at Hamilton. Although he has the responsibility of managing that large institution with its 1200 inmates and some 200 assistants, Dr. English takes a close interest in the 527 acre farm, as well as in the live stock. The herd at the institution includes a number of pure bred Holstein cattle. For several years Dr. English has shown his interest in this breed by attending the annual meetings of the Holstein Breeders' Association in Toronto.

Of the farm proper 340 acres are

although she had been in since December, 1910, was giving about 46 lbs. of milk a day in May.

The King system of ventilation is used in the stable and is giving good satisfaction. The ceilings of the stable are high. Not an odour of any kind could be detected. Our representative was informed that even in winter there was very little foul air.

Milking is conducted at 5 a.m. and 5 p.m. Chain ties similar to those in use at Guelph are used and are giving entire satisfaction. The water troughs run in front of each of the cows. It is claimed that these have given better satisfaction than small basins that were used previously. The



A Large Piggy Having Many Desirable Features

The large and convenient piggy at the Hamilton Asylum Farm, illustrated herewith, is described in the adjoining article. To the left of the central building is another wing of equal size to the one shown.

—Photo by an editor of Farm and Dairy

under cultivation, about 100 additional acres being in lawns and gardens. The ticks, cats and sheep are bought in Toronto, about 24 head of cattle and 12 sheep being purchased every three weeks. These are required for the maintenance of the patients and staff. The milk used, about 1,110 lbs. a day, is produced on the farm, as well as is the pork. At present the piggy are undergoing considerable repairs and extensions. When completed they will be among the finest buildings of the kind in Canada. The cattle barn and stable is a commodious, well-arranged building and reflects credit on the institution.

An editor of Farm and Dairy paid the farm a visit recently and received a cordial welcome from Dr. English as well as from his capable assistants, Messrs. F. M. Regan, farm superintendent, and R. Salter, the dairyman. Farm and Dairy is much appreciated at this institution and its various articles carefully read.

SOME OF THE HOLSTEINS
The dairy herd is a credit to the management. The stock is mostly grade, but the animals show every indication of being heavy producers. Several grade cows were noticed that would have stood high in the grade classes at any of our large exhibitions. An exceptionally fine Holstein bull, Canary Ormsby, a two-year-old, bred by George Rice, heads the herd. This is an unusually well-proportioned animal, being evenly balanced throughout, smooth, deep, long and vigorous. The bulk of all of the herd is Sir Wayne Korndyke. The herd comprises among its pure bred, a heifer valued at something over \$500, as well as an usually fine cow, Johanna Rue, which,

mangers are of cement but are not so high as to prevent the cattle from obtaining plenty of fresh air. It is possible to flush them out when desired.

THE PIGGIES

Any one thinking of building a modern piggy, who can conveniently do so, would obtain valuable suggestions by visiting the piggy. This center building is 49x45 feet and contains an upright boiler and an iron receiving tank for swill in which the food is cooked. From this building there are extensions on two sides of 100x49 feet. As yet only one of these has been completed the other being under construction.

These extensions on each side are 15 inches from the center building to the ends. There is a passage down the center, the pens being on either side. It is possible to run the feed from the feed rooms down these passages very conveniently. Each pen has a sleeping division 10x10 feet with a fall of two inches towards the center, as well as its proportion of the 15 inches towards the end of the building. Between the sleeping pen and the centre walk is the feeding section, also 10x10 feet with a fall towards the end of the building. A slight passage leads from the feeding pen into the sleeping pen making a small third division. The sleeping pens are lined with plank both on the floors and on the sides. Dr. English considers this advisable as the building is made of cement and he finds that the pigs are less subject to rheumatism when on plank than on the loads. The sleeping portion of each pen is considerably higher than the feeding division.

About 15 breeding sows are kept. At present, including young stock, about 250 hogs occupy the pens. These were noticed to be in an unusually thrifty condition and of the true bacon type. A mechanical apparatus is used for opening and closing the windows. This is convenient and assists in providing ample ventilation.

As an end of the extensions there is an uncovered cement receiving tank for the manure. By the use of plenty of straw, this makes it possible to save much of the liquids and to increase the value of the manure. This piggy, an illustration of which appears in this issue, was completed last summer. Dr. English stated that the manner in which the stock has improved since it has occupied the new premises has been surprising.

(Continued on page 13)

FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.

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

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add postage. A year's subscription free for a club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 30 cents for exchange fee required at the banks.

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 12,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrear, and extra copies, amount to from 12,500 to 14,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

OUR PROTECTIVE POLICY

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

FARM AND DAIRY PETERBORO, ONT.

CONSULTING THE PEOPLE

Farm and Dairy is in hearty accord with Premier Borden's announced intention of submitting the whole question of naval defence to the people of Canada. In matters of great public importance such as the question of establishing a Canadian navy, involving as it does the expenditure of many millions of dollars a year, practically for all time, it is always a safe course to consult the people. If they don't, it they will say so. If they don't, then it would be a great mistake to force it on them.

The submission of this great question to the people will be of great value. The advisability of incurring the proposed naval expenditure will be freely discussed through the press and on the public platform. Thus the public will be enlightened on many points and will be able to give an intelligent

decision on this matter that is of such great importance. While the cost of submitting this question to the people for consideration may be great, the value of the educational campaign that will accompany it will greatly exceed the expense involved.

COOPERATIVE LEGISLATION

A great hindrance to the extensive adoption of the cooperative principle of doing business by our Canadian farmers has been the poor success that has attended the movement in the past, due to lack of uniformity in the societies formed. Each cooperative society has been the result of one man's ideas. Many of these societies, particularly those formed by the fruit growers, have been a success. But many of the societies that have been formed were based on faulty principles and have failed in consequence.

Cooperative legislation such as is now being introduced in the Danish Parliament, regulating the formation, constitution and government of cooperative societies, would in Canada do away with many of the mistakes that have led to the failure of our cooperative societies. If in Denmark, where they have made such a marked success of cooperation, they now recognize the need of cooperative legislation, how much more necessary is it in Canada, where we are just starting out in the practice of cooperative buying and selling.

We in Canada are in great need of reasonable cooperative legislation, both provincial and Dominion. Our law makers would do well to enquire into the legislation that is now being formulated by the Danish Government and take advantage of their years of experience with agricultural cooperation. We farmers would welcome legislation of this nature. The objection of a small class in the community to cooperative endeavor should not be allowed to carry weight in preventing such useful legislation.

ECONOMY IN EXPENDITURE

The continual demands that are being made on the Dominion Government for financial assistance to projects which properly come under provincial supervision would seem to indicate that we Canadians are coming to regard Federal subsidies almost as so much found money. One of the curses of indirect taxation is that it breeds waste and extravagance in expenditure. We hardly realize that the taxes that fill the Dominion treasury really come out of our own pockets. We pay a little more for the clothes we wear, the food we eat, or the implements we must purchase to work our farms, and we do not stop to consider that part of that price is due to the tariff which the Government levies to supply itself with funds. Did we have to pay the same amount of money directly into the hands of a tax collector, as we do for municipal purposes, we would soon cease our demand for Federal assistance to provincial projects, realizing

that in the end we ourselves must foot the bill.

Under our present system of taxation there is no public revenue so carefully expended as that which is raised by direct taxation for municipal purposes. Experience teaches us that the nearer that we can keep taxation to the place where the money is expended the more economically and wisely will that money be used.

Agricultural extension work and the building and maintenance of good roads are properly projects that come under provincial supervision. The alacrity with which some of our farmers and good roads enthusiasts have received the news that federal assistance will be given in both these departments would indicate that these enthusiasts do not sufficiently realize that they pay the bill in the end or that they will get the most for their money under conditions as they now are where the expenditure is more or less under the eye of the tax payer. If we farmers wish to encourage economy in the expenditure of public funds, we will insist that provincial projects be conducted by means of provincial funds and not by federal aid which too many will regard like "money from home."

CONSERVATION

The vital relationship that exists between live stock farming and the conservation of soil fertility was a subject that was referred to time and time again at the National Convention of Live Stock men held in Ottawa recently. Delegates from one end of Canada to the other were unanimous in their declaration that the only way in which the fertility of our soils can be economically maintained is by the more extensive practice of live stock farming in Canada. Leading agriculturists from every province of the Dominion decried the great waste of fertility that is going on in our country and without exception the remedy suggested was more live stock.

The conservation of natural resources has become a by-word with the most of us. Through the press and from the platform we have been educated to the immense importance of conserving our natural sources of wealth. The greatest of all natural sources of wealth lies in our soil and in its ability to produce human food. We may prosper for a time by robbing the soil of its fertility and by being miners instead of farmers, but in the long run we will have to resort to some system of farming that will conserve the natural fertility of the soil. Our Governments, which are doing much to forward the policy of conservation, can approach the problem in no better manner than by encouraging the live stock industry, as was suggested by the delegates at the National Live Stock Congress. At the same time it will pay us farmers individually to adopt the soil enriching policy of live stock farming.

By stopping the leaks we add to our incomes.

In Ontario the average yield of potatoes is a little over 100 bushels an acre. In the State of Maine, the average yield is 225 bushels an acre.

Fertilizers average an acre. In for Potatoes.

The Maritime Provinces, from whence come a large part of the potatoes consumed in Ontario, the average yield is almost twice the Ontario yield. Why this difference? The farmers of Maine use 1,800 to 1,500 bushels an acre of high grade potato fertilizer for their crops. This means a considerable expenditure, but their increased production more than justifies the outlay. In Maritime Canada commercial potato fertilizer is used universally, and Maritime potatoes, classed as "Delaware" on the Toronto market, are noted for their high quality and sell for ten cents a bushel more than the Ontario product. Is there any reason to believe that commercial fertilizers will not give as good results in Ontario as they have in Maine or in the Maritime Provinces?

One seldom makes a mistake in cutting down acres, and doubling cultivation.

The "civilized" countries of Europe maintain a standing army of 5,000,000 men, and the total war budget of the nations runs up to \$300,000,000, or almost \$1,500,000,000. If the productive power of industry determines the size of armaments, Europe must be almost at its limit. They are now spending nearly seven hundred million dollars annually on warships alone.

Compulsory Spraying (Canadian Horticulturist)

British Columbia has had a law for some years making the proper spraying of orchards compulsory. "So far we have heard no complaints against this law." While this may mean that it has not been strictly enforced, still we have reason to believe that the law is being applied as conditions require and that it is being attended by satisfactory results.

The state of Ohio, where conditions are closely similar to those which prevail in Ontario, has now followed this example. A law passed by the last legislature requires all orchards in which there are five or more trees to be sprayed at least once between November first and April thirtieth. The preparation used must be such as will destroy San Jose, oyster shell and curly scale, a fine of twenty-five to one hundred dollars is to be imposed for each year spraying is not performed. This law goes into force next May.

We are so afraid of preceding public opinion in Ontario there is reason to believe that we are falling behind other provinces and states in several important respects. A compulsory spraying law in Ontario, as well as in our other eastern provinces, would not be any more drastic or any more of a hardship than the sanitary laws now generally in force which require the patrons of cheese factories and creameries to keep their milk clean, wash their separators and other dairy utensils regularly and to maintain clean conditions generally in connection with the handling of their dairy products. This matter of compulsory spraying deserves to be given more consideration than it has yet received in our eastern provinces.

Words of Commendation

Editor, Farm and Dairy.—I notice by label on my paper that my subscription is run out, so thought it better to renew at once, as we would not care to miss any of the numerous of Farm and Dairy. We look forward to the future, when we farmers will enjoy those rights for which Farm and Dairy and The Weekly Sun are striving so hard through their columns to obtain.

I consider that I have lost \$100 each on 12 hogs and 250 barrels of apples that I have sold since September 21st by the failure of the reciprocity agreement. I was pleased to see the report of the Dominion Grange in Farm and

XXI

One of the most progressive ideas in modern advertising that we have noted in a long time is on display last week and again this week in Farm and Dairy, and in several other farm papers in Canada.

We refer to the advertisement "MONEY IN POTATOES," sent out for the Canadian Potato Machinery Co., Ltd.

Potatoes are a money crop. When properly handled in a big way they are immensely profitable.

Growers in the State of Maine, and in our own country,—more particularly in the Maritime Provinces,—have become independently rich from their crops of potatoes.

Experimental work has demonstrated beyond a doubt that Ontario farmers can grow this crop, and grow it most successfully.

All our farmers are even now growing potatoes,—only they are producers in a very limited way.

Our farmers have never gotten down to growing potatoes as a business.

As a result, not enough potatoes are produced in Ontario to supply local needs. Toronto has for years imported a great percentage of her good potatoes from far-away New Brunswick!

Now, the Canadian Potato Machinery Co. has grasped the situation. They see what a veritable Gold mine is within reach of every farmer who can and will grow potatoes.

They have gotten out a book giving the latest information on how to grow and make the most money out of potatoes. This company knows full well that as our farmers become interested in growing more potatoes, then more and more will there be demand for Canadian Potato Machinery. Then will their factory run full time, and BUSINESS in this line BE AS THEY WANT IT—verily as they have made it!

WONDERFUL ARE THE POSSIBILITIES OF ADVERTISING BY MEANS OF THE PRINTED WORD! WONDERFUL IS THE POWER OF ADVERTISING IN LEADING FARM PAPERS LIKE FARM AND DAIRY, which is,—
"A Paper Farmers Swear By."

Dairy, and to read the resolutions contained in the report.

I would say "Keep on in the fight for farmers' rights and legislation by referendum." Wishing Farm and Dairy every success.—F. W. L. Tamlyn, Durham Co., Ont.

Neck and Shoulder Troubles

Collar galls are very common among work horses, and in many cases are quite painful. The swelling which takes place is often termed a cold abscess, but it is really due to small parasites, and when they are destroyed and prevented from multiplying the sore shoulder soon gets well. Now, the first and most important step to be taken in line of treatment is a removal of the exciting cause, if possible. It is not always convenient to discontinue working the horse until the shoulder heals, but it is generally possible to relieve the parts of some pressure or friction which aids in giving partial relief.

A change or readjustment of the collar, or a removal of a portion of its filling often relieves the sore part or parts of pressure, making it possible for soothing or healing remedies to do good work. Very often a sweat pad placed under the collar will give great relief and is quite possible to heal the sore without resting the horse.

GIVE IMMEDIATE ATTENTION

Whenever the shoulder, neck or back chafes and becomes raw or inflamed and swells much, it is time to get busy, for delay in treatment often leads on to a condition of the shoulder requiring surgical work before a recovery can take place. When a collar gall appears the hair should be clipped off, the shoulder washed clean, hot applications applied and kept up for hours and sometimes days. We should apply peroxide of hydrogen to sore parts three times a day; 10 minutes later apply either of the following remedies, which are made by dissolving a quart of a pound of acetate of lead in a gallon of clean, cold water, or dissolve six ounces of powdered alum in a gallon of clean water, adding one ounce of tannic acid to either lotion and apply to shoulders five or six times a day.

It is well to bear in mind that sore shoulders should be treated antiseptically and the same dressing which are applied to shoulders should also be applied to the face of the collar pad. By treating the collar with a lotion composed of carbolic acid one part, and 30 parts of water, or either the lead or alum lotion the sore is not reinfectured. It is also important to air and dry the collar and pad as often as possible.

ORRIS. GOOD ANTISEPTIC

A lotion made by dissolving one part bichloride of mercury in 1,000 parts of water acts fairly well. A healing powder made by mixing equal parts boracic acid, oxide of zinc, powdered alum and iodine is useful in dressing raw surfaces. When treating sore shoulders, necks and backs clip off the hair.

Whenever there is a small opening leading into the gall and extending deep it should be opened up freely, then fix the horse so that he cannot rub the sore parts. These cases must be treated antiseptically or a nasty suppurating sore follows, and when it heals the parts remain inflamed. A hard bunch frequently forms which can never be gotten rid of unless it is cut out. When it does occur such a bunch (sitfast) we should remove the skin that covers it or we will have a wrinkled condition of the skin.—W. C. Fair, V. B.

If we only knew how much we lose by leaving our machinery out in the snow drifts we would be more keen on implementing sheds.—A. C. Hardy, York Co., Ont.

TRADE
in your old separator
on account of a new
DE LAVAL
CREAM SEPARATOR

38,796 Users did so Last Year
26,569 in the U. S. Alone

It's come to be an accepted fact that DE LAVAL cream separators are as much superior to other separators as other separators are to gravity setting systems, and that an up-to-date DE LAVAL machine will on an average save its cost every year over any other separator.

Aside from the actual saving in more and better cream and butter and in time of separation and cleaning, easier running, greater durability and less repairs, there's the pride, comfort, and satisfaction which none but the owner and user of a DE LAVAL machine can feel in his separator.

In consequence thousands of users of inferior and worn-out separators of various makes take advantage every year of the educational allowances which the DE LAVAL Company continues to make and trade in their old separators.

APPLIES TO OLD DE LAVAL USERS ALSO

While all this applies particularly to the users of inferior separators it applies likewise to the many thousands of DE LAVAL machines 10 to 25 years old. They are not worn out and are still superior to other new machines of to-day, but there are so many improvements embodied in the modern DE LAVAL machines that these old DE LAVAL users can well afford to make an exchange and soon save the cost of doing so.

SEE THE NEAREST DE LAVAL AGENT

He will tell you how much he can allow on your old machine, whether a DE LAVAL or some other make, toward the purchase of a new DE LAVAL. If you don't know a DE LAVAL agent, write to the nearest DE LAVAL office giving make, number and size of your present machine, and full information will be sent you.

DE LAVAL DAIRY SUPPLY CO., LIMITED
113 William St. MONTREAL. 14 Princess St. WINNIPEG

OF USE EVERY DAY
Is this favorite
WESTERN STOCK KNIFE



This Busy Farmer's Friend

Known as the Western Stock Knife, is especially made and designed for the use of cattlemen and farmers. It is light to carry in your pocket. It is strongly and perfectly made. It is light to carry in your pocket.

Has two extra fine steel blades and a special castrating blade, brass lining and bolster ends. Choice of buff or stag handles.

This splendid knife, which you will find to be such a constant friend, and which will fill a long felt need, we will send you free and post paid in return for one New Year Subscription to this your favourite farm paper, subscription to be new to us and taken at only \$1.00 a year.

See a friend or neighbour first time you have the opportunity. Ask him to take Farm and Dairy for a year. Send us his subscription and we'll send you this useful knife.
FARM AND DAIRY, Peterboro, Ont.

Cheese Department

Makers are invited to send contributions to this department, to ask questions of others relating to cheese making, to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

Adulteration of Milk Prevented

J. J. Parsons, Haldimand Co., Ont.

We have paid by test, that is, fat test plus 2, for milk for cheese-making at our factories, for the past three seasons. As far as I can find out, pay by test is quite satisfactory to the patrons, and I must say it is most satisfactory to me.

One reason, if no other, for my preference for the test would be the relief from the fear that some patron may be tempted beyond his strength to resist to tamper with his milk in some manner that would lead to trouble. Precious to introducing this plan of paying for milk, we found cases of adulteration and had trouble. Since we adopted this plan our milk is of better quality generally and none of it low enough in fat to cause suspicion of any wrongdoing in handling it.

We get a better quality of milk in the hot weather, as this system of paying induces patrons to take better care of milk in the summer. We are also quite satisfied that the cheese made is better and that there is some increase in quantity from the same amount of milk.

It cannot be by all factories have not seen fit to adopt this plan of paying for milk by test. I believe it is the only fair way to pay for milk used in cheese-making.

A Heavy Responsibility

The veteran "Dan" Derbyshire of Brockville, Ontario, has suggested the establishing of two cheese vats in the cheese factory and the working up of good and bad milk separately. There is something attractive in the idea at first sight and a temporary demonstration might be all right, but it seems to us a very heavy responsibility to place on the shoulders of the cheesemaker, with the additional danger of not doing justice to the patrons after all.

If the makers have to grade the milk in the usual rush of receiving it, it will be hard for them to discriminate very finely and they may easily turn into the poor vat milk that ought to go to the good one, unless indeed the poor vat is used only for such milk as under the present rules ought to be condensed and sent back. But, even in that case, the difficulty still remains that patron A may have better milk than patron B, but the latter has chilled his milk more and so the maker will be fooled, or the milk of both may be chilled so as to render discrimination very difficult.

IS IT PRACTICABLE?

So while the Derbyshire idea would be an excellent object lesson, which we believe would amply repay the cost if used temporarily, we have our doubts as to its permanent practicability. The maker who now favors a director or his best girl's father by accepting milk which ought to be returned, will also favor these by putting into vat No. 1 milk that ought to go into vat No. 2. And even if he is absolutely fair there will always be the suspicion of partiality unless indeed he is in the exceptionally happy possession of the confidence of all his patrons.

No! If the farmers and the maker desire to do absolute justice to all, let the maker return all such milk which is evidently unfit for cheesemaking and let him set the fermentation test or, better still, let the patrons appoint some one to set the fermentation

test at least for all the milk of which the maker is not certain enough to be willing to guarantee the quality of his cheese. If this is done and a record kept of the results it will be easy to assess the loss by inferior cheese on the owners of the faulty milk.

ABSOLUTE JUSTICE

This system will give absolute justice as nearly as it is possible, and it is not a theory but has been practiced for years in Switzerland, where a committee of farmers attends to the test. 'Tis true it will cost a good deal, so do all it justice and the effect of improving the cheese, if combined with payment according to fat percentage, will be enormous.

A combination of the system might be made with the modern Danish milk scoring system, where several creameries (factories) combine in hiring an expert milk scorer; the way to resume is to resume and the step should be taken fully so as to leave no openings for discriminations.

Meanwhile we recommend the Derbyshire proposition as a practical one, with the following demonstration, more effective than the fermentation test, in opening the eyes of the milk producers that take good care of their milk to the unjust robbery from which they suffer by mixing it with milk not fit to make into cheese. Having made such a demonstration and being armed with facts and figures, the maker should have no difficulty in gaining the consent of the patrons to a permanent system of control like the old Swiss, the modern Danish, a combination of both or a new and better plan of which we have not yet even dreamt.

The men who handle the product in the cheese factories and creameries must be competent. They must be educated and must qualify for their positions. There is too much money placed in their hands daily for them not to know their business. Dairying is the great business of Eastern Ontario.—D. Derbyshire, Leed Co., Ont.



WHERE MONEY IS MADE

Finest homes, biggest barns, heaviest crops are found on dairy farms. Dairy farming improves the land. Wheat or similar crops without dairying robs the land. Why not follow the lead of keen business farmers who are making most money? Such men use highly productive land because it pays them profits which inferior land cannot pay, and they use and recommend the highly productive



SHARPLES Tubular Cream Separator

For similar good reasons. Tubulars have twice the skimming force of others, skim twice as clean, pay profits no other can pay.

The widely known T. Eaton Estate, here shown, near Georgetown, Ont., is but one instance out of many too numerous to mention. Dairy Tubulars are used both on this farm and at Mrs. Eaton's summer home. Wear a lifetime. Guaranteed forever by the oldest separator concern on this continent. One-quarter to twice as much butter as getting milk in pans or cans. Tubulars produce enough more every year over best best separator to pay a big part of the price of the Tubular.

All There Is to the Light, Simple, Sanitary Dairy Tubular Bowl

Write for FREE Catalog #33

THE SHARPLES SEPARATOR CO. Toronto, Ont. Winnipeg, Man.

Cheese Making Outfit - For Sale

Gang Steel Press, Richardson make, for 14 large cheese. Six 14 1/2 inch large Hoops; 18 Stilton Hoops for 10-lb. cheese; diameter 5 1/2 inches; 3 Bandagers. Everything complete for making 18-pound cheese. Back in gang Press. This outfit practically as good as new; used very little, good money in making 18-pound cheese for sale, very cheap. \$50. Also one Bernard Hand-curd Mill, used 2 months, \$5.

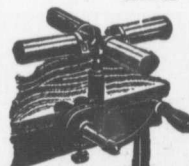
A. KEILLOR - Wallacestown, P. O.

Extra Money

You can earn money in leisure hours, or when you go to town to the blacksmith shop, to the mill, to the cheese factory or creamery, by speaking to your friends and neighbors about Farm and Dairy and getting them to subscribe. We pay a liberal cash commission for each new subscriber you get for us. If I'll pay you to get busy on this proposition first time you are out.

THE RURAL PUBLISHING CO. Peterboro, Ont.

DRUMMOND Sells Dairy Supplies by Mail Cheaper Than You Can Buy Anywhere Else and Guarantees the Goods



The Beaver Babcock Tester

Used by all the Gov't Testing Stations. This Babcock Tester is the same as carried by all the Canadian Gov't Testers, who travel all over the country on their official trips. It is extremely simple in construction and operation. The working parts consist of but two cut gears and they are enclosed in a cast iron case to keep them free from dirt and to prevent their catching clothing, towels, etc. It turns easily within an hour or so. It is cost complete with glass-ware, bottle brush, acid, and full directions for use. It will pay you to have this tester whether you milk 1 or 30 cows.

4-Bottle Machine Complete, \$5.50

4-bottle Test - \$5.50 2-bottle Tester - \$4.25

Beaver Coolers and Aerators

Milk should be cooled soon as possible after being drawn from the cow. The Beaver Cooler will cool the milk to within 2 degrees of the temperature of water. The Beaver Aerator acts as an Aerator and expels all foreign odors. Insures \$17.00 sweeter, longer-keeping milk. Hanging wall style.

Write NOW for FREE Catalogue

Everything you need fully described and illustrated, so you can buy in the money-saving, time-saving way! Send FREE Request if you write

W. A. DRUMMOND & CO. 215 King Street E. Toronto

You will find that it pays to have all your dairy needs supplied direct from the largest dairy supply house in Canada. You can always get exactly what you want at the lowest prices asked anywhere—and get it PROMPTLY. And you run no risk of disappointment—just read our guarantee. Any of the following articles shipped promptly on receipt of price.

The Beaver Sterilac Sanitary Milk Pail

Note its clever construction. The funnel is detachable. As the milk falls on the slant towards the strainer it passes directly through the strainer into the pail. All dirt falls on a deep shelf inside the funnel—not on the strainer—thus milk and dirt never come in contact. You can use ordinary cheese cloth for straining. Capacity 14 quarts, no joints on the inside; it is easily cleaned. Price \$2.50.



Capacity 14 Quarts Price \$2.50

Other Things You Need in the Dairy

- Decimal Milk Scale | 30 lbs. by ea. \$3.50, by tenths - \$4.00
- 30 lbs. - \$4.50, - \$5.00
- Straight Spring Scale | 25 lbs. - - - - - 38c.
- 30 lbs. - - - - - 50c.
- Sterile Atmospheric Milk Fever Outfit. Cures 90 per cent. of milk fever cases. Complete - - - - - \$3.00
- Hard Milkier Outfit in Handsome Case, contains Bristley Test Opener, Test Expander and Milking Tubes - - - - - \$3.00
- Cattle Trocurs for Blood, nickel plated - - - - - \$1.50

EVERYTHING FOR THE DAIRY

This is Our GUARANTEE

We guarantee all our goods to be as good as we say. If you have trouble in getting results, or if there is any defect in what you buy, let us know and we will adjust it satisfactorily.

The Dairy Car on the Ontario Government Demonstration Train was Equipped Entirely with "Drummond" Supplies. 102 It is desirable to mention the name of this publication when writing to advertisers



NEVER bear more than one kind of trouble at a time. Some people bear three; all they have had, all they have now, all they expect to have.

—Everet Hale.

The Second Chance

(Copyrighted)
NELLIE L. MCLUNG
Author of "Sowing Seeds in Dany"
(Continued from last week)

Pearl, the oldest daughter of John Watson, a C.P.R. section man in Millford, Man., receives a sum of money and starts in to educate herself and the rest of the family. She proves a clever scholar; but seeing that her small brothers are getting into bad habits in town, suggests moving the family on to a farm. We are next introduced to the children at a country school. Tom Steadman, a bully, is thrashed education at the country school. The Watsons again take up their Libby Ann, gets drunk and is found dead. Sandy Braden, the hotel keeper, deeply affected, closes up his saloon in consequence. Mr. Perkins plugs his grain with frozen wheat and Bud gets the blame. He leaves home. Mr. Perkins' daughter, Martha, is in love with a young Englishman on a neighboring farm, Arthur Wemyss. Arthur is engaged to an English girl, who is shortly to come out and join him in his new home.

THURSA pursued her pretty lips. "Well enough—oh, yes, real well—and I like him fully when he decided to come to Canada—it was so splendid and dashing of him, I thought, and I was simply wild to come, too, for the adventures!"

"The what?" Pearl asked.

"The adventures. It must be perfectly jolly to chase Indians and buffaloes and bears. Wouldn't it be a lark to send one home?"

Pearl winked back, wondering if it was an Indian, a buffalo or a bear she wanted to send home.

After dinner, for which Arthur stayed, Thursa said she believed she would take a rest—she had so many letters to write, too, to people she met on shipboard, and such delightful people.

Arthur begged to be let stay a little while longer, but Thursa said very decidedly he must go now and not come back until the next evening, for she really must get her letters done—there was one in particular that must be sent by next post. "Do you know a Mr. Smeaton in Brandon?" she asked. "Mr. Jack Smeaton?"

Arthur did not know him.

"He was on the boat and was so jolly! He was teaching me Canadian things. We did have good fun over it. He told me to be sure and let him know how I liked you when I saw you."

Arthur winced.

"I said I would come and see anyway, for I said I couldn't believe you had changed so very much in two years. He said it was always well to take thirty days to consider any serious steps and he taught me the word for it—'a thirty days' option'—that's it, Arthur. That's what I have on you!"

She laughed merrily, but Arthur pleaded with her not to say such things.

Then Thursa became very serious.

"Now, Arthur, for heaven's sake," she said, "don't act like the ants. That's what I've listened to all my life. Calm yourself, my dear. That's what I've run away from. I might as well have stayed with them if you're going to do it. It's wicked of you,

Arthur, it really is, to scold me, when I came so far just to see you, and when you know how tired I am."

Pearl and Martha retired hastily to the kitchen.

Arthur apologized in due form, and Thursa's good humour came back.

"Now, then, Arthur, run along, because I am going to have a long sleep, and then I have some very serious thinking to do. The ants said that is what I am incapable of doing, but I've done some that would have surprised them if they had just heard me at it. Now I am going to do some more. It's so horrible to be in a quarry. It is as bad as it was when I was choosing a gown for my first party; I lay awake nearly a whole night trying to decide between a perle and a pink-wool. It was perfectly maddening, and I did have such a head the next day."

"Are you in a quarry now,

Thursa?" he asked gently. "Tell me about it."

"Oh, no, Arthur, dear me, no—I haven't got half my thinking done yet. I'll tell you after I get it done. I am so happy to think that I got away without any of the aunts that really. I am not very worried about anything. You know I was away perfectly sure that I was away until I was a day out, and once I got such a fright—there was something swimming behind the boat! But you like. There, now, that will do. Yes, I do like you, Arthur, you're a good sort. Good-bye till tomorrow evening."

Two days later Arthur took Thursa over to the boat. She was quite rested now from her journey, and in her scarlet coat and hat she was more bewitching than ever.

"It is very pretty here in the summertime, Thursa," he said, as they stood together in the little porch.

"I had some flowers last year, and the trees are growing nicely. It will be the dearest place on earth to me when you are here. Won't it be glorious to be together always, dearie, you and I? I wonder if you know how beautiful you are, Thursa?"

Thursa knit her brows in deep thought. "I wonder if I do?" she said quite gravely. "I've heard quite a lot about it lately, and I don't object to hearing it as much as my aunts would wish me to, I fear. It seems pleasant, really!"

Arthur laughed joyously. Her beauty dazzled him.

Then they went into the house that he had built and furnished with much loving care. Thursa was interested in everything; the shining new pots and pans gave her great delight—she said they were "such jolly little dears," but what were they all for? Arthur tried to explain, but Thursa became impatient at the mention of cooking and washing dishes, and cried out petulantly: "Why don't you tame a squaw and have her to do all this? I simply loathe cooking or washing up. It is horrid, messy work, Arthur, and I really never can do it. I know I can't. I never stayed in our scullery at home for one minute. Of course my aunts would not have allowed me to stay anyway, but that isn't why. I simply detest work of that kind."

Arthur's face showed his disappoint-

ment. "We will have to get someone to show you how," he said, after an unpleasant pause. "You will not dislike it so much after you learn how. Thursa, it is really pleasant work, housekeeping is, and I am sure you will learn to be a famous little housewife."

"Don't bank too strong on it, Arthur. Isn't that the right word? Mr. Smeaton taught me that. This idea of having to cook has upset me dreadfully."

She sat down in the rocking-chair, and rocked herself in her agitation. "Arthur, I shall go straight up and have to mess around and try to cook. I know I shall. I feel it beginning on me, and I shall have rough hands, and my skin will get red and blotchy, just like a cook's, and there will always be a greasy smell on my clothes. I am going to cry, Arthur, I am now, really, and nobody can stop me, and I do cry dreadfully when I start."

"Oh, don't cry, Thursa!" Arthur pleaded, with all the helplessness of a man in the presence of tears.

"Don't cry, dearest. You'll hurt my heart if you cry the first day you come into your new home. I don't want you to cook or work or do anything, only just to let me love and love me, and to let me look at you—you are too beautiful to ever have to work, darling."

Contrary to her expectations, Thursa did not cry, but looked at Arthur with a very shrewd expression on her pretty face.

"I'd rather stay here and take a chance on it—that's a Canadian way to do—than go back to the aunts and have to work an antimacassar and put up with them trailing around after me always—that was perfectly maddening—but it seems to me—" she went over to Arthur's new side-board and looked critically into the glass—"it seems to me a girl like me—you see I am not what you might call a fright, am I, Arthur?—and here in Canada there are abundant—"

Arthur stood beside her looking at her image in the glass. When her meaning became clear he turned away hastily to hide the hurt her words had given him.

"You mean that I am not good enough for you. You are quite right, I am not. You are a queen among women, Thursa."

"Queen nothing!" Thursa cried impatiently. "You make love like they do it in Scott's novels. The aunts made me read it, and now I simply loathe anything that sounds like it. Now, Mr. Smeaton said I was a peach."

Arthur consigned Mr. Smeaton and all such cads to a hotter climate.

"Good for you, Arthur!" she said, laughing, "you can ride the high horse, too. I like you like that. Now, Mr. Smeaton said—"

"See here, Thursa," Arthur broke in, "did that cur make love to you?"

"Madly," she said.

"And you let him—and listened?"

She clapped her hands and laughed merrily.

"I listened? I didn't have to listen hard. He was near me, you know, and he did make love so beautiful. I wish you could have heard him."

"I'd have lashed his head for him," Arthur said hotly. "Who is he, anyway?"

"He has a dry-goods store in Brandon. He's a linen draper really, and only six-and-twenty, but he is awfully clever, and so charming. When I sent you word that I was staying to see the shops I meant that I was staying to see his shop. He took me to his own home, and his mother and sisters were lovely to me. He wants



Good? Well, Just a Few!

—Photo taken on farm of Robt. Snowden, Huron Co., Ont.

ed me to marry him at Montreal, and asked me again at North Bay, and twice in Winnipeg, and I really forgot to count how many times he proposed to me in Brandon; but I wanted to be perfectly fair, and would not marry him until I had seen you."

Arthur said not a word, but walked over to the eastern window. It was a pleasant day in early winter. He could see the curls of smoke rising from the neighbours' houses into the frosty air, and the long gray wreath of it that the morning train had left still lay on the Finger Hills. A mirage had lifted the old spruce

bush on the Assiniboine into vision. Every mark on the landscape struck him with remembrances of happy days when youth and love and hope were weaving for him a glorious dream.

He turned suddenly and caught her in his arms. "Don't go back on me, Thursa! I won't give you up!" he cried. "He can't love you the way I do. You haven't been in his mind, day and night, all these years. He doesn't love you, dear, like I do, and he can't have you. I tell you, I don't give you up. You are mine for ever."

Suddenly his arms dropped and he put her away from him. "Let me think a minute, Thursa," he said, in his usual tone. "This has come on me suddenly. Stay here until I come back."

(To be continued)

The Upward Look

Rendering Thanks

In everything give thanks, for this is the will of God in Christ Jesus concerning you.—I. Thessalonians 5: 18.

Have you ever looked in the concordance for passages in the Bible in which the words "thank" or "thanksgiving" appear. If not, if you will do so you will be surprised to find how often, and the connections in which these words are used. We are literally told in detail what our text tells us in brief, that we are to give thanks in all things. We are to come before God with thanks, we are to enter into His gates with thanks and praise, we are to let our requests be made known unto God with praise, we are to give thanks for our daily bread, we are to sing to the Lord with thanksgiving, we are to give thanks for spiritual blessings, for moral blessings, such as wisdom and knowledge, for temporal blessings, such as our raiment and comfortable homes.

Should we look also for reference to the word "rejoice," we will find that God expects us to rejoice under all manner of circumstances. We are to rejoice in all that we put our hand to, we are to rejoice in every good thing we are to rejoice in God's salvation, we are to rejoice evermore, we are to rejoice even in the midst of manifold temptations.

If our lives are not filled with rejoicing and thanksgiving we are not being as God wants us to live, as he has told us that we should live. The reason many of us are not more successful in living the overcoming life is because we have forgotten how to give thanks for our blessings. We can hardly expect to receive more blessings on us until we remember to give thanks for those we have already received.

Giving thanks, even in the midst of our troubles, is not so hard when we remember and learn to believe that all things, even the hard things, work together for good for those who love God. Christians should reflect God's love. When love abounds in our heart praise and thanksgiving will come natural to us.—I. H. N.

Good Polish for Oilcloth or Linoleum—Save all ends of candles and melt in the oven. Mix with it sufficient turpentine to make a soft paste. This is really an excellent preparation.

Great care should be taken to dry towels thoroughly before putting them away. If placed in the linen press without being well aired, while still damp, a mould is likely to form upon them, which, it is said, produces skin diseases.

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This Washer Must Pay for Itself

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing the matter with it, and I wanted a fine horse. But I didn't know anything about horses much. And I didn't know the man very well either. So I told him I wanted to try the horse for a month. He said "All right, but pay me first, and I'll give you back your money if the horse isn't all right."



Well, I didn't like that. I was afraid the horse wasn't all right, and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse, although I wanted it badly. Now this set me thinking.

You see I make Washing Machines—the "300 Gravity" Washer. And I said to myself, lots of people may think about my Washer as a machine as I thought about the horse, and about the man who owned it.

But I'd never know, because they wouldn't write and tell me. So, I thought I, it is only fair enough to let people try my Washing Machines for a month, before they pay for them, just as I wanted to try the horse.

You see I sell my Washing Machines by mail. I have sold over half a million that way. Now, I know what our "300 Gravity" Washer will do. I know it will wash the clothes, without wearing or tearing them, in less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in six minutes. I know no other machine ever invented can do that, without wearing out the clothes.

Our "300 Gravity" Washer does the work so easy that a child can run it at most as well as a strong woman, and it won't wear the clothes, from the edges and break buttons the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump might.

So, said I to myself, I will do with my "300 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good the offer every time. Let me send you a "300 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight too. Surely that is fair enough, isn't it?

Doesn't it prove that the "300 Gravity" Washer must be all that I say it is?

And you can pay me out of what it saves for you. It will save the whole cost in a few months. In wear and tear on the clothes alone. And then it will save 50 cents to 75 cents a week over that in washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 50 cents a week, send me 50 cents a week till paid for. If it saves that cheerfully, and I'll wait for my money until the machine itself earns the balance. Drop me a line today and let me send you a book about the "300 Gravity" Washer that washes clothes in 4 minutes. Address me personally—A. W. Bach, Manager, 1960 Washer Co., 377, Yonge St., Toronto.

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Extra Cooking that Pays

By Hilda Richmond

"In my home there is but one breakfast" said a capable looking matron with emphasis, "and every member of the family must be at the table unless positively ill. I have enough to do without extra meals. I cook a good, hot, substantial breakfast with no extra dishes for anyone, and then I get at my day's work when it is finished. The reason some women are always behind with everything is that they potter too much with their cooking, especially in the mornings. We have our meals on time and are all present, so I get my work done in season."

This all sounded very well, but neighbors who were intimately acquainted with the family had no desire to follow the energetic lady's plan. They were guilty of having several breakfasts in their own homes often, and also of preparing extra foods for different members of the family circle, but they took it all good naturedly and several of them said politely that Mrs. F. had the reputation of being the best housekeeper in the neighborhood, much to that lady's satisfaction.

OBJECTS OF PITY

But as a matter of fact her children were delicate and her aged father-in-law the object of pity of the whole community though she was kind in her way to him. The little folks and the aged man dutifully wrestled every morning with buckwheat cakes, sausages, doughnuts and often pie and fried potatoes which the men found so appetizing, but really they left the table hungry. What was suited to active, hearty men was poison to delicate stomachs, and the good lady paid dearly for her system and her fixed rules later on.

It pays to prepare tempting things for old people and for invalids and children, and it isn't pampering them a bit to see that every meal includes something nourishing for them as well as for the workers of the family. Often the mother of the family should have something extra herself, but she secures the idea and goes on until a spell of sickness confines her to her bed. Many and many a case of serious illness might have been avoided if only women knew how to feed themselves and their families.

THE "MEN" NOT ALL

What if the men do like cakes and sausage and fried ham and browned

potatoes and fried mush? That is no sign that they agree with delicate children and women closely confined to the house, and old folks. Such persons need hot cocoa, a thing despised by most men, soft boiled eggs, rice eggs fried in ham grease, toast, rice with milk, broths, hot milk, well cooked cereals and various other foods the men think not "filling" enough in winter and spring. And it pays to take the time to prepare all these things, for none of them are much trouble.

If the mistress of the house is too busy to get so many things ready at once she will do well to encourage the elderly and delicate members of the family to remain in bed, as well as the children, for a second breakfast. It is always annoying to stop in the midst of cooking and dress children's and comb hair, while the habit of allowing them to eat in their night clothes unwashed and uncombed should never be permitted to exist. Often children cry for things they should not have and the second breakfast gives the mother a chance to dispose of all tempting but indigestible dishes. Rules of all right and systems a good thing, but above all rules and systems the health of the family must be considered, or the whole scheme is a failure.—Indiana Farmer.

Household Suggestions

Many people have wondered if a clothes iron appears that a suit of clothes is apt to acquire can be removed. It can to a great extent, by rubbing the shiny spots with very fine, black emery paper, that can be purchased at any hardware store for a few cents.

When packing a pasteboard hat box in a trunk for a journey, saw the hat to the bottom of the box. No amount of jolting of the trunk can then crush or injure the hat or trimmings, as it will remain firmly in place. This is an especially good plan when the trimming consists of expensive plumes or tips.

By heating a lemon thoroughly before squeezing it, nearly twice as much juice will be obtained, as otherwise would be the case—a bit of economy easily put into practice.

The ordinary wire screens for doors and windows offer no protection from prying eyes. This can be remedied by giving the outside of all screens a coat of thin, white paint. Strange as it may seem, the paint will not be noticeable, and while those inside may look out through the screens, outsiders can not see into the room. The paint should be made as thin as possible with turpentine, and applied with a broad, flat brush.

Cut a round piece from an old stocking. Whip the edges to prevent raveling, and sew on the wrong side of the stocking, where you catch the hose supporter. This will keep the finest hose from being torn, and if done neatly is not disfiguring to the stocking.

When blankets become thin, torn, faded and frayed at the ends, cover them over, or spread them between sheets of alkaline or silk and turf them with ribbon or worsted. In place of an old, untidy blanket, you now have an attractive covering for your bed.

Ironing may be made easy by several thicknesses of newspaper, instead of cloth, being used when pressing. This prevents the shiny appearance which often follows the use of a damp cloth. Using a newspaper when pressing tucks in skirts instead of cloth will render the iron much easier in use.

To remove obstinate stoppers from glass bottles, dip a piece of woollen cloth into boiling water and wrap tightly about neck of bottle. In a

few minutes, the stopper can be removed.

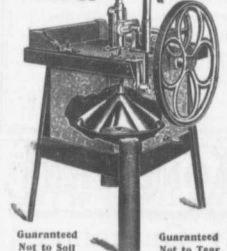
If, when boiling milk sauces, gravies, stews, porridges or liquids, you place a large clean marble in the kettle, it will automatically do the stirring during the cooking process, and will save standing and wasting precious time doing it with a spoon. It prevents any burning, and you can attend to the rest of your work while the marble is busily helping you.

Fruit cake which is steamed is much more delicious than that which is baked. Steam the cake three hours, then allow it to dry out in a slow oven for half an hour. Each piece of fruit is plump and tender instead of hard and dry, as is often the case when the cake is baked. Steam in large pans, or in square cocoa tins to make small cakes. Small cakes are easy to pack away, and may be brought out one at a time, as needed. Furthermore, when wrapped in tissue paper, tied with ribbon and ornamented with a sprig of holly, they make delightful Christmas remembrances.

A Priceless Possession

I have deliberately forgotten all the unpleasant things and remembered the others. When a little pleasure has flashed for a moment against the dark, I have made that jewel mine. I call it my Necklace of Perfect Joy. When the world goes wrong, I have only to close my eyes and remember the links in my chain, set with gems, some large and some small, but beautiful with the beauty which never fades. It is all I can take with me when I go. My material possessions must stay behind, but my Necklace of Perfect Joy will bring me happiness to the end, when I put it on, to be nevermore unclasped.—Myrtle Reed.

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Recreation, Mental and Physical

Mrs. Paul, Clagstone

This is a phase of farm life which is much neglected and unappreciated. Few people realize the great importance of recreation; they think it is a luxury, or useless waste of time. Little realizing how necessary it is, not only for the physical well being, but the mental as well.

A farm woman's life is often one of nothing but drudgery and yet why should it be so? The old ideas that "a man's work is from sun to sun, a woman's work is never done" has long since been dissipated. Too many women feel that they must do it all and that servants are not necessary, even if one can afford them.

WHEN JUST STARTING

There are two kinds of farmers' wives—first, the wife of the man who is making a start, with money short, owing to the necessity of getting the farm on a paying basis. His wife needs recreation more than anyone else, except him, and perhaps, but seldom feels she can spare the time from the pressure of work; the feeling that she must accomplish just so much and a little more seems paramount.

That is the reason why every afternoon, after luncheon or dinner, she should not lie down for fifteen minutes. Suppose the table is piled high with unwashed dishes, clothes to be ironed, etc. All the more reason why she should give herself a chance to recuperate. All her tasks will be better done for this needed rest. Lie down, alone if possible; if not, give the babies a toy or perhaps, relax. Get your mind off the work; start your rest by looking over a magazine; then perhaps you will become drowsy, and if you can sleep for only 10 minutes, you will feel like a new woman, and your work will go twice as quickly and well.

Few women appreciate the necessity of relaxation and absolute repose to the tired nerves and brain. Don't think about the work, forget all about it; try and cultivate thinking only of the pleasant things—your flowers, the next basket social, and the Grange meeting. This will be hard at first, but in time it will come. It will surprise you when you get up, to find how refreshed you are, physically and mentally.

WORDS "FOR THE CHILDREN"

The other farmer's wife is the one whose farm is paying well. She can afford to have servants and many things her sister farmers cannot have, but half the time she has them. Don't think about the work, forget all about it; try and cultivate thinking only of the pleasant things—your flowers, the next basket social, and the Grange meeting. This will be hard at first, but in time it will come. It will surprise you when you get up, to find how refreshed you are, physically and mentally.

Rejuvenating the Lawn

The rejuvenation of an old worn-out lawn is a frequent spring problem. A light application of white clover and blue grass on the lawn, after it has been thoroughly raked, will often bring good results. Do not be afraid to rake the surface severely. The breaking of the roots of the old stand of grass will be con-

ductive to good results. If it can be had, a light top-dressing of well-rotted manure may be applied before the raking is done; and the seed sown after the raking.

If the lawn has been covered with coarse manure, as a protection during the winter, the heavy coarse parts may be removed, and the finer parts will then take the place of a top-dressing. Very often a sickly-looking lawn may be built up and given a better appearance by giving it a top-dressing of commercial fertilizer. For this purpose ground bone is one of the best materials. It should be sown broadcast very early in the spring, at the rate of about 300 pounds an acre.

SUMMER TREATMENT

Of course, the sowing of seeds and the "rejuvenation" will be of little account unless the lawn receives good care during the season. Poultry should not be allowed to run about the lawn. They keep the grass in a foul condition, and prevent its giving the best results. As soon as the grass makes sufficient growth, a lawn mower should be placed upon it and it should be kept cut quite closely during the early part of the season. This will help the turf to thicken up, and will be productive of a good lawn in after years. If there are small clods and trash on the ground, it should be rolled, and the trash should be raked off before the lawn mower is put on.

The stronger one can make the turf, the less trouble there will be with weeds. Usually, if there is a very heavy stand of grass and a good well-kept sod, dandelions and other weeds will not give much trouble.—K. A. Kirkpatrick.

How to use Milk

Milk is a fluid which readily coagulates in the stomach and forms a curd. Now the curd of the milk of different animals differs much in its constituency, hardness and digestibility. Cow's milk forms a very hard, indigestible curd compared to that obtained from the milk of an ass, for example. All milk coagulates when acted on by the gastric juices, so that Nature is careful to provide this fluid in such a form that it can only be swallowed in dribbles, and after complete mixture with the saliva. While water is provided in running streams and ponds and lakes and seas, so that men and animals alike can drink themselves full in deep draughts, milk is provided in reservoirs, called udders, from which it can only be obtained in tiny streams by much pulling at a teat.

This gives a key to the whole position. In order to use milk properly, and in such a way that it can be readily digested and assimilated, it is necessary, firstly, to mix it, and, secondly, to imbibe it in dribbles. The practical method of carrying out these principles is to take half a pint of new milk, specially drawn from a healthy cow, add to it half a pint of distilled or boiled water, or a little less of rice water, or wheaten, or oatmeal, and then to sip it, or, in case of invalids, to suck it, like cocktail, through a straw or glass tube. There are many people who are gradually dying of starvation because they can digest nothing, who would be restored to a considerably increased standard of vitality if they would only learn the proper method of using milk.—Family Doctor.

"You may as well keep smilin'
For there aint a bit o' sense
Of fidgetin' and rilin'
An' a longin' too intense;
For most things worth the gettin'
Are sure to find the place
When you're peaceful, an' a settin'
With a smile upon your face."

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 Any felt makes a good roof if you paint it.
 Even paper makes a good roof if you paint it.
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On a painted roof, the paint is what gives the real protection. The rest of it has no function except to provide a smooth unbroken surface with no seams or cracks, to which the paint can be applied. Anything which has strength enough to keep the wind from blowing it away or the rain from beating it in, will be waterproof if you use painting enough.

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Pastry

Soft flours are generally used for making pastry, and are, consequently, called pastry flour. It does not follow, however, that good pastry cannot be made from the stronger flours. In fact, experiments made at Macdonald Institute, Guelph, have clearly shown that it is possible. More shortening must be used to get best results. The greater gluten content, expansive powers and good color of the stronger flours are not necessary requisites for pastry purposes. It would not appear to be good practice to purchase these more expensive flours and then use large quantities of shortening in order to obtain the same results that may be secured by the use of the cheaper flours and less shortening. Practically the matter resolves itself into one of cost.

SHORT PASTRY.
 1 lb. flour.
 1/2 lb. shortening.
 Ice-cold water.

The shortening may be a mixture of butter and sweet lard or sweet dripping. If the fingers are cool, the shortening may be rubbed into the flour; otherwise, it should be cut into it with two knives until thoroughly mixed with the flour.

Mix into a dough with ice water, using only enough to hold together. It should be so dry that it will not stick to the bowl or fingers.

Turn out on a floured board, and knead only enough to make the ball smooth, when it is ready to cut into pieces for rolling out to line pie plates.

The quantity of shortening may be lessened for a plainer pastry.

FLAKY PASTRY.
 1 lb. flour.
 1/2 cup butter.
 1/4 to 1/2 cup water.
 Ice-cold water.

Rub 2 oz. of butter into the flour. Cut the remainder into 1/2-inch dice, and stir through the flour. Mix the water in with a broad-bladed knife, using only enough to hold the flour and butter together. The quantity is difficult to mix without cutting through the lumps, fold the board lift out the part that mixes first, and proceed to mix the rest. The object is to avoid any further breaking of the butter lumps. Turn the mixture out on a board in a pile, pack it together with the hands, and roll into a sheet. Use a broad-bladed knife, and fold it into 3 or 4 layers, tucking in all the loose shreds about the edges. Be sure it is not sticking to the board, turn it around, and roll out again. Fold and roll out again. If necessary, before rolling it out to line pie-plates, etc.

This requires a hot oven at first to puff it, but a cooler one to complete the baking.

PUFF PASTRY.
 1 lb. flour.
 1/2 lb. butter.
 Ice-cold water.

Wash the butter, form it into a flat, round cake, and put it away to chill. Make the flour into a stiff dough with ice water, and knead until perfectly smooth. It should be firm enough to roll out without much contraction, but should not be dry. Roll into 2 pieces a trifle larger than the butter pat; place the other on top, and fit the edges together. Put aside to chill. Roll in one direction only, until about 3 times as long as broad, fold into 3 or 4 layers, turn around and roll again in the same way, but fold it in half the last time. It is then ready to roll out and cut into shape for baking.

The oven for baking should be rather hot at first, then cooler, to permit of baking the pastry thoroughly without burning. One-quarter of the butter may be replaced with lard.

The Cook books indicate many different ways of making puff pastry, and all of them are good in skillful hands.

The Sewing Room

Patterns 10 cents each. Order by number and size, to fabricator, give age; for adults, give bust measure. Free for waist, and waist measure for skirts. Address: **THE PATERN DEPARTMENT.**

CHILD'S DRESS

The simplest dresses are the prettiest for the younger children. This one is made in just two pieces with under-arm seams and shoulder seams that are closed for a portion of their length only, the closing being made beneath the shoulder straps.

For the 5 year size will be required 2 yards of material 27, 36 or 44 inches wide with 1 yard of 2 or 27 for the trimming.

This pattern is cut in sizes from 4 to 8 years of age.

GIRL'S NORFOLK COSTUME, 738.

The Norfolk costume is a very becoming one to little girls, and it is exceedingly smart this season. This coat can be made with or without a yoke that is applied over it, and the suit is adapted to all seasons materials.

For the 10 year size will be required 5 1/2 yards of material 27, 43 1/2 yards 44 inches wide.

This pattern is cut in sizes for girls of 4 to 12 years of age.

SEVEN GORED SKIRT, 732.

The seven gored skirt is one that is always in demand. Here is a model that takes straight lines and is of moderate width and several ways as illustrated with the high waist line and tucks at the front edges, or without the tucks and up to the natural waist line and finished with a belt.

This pattern is cut in sizes for a 26, 28, 30, 32, 34 and 36 inch waist.

SEMI-PRINCESS GOWN, 736.

6 m - 1 - princess gown made as this one can be made from many different materials and adapted to many uses. In the Illustration material is trimmed with plaid silk.

For the medium size will be required 9 1/4 yards of material 27, 34 yards 36, 44 inches wide with 1 yard 27 for the trimming; the width of the skirt at the lower edge is 2 yards.

This pattern is cut in sizes for a 34, 36, 38, 40 and 42 inch bust measure.

GRASS

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HOLSTEIN-FRIESIAN NEWS

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

SALE DATES CLAIMED

April 4, 1912: J. W. McCormick, Morewood, Ont., Hinds.
 March 26, 1912: S. Macklin, Weston, Ont., Holsteins.
 March 27, 1912: C. C. Kettin, Wilsonville, Ont., Holsteins and Yorkshires.
 May 23, 1912: Thos. Hartley, Downview, Ont., Holsteins.
 March 25, 1912: E. F. Osler, Bronte, Ont., Holsteins and Clydesdales.
 April 4, 1912: Wm. Slaght, Bealton, Ont., Holsteins.
 April 3 and 4, 1912: Belleville Dist. Breeders' Sale, Holsteins.

GREAT HOLSTEINS AT AUCTION

(Continued from last week)

Space does not permit us to say but a part of the many things we might write about the superior animals in Mr. Macklin's herd. Mol De Kol, one of his cows, as a four-year-old made 30 lbs. 2 cts. Netherland Hees made nearly 19 lbs. as a four-year-old. Madam De Kol, a cow not officially tested, but having the appearance of being a regular milking machine, has milked up to 70 lbs. a day. Vaf Friesland Lady Inka, an imported cow, has a record of 14 lbs. at two years, month and 14 days. Her dam made 18.25 lbs. and her grandam 30.55 lbs. Her grand sire is Pieterje Hengerveld Count De Kol, sire of two 29 lb. daughters, and a great number of 27 lb. daughters, and is one of the greatest bulls on the other side. Another cow, Grace Anka, De Kol (imported), has a record of 15.75 lbs. as

TIMOTHY SEED

Buy The Best

Ottawa Valley Seed, Capital Brand, grown in the best growing section in Ontario. Every bag inspected by officer of Seed Commission, Ottawa.

No. 2 Gert. Standard, 16 lb; bank, \$7.68
 No. 3 " " " 15; " " \$7.20
 Bags 30c extra

Above prices for five bags lots and up, f.o.b. Navan, Ontario.
 This seed has been thrashed out of heavy clay land and is good, strong, vigorous seed.

Compare my prices with others and remember each bag of seed will be inspected before shipping.

Farmers buying seed of me can send money to Traders Bank, Vaux, Ontario, and when seed is shipped, bank will transfer money.

MARSHALL RATHWELL, NAVAN, ONT.

GRAND TRUNK RAILWAY SYSTEM

Low Rates

To PACIFIC COAST

MARCH 1 to APRIL 15

Spokane, Wash. Nelson, B.C.
 Seattle, Wash. San Francisco, Cal.
 Vancouver, B.C. Los Angeles, Cal.
 Victoria, B.C. San Diego, Cal.
 Portland, Ore. Mexico City, Mex.
 Proportionate rates from other points in Ontario.

THE POPULAR ROUTE TO WESTERN CANADA VIA CHICAGO

The Grand Trunk Pacific Railway, shortest line, fastest time, finest service between Winnipeg, Saskatoon and Edmonton. For full particulars and tickets call on Grand Trunk Agents.

a two-year-old and is sired by Aggie Grace Bir De Kol, son of Manor De Kol, another of the great bulls in the States. She is a good tester, giving 3.7 in fat. Delta Gem, another cow, has an official record of 29.4 lbs. She has a daughter that has made over 12 lbs. in the yearling class. She is not big, but is of excellent type. Manor De Kol's Cora Gra, another cow in this offering, has made something over 15 lbs. and is one of the best bred animals Mr. Macklin has. Her tests are a little short of perfection, but she has everything else to commend her.

While Mr. Macklin has 27 animals cataloged, he expects by the time of the sale to have at least 40 in the herd.

The stock bull is Cora's Brightest Canary, an animal of strict dairy type, with the strong wedge shaped shoulder so much desired, and being a good, real low handler, of excellent quality, strong in constitution, lengthy—and in fact just such a bull as one would expect Mr. Macklin to have for his superior herd. The sire of this bull is Brightest Canary, out of Paul De Kol, Ja., out of Sadie Vale Concordia, the first cow in the world to make 30 lbs. of milk in seven days. The dam of Mr. Macklin's bull is Cora's De Kol Pet, 25.55 lbs., official Brightest Canary's dam is Canary Mercedes Brightest having an official record of 27.5 lbs. The four nearest dams of Mr. Macklin's stock bull average over 27.0 lbs. butler in seven days.

There will be 21 milking cows all told in this sale, and when it is known that Mr. Macklin refused a cash offer of \$5,000 for his herd it can be appreciated how much faith he has in the excellence of these cattle, which he is offering on March 26th.

QUEBEC HOLSTEINS FOR SALE

We take the following from a letter recently sent to Farm and Dairy by F. L. Brown, Beth, Que., who advertises his Holsteins for sale elsewhere in this issue: "In the year 1897 I in company with my brother, D. H. Brown, bought a registered bull from Cook & Sons, Aulacville, Ont. He proved a good investment. We crossed him with our common stock (and they were very common). Every one of this cross proved to be extra milkers. In 1898 I bought from McMurphy and Butters, Stanstead, Que., my first registered cow, Iago of Sunnyside (No. 1521). She proved to be a good one, and all of my registered cows in sale (except two) trace back to her. "In the year 1902 we bought from N. Sangster, Ormstown, the bull Manor De Kol Colanthus 2nd (No. 2,274), a son of Manor De Kol Colanthus (No. 2,228), who sired the cows Maud and Rhoda, the Queen, the cows that made world's records in the dairy test at Ottawa. Eleven cows in the sale are sired by Manor De Kol Colanthus 2nd. White Prince Mercedes (No. 776) now heads the herd. "I have never kept records of my cows, but they are all large and of dairy type and ready to make records any time."

NOTES ON MCCORMICK'S HOLSTEINS

Some months ago mention was made in these columns of the approaching sale of pure-bred Holstein-Friesian cattle at Brookland Farm, Morewood, Ont. This sale is now close at hand, and Mr. McCormick will dispose of this fine herd on April 4th, 1912. Mr. McCormick has been building up a herd of cattle rich in butter fat, together with large milk producing qualities, and this success can be seen in the records of his animals. He has been doing official testing only for the past two years, and the results should satisfy the most sanguine. Although his cattle have done so creditably he regrets he did not begin testing sooner, for the work was new to him. He feels satisfied that with the practical knowledge he has gained, many of the records could be greatly increased. In his herd two-year-old heifers have given 1,000 lbs. of milk each month for 11 months, while mature cows have given around 14,000 lbs. of milk in a year.

This herd is recognized as the highest testing herd of Holsteins in the Record of Performance. The whole herd is nicely marked, more white than black, and the youngsters arriving, sired by that noted young bull, Sir Hengerveld Jewel, are a thrifty lot of ideal type and color. Mr. McCormick has been visited by a number of desiring purchasers, and has been offered long prices for some of his animals, but he did not and will not dis-

(Concluded on page 25)



The Lakeview Stock Farm, Bronte, Ont.

WILL SELL BY PUBLIC AUCTION, ON **Monday, March 25th, 1912**

Pure Bred Holstein-Friesian Cattle and Clydesdale Mares

The sale will be held in a building specially arranged at the LAKEVIEW FARM, near BRONTE, ONT., and will offer breeders the best chance of the season to procure the best blood in the continent.

If you want a grandson of PIETERJE HENGERVELD, COUNT DE KOL, out of a cow with a 24. lb. record, this is your chance to get him at your own price.

If you want to get a sound young cow with a 20 lb. record, in call to Count Hengerveld Fayne De Kol, you will find her here.

If you want a BIG, SOUND CLYDESDALE MARE, of rich breeding, or a team of them, they are here to be sold.

WRITE FOR CATALOGUE AT ONCE
 Hamilton Radial to Trafalgar—Cars every hour.
 G. T. R. to Bronte (25 miles West of Toronto.)
 Morning Trains and Cars Met on day of Sale.

COL. D. L. PERRY Auctioneer **E. F. OSLER** Bronte, Ont.

Defy Lightning

Roof or repair with Preston Safe Lock Shingles—follow the Improved Preston Specification—insure yourself with the Free Preston Guaranty Bond—and you need fear lightning no longer, so far as the contents or the structure of your house or your barn is concerned. For here at last is the COMPLETE roof—the new Preston Shingle roof—which resists fire, wet, rust or wind, and which is, withal, SAFE against damage by lightning.

PRESTON Safe Lock Shingles

This COMPLETE roofing—the only roof safe at ALL points—will cost you less than cedar shingles won't need paint nor repairs; and will give you treble value for the money.

There is a new edition of that encyclopedia of roofing facts called "TRUTH ABOUT ROOFING." You are entitled to a FREE copy, which will promptly forward you postpaid if you ask. The edition is limited. ASK NOW.



MANAGER
METAL SHINGLE & SIDING CO., Limited
PRESTON ONTARIO
 Branch Office and Factory: Montreal, Que.

AYRSHIRES

AYRSHIRES AND YORKSHIRES

For sale—High class Ayrshires, all ages, including Calves and Bulls fit for service...

CITY VIEW AYRSHIRES.

R. O. P. cows and two-year-old heifers, all ages, including bulls, fit for service...

Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes, imported or Canadian bred, for sale.

Ayrshires

World's Champion herd for milk and production. Some young bulls and bull calves, all from E.O.M.

SUNNYSIDE AYRSHIRES.

Imported and home bred, are of the choicest breeding of good type and have not succeeded for production.

AYRSHIRES

Three bulls, one rising two years. These are from deep milking stock and first Prize Winners.

AYRSHIRES AND YORKSHIRES

Young Bulls and heifers of good type and breeding not akin to other Ayrshires.

LAKESIDE AYRSHIRES

We have a number of fine young bulls of different ages bred by our imported bull and the majority of them from dams entered or qualified for the record of performance.

ADVERTISE

In these popular columns, which others cost you only 30 cents an inch, you can get the most for your money.

AYRSHIRE BULLS

Two April, white, one a very choice son of Annie Laurie 3rd (R. of P., 778) lb. milk and 32 lb. butter as a 2 year old...

CARLYLE'S SALE OF AYRSHIRES

Satisfactory prices were realized at the dispersion sale of W. J. Carlyle's Ayrshires on March 13th.

Several hundred people attended the sale and the following were sold: Mr. Arthur, N. Georgetown, Que.; E. B. Palmer and Son, Norwich, Ont.; J. Logan, Howick, Que.; P. Bennie, Calgary; Gillespie Bros., Ventnor, Ont.; E. Montgomery, 22, L'Aligre, Berwick Ont.; A. Beckett, Beckett, Ont.; C. Munro, Chertsville, and Lougheed and Mr. Myers, of Morewood, Ont.

NOTES ON MCCORMICK'S HOLSTEIN

(Continued from page 23) pose of any animals before the day of sale. Individuals have written him desiring of entering stock in his sale, but Mr. McCormick wishes to be understood by that under no circumstances will he sell privately or include in his offering stock contributed by outside parties.

GEO. W. ANDERSON'S CONSIGNMENT

A unique offering of the Belleville breed. Our Holstein stock is a combination of 15 females and six males owned by Geo. W. Anderson, Rossmore, Ont.

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 2 insertions during twelve months.

HAMPSHIRE FIBS—Canadian Champion herd. Best bred, best Sows, three months and under.—Hastings Bros., Crosshill, Ont.

HOLSTEINS—Young stock, for sale. Sired by Imperial Sulline Dookin, whose 13 nearest dams average 25.10 lbs. butter in 7 days.—K. W. Walker, Utica, Ont.

HOLSTEIN AND TANTWORTHS—All ages, also B.O.W. Lehighs. Young stock for sale at any time.—J. McKenzie, Willowdale, Ontario.

MISCELLANEOUS

CLYDE STALLION Registered, out of Dam by Matchless McQueen bred 3 years old, nicely proportioned, best of feet and legs, 160 lbs. Write or come and see.

THOS. BUTTON - PETERBORO, ONT.

MERTON LODGE

is now offering registered Tantworths of the choicest breeding and type. Young sows try to farrow in April; boars ready for service and young pigs of all ages, either sex.

W. W. GEORGE. CRAMPTON, ONT.

GETTING TIRED?

Are you getting tired of waiting for your Holstein cows? Don't wait for them. In like other progressive breeders do: Go after them.

HOLSTEINS

LAKESIDE DAIRY AND STOCK FARM Present offering, Bull Calves from Record of Performance dams; also, a few females.

W. F. BELL, BRITANNIA BAY, ONT. Ottawa, Bk. Phone.

BULL CALF from dam closely related to May Echo, Holstein

Champion Cow of Canada, and mother of 12,000 possible buyers. Butter change or sell.

3 Bulls, ready for service. Priced right for Quick Sale. Write for particulars.

S. ARMSTRONG, JERMYN P.O., Peterborough Co., Ont.

Auction Sale Notice

I will sell 20 RECORD OF MERIT COWS. (Some of these have quality noted in both tests.) I will also sell about 20 heifers from my old prize winning bull and my Dispenser cow.

THOS. HARTLEY DOWNSVIEW, ONT.

OURVILLE HOLSTEIN HERD

Present Offering—Bull Calves, five months old, and younger, from our great bull, Dutchland Colantha Sir Abbecker.

EDMUND LAIDLAW & SONS Elgin County, Aylmer West, Ont.

FREE-FARM ACCOUNT BOOK

Dickson's Farm Account Book will be sent free to any farmer who will tell us who and where he is. This book is arranged to keep all accounts in simple form—more simple and certainly more practical than trying to remember them; shows what to charge against crop production; has a laborer's time record; and section for personal accounts, 64 pages, for ink or pencil. Not for sale.

FOR TANTWORTH SWIRE—Write John W. Todd, Cornith, Ont., R.F.D. No. 1.

CLYDESDALES, Imp. Stallions and Fillies. Fresh importations always on hand. Every mare guaranteed to foal. J. & J. Sempie, Milverton, Ont., and Levern, Ont., S.A.

CLYDESDALES—Home of Aome. (Imp.) Holsteins—Home of King Faysie Regie Oldtime, nearest 7 dams of lbs. butter per week, and Broken Welsh Fannies.—R. M. Holby, G.T.R. & P.O. Manchester, Ont., Myrtle C.P.R.

SYNOPSIS OF CANADIAN NORTH-WEST AND REGULATIONS

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

Forties-six months' residence upon and cultivation of the land in each of three years, at least, may be waived within this time if the homesteader has a farm of at least 20 acres solely owned and occupied by him or her, or his or her son, daughter, brother or sister.

It certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$3.00 per acre. Pre-emptor must reside upon the homestead or pre-emption six months in each of three years from date of homestead entry (including the time required to earn homestead patent) and cultivate 5 acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption, may enter for a pre-empted homestead in certain districts. Price \$100 per acre. Pre-emptor must reside six months in each of three years, cultivate fifty acres and erect a house worth \$100.

W. W. COBLE, Deputy of the Minister of the Interior, R. 2—Unassisted public lands. This advertisement will not be paid for.

H. F. BULL FOR SALE

Grandson of Pontiac Korndyke and Henderson De Kol. Eleven months old. Mostly white, strong, active and well developed. Now fit for service. A. A. FAREWELL, OSHAWA, ONT.

STOCK MARKS. Metal ear tags for cattle, sheep and hogs, splendid attachment, light and low. Sample and circular free, write for particulars to C. H. F. G. James, Broomville, Ont.

CHOICE AYRSHIRES

In Farm and Dairy of March 7th appeared an illustration of a Brown cow, Hazel Maiden Mercedes De Kol, with a record of 467 lbs. of milk and 30.75 lbs. of butter in seven days as a three year old. This cow belongs to Mr. P. J. Salley, Lachine Rapids, Que., and not to the Hamilton Asylum Farm, as was there announced.

CHOICE AYRSHIRES

Are bred at "CHERRY BANK" A few young bull calves for sale. Write for prices. P. D. MCARTHUR, North Georgetown, Howick Station on G. T. Ry. Que.

40 Pure Bred Holsteins



Will Be Sold Without Reserve
BY PUBLIC AUCTION

THURSDAY, APRIL 4, 1912

By the MAPLE STOCK FARM

At their **BARN, BEALTON, Ont.**
(Norfolk County)

Offering includes 34 heifers and cows, either fresh or in calf. These are nearly all two and three year olds, and are an exceptionally fine lot.

Six young bulls, nearly all from Record of Merit dams, and sired by COUNT MERCENA FAVORIT, Grand Champion at London in 1909.

The dam of this bull and sire's dam averaged 25 pounds of butter a week.

These cattle I am offering have reputations for being heavy producers; a large number of them, both cows and heifers, are officially tested.

It will pay you to take this opportunity of getting a good young cow.

ALL OF THESE CATTLE WILL BE SOLD ON DAY OF SALE WITHOUT RESERVE.

All official testing in connection with each of the cows will be given at the time of sale.

Catalogues will be ready, March 25th. Send to-day for your copy.

TERMS.—Sums of \$50 and under, cash. Over this amount six months' credit on approved joint notes; 3 per cent. off for cash.

All trains will be met at Waterford, and Mail Train at Villa Nova in the forenoon of day of sale.

LUNCH AT NOON for those coming from a distance. SALE AT ONE O'CLOCK SHARP. SALE HELD UNDER COVER.

Col. WELBY SHARP
Auctioneer, Brantford

WM. SLAGHT, Prop.
Bealton, Ontario



Holsteins

Great Dispersion Sale

ON

Thursday, April 4, 1912

I will offer at Public Auction my entire herd, consisting of sixty-five head of richly bred, registered Holstein-Friesian Cattle.

I have carefully studied the advantages derived from breeding from high testing and large milk-producing strains, and can now offer to the public a choice lot of animals.

Parties desiring choice individuals to swell their herds or anxious to obtain good foundation stock should attend this sale.

Apply for Catalogues early and as soon as ready a copy will be mailed to you.

For further particulars apply to:

J. W. McCORMICK - BROOKLAND FARM
MOREWOOD - ONT.

OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND

KINGS CO., P.E.I.

GARDIGAN, March 6.—We are having fine winter weather. Stock is wintering well. The seed fair held in Georgetown on March 1st was a decided success, being largely attended. There was a fine showing of all kinds of grain and vegetables on exhibit. There was a poultry show held in connection with the Seed Fair.—H. P.

NOVA SCOTIA

COLCHESTER CO., N.S.

TRURO, March 14.—The markets are fairly well supplied with local beef of only fair quality. In the eastern part of the province the market is almost entirely supplied with western beef, lamb, mutton and pork. Large quantities of butter, eggs, cheese, lard and poultry also find their way to Cape Breton from the other provinces. Over one million barrels of 1911's immense apple crop has been shipped to the British Isles. Germany, Belgium and South Africa. Quite a trade has been started in the Canadian West; a few carloads have already been shipped to British Columbia. The fruit growers claim there is every prospect of being able to duplicate this year, if not increase it, the bumper crop of 1911, which, counting culls and dregs, reached the 3,000,000 barrel mark. The winter has been an unusually good one for the lumbermen, while the snowfall up to a week ago was very light, yet the sliding was steady and continuous. Fine weather prevailed since the first sliding came in the mountains here, owing to the usual excessive snowfall that always hampers operations, this winter they have been able to do more and better work with just enough snow for nice working.—A. Hector Outter

QUEBEC

GREENVILLE CO., ONT.

CHAMPLAINVILLE, March 1.—Our cheese factory is still separating and shipping cream, but have had an offer for butter of 35¢ a lb. wholesale, which the patrons want the factory owner to accept. Some are still making cheese. To show the difference in shipping cream and cheese the following prices will convince: Shipping cream, 83¢ 4¢ a ton of milk; cheese, 87¢ 16¢. Quite a difference. A few factories will start making cheese next week, as the milk supply will increase.—T. W. O.

WELLINGTON CO., ONT.

MAPLE LAKE, March 5.—The weather continues cold and those who are a little shy of feed think spring appears to be a long way off. Although feed is a little high at sales; common cows, \$40 to \$70; sheep, \$10 to \$12; horses, \$150 to \$225, and fancy stuff higher according to quality. There are some fat cattle on hand yet. Stock generally have wintered well, and if grass is not too long coming will go out in fairly good shape.—J. R. P.

WATERLOO CO., ONT.

NEW HAMBURG, March 2.—A very successful short judging course was held in New Hamburg on Tuesday and Wednesday, Feb. 27th and 28th. The final session was held in the Wax and Tel Hall on Tuesday afternoon. In the absence of Mr. Simpson Dennis, of Toronto, Mr. Allan Smith gave an illustrated lecture on weeds and the Seed Control Act. Mr. F. O. Hart, B.S.A., District Repre-

sentative, and Mr. Knapp, his assistant, took the class in seeds and very ably instructed the farmers present on many important points regarding the selection of seeds. At the evening meeting Mr. Levi Master presided. An address of welcome was extended by Mr. G. Hartman, Councillor of New Hamburg, and reported by Mr. Knapp of Galtville. Speeches were delivered regarding "The Schools of the Future," "The Waterloo County Board of Agriculture" and "The Problem of the Farmer." The S. S. No. 5 Without Orchestra was present. Wednesday morning, March 7th, the judging of light horses. Mr. Smith of the firm of Smith & Richardson of Columbus very ably conducted the placing of the various classes.—A. S.

ELGIN CO., ONT.

WEST LORNE, March 14.—A very enthusiastic meeting of about 60 farmers of the townships of Aldborough and Dunwich was held March 12nd and it was unanimously decided to organize an association to be called the West Elgin Poultry Show and Exhibition Association. It was also decided to hold an exhibition in connection with the West Elgin Poultry Show at West Lorne next winter. Following are the officers: President, J. G. Macdonald, Hon. pres., F. G. Macdonald, M.L.A.; Hon. pres., P. Stalker; vice, A. D. McGowan; sec. pres., J. A. McKillop; sec., D. 2nd vice pres., P. A. A. McKillop; sec., D. Carmichael, Jr.; treas., A. McKillop. A board of nine directors was also appointed. Aldborough: F. Sileo and J. Pearce, Dunwich: J. E. Burton and H. S. Macdonald, Southwell.

HURON CO., ONT.

BLYTHE, March 11.—Quite a number are preparing for syrup making. A large number of cattle are being shipped at good prices. Feed is plentiful in most sections, although some complaints are made of shortness. The Better Farming Special sent through this district last week and attracted much attention, the cars being crowded with sightseers and others keen to get at least a little knowledge during the short time allotted for speaking on the different subjects. The work was managed on the cars in a very creditable manner by G. A. Putnam, Supt. Farmers' Institutes.—R. S.

GREY CO., ONT.

OXENDEN, March 8.—The nights are still cold, as the mercury drops down 20 degrees below zero. The heavy snowfall of the winter is still here, as no thaws have taken place to reduce the quantity. The roads have been badly drifted, and the road snow-plow is the only article that will swear by. A quantity of mill timber has been taken out, but the work was very much handicapped by the great depth of snow. Very little stored wood has been cut so far, and the price is going up. Manure is still in the sheds, as it was impossible to drive into a field. Fodder is holding on well, as a long feeding season was anticipated and stock well conserved. Hay, \$13, wheat, 90¢; peas, \$1.15; oats, \$1.50; potatoes, \$1.50 a bag. Butter has reached the 35¢ mark, being the highest price ever obtained. Fresh eggs are as high as the perch on the hens roost upon.—J. N.

NISSIPING DIST., ONT.

OOGRANE, Feb. 5.—All kinds of produce is in good demand at prices last quoted. Potatoes are not to be had. No snow has fallen for the last 14 days, and the weather is exceptionally fine and warm during the day. The mean temperature for February was 9.6 degrees.—E. E. S.

RUSSELL'S SECOND ANNUAL SALE

DECORATION DAY
MAY 30, 1912

Every Animal is
Guaranteed
Without a Blemish

100 Head of Officially Tested Cows or 2 daughters of officially tested cows will be sold. No Males.

If you do not find something in the sale, you will have another hundred or more to choose from. Every animal on the farm for sale.

T. H. Russell, Geneva, Ohio, U. S. A.

This is not a
Consignment Sale
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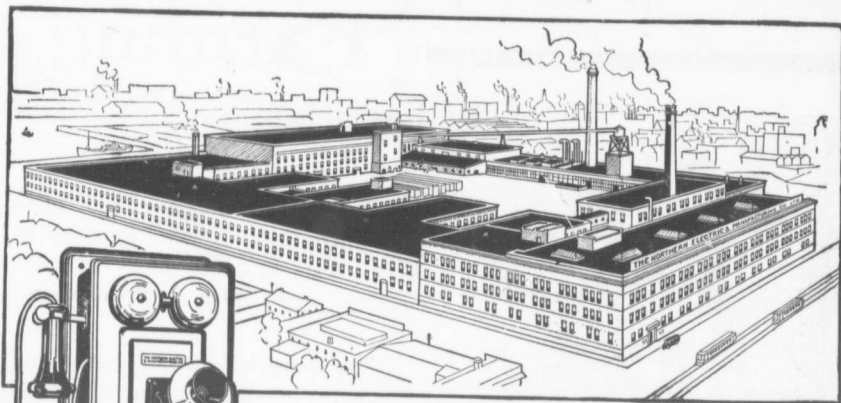
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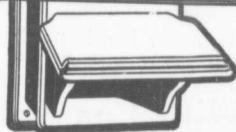
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