

Issued Each Week—Only One Dollar A Year

VOL. XXXI.

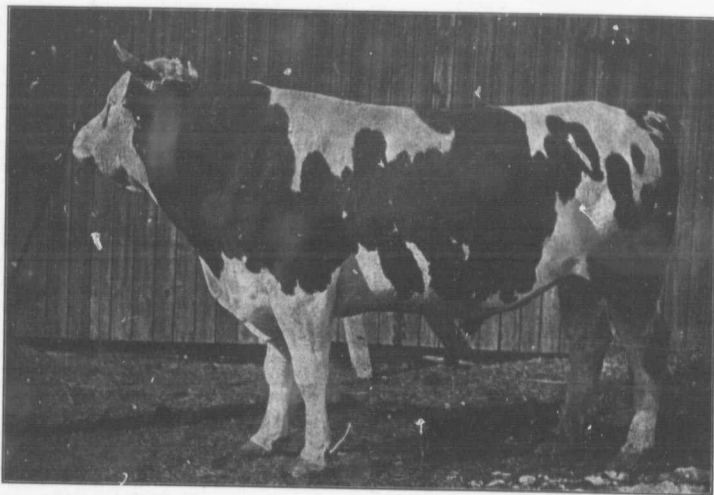
NUMBER 16

FARM AND DAIRY  
RURAL HOME

PETERBORO, ONT.

APRIL 18

1912.



GREAT BREEDING AND PROVEN MERIT BROUGHT FOR THIS BULL A RECORD PRICE

At the Belleville sale held two weeks ago, Pontiac Hermes, the Holstein bull here illustrated, consigned by C. A. Brethen, Norwood, Ont., sold for \$700 to A. D. Foster and E. B. Mallory. This is a record high price for a Holstein bull offered for sale at a public auction in Canada. Pontiac's breeding accounts for the high value set on him by his purchasers. He is a son of Hengerveld De Kol, the world's greatest sire of producers, he having 115 A.R.O. daughters with records as high as 33.60 pounds of butter in seven days. The increased value of the stock sired by a bull with breeding such as this will more than justify the \$700 investment. The same applies to all good bulls. High prices are justified when the value of the stock is considered. Belleville breeders did well to keep this grand bull in their district.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

**What the  
Link-Blade  
Skimming  
Device  
Represents  
To You**



**You Get it in the "Simplex"**

1. Increased capacity of from 30 to 50 per cent. over the most efficient of previous devices, combined with very clean skimming under a wide range of conditions as to milk, temperatures, etc.
2. Great convenience in cleaning and handling, because the blades do not come apart, and do not have to be re-assembled in any particular order.
3. The device being expandible, and fitting the bowl snugly, it can never become loose, or shift in the bowl, and throw the same out of balance.
4. The pressure being transmitted through a series of brass rivets, there is no strain on the blades themselves, and there is no rusting formed by the points of contact of the rivets.
5. The device, being much more efficient, is a great deal lighter and smaller in order to do the same amount of work, making it still easier to handle, and requires less power to run than other devices of same capacity.

There are several other exclusive features of the Simplex that it will pay you to know about. Send a post card tonight for our illustrated booklets telling you more about this Peer Amongst Cream Separators.

**D. Derbyshire & Co.**

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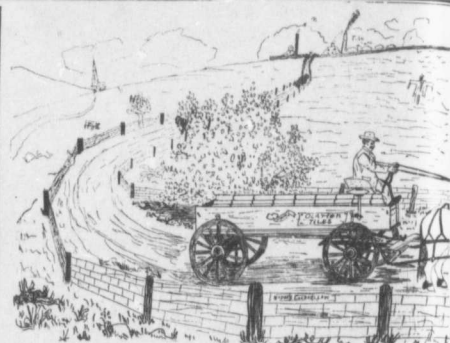
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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

**ONE WEEK** from date of this issue our Farm Improvement Magazine Number (Fourth Annual) starts on the presses.

Prepare your copy and send it in now to go out **14,500 strong, May 2nd**, to over 75,000 prosperous, Dairy farmer people. Farm and Dairy reaches these exclusively.

Bear in mind the records we are making—Great Dairy Annual April 7th was **65% ahead of a year ago**—and get your copy in early. Better send it to-day.



Over the Hill from the Tile Yard is a Road Progressive Farmers Travel Frequently Now-a-days

**Toronto Milk Producers Meet**

Milk prices for the summer months was the chief topic for discussion at the semi-annual meeting of the Toronto Milk Dealers' Association, it was decided that the average price for the five months beginning May 1st, should be \$1.27 an eight gallon can, delivered to the dealer. The prices paid last year were \$1.15 to \$1.30. Hence this year the price is slightly higher.

After some discussion, Mr. Anthony Forest of LeRoy Hill, moved that the regulation of prices be left to the executive. Later at a private meeting of the executive following a conference with representatives of the Toronto Milk Dealers' Association, it was decided that the average price for the five months beginning May 1st, should be \$1.27 an eight gallon can, delivered to the dealer. The prices paid last year were \$1.15 to \$1.30. Hence this year the price is slightly higher.

**Get Rid of Smut**

This is the time of the year to insure against smut in grain. Year after year smut causes great losses. There is no reason why this should be the case if the seed is properly treated.

The best known and most widely used substance for treating seed grain is formaldehyde. This can be bought in drug stores at a moderate price. One pint is put into 40 gallons of water, and the seed grain is then dipped in the mixture in such a way as to wet the outside of every kernel. Or the formaldehyde solution may be sprayed onto the grain, while spread upon the floor—it being raked or shoveled over frequently.

**PRECAUTIONS**

A few precautions should always be observed:

(1) Formaldehyde varies in strength and, if there is doubt as to its quality, a sample of it should be sent to the chemist of the Experiment Station, in order to determine its exact strength.

(2) The sacks in which the grain is treated should first be cleansed by boiling in water, or by washing in a strong solution of formaldehyde.

(3) Everything which the grain touches after having been treated, sacks, seeder, etc., should be very thoroughly cleaned with a strong solution of formaldehyde (1 pint to 10 gallons of water).

(4) If seed is kept for some time after treatment: do not let it sprout or mold; do not let it freeze while swollen after treatment; allow for the swelling of the seed, if you sow the grain soon after treatment, by planting more per acre.

This formaldehyde treatment will prevent stinking smut of wheat, covered smut of barley, and smut of oats. It also prevents flax-wilt if the treated seed is sown on land which has grown no flax for five or six years. It will not prevent loose smut of wheat, loose smut of barley or corn smut. These must be dealt with differently.

**Items of Interest**

The Ontario Agricultural and Experimental Union will in 1912 carry on cooperative experiments in weed eradication. A few of the more common and troublesome weeds have been selected for this year's work. All interested in clean farming are asked to cooperate. Full particulars can be obtained on application to the Director of Weed Eradication, Ontario Agricultural College, Guelph, Ont. Mr. J. E. Howitt, of the Botanical Department, is taking charge of the work.

Plans of barns that are already in use on farms in Ontario and giving good satisfaction from the standpoint of convenience, comfort in working, etc., are given in diagram form in a new booklet gotten out by the Metal Shingle and Siding Company of Preston, Ont. As well as giving stable plans, this book, by means of diagrams describes the various styles of frame construction and also illustrates how the frame of an old barn may be used to good advantage in enlarging for the new barn. These plans are such as will appeal to the every-day farmer. Farm and Dairy readers are advised to write to the Metal Shingle and Siding Company for a copy of this book, which is given free to Farm and Dairy readers who apply for it.

The O.A.C. is again renewing its offer of assistance to farmers in laying out their drainage systems. The Department of Physics has a special staff of Drainage Advisors for this work. There is no charge for the services of these men, the only outlay to the farmer being the travelling expenses, which are low. As the railway fare is only one cent a mile for this work, and as several surveys are always made on one trip the expenses are divided among the several parties concerned. Anyone wishing to have a drainage survey made should drop a card to the Department of Physics, O.A.C., Guelph, whereupon a regular application form will be sent, and later on one of the department's drainage advisors will make the survey.

Issued  
Each Week

Vol. XXXI.

HOW TO SEC

The Average Yield  
Possible—How

**O**ATS are grown on Canadian farms an... We are convinced that the quality of the oat farmers might also... some of our best farm oat crops yield over 1... average yield is now... bushels. This is al... any between the av... will endeavor to expl... farmers that we are... able to secure averag... to the acre.

We believe that the... as much to do with... preparation of the so... pect good results from... we have seen tried... of oats in the same fi... to same treatment, sh... 40 bushels. After...-overs have come... we find to be a good... oat. Some of our ne... inian variety and cons... Banner. For grain... we sometimes grow... not because it is a... ripens about the sam... barley.

NOT AS GO

It may be well also... that we have had w... variety makes a gre... have found it to be... good horse feed and... what one would expect... harvesting.

We practice fanning... but the largest and... Sowing directly from... generally practiced m... ada, is always bad... of oats there is cert... small shrunken grains... produce a poor plant... plan to select one bu... to four bushels put

INSURANCE

We treat all our see... we have not seen th... years. We consider... one pint of formalin... water and with th... oats that we use in... plication that we follo... clean, so clean that... around, and then spre

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Each Week

# FARM AND DAIRY

## RURAL HOME

Only \$1.00  
a Year

Vol. XXXI.

FOR WEEK ENDING APRIL 18, 1912.

No. 16

### HOW TO SECURE BIGGER YIELDS FROM ONE OF OUR MOST COMMON CROPS

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

#### The Average Yield of Oats is 30 to 40 Bushels an Acre—Yields of 75 to 100 Bushels are Easily Possible—How to Secure a Maximum Yield—Suggestions from a Successful Grain Grower

OATS are grown almost universally on Canadian farms and their value is appreciated.

We are convinced, however, that the average yield might be well high doubled and that the quality of the oats produced by many of our farmers might also be greatly improved. On some of our best farms, I have frequently seen oat crops yield over 100 bushels to the acre. The average yield is somewhere between 30 and 40 bushels. This is altogether too great a discrepancy between the average and good yields. We will endeavor to explain how we and several other farmers that we are acquainted with have been able to secure average yields of 75 to 90 bushels to the acre.

We believe that the selection of seed has almost as much to do with a favorable yield as has the preparation of the soil. It is foolishness to expect good results from some varieties of oats that we have seen tried. We have seen two varieties of oats in the same field, each getting exactly the same treatment, show a difference in yield of 30 to 40 bushels. After trying several varieties we ourselves have come down to the Banner which we find to be a good yielder and a good quality oat. Some of our neighbors are using the Siberian variety and consider it even superior to the Banner. For grain mixtures with barley, which we sometimes grow, we prefer the Daubeny oat, not because it is a heavy yielder but because it ripens about the same time as the Mandscheuri barley.

#### NOT AS GOOD AS IT LOOKS

It may be well also to mention the experience that we have had with the Tartar King. This variety makes a great showing in the field but we have found it to have too thick a hull to make good horse feed and the yield was nothing like what one would expect from its appearance before harvesting.

We practice fanning mill selection and nothing but the largest and plumpest of seed is sown. Sowing directly from the bin, which is the most generally practiced method here in Eastern Canada, is always bad practice. In the best crop of oats there is certain to be a percentage of small shrunken grains that germinate poorly and produce a poor plant. In a fairly good year we plan to select one bushel of seed from the two to four bushels put through the mill.

#### INSURANCE AGAINST SMUT

We treat all our seed grain for smut, although we have not seen that disease on our farms for years. We consider it cheap insurance to buy one pint of formalin, mix it with 40 gallons of water and with that amount treat all of the seed oats that we use in one year. The method of application that we follow is to sweep the barn floor clean, so clean that there will be no seed around, and then spread the seed grain out to a

depth of three to four inches. This we moisten with the formalin solution by means of an ordinary watering can. We turn the grain over with a scoop shovel and water again. We then push the grain into a corner in a heap, cover the heap with horse rugs or grain sacks to retain the fumes of the formalin, and in 24 or 36 hours we will guarantee that grain absolutely free from smut spores

#### EARLY SEEDING IMPORTANT

We prefer to seed our oats following some hood crop; in our case mangels, turnips and potatoes. It is of vital importance that oats be seeded as early in the season as possible. We believe that a week's difference in seeding may make a difference of 10 bushels an acre in the yield. For that reason we prefer to plow the land shallow in the

#### Forceful Articles

I am very glad to receive Farm and Dairy and wish to compliment you on the steady improvement which is noticeable through the paper.

I have taken a good deal of interest in reading the special articles that have been a feature on page four, and have been wondering who has had the time to work out such comprehensive and forceful articles.—J. A. McLean, Professor of Animal Husbandry, Mass., Agricultural College, Amherst, Mass.

fall, apply the manure in the winter and then all that there is to do in the spring is to thoroughly disc the soil, going over it twice, first longitudinal, and then crosswise, lapping the disc each trip. This disc will work the manure in the ground and spring plowing is not necessary. We follow the disc with the drag, and then comes the seeder.

#### FOR A BETTER LOOKING FIELD

A small point in seeding, but one that has much to do with making an even looking field, is to open the feed, when at the head lands, about two feet from where you wish to start seeding as one will go that distance before the grain reached the bottom of the spout. Where our oat crop follows so, we prefer to plow, disc and work the land as much as possible before winter to facilitate getting the crop in early in the spring.

We believe it a mistake to use the roller as a last operation. This leaves the land in just the right shape to lose moisture at a tremendous rate and this loss of moisture will have an even more detrimental effect on the small clover plants than it will on the crop of oats. We roll after seeding to compact the soil around the seed and give it plenty of moisture for germination but after the roller we follow with what we call the Breed

weeder. This is a very light harrow that pulverizes the soil and leaves a mulch about an inch deep on the surface. Again, after the field is showing quite green, we run over it with a light harrow to reform the surface mulch.

We have noticed in recent issues of Farm and Dairy considerable discussion regarding the advisability of using commercial fertilizer on every day farm crops. In our own section of Nova Scotia, fertilizers are almost universally used, and are generally believed to be profitable. On the land on which potatoes have been previously grown, no fertilizers would be applied to oats as the heavy application to the potato crop has beneficial after effects. Following other crops, however, we would make liberal applications of potash and phosphate fertilizers. Bone meal was once a favorite fertilizer but we are now come to prefer muriate of potash and Thomas phosphate. For nitrogen, of course, we depend on barn yard manure and leguminous crops. The amount and proportion of the fertilizers used depends altogether on the quality of the soil. We seldom use over 400 pounds mixed fertilizers to the acre.

#### Be Prepared for Spring Work

E. C. Colback, Cumberland County, N. S.

It almost makes me mad to see the way in which some farmers take their horses out of the stables in the spring when they have stood almost idle for months and start them right in to the hardest kind of spring work. This looks to me like a case for the Society for the Prevention of Cruelty.

There is another side of the question too, besides the humane one. We cannot afford to do it. The efficiency of the horse for work is lowered immensely by lack of preparation and just at the season when we need good work most—in the spring. And I do not believe that the horse jumped from the stable to the plow in spring can be as efficient a worker through the whole succeeding summer as the horse that is prepared wisely and judiciously for the strenuous weeks of the spring.

At least a couple of months before spring work starts we commence to get our horses into shape, but even yet much can be done to harden the horses. If we have no work for them we should make work. They should get increasing amounts of exercise every day. Likewise the grain ration should be gradually increased, but in this particular care should be taken or we will have the horses down with founder, indigestion or even azotures, all of which diseases result from bad feeding, or too heavy feeding. Increasing the exercise, however, is the main point in preparing the horses for spring work.

Cow testing is a simple, reliable and very inexpensive method of determining what each cow gives in weight of milk and in weight of butter fat. It is a method of determining what each cow gives, not what the herd averages.—C. F. Whitley, Ottawa, Ont.

# GREAT FORTUNES—ECONOMIC CONDITIONS AND THE PEOPLE

ARTICLE No. 17

Becoming a millionaire or multi-millionaire is not such a difficult matter as most people think. The main essential is to obtain a monopoly, form a combine or secure special legislation that will give you the power—directly or indirectly, it doesn't matter much which—to squeeze their earnings out of the people at large. Once you have done this money will flow into your pockets in a stream the size of which will be limited only by the extent of the "special privilege" which you enjoy. That is what the words "special privilege" mean. They represent the advantage that is acquired by some one portion or group of persons over others by means of which they are enabled to tax others to their disadvantage but to the advantage of those who hold the "special privilege." There are other ways in which great fortunes are sometimes made but they are not numerous and in comparison with the methods mentioned they are unimportant. We seldom hear of a lawyer, a doctor, a merchant, or even a much abused "middle man," who has become a millionaire through following their profession or trade. It is only when they break away and get control of or an interest in a "special privilege" of some kind, that their wealth begins to double and treble as though by magic.

## THE PUBLIC VIEW-POINT CHANGING

There has been a wonderful change during the past fifteen years in the position of the public in regard to the granting of "special privileges." This change is but the beginning of still greater changes to come. The struggle against "special privilege" is only in its infancy. It can, however, ever have only one ending. The people in time will triumph on every point.

## CONDITIONS AS THEY HAVE BEEN

Up to about fifteen years ago the public—particularly the people of the United States, used to fall down and worship the millionaire and multi-millionaire. Such men were acclaimed as "wizards of finance," the "marvels of the age." People talked about them with awe. The press, of almost all grades, in answer to the demand of the public, revelled in publishing their illustrations, in describing their modes of life, and in relating accounts of their sudden ascents from poverty to affluence. The young people of the country were regaled almost from infancy, by tales of the wealth that might ultimately be theirs if they would but follow the examples of these great men. All this was because the public did not understand how most of these enormous fortunes had been made.

## WHEN THE CHANGE CAME

Some fifteen years ago the change commenced. Cities began to cease giving monopolies and exclusive franchises to electric light and street railway companies. Protests were made against the sale, at paltry prices, of great timber limits and other natural resources to private individuals. McClure's Magazine commenced to publish the series of articles by Ida M. Tarbell exposing the methods of the Standard Oil Company. "Everybody's" held the public spellbound by its articles, written by a millionaire, on "Frenzied Finance." Other magazines followed suit. They revealed to the astounded public the methods of the great railway companies and other monopolies. The precincts of even the sacred tariff were invaded. Exposure followed exposure. The Beef Trust was dragged into the open. The men of wealth, whom the public had shortly before been acclaiming as types of the country's greatness and virility, were called into court, and forced to fight with all their might to save themselves from being sent to gaol. The cold-blooded, remorseless manner in which they had used their "special privileges" to crush and ruin weaker competitors and plunder the public, were disclosed.

All this time the public was being educated to see things as they were. The demand for reform grew. Ex-President Roosevelt entered the lists in the contest with "predatory wealth." The people were with him and showed it. President Taft has continued the fight. The machinery of the National Government has been used to break up the Standard Oil monopoly, the Tobacco Trust and other combinations that were plundering the public. In Great Britain an even greater fight has been waged and has resulted in the Mother Country attacking the greatest monopoly of all, the monopoly in land, by imposing a direct tax on land values and thereby regaining for the people at large a portion of the wealth which the people at large create.

## A WONDERFUL CHANGE

All this has worked a wonderful change in the attitude of the public. Instead of asking now how much wealth a man or corporation has, the first question is, "How did he make it?" Men who a few years ago were lauded to the skies have since been branded by public disfavor. The public has begun to see things as they are. They realize that most, although possibly not all, of the great fortunes at which the world has wondered, have been made by plundering and exploiting the people of the country, and while this has been accomplished for the most part in a perfectly legal manner, it has been done just as flagrantly as the pirates of old sacked the merchantmen on which they preyed. And just as the people ultimately drove the brigands from the seas so the public will rise soon and put an end to the power of the few to exploit the rest of us for their benefit. In this struggle we farmers must play an important part. For years we have been preyed upon, as we still are, by "Special Privilege" masked in many forms. This has been the main cause for rural depopulation, for worse farming as profitable as it should be, people instead of flocking from would flock to our farms. Monopoly after monopoly, combine after combine, merger after merger, has been forcing up the prices of the articles the public must buy. These have reached higher levels than ever known before. Thus, while we farmers are receiving more for our farm produce than we ever did before, and while the wages of the working men in our cities are the greatest on record, still rural depopulation continues, city slums grow and the number of our millionaires and multi-millionaires increases.

## ECONOMIC CONDITIONS RESPONSIBLE

Economic conditions are responsible for the problems that confront us. Our leading thinkers realize this. Prof. L. H. Bailey, of Cornell University, possibly the world's greatest authority on agriculture, in his book, "The Country-Life Movement," makes the statement: "The decline in rural population grows out of economic conditions." Our education is only beginning, but already the public press is beginning to deal with these questions as it never has before. This series of articles in Farm and Dairy is but a proof of this. Five years ago Farm and Dairy could not have published such a series of articles. To-day similar articles are appearing in the daily and agricultural press all over the continent. The extension of rural free mail delivery, country telephone lines and other agencies for the up-lift of agriculture are working a transformation in public thought. In this transformation our farmers' organizations, particularly in Western Canada, are playing an important part. Agriculture in Canada is entering upon a new era, an era in which we farmers are destined to do our

own thinking as we never have before. It will be attended in all likelihood by a number of violent convulsions in the body politic, as all important changes in public thought are, but a better day is dawning; and as it dawns, agriculture will come into its own as it never has in the past. The next few articles in this series will show how monopolies are obtained and combines created, and will mention briefly simple remedies that would work a wonderful change.

## Dairying and Soil Fertility

J. R. Westlake, Carleton Co., Ont.

One of the greatest things that dairymen, good dairymen, are doing for agriculture is the returning to the soil of the elements of plant food that they take from it. We farmers all over America have been wasting fertility at a fearful rate. We talk about the corruption and extravagance of our Governments, of the millions of dollars that are wasted in useless public works, in bounties, etc., but the total loss from that source does not begin to compare with the millions that are lost through wasted soil fertility every year. I would not be afraid to guarantee that the soil fertility that has been wasted in Western Canada is worth almost as much as the wheat that is being shipped out of the country. Even here in our county I know of dozens of farms, and in the whole province there will be thousands upon thousands of farms, where there is only one cow to 10 or 12 acres and where the best part of the income is made by selling grain, hay and so forth.

## THE FARMER TO ADMIRE

All of this means waste. The farmer of today that we should all admire is the farmer who has faith enough in his business to market all the products of his soil at home. When he sells his butter, his cheese, or pork, he sells comparatively little soil fertility. He retains for his own benefit and the benefit of his children the elements that will make and remake wealth. He sets an example to the rest of us and is deserving of the thanks of future generations.

So far I have been merely moralizing. I realize that most of us are looking for satisfactory returns for our labors in this generation and are not worrying particularly about those that come after us. So for our own benefit, I can claim that intensive dairy farming will pay larger returns in this generation than will grain growing. I know of almost a dozen farms right here in Carleton county where the farmer's income has been doubled and trebled by the adoption of dairying. These farmers are actually maintaining the fertility of their soils or increasing it, and at the same time are making more dollars and cents every year. The fact that dairying is the best method of conserving the fertility is the best argument I can advance why we should go in for it more intensively.

## Notes from a Bee Man

R. I. Holterman, Brant Co., Ont.

The snow will have to be cleared from the ground in the spring, because bees flying early in the spring are often partly chilled, maybe by a passing gust of wind or the sun is hidden for a minute, and when they drop on this snow they very rarely rise again. A good plan is to spread straw over the snow or ice.

Some warm evening, when there is promise of a fine day, the bees may be quietly carried out and placed on their permanent stands for the season. This allows the bees to become a little accustomed to the outside air before the warm air next day gradually warms them to flight, and they are more apt to locate themselves and return safely to their homes.

## Shall We

Jas. Armstrong

Just now before we work is a good time for work horses. If their working horses on this is this spring. We weather last winter. Our horses have grown set in to hard work, with a rush with which efficiency and to its say by all means elicit. Of course precaution is well. If the horse is well to see that it does not do stand for a Just use common sense never have had any work horses in the spring.

## A Talk on Snow

J. N. Mowbray

It is not necessary sugar beet business of Chatham. The companies operating in taken up all the acreage this season is ample for the sugar growers. A sugar crop already contracted for will run their factory.

In the culture of it should remember five importance to the sugar

(1) Thorough preparation should be done. Wheat, barley or clover should be plowed shallow at this time and if any manure to be used, it should be applied at this time. Land must be worked thoroughly to germinate as many weeds as possible and the should be followed by fall plowing a little deeper than it is usually done. A seed bed for beets in the spring is just what a good seed considered a well seeded for fall wheat—a solid top with a firm bottom.

(2) Shallow planting—from one-half inch to one and a half inches deep, using 15 to 25 lbs. of seed an acre.

(3) Early thinning when the beet has from four to six leaves.

(4) Frequent cultivating once each week for thinned till the tops

## HARVEST AT

The farmers think that the harvesting bees. But is just as necessary when ripe as with an are not harvested then and lose both weight

### Shall We Clip Our Horses?

Jan. Armstrong, Wellington Co., Ont.

Just now before we start in to the hard spring work is a good time to think about clipping our work horses. If there ever was a time when the working horses on the farm should be clipped it is this spring. We had more continuous cold weather last winter than for many years past. Our horses have grown a long shaggy coat. When set in to hard work, and we will be going at things with a rush with the late spring, this warm coating of hair will be very detrimental to the horse's efficiency and to its comfort as well. We would say by all means clip the horses this spring.

Of course precautions must be taken with the clipped horse. So long as he is working hard all is well. If the nights are cold, however, it would be well to see that the horse is blanketed. It will not do to stand for too long around the head-rows. Just use common sense and avoid chills. We never have had any cause to regret clipping work horses in the spring.

### A Talk on Sugar Beet Growing

J. N. Mowbray, Oxford Co., Ont.

It is not necessary to talk of the profits of the sugar beet business to farmers in the vicinity of Chatham. The fact that all the sugar companies operating in that section have already taken up all the acreage they can handle for the season is ample proof of the faith that farmers have in the sugar beet as a profitable crop to grow. A sugar concern in Wallaceburg has already contracted 7,000 acres for 1912 which will run their factory to its full capacity.

In the culture of the sugar beet crop, farmers should remember five points which are of vital importance to the successful production of beets:

(1) Thorough preparation of the soil, beginning the previous season if possible. The preparation should begin after a crop of oats, wheat, barley or clover has been harvested. The land should be plowed shallow at this time and if any manure is to be used, it should be applied at this time. Land must be worked thoroughly to germinate as many weed seeds as possible and then should be followed by fall plowing a little deeper than it is usually done. A seed bed for beets in the spring is just what would be considered a good seed bed for fall wheat—a solid top with a fine bottom.

(2) Shallow planting—from one-half inch to one and a half inches deep, using 15 to 20 lbs. of seed an acre.

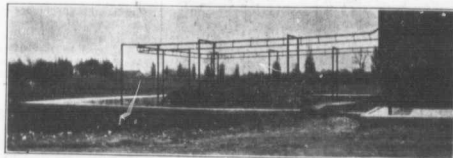
(3) Early thinning when the beet has from four to six leaves.

(4) Frequent cultivation. I advise cultivating once each week from the time the beets are thinned till the tops cover the ground.

#### HARVEST AT THE RIGHT TIME

(5) Harvesting the crop when ripe. Too many farmers think that there is no definite time for harvesting beets. But experience shows that it is just as necessary to harvest a crop of beets when ripe as with any other crop. If the beets are not harvested they take a second growth and lose both weight and sugar content.

Our soil and climate here in Ontario have proven exceptionally well adapted to the production of beets, and I see no reason why the \$20,000,000 which is now being sent out of the country for sugar should not eventually be retained by the farmers of Ontario. At the present time we take all the wheat that grows on six acres of land and exchange it for the sugar which grows on one acre. In addition to this we lose about 17 cents worth of soil fertility with each bushel of wheat, or about \$3,000,000 worth annually, while in the sugar there is no fertility whatever.



### Hog Manure is Much Too Valuable a Fertilizer to Waste

The water tight, cement tank here illustrated bears testimony to the care used at the Hamilton Asylum Farm to preserve that valuable fertilizer, hog manure. The tank is located at the end of the pig pen, and conveniently arranged as may be seen.

—Photo by an editor of Farm and Dairy.

I hope to see this condition remedied some day by the production of more sugar at home, and I am pleased to know that some farmers of Western Ontario are doing their share in the work of retaining for Canada the sugar making industry that should be her's.

### Why a Pure Bred Sire Is Best

G. D. Mole, Prescott Co., Ont.

Every male animal has within himself the power to impress his characteristics upon his offspring. Some have the power to a much greater degree than others. In this differing power lies the



### A Sap House Conveniently Located near the Barns on a Western Ontario Farm

Mr. Geo. Wood, of Wentworth Co., Ont., finds it to his advantage to boil his sap at or near the barns rather than in the bush. He has built this neat and substantial sugar house to the rear of his barn, and hauls the sap to this place for "boiling in." It permits him to attend to chores, and in the case of late boiling, to be more comfortably near the house and sapper than were the boiling done in the bush.

—Photo by an Editor of Farm and Dairy.

secret of the greater propentency of the pure bred dairy sire.

The grade bull has this power of impressing himself upon his offspring as well as the pure bred. As we have no certainty what his ancestors were, what certainty have we as to what his offspring will be?

On the other hand, take a pure bred bull whose dam has a big record to her credit and whose sire's dam has also a big record, and the grand-dams on both sides likewise, what must the off-

spring of this sire be? If they inherit the characteristics of the sire's dam or of the sire's sire they cannot be a failure, as both sides have proven their usefulness. Hence the secret of the success of those using a pure bred sire with known records.

### Three Important "Don't's" in Breeding\*

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

The advice that I would give to any young man who wants to breed good horses, the kind that the young farmer will be proud to own and ride behind is summed up in three don't's: Don't mare and don't breed from a cross bred or grade stallion.

The cross bred animal is usually a general purpose horse. I have nothing to say against the dual purpose horse in its place, but the better class horse is the special purpose horse.

The general purpose animal is always a comparatively cheap purchase. Take the mare and don't breed from a very inferior ket quotations in Toronto. General purpose horses can be had for \$150, good ones, while for a good draughter you will pay \$250 to \$100.

When our young breeder has selected a good stallion of a special purpose breed he should not imagine that the mare doesn't count. Never breed from a very inferior mare. It has just one-half of the influence in determining what your colt will be.

The man who is anxious to breed good stuff will never use a grade stallion. We have all seen grade stallions that were hard to fault as individuals. We also have seen many of our farmers use those stallions, believing them to be as good as the higher-priced pure bred horse. But did you ever see one of those stallions make good stock horses? I never did.

It is here that the law of reversion plays a part. The colts are continually harking back to the defects in the ancestors of that grade stallion. It is here that we have the strong point of the well bred, pure bred. There is nothing bad in his ancestry, and his colts stand a good chance to be uniformly good.

The young breeder who will take these three don't's to heart is making a good foundation on which to base his breeding operations.

### Jottings from Farmers

Did we realize sufficiently that both cows and horses are nervous animals and that we must control ourselves in dealing with them, we would lose our temper less frequently. An irritable man always breeds irritable stock.—C. N. Elmer, Waterloo Co., Ont.

We also breed to have our stock as beautiful as possible, but do not let beauty come before deep milking qualities, as is so often done. Milking qualities are more profitable than beauty; especially to the farmer who has to pay his way through his cows.—A. S. Turner and Sons, Wentworth Co., Ont.

Sheep do well on the same foods as are fed to cattle, but they like a variety of diet and it pays well to go to some trouble to give it to them, not only in winter, but during the pasturing season when two small fields will usually give much better results than one large one.—J. B. Spencer, B.S.A., Ottawa, Ont.

\*Synopsis of an address given by Dr. Reed on the O. P. R. Special Train.

# The Worlds Finest Dairy Cows are Milked by the SHARPLES MECHANICAL MILKER



Owners of the highest priced dairy cows in America use the Sharples Mechanical Milker. One of the world's highest priced dairy cows, imported Billy's Lady Frances Gazelle, owned by Branford Farms, Grotton, Conn., is an example. Another, the 70 Dairy Cows on the famous "White Horse Farm" at Paoli, Pa., none of which is valued at less than \$1,000. Read this letter:

After considerable use of the mechanical milker I can say that it is the most satisfactory I have ever used. It is simple and easy to use and gives the best results. I have had no trouble with it and it has been a great help to me. I have had no trouble with it and it has been a great help to me. I have had no trouble with it and it has been a great help to me.

When owners of these high priced animals use and endorse the Sharples Milker, surely you need have no fear of the slightest injury to even the most sensitive animal. Further, it will enable you to add \$300 to \$500 extra to your dairy profits. It will do away with the most disagreeable job on the farm; enable you to double your dairy capacity with the same help; give you absolute freedom from worry, and independence from shiftless, unreliable workmen.

Send this coupon for free catalog. We will give you six months time for trial. If the Sharples Milker does not make good, if it doesn't more than satisfy you, there will be no sale. Guaranteed by The Sharples Separator Company, which has been making high-class Dairy Machinery for 31 years. Write today for free catalog N.

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## Farm Improvement

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HERE'S the best Harpoon Fork made, simple, powerful and positive in action, and lifts a bigger load than any other double harpoon fork on the market.

It is made entirely of the best steel and tines are slender and straight, entering grove or wet hay easily. Carries load close up to the carrier, without drooping or scattering. Has a Special Patented Trip-Release which works perfectly and deposits its load in good shape for handling.

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We also make Loudens's Famous *Grass and Seed Fork*, the best in the world, the *Clay Clover*, *Alex. Wheel Fork*, and other short-listed; also *Hay Slings*, *Stickers*, *Hoists*, etc. Write for our catalogue of modern farm equipment.

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### Audels Answers on Refrigeration (2 Vols. \$4)

This is a well-timed work which explains in plain language the practical science of refrigeration in its many rapidly extending applications. It gives in detail all necessary information complete with 250 illustrations, on the practical handling of the machines and apparatus in use to-day.

To make the work an easy guide for careful study and ready reference the subjects are arranged in the form of "Answers," giving in plain language all the information requisite for successfully and economically operating a plant of any size.

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**FARM AND DAIRY - Peterboro, Ont., Can.**

## FARM MANAGEMENT

### Notes on Seed Selection

Good seed is essential to the best yields of all farm crops. Obtain the best seed from crop grown on your own farm or in the vicinity.

Select seed from small grains on the basis of size and weight.

A good fanning mill properly used is the most practical way to select good seed.

Tests and experience have proven that heavy, plump seed will increase and improve crop yields.

Treat seed to prevent plant disease.

Make a germination test of seed to prevent planting seed that will not grow.

### Ancient Commercial Fertilizers

Editor, Farm and Dairy.—I have followed with interest the discussion in Farm and Dairy on fertilizers. I gave a fertilizer man \$50 one spring. I applied the fertilizer on 13 acres of corn. The corn that got the fertilizer and the corn that got none was all the same. Ten acres of the land got a good dressing of farm manure. On this land the effect of the fertilizer was never seen. I might as well have applied sand. The other three acres of land were poor. The fertilizer did not help the corn any, but next year the oats showed the good effects, and for two years after the hay crop also showed the effects of the application of fertilizer.

In my estimation any man that cannot keep his land in good condition and fit to grow any crop he chooses without fertilizer or anything else but the manure made at his barn, had better hire out with the farmer who has brains.—E. R. Candie, Lanark Co., Ont.

### Bulletin of Weeds

A bulletin has been issued by the Seed Branch of the Department of Agriculture, Ottawa, giving a full reprint of the Seed Control Act, 1911, which is the law governing the sale of seeds in Canada. The second part of the bulletin deals with seed testing work, and the application of the law were poor. Seed laboratories are maintained in Ottawa and Calgary for the use of seedsmen and farmers, where samples are tested free of charge.

The largest part of the bulletin, perhaps, of most interest to farmers, deals with weeds and seeds. About 90 different species are illustrated and described, and with the use of the bulletin the identification of both the growing plants and the seeds should be comparatively easy. The weed considered noxious under the Seed

Control Act are given first, in botanical order. This bulletin will be very interesting and useful to those interested in the identification and control of weeds and the means to adopt to prevent their introduction and spread through commercial seeds. It is known as Bulletin No. 106, and may be had free on application to the Publications Branch, Department of Agriculture, Ottawa.

### Alfalfa for New Ontario

Will alfalfa grow in the vicinity of Port Arthur on heavy, yellow loam and on a field following two crops of potatoes that have been well manured? How much seed should I sow an acre? Where can I get 1 1/2-A. P., Rainy River Dist., Ont.

Alfalfa has been grown very successfully by a few farmers in your district of Ontario, but it has not as yet been extensively tried. If the potatoes were well manured and kept free from weeds for the two years, the land should be in excellent condition for the alfalfa. You would do well to try it at least.

We would advise you to cultivate the land up to the first of July and then sow 20 lbs. of good seed an acre without a nurse crop. As alfalfa has not been previously grown on your farm it would be well to inoculate the seed with the preparation that can be secured for 25 cents from the Ontario Agricultural College, Guelph. All leading seed houses advertise in Farm and Dairy handle alfalfa seed.

### Warning re Fertilizers

Editor, Farm and Dairy.—Several cases of low grade nitrate fertilizer have in the past appeared on the market, and I am writing you to suggest that you advise correspondents to purchase nitrate from trustworthy dealers only. One adulterant is common salt, and sometimes salt cake has been used. Both are worthless as fertilizers and contain no plant food. It is preferable to purchase nitrate in original bags, which now contain about 200 pounds. So far as the Chilean producers of nitrate are concerned, however, the greatest care is taken, and samples are drawn by inspectors from all cargoes before they leave the ports of Chili, and heavy fines would be imposed upon any producers who attempted to export low-grade nitrate.

Salt cake residue made as a by-product in the manufacture of nitric acid has also been used to adulterate nitrate, and in certain cases has been sold as nit-cake. This name tends to give it a false value. It is also worthless as plant food. On our part, we have done all that is possible to maintain a high standard, and that our policy will be the same in the future you may be fully assured, and I hope that you will be able to cooperate with us in helping to prevent sales of low-grade nitrate.—William S. Myers, New York, U. S. A.

### Dairy Notes

High fat production is not a matter of breed but of strain and management.

Clean milk is a case of keeping the dirt out, not straining it out.

Good results from the dairy herd and an ill-tempered herdsmen seldom go together.

Breeding for milk production or beef production is epitomized in the word "Selection."

Warm, comfortable stables are essential and a good investment in our cold Canadian climate.

Scalding water should always be used in cleaning dairy vessels, but only after the milk has been washed off with cool or luke warm water.

## The Feeders'

The Feeders' Corner is one of our subscribers treated are invited to write or send them. All questions will receive attention.

### Sweet Clover as

L. K. Shaw, Walkerville  
 We see sweet clover grown around us under the most favorable conditions. If we can make that clover for feed stock it would certainly in many sections where there is sweet clover grows any other leguminous crop I have had no person with feeding sweet clover to other legumes grow



Members of one of the Farmers' Club under the supervision of the Wood Farmers' Club in Lanark County, Ontario.

I have just been reading issued by the United States Department of Agriculture, and in several states of the clover is fed regularly, it stock become used to it.

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### Farmer's Cement Tile Machine

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## Have City Conveniences

Prevent the pestilent, draughty, dangerous and offensive out-door closet with an indoor closet which requires no sewer, no plumbing, and no flushing system. Have city conveniences in your home. Safeguard by installing

### "Tweed" Closets

"Tweed" Closets can be installed in room, cellar or any other convenient place. They require no plumbing for ventilation with "Tweed" Liquid Chemical, used with "Tweed" Closets is both a disinfectant. Many hundreds of have been sold in Canada. Send for price list.

**STEEL TROUGH AND MACHINERY**  
 Dept. 101

### The Feeders' Corner

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

#### Sweet Clover as a Feed

L. K. Shaw, Welland Co., Ont.

We see sweet clover growing all around us under the most unfavorable conditions. If we can make good use of that clover for feeding to farm stock it would certainly be a bonanza in many sections where the soil is poor and sweet clover grows better than any other leguminous crop.

I have had no personal experience with feeding sweet clover as with us other legumes grow luxuriantly.



Members of one Progressive Branch of a Widespread Movement

The Farmers' Club movement has made great headway in Ontario, chiefly under the supervision of the District Representatives. The members of the Inwood Farmers' Club in Lambton Co., Ont., may be here seen. This club was organized by S. E. Todd, B.S.A.

I have just been reading a bulletin issued by the United States Department of Agriculture, and I find that in several states of the Union, sweet clover is fed regularly, and once the stock became used to it they like it. I

can well believe this, as when I first started to feed alfalfa some of my cows would not look at it, but once their first dislike was over they went for it eagerly. I have also been told that grass-fed steers from the West will not at first touch corn, which is one of the most palatable of foods.

**HIGH FEEDING VALUE**  
An analysis of the digestive nutrients in sweet clover as compared with other forage crops would indicate that it has great feeding value. For instance, it contains 9.5 per cent of digestible protein as compared with 6.8 per cent in red clover and 11 per cent in alfalfa. It contains 38.1 per cent of carbohydrates as compared with 35.8 per cent in red clover, and 1.2 per cent of fat as compared with 1.7 per cent of red clover.

In a feeding test with lambs at the Wyooming Experimental Station, re-

ported in this bulletin, a ration of sweet clover hay, corn and oil meal produced an average gain per head in 14 days of 30.7 lbs., and when alfalfa hay was substituted for the sweet clover the gain only increased about four pounds. When native grass hay was fed the total gain in weight was only 20.3 lbs.

**LOW EXPERIMENTAL EVIDENCE**  
The only other actual experiment that I know of in determining the feeding value of sweet clover was one that was conducted at Iowa, where hogs were grazed on clover, and the gain for the entire lot of hogs on one acre of sweet clover was 2,694 pounds, and on red clover 2,394 pounds. About equal amounts of grain were fed in both cases. Hundreds of fat cattle are fed annually in Utah exclusively on sweet clover hay.

At our own experiment station at Guelpi they have out over 30 tons of green fodder an acre from sweet clover.

#### Query re Calf Management

Should the calf be allowed to suck the cow? We have had an argument about this matter. I claim that the calf should suck the cow for the first week, as it saves the bother of milking the cow and feeding the calf, and keeps the cow and calf from worrying, and makes the cow's teats longer. A friend of mine takes the calf away one-hour after it arrives. Which would you prefer?—N. B. Brant Co., Ont.

Under ordinary circumstances we greatly prefer to remove the calf at once. There is then less worrying on the part of both cow and calf, and one has the opportunity to make the most of the milk from the cow, for other calves or pigs.

It is a little short of cruelty to allow a calf with its dam should the udder be badly swollen, since the bunting of the calf will cause the cow udder suffering.

A great many people prefer to allow the calf to suck, but where this practice is followed slipshod methods more or less frequently prevail, and the management gets farther and farther remote from the business it should be.

## Valuable Book on Barn Building FREE



Write at once for this valuable book. It contains information that every farmer should have regarding the sanitary housing of dairy cows. It explains every fundamental of correct construction and gives proper dimensions and arrangements. It describes lighting, ventilation, stable floors, and their construction, and contains suggestions about alleys, sties, exposure, appearance, design, drainage and inside equipment. Besides, you will find in this book a number of practical farm plans and other information that may point the way to your 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 contains all the latest and most advanced farm information necessary to any farmer who is planning to build or remodel. Without any obligation on your part—just for answering these few questions: Do you intend to build or remodel? How soon? How many cows have you? Will you want a little easier? Will you want a bay fork out? Send to-day.

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# Your Kitchen Walls and Ceilings



You know the trouble it is to keep the ordinary kitchen wall and ceilings clean. They get discolored with smoke, dirt and grease stains so quickly, and damp with steam. This makes the average kitchen very unsanitary and a regular breeding place for vermin.

You can always have a nice bright clean kitchen or room if you cover the walls and ceilings with METALLIC. The cost is very low and when once on is good for a life time. Vermin-proof, fire-proof, and easily kept clean by simply wiping with a damp cloth. Just imagine the comfort this means to you.

Send us a post-card asking for our free booklets on interior decorations.

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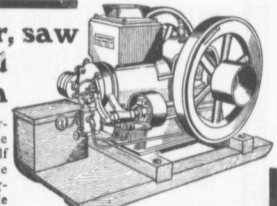


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Sanitary and Odorless  
"Tweed" Closets can be installed in the bath room, cellar, or any other convenient place indoors, merely requiring to be connected by a pipe for ventilation with a chimney hole.  
"Tweed" Liquid Chemical, used in connection with "Tweed" Closets is both a deodorant and a disinfectant. Many hundreds of "Tweed" Closets have been sold in Canada. Send for illustrated price list.

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## Pump water, saw wood, grind grain, churn



and do many other labor-saving tasks with the Barrie Engine. Will pay for itself quickly by saving valuable time for you. Strong, rugged construction. So simple a lad can run it. Sure in action, economical in operation. Every farmer needs one. Write for booklet.

Agents Wanted

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# Standard

## Sprays itself with Oil all the time it's running

The self-oiling system starts spraying the working parts of the "STANDARD" cream separator with oil the instant you start turning the crank. It stops oiling when you stop turning. There are no glass lubricators that demand continuous attention. The "STANDARD" oiling system looks after itself. The oil-proof and dust-proof casing, enclosing the working parts, prevents dust and dirt clogging up the machine and oil getting on to the floor.

Because of the self-oiling system, the "STANDARD" runs easier. There is always a body of oil in the bearings—always oil between the teeth of the cog wheels when they mesh. This means that the cogs in the different gears are not subject to the ordinary wear. The less wear, the easier the separator will run, and the longer it will last.

When changing the oil in the oil chamber once every two or three months, cleanse the working parts by running a cupful of coal oil or gasoline through the machine a few minutes. This will keep your "STANDARD" running at highest efficiency. The self-oiling system is only one of the outstanding features of "the world's greatest separator." Others are described in our booklet. Write for a copy.



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## "VANCO" Arsenate of Lead

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"VANCO" ARSENATE OF LEAD will destroy every kind of leaf-eating insect—and will not burn the leaves.

"VANCO" ARSENATE OF LEAD cleans the trees and plants, and saves them from "VANCO" and you won't be troubled with Codling Moth, Potato Bugs, Cabbage Worms, Asparagus Beetles, Canker Worms and other destructive pests. The largest fruit growers in Canada don't risk their year's profits by trusting to Paris Green or home-made mixtures.

They want sound fruit and vegetables, that will bring the top market prices—so they use "VANCO" ARSENATE OF LEAD—the spray that kills every time. This is because "VANCO" Spray Chemicals are made by skilled chemists—and are of guaranteed chemical strength.

"VANCO" ARSENATE OF LEAD sticks to the leaves, even after two or three heavy rains—sprays easily—does not clog the nozzle—and is easily kept in suspension. Being made right here in Toronto, there is no duty to pay on it—and it gives results.

READ THE "VANCO" BOOK—it tells a lot of facts about Sprays that you ought to know. Glad to send you a copy, free.

FERTILIZERS—Nitrate of Potash, Sulphate of Potash, Nitrate of Soda and Acid Phosphate—straight or fertilizing chemicals of guaranteed analysis.

SAVE FREIGHT—by ordering Sprays and Fertilizers together and having both sent in one shipment.

CHEMICAL LABORATORIES LIMITED, 148-158 Van Horne St., TORONTO.

## HORTICULTURE

### Covering a Dead Hedge

We have a fine cedar hedge which, from the effects of some blight, has died out in some places. Will you kindly suggest the best vine to cover such parts of dead area?—A. L.

I would recommend the Common Virginia Creeper as one of the hardiest and most vigorous vines likely to meet requirements. It is a very difficult problem to repair or patch up a hedge when its uniformity is broken in this way. For this reason, we recommend an irregular border of mixed planting, rather than a straight formal hedge. Such a border gives far greater variety throughout the season and is, on the whole, far more satisfactory than a formal hedge, the beauty of which is destroyed as soon as a gap occurs in it.—H. L. Hutt, Prof. of Landscape Gardening, O. A. C., Guelph.

### Spraying on the Pacific Slope

T. Cunningham, Inspector of Fruit Pests, Vancouver, B. C.

I notice an editorial in Farm and Dairy of March 7th, calling for government regulation of the analysis of lime-sulphur. They are up against the same difficulties in Washington that you are in Ontario, and I have it on the authority of the State Entomologist at Pullman, Washington, that the best they are doing now in the suppression of the San Jose Scale, which, I may say, is one of their worst pests, is to kill 80 per cent, and as the Entomologist pertinently remarked, "If we carry over 20 per cent for propagation, there is very little use in spraying at all."

This is a serious problem for our

neighbors in Washington, but I am thankful to state that there is not known to exist in the entire Province of British Columbia a single infection of the San Jose Scale. The same is practically true of the Codling Moth.

We are not, however, without our share of troubles. Fungoid diseases seem to be our most serious infection. I believe we will have to go back to the Bordeaux Mixture, if growers are doing in Washington. The sentiment of the most up-to-date horticultural authorities there is in favor of a more general use of sulphate of copper. I think too much reliance has been placed upon the lime-sulphur. This is very natural, because busy men would like to be able to accomplish all that is necessary with one general spraying mixture.

### Heading Back Young Trees

R. R. Waddle, Ontario Co., Ont.

Finding several growers with the opinion that young trees should not be headed back the first year, or not at all, which in the majority of cases, is a great mistake, I am giving you the results of an experiment I have carried out in Ontario County last season. Probably about 200 trees were cut back at time of planting. Later in the season the unpruned portion suffered so greatly that we were compelled to prune some of them in order to save the trees, as they had died back further than so many had been cut. This season, the foliage of the trees, which were cut back at the time of planting, is in the very best condition. The trees stand erect and have made a wonderful root and body growth. The young trees cut back late in the season are looking equal to those not cut back, which all show a sickly condition.

The remainder which were not cut back this spring show the effect of having too heavy a top for the roots. They have been whipped back and forth by the wind, have made no body growth and are expected to die back late in the season. During the winter the trees suffered very little from freezing back, all portions being equal in this respect. The loss in trees seemed to be sustained by the unpruned portion, which goes to prove trees are better cut back at time of planting.

### Horticultural Jots

W. H. Gibson, Durham Co., Ont.

I spray three times. Once when the buds are swelling, with the strong solution of a commercial lime-sulphur; the next two sprayings are made, one just before the blossoms open, the other immediately after they have fallen. I have had good results from using the regular 4-4-40 Bordeaux, with one-third part of a pound of Paris green added for the blossoms open, the other year part of the orchard was sprayed with the dilute commercial lime-sulphur, one to thirty-three with three pounds of arsenate of lead to the barrel of the mixture.

For the past two years I have been planting heavily of early varieties. Owing to the poor market facilities in the early days, very few early varieties were planted, and the few that were planted have been graded to winter varieties. The last early varieties for this district are Duchesne, Gravenstein, Alexander, Wealthy, Blenheim, McIntosh Red and Snow or Fameuse. The market is improving for early apples, and their growth lengthens the season greatly as we can begin picking the Duchesne by August 23rd and continue picking a succession of varieties right through until the winter apples are finished.



Right here  
This is why the corn  
This illustration is from

## POULTRY

### Mistakes in Poultry

"The common idea of a success to an editor of Farm and Dairy recently, 'is not the right many of us think that dandy fine house which is many of us think that dandy fine house which is many of us think that dandy fine house which is

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Right Next to Nature the Best Place for Chicks

Chickens grow faster and are healthier on cultivated land than on land in sod. That is why the corn field or the cultivated orchard is the best place for chicks. This illustration is from a photo taken on the College Farm at Guelph.

**POULTRY YARD**

**Mistakes in Poultry Housing**

"The common idea of a fine poultry house," said a successful poultry man in an editor of Farm and Dairy recently, "is not the right idea. Too many of us think that we have a dandy fine house when we have dead air spaces in the walls and double windows in the front and air spaces nowhere. I had this idea once myself, but it did not work out. The walls were either thick with frost or dripping with water from spring to fall, the birds were constantly down with rump or colic and winter eggs were almost a curiosity.

"We have since found out that the cheapest house is in the long run the best house, and that the more air we get into a house the better. The latest house we have put up is 20 by 30 feet with an 'A' shaped roof. The front of the house, about three feet to the eaves, is left entirely open. This seems radical in the cold climate of Ontario County, but the hens lay just the same. There are no dead air spaces in the walls of this house. The walls are all single ply lumber, covered with a good grade of roofing paper."

"How do you like the long poultry house?" we asked.

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**ORPINGTONS**, Black, Buff, Golden, Silver, White Wyandottes, Dark Brahmas, Black Minorcas, Hamburgs, stock and eggs.—Harry Leah, Peterboro, Ont.

**EGGS FOR SETTING**—White Orpingtons, B.C. White Leghorns, Barred Rocks. Hatched by prize winners. Write Geo. J. Northcott, Clarum Brse, Solina, Ont.

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**CHOICE SINGLE COMB BROWN LEGHORN EGGS**

Famous Booker and Gurney Strains, \$1.50 per 15. David A. Ashworth, Maple Grove, Ontario.

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"Well," was the reply. "The long poultry house, with several compartments, has its advantage in that it is easy to get around and feed the birds. It has its disadvantages, and with the hopper system of feeding, which we practice, and labor reduced to a minimum, we prefer the individual houses. In the long house drafts are apt to develop, which makes it very unhealthy for the birds. This applies to any house more than 50 feet long. And then we do not consider it healthy to have several hundred birds as close together as they are in the long houses.

"Another point that I would like to mention is the importance of having the inside fixtures of the poultry house so placed that they can be easily cleaned. Dirt and vermin are two of the greatest enemies of profitable poultry keeping, and they certainly thrive where the old-fashioned covered-in nests are in vogue. We prefer nest boxes that can be torn to pieces and their parts thoroughly cleaned."

**Poultry Pointers**

Keep the houses clean, the yards swept or sown in rye.

Catering to the appetite of the bird often increases the egg yield.

Regularity and liberality are necessary to secure the most profitable growth.

The eggs should be gathered often during warm weather. They should be sorted in color and shape before going to market, too.

A hen that goes around with her mouth open is not a comfortable hen; she is too warm. Provide her with a place to sit down and cool off.

If a gradual growth is made, the start being limited, all the details watched and the lesson studied well, the business is surely started on a firm foundation. Anything else makes a risk.

Makes us laugh when the old rooster finds a worm and cackles over it till he gets all the hens in the yard around him and then just gobbles the worm up himself; but isn't that about what lots of folks do?

Green cut bone has a high nutritive value and it is also one of the cheapest feeds there is. It pays to use this when the weather keeps the fowls from roaming over the fields where they naturally find their supply of this kind of food.

Exercise is of supreme importance all through the winter. Unless this is enforced the hens will become fat and they will not lay as they should. Scatter the feed in the litter and make them hunt for it. They will be healthier, more profitable and they will enjoy life better.

Don't ever keep the weakly chick for either a winter layer, or to place in the breeding pen. They will lay few, if any more eggs than will pay their board bill, with six times out of 10 hatch a weak chick, and they are always grabbing at chances to take cold, crop or to go under from the least offense in their feed. In short, they are weaklings from start to finish.



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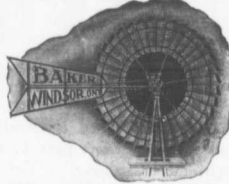
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ball-bearing turntable and self-regulating device all working parts covered with a cast iron shield, thus protecting same from ice and sleet. We make a full line of steel towers, galvanised steel tanks, pumps gasoline engines, etc. Write for catalogue.

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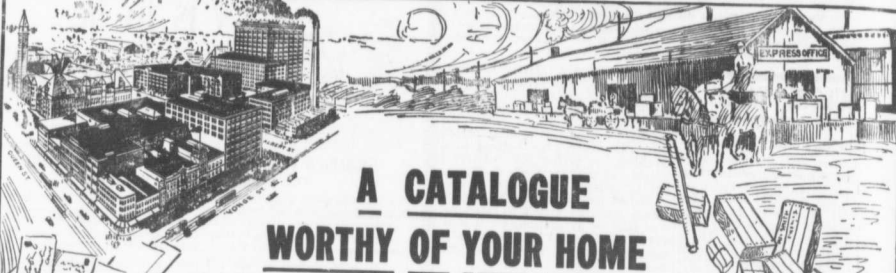
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to about the care o... er at the Instito... practical advice... and devoted atten... the sow at farrow... "Some days after... farmer to whom I... ed me to come over... ly as a fine sow he... farrowed appeared... had seen this sow... a splendid animal... ried over as soon... I got there I found... a fine large litter... had been feeding... that they had give... pea chop and they... shortly after she fa...

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**Warnings to Sw**  
Prof. W. J. Kenned... Iowa  
Breeders of hogs w... more attention to th... the business and mu... end as illustrated b... craze, shape of head... face, etc. The one p... in the hog business i... quality and prolifica... early maturity. Such... described as the kin...



**SWINE DEPARTMENT**

Our readers are invited to ask questions in regard to swine. These will be answered in this department. You are also invited to offer helpful suggestions or relate experience through the columns.

**How a Farmer lost a Sow**

"Farmers who remain away from Farmers' Institute meetings, thinking they know all that the speakers can tell them, often lose more than they realize," remarked Mr. Richard Honey, of Brickley, Ont., to an editor of Farm and Dairy recently. "Some time ago a striking evidence of this fact came to my attention. I asked a farmer whom I knew if he intended being present at the Institute meeting that afternoon when the Institute speaker was to speak on the care of hogs. He told me he would not be present as he knew all he wanted



**Making Good Use of a By-Product**

"Every bit added to what you have makes just a little bit more." Every little bit that we can add to our income by turning the skin and bones into pork will add to the returns of the dairy farmer and his satisfaction in his occupation.

to about the care of hogs. The speaker at the Institute meeting gave a practical address on the care of hogs, and devoted attention to the care of the sow at farrowing time.

"Some days after the meeting the farmer to whom I have referred asked me to come over to his place quickly as a fine sow he had that had just farrowed appeared to be dying. I had seen this sow and knew her to be a splendid animal, and therefore hurried over as soon as I could. When I got there I found that she had had a fine large litter. I asked what they had been feeding her, and was told that they had given her a gallon of pea chop and when a couple of times shortly after she farrowed.

"As soon as I heard that I told the man there was no use of me going out to the barn as I knew that nothing could save the sow. As I was there, however, I went out to the barn and got there just in time to see the sow die. I explained to this farmer that the feed that he had given this sow was what had killed her, as she was rather fat, and the feed had brought on the fever which had caused her death. I also told him that if he had only attended that Farmers' Institute meeting, which he had refused to attend because he knew all about the feeding of hogs, he would have been given instruction on the right feeding of hogs, and therefore he might have saved his sow."

**Warnings to Swine Breeders.**

Prof. W. J. Kennedy, University of Iowa

Breeders of hogs will do well to pay more attention to the utility end of the business and much less to the fad end as illustrated by the pedigree, crabs, shape of head, ear, nose, dish of face, etc. The one great need to-day in the hog business is a hog with size, quality and prolificacy, combined with early maturity. Such a hog is best described as the kind that never lies

to the assessor, that is, he is born after the assessor is around this year and marketed before the assessor comes back next year. Some such hogs may be found in any of the well known breeds. With careful selection and judicious mating it is surprising how rapidly this type can be revived.

In addition to the evil results of "faddism," the exclusive use of corn diet and the policy of breeding from immature sires and dams, have been detrimental both from the standpoint of size and prolificacy. It is safe to say that over 75 per cent. of all the sires and dams used in our state of Iowa are under one year of age. It has been clearly proven by experimental work that pigs from young sows are inferior in every way to those from mature sows. The continued use of young sires and dams, especially when associated with corn feeding, will cause marked deterioration in any breed of swine.

In selecting breeding swine attention must be given to size, quality, strength of bone, evenness of fleshing and the use of more mature boars and sows. All pigs intended for breeding purposes should be well selected from well developed mature sows. If the sires are mature animals so much the better. These pigs should be fed on rations calculated to produce bone and muscle, not fat alone. In this way we could materially improve our swine herds without changing breeds.

Butter fat is too valuable a product to feed to the calves or the pigs. Use a good standard make of separator, and get practically all the butter fat.

**Letter Heads Good Advertising**

Printed letterheads and envelopes are traveling advertisers. When a letter comes, it makes a big difference if it has a printed letterhead and envelope. It looks like business, and it is business of the best kind.

We farmers need such printed letterheads. There should be something for sale on every farm, and the letterhead can be made to advertise it very cheaply. It will also be found that the printed letterhead will have quite an influence on the person himself. The more he sees it the more pride will be taken in keeping up the quality of the articles for sale.

It is not accident that business men in all lines use the printed letterhead. They have found that it is a good business proposition. Those farmers who have tried it have found it both profitable and a source of pride. The cost will not be so much more than for plain paper. It may seem a little large, but then one wants to remember that he is getting a good many sheets and envelopes at one time.

If you are inclined to see faults in others, take a good look at yourself.

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WHILE driving along the road did you ever notice that some barns have large light-colored patches on the roofs? Those patches are "threshing spots." They are made up of the dust and chaff from every threshing that has been done in that barn. The threshing machine blower raises the dust to the roof, and all the brooms on the farm will not clean it all off again—if it is a wooden roof. The dust clings to the grain of the shingles and is there for keeps. These threshing spots might easily be called **danger spots**, for they have a triple danger—danger to the man who risks life and limb in a vain attempt to sweep them off; danger of fire from sparks in threshing time; and absolute certainty that the dirt and dust will rot the shingles.

How to guard against threshing spots is really quite a simple matter. They cannot occur on a roof because the surface affords nothing for dust to cling to and it is either whisked away with the first breeze or washed off by showers. Nothing will stick to metal roofing—not even the lightest fall of snow.

This matter of roofing is but one of many problems confronting the farmer to-day when contemplating barn building. You will find it, and many other questions, answered fully, also plans, specifications and full instructions for the erection of all kinds of barns, fully treated in our new free book, "How to Build a Barn." Your copy is ready and just awaiting your address. Let us know to-day and it will be sent by return mail.

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F. D.

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No. 527 71/2

### New Queen of the Dairy World

Editor, Farm and Dairy.—With a record of 1068.34 pounds of butter-fat produced in 363 days, Banostine Belle De Kol, a five-year-old Holstein Friesian cow owned by Dan Dimmick & Bro., East Claridon, Ohio, becomes the new "Queen of the Dairy World." This wonderful cow produced during the year 27,404.4 pounds of milk testing 3.86 per cent. fat.

This means over nine gallons of milk a day, or enough to supply 36 families each with a quart of milk daily. If made into butter, her fat production would equal 1322.925 pounds of butter, or over 3½ pounds a day for 363 days.

This is all the more remarkable because it was made without her being dry at all before freshening. No other cow in the world has even produced such an enormous amount of butter fat in a yearly test and only one other has ever exceeded Banostine's milk record.

The official records of Banostine Belle De Kol are as follows:

Length of record	Milk Lbs.	Butter fat per cent	Butter fat Lbs.
7	472.5	3.67	24.697
30	2928.0	3.50	98.987
60	5905.0	3.53	194.053
90	7856.8	3.61	283.543
97	492.7	4.31	*21.195
365	27404.4	3.86	1068.34

\*This 7-day record was made 3 months after freshening.

Banostine Belle De Kol was bred, reared and developed by Dimmick & Bro., at the Maplecrest Farm. She is a strong, vigorous cow of wonderful capacity and will weigh in the neighborhood of 1600 pounds. She is the daughter of Ephrasia A., one of the greatest foundation cows the breed has ever produced, and who was brought to Geauga county about 30 years ago. The sire of Banostine De Kol is Friend Hengerveld De Kol Butter Boy, all of whose A.K.O. daughters have records of 50 pounds or more. Friend Hengerveld De Kol Butter Boy is a son of De Kol's 2nd's Butter Boy 3rd, and is showing himself to be the greatest son of that great sire.

These tests were made under the careful supervision of the Dairy Department of the Ohio State University. The cows were tested by nine different persons and were watched at times day and night, so that the records are fully verified.—Prof. Oscar Erf, College of Agriculture, Ohio State University.

### To Encourage Scientific Farming

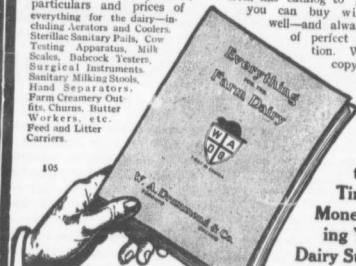
The Dominion Conservation Commission will this summer cooperate with the Federal and Provincial Agricultural Departments in assisting in the spread of information to encourage scientific farming. One new departure will be the publication by the Commission of illustrated reports describing improved farming conditions on selected farms in each province.

Illustration farms in several localities in each province will be used as types of what can be accomplished through scientific farming.

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have increased more than the sales of any other cream separator. There must be some reason or reasons for this great showing. These are some of the reasons:

Empire Separators skim to a trace. There isn't a machine made their equal for close skimming under difficult farm conditions.

They are easy to clean. They don't spatter oil. And they have anti-splash steel supply tanks.

So nearly frictionless they almost run themselves. Children delight in operating them, and can easily do so with perfect safety.

They are durable. Years of service have proven their true worth. Their cost per year of service is less than any known separator. Years in advance of competing makes.

Your choice of the two standard methods of cream separation. We make both cone and disc machines. Both are fully explained in our latest catalogue. Send for a copy. Get reliable, accurate information on the subject. 31

**EMPIRE CREAM SEPARATOR CO. OF CANADA, LIMITED.**  
Winnipeg, Toronto, Montreal, Suxes.  
Agents everywhere in Canada—Look for the Empire Sign.

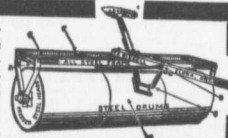
## The "Bissell" is a 3-drum roller

3 DRUMS make the best Land Roller. It is easy to understand how the "Bissell" Roller with 3 drums and supported by 6 heads is a STRONGER IMPLEMENT than any 2 drum Roller on the market. With 3 drums the centre bearing is not needed. When the "Bissell" Roller is at work, the axle turns with the drums.

It costs more to manufacture the 3 drum Roller than the 2 drum, but you pay no more for the "Bissell" 3 drum and get BETTER VALUE FOR YOUR MONEY. You get heavier weight in the "Bissell" drums too.

The good points cannot all be told here. Ask your dealer about the "Bissell" Roller and do not be put off

with a Roller unless the name "Bissell" is plainly stenciled thereon.



Grass Seed-er Attachment furnished if required. Write Dept. R for free catalogue. 63

**T. E. BISSELL CO., LIMITED, ELORA, ONT.**

## FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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

**2. SUBSCRIPTIONS** in Great Britain, £1.00 a year. For all other countries, except Canada and Great Britain, £1.25. On all checks a year's subscription free for a club of two new subscribers.

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

**4. CHANGE OF ADDRESS**—When a change of address is ordered, both the old and new address should 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 subject. 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 to subscribers who are but slight subscribers, and sample copies sent free in arrears, to 15,300 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 our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from one of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements, and if 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, and must include 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.

### DANGER OF OVERPRODUCTION

The number of dairy cows in Canada has increased thirty-three per cent. in ten years. The average production of our milk cows has improved also. Many of our dairymen are now asking themselves, "Is there danger of overproduction?" Farm and Dairy believes that the overproduction policy is usually a false cry. A sane review of the conditions should dispel all doubts as to their being a market for all the dairy produce that we can produce. The demands of both our foreign and home markets are increasing faster than is our supply.

The outlook for our foreign trade is hopeful. The United Kingdom continues to absorb an increasing quantity of dairy produce. Germany with its millions of people is growing industriously and becoming every year a larger buyer of these articles of food from outside countries. In sources of supply for these older

countries, Australia, New Zealand, and possibly Siberia are the only countries that are likely to increase their export to any extent, and there is no reason to believe that the supplies coming from these countries will increase faster than will the demand for dairy produce on the foreign market.

The feature of the trade that should give us dairy farmers most encouragement in increasing our output of dairy produce is the rapid growth of the home market. Canadian cities are now taking a large percentage of the butter and cheese we manufacture. The most outstanding feature of our home trade, however, is the ever-increasing demand for milk for consumption in cities. This demand has taken away a large amount of the milk that would otherwise be manufactured into butter or cheese, and has resulted in higher prices for the manufactured goods.

Statistics warrant the statement also that consumption of dairy products per capita is increasing in all countries. People are beginning to learn the good value of a dollar invested in dairy produce. There is no danger of overproduction confronting us dairymen.

### A GOOD THING TO HAVE

Why is it that some farmers seem to find more hours in a day than others? They do not start to work earlier in the morning, nor do they finish later at night; but they get more done in their ten or twelve hours than the rest of us do in a longer day. Every minute seems to count for something with these farmers.

It is just a case of system in work. System has been defined as the "essential factor of successful business," and the "keystone of modern industry" and so forth; but to bring it down to a fine thing it is just a case of using one's head to save one's feet.

There is no business that calls for a greater attention to details than farming. The number of small things that we farmers have to think of if we are to make a success of our business is tremendous. We have greater need of system in our work than have most business men. Too many of us are trying to run large farms without a semblance of systematic management.

We are acquainted with an old farmer who runs a large farm by hired labor, has several branches of livestock to look after, and everything goes like clock work. In explaining his success to us this farmer attributed it to his knowing every day and generally two or three days in advance just what work was going to be done on a certain date and on just what hour of every day the small "chores" were to be done. Systematic management of this kind can be made to save many hours of labor and enable us to do much more work in a given time. We farmers of all men need system in our business. It will cost us nothing but a little mental effort to make our management systematic.

### SILAGE AND MILK TAINTS

Those who oppose ensilage as a desirable feed for milk cows are not now taken seriously by progressive dairymen. It has been proved in the experience of our best farmers that silage is both desirable and economical for milk production. The one argument on which the opponents of the silage now fall back is that silage milk is inferior milk. They tell us that in those stables where the best of milk for the city trade is produced silage is debarred.

Unfortunately this argument has in it an element of truth and has been the means of preventing some milk producers from putting up a silo. Where silage is kept in an inferior structure, and the spoiled ensilage is fed to the cattle, bad milk has resulted. Several large concerns, such as many of our condensers, have condemned ensilage in consequence. As we have learned more about storing and feeding ensilage, however, the amount of bad milk coming from herds where ensilage is fed has been greatly reduced; and from the great majority of farms where ensilage is fed no bad milk is now shipped. Most of these milk concerns have therefore withdrawn their objections to ensilage as a food for dairy cows. When we come to think of it, it is a foolish objection anyway. Musty hay or rotten roots will both produce the same effect.

Where silage is intelligently fed it will produce as good milk as any other food. Whether we send our milk to the factory or supply it to the highest class of retail trade, we need not fear that the feeding of ensilage will cheapen our product.

### AS OTHERS SEE US

Do we farmers here in eastern Canada appreciate our opportunities as we should? We have all heard the story of the man who wandered over all the world looking for the four-leaved clover, and found it after his wanderings by his own doorstep. There is a moral in this old fable that many of us might well take to ourselves. While rural Ontario is being drained of its population and many of its young farmers are leaving for the cities or the new lands of the west, many farmers of other countries, who see the possibilities of our farms here, are coming in and taking the places that we should have.

Real estate dealers from the United States have for some months been buying up land in South Western Ontario, and selling it to farmers who move there from the corn belt of the United States. The well known Sorby Farm, at Guelph, Ont., was recently purchased at a high figure by an American who saw the possibilities of an Old Ontario farm. Instances multiply every day of cases where United States and European farmers have seen possibilities in our farms of which we ourselves had never dreamed.

Let us stop and try to see our farms as others see them. We will then cease thinking of the fertile prairies

of the west, or the "riches" to be made in our cities. Let us remember that distant fields are green; and make the best of our opportunities on our own farms.

What a source of satisfaction is a good garden. And how few of us farmers have a real good one. We feel safe in saying that

**That Garden** ten does a farmer have a regular succession of vegetables and fruits from spring to fall. The trouble is that we do not plan enough. If we fore the spring work actively starts, we were to sit down and spend an hour or two actively planning out our garden we would not find it one-half the trouble that it usually is when it comes to planting time. If we are foresighted enough in our planning we will have the rewards of our labor on the table every day for every summer month. Let us get busy.

Easy to have fun: Be kind; do a good turn for your neighbor.

The farmer who makes \$3 or \$4 a day by working his team for somebody else is probably losing twice as much by not being at home attending to his own business.

### How the Dairyman is Fined

(Hoard's Dairyman)

Dairy farming is a rigid, meretricious court where there is no escape from paying the fines imposed. The farmer is fined in good round dollars in this court if he has loose poor cows; if he has unhealthful stables; if he does not provide plenty of pure air, water and feed; if he feeds an unfitting, unbalanced ration; if he does not care for his milk and cream in a sanitary manner; if he does not provide improving blood for the building up of his herd; lastly, but not least, he is fined most seriously if he undertakes to deal with all these questions with an ignorant, uninformed mind. There is no escape, no appealing to the mercy of the court, no remitting of the fines. Refusal to make a serious study of the business of dairying is just where love and how so many are heavily fined in this court.

### Knowledge Brings Contentment

(Breder's Gazette)

It is human nature to wish for the things that are just out of reach. Thoroughly acquainted with the unpleasant features of the present occupation, one learns mainly of the brighter side of the work and amusements of other people. The darker side is kept in the background by the effort of people to present a brave front to the world. Thus city people look longingly toward the country, while farmers' sons and daughters imagine that the city holds the greater measure of opportunity and happiness.

The traffic experts of New York in suburban lines find that the young people within the radius of interurban transportation gain increased contentment in farm life. While still living on the farm they are enabled to enjoy the advantages of city friendships, sights and amusements. They also learn of the hardships and dangers of city life without suffering from them. With an understanding of both sides of city life, boys and girls reared in farm families are likely to choose a free, healthful, substantial life of the country.

### Dairying Aves.

Dr. J. A. Quebec farmers have solved to dairying, poor horse and swine lamentably great increase in milk yield in great good will make up to so others in other bran-

In 1910 we had series in Quebec which number that the quality of our milk proved in breeding. At one time in the had the milking universally. Ayrshire grades are now more becoming popular a have 730 breeders Quebec. The Holsteins 120 much ground at the Holstein Breeds French Canadian a special breed, are no

### XX

What a joke you out a salesman for or twice a year to duct for which you every week of ever A few firms old do much better, do th when it comes to The price of su sales organization is ing."

With advertising. ING EVERLASTING that brings success. Consider for a mo the advertised articl does you use? How verified?

Your Outmeal: Is it Your Sugar: Is it or Redpath? Your A Gillette? Your A Waterman? The which you sleep: A Your Dentifrice: Co Perhaps not? You not. Don't you wish

Why this wish? you to have so good of these particular what they stand for

It is because of a ALL THESE FIRMS ALL HAVE QUALITY PRODUCTS. THEN YOU KNOW ABOUT

"Not a mere 'pan!' They now forget so they have LASTINGLY AT IT. continue to practice policy in their adverti

These firms in this done only what you m your quality product, bring repeat orders of ple get it! Be wise! Keep

This policy in con your advertising in Dairy will bring y sults. Our people ar perous Dairy farmer reach them exclusiv waste or duplication Farm and Dairy— "A Paper Farmers

**Dairying Ahead in Quebec**

Dr. J. A. Couture, Quebec farmers have devoted themselves to dairying, the general purpose horse and swine. Sheep have been lamentably neglected. The great increase in dairying has resulted in great good to pure farmers and will make up to some extent for declines in other branches of live stock. In 1910 we had 2,165 dairy factories in Quebec which is double the number that we had in 1895. The quality of our milking herds has improved in breeding and production. At one time in the Eastern townships, we had the milking Shorthorn almost universally. Ayrshires, pure bred and grades are now most numerous and becoming popular all the time. We have 730 breeders of Ayrshires in Quebec. The Holstein also is gaining much ground and there are now 120 members in the Quebec Branch of the Holstein Breeders' Association. French Canadian cattle, our own special breed, are not gaining ground.

**XXV**

What a joke you'd be sending out a salesman for one week once or twice a year to sell your product for which you require sales every week of every year!

A few firms old enough to know much better, do this very thing when it comes to advertising.

The price of success in any sales organization is to "keep going."

With advertising, it is "KEEPING EVERLASTINGLY AT IT" that brings success.

Consider for a moment some of the advertised articles and products you use! How are they advertised?

Your Outmeal: Is it Quaker's? Your Sugar: Is it St. Lawrence or Redpath? Your Safety Razor: A Gillette? Your Fountain Pen: A Waterman? The Mattress on which you sleep: An Osterman? Your Dentrice: Colgate's?

Perhaps not! But frankly, if not, don't you wish they were?

Why this wish? How came you to have so good an opinion of these particular names, and what they stand for?

It is because of advertising!

THESE FIRMS, FIRST OF ALL HAVE QUALITY PRODUCTS. THEN THEY LET YOU KNOW ABOUT THEM.

Not a mere "flash in the pan"! They know you might soon forget so they have kept "EVERLASTINGLY AT IT," and they continue to practice this sound policy in their advertising.

These firms in this matter have done only what you may do. With your quality product, which will bring repeat orders once the people get it, you can do likewise.

Be wise! Keep everlastingly at it!

This policy in connection with your advertising in Farm and Dairy will bring you gratifying results. Our people are the prosperous Dairy farmers and you reach them exclusively, without waste or duplication, through Farm and Dairy—

"A Paper Farmers Swear By"

There are 150 pure bred herds in the province. There are practically no beef herds in Quebec.

**Dairying is Popular in B. C.**

Dr. S. F. Tolmie, Victoria, B. C. The man who follows an intelligent system of live stock farming is building up a farm for himself and is leaving something for which future generations will thank him. This is a lesson that we must impress on our farmers in B. C. Our markets are good, the country has hardly been scratched. We now have two new railroads that will open up much new country. Is this new country to be robbed of its fertility by the improvident systems of agriculture that have been followed in the other new provinces?

In dairy and other farm products, British Columbia will be a consumer in excess of production for many years to come. Condensed milk from the State of Washington is now imported in large quantities. Dairying is making satisfactory progress, particularly in pure bred lines. One of our B. C. cows has given almost 100 pounds of milk a day. The Coquitlam Ayrlian Farm and the Experimental Farm at Agassiz will both be run as dairy farms and will be of great assistance to our dairymen. The city milk supply affords a market for many of our farmers. This has led to a tendency to buy cows rather than breed them and good heifers have become scarce.

Record of Performance tests are popular in our province and I expect that in the not far distant future, British Columbia will be producing some of the best dairy cattle in Canada.

**Low Grade Fertilizers**

Editor, Farm and Dairy.—It is evident from the analyses of the fertilizers used by Mr. Cottingham, as published in Farm and Dairy, March 14th, that they were very low grade materials, and could scarcely have been expected to produce much effect, considering the comparatively small amounts applied.

I find from the analyses given that fertilizer No. 1, which cost \$22 a ton, was only worth \$22. According to the analyses of fertilizer No. 2, which cost \$24 a ton, this material is only worth \$18. The latter was said to be suitable for use on grain, but it seems strange that a fertilizer for grain should contain no nitrogen whatever.—B. L. E., York Co., Ont.

**Information on Barn Construction**

"How to Build a Dairy Barn" is the title of a most useful and neat booklet gotten out recently by Beatty Bros., of Fergus, Ont. This book is replete with information on barn construction and deals with every phase of the question from foundation to roof. Complete directions are given for erecting a plank frame barn, for laying concrete floors, and for the construction of cow stalls and mangers. An excellent article on ventilation by J. H. Grisdale, Superintendent of Dominion Experimental Farms, is a feature of the book. Plans for model stables are given in diagram.

It has cost the firm of Beatty Bros. \$3,000 to get out this book on barn construction. They will send it free to their friends and customers on application.

After calving the cow should be brought to her full milk flow as soon as possible. The daily milk records will here assist and guide the feeder.

**DE LAVAL CREAM SEPARATORS**

**ARE THE MOST SANITARY**

The up-to-date De Laval Cream Separators excel other separators not only in thoroughness of separation, ease of running, simplicity and durability—but as well in the important feature of being the easiest cleaned of all cream separators and the only cream separator which is thoroughly cleanable under ordinary every day use conditions.

The modern De Laval separator bowl is completely unassembled in cleaning and every part is smooth, visible and easily reachable, without hinge, tube, pocket or crevice anywhere. The whole bowl is washed thoroughly in a couple of minutes.

The frame is smooth and free from recesses and every part is as accessible and thoroughly cleanable as the bowl itself. The gears and bushings are protected from milk or water reaching them, and there is no slop under or around the machine.

**QUALITY OF CREAM AND BUTTER DEPENDENT UPON SEPARATOR CLEANLINESS**

An unclean separator bowl or filthy separator frame necessarily means a bacteria-infected and inferior quality of cream. Buyers of farm separator cream and buttermaking authorities generally are constantly emphasizing this point.

One of the prize winning creamery buttermakers at the last National Dairy Show recently wrote us:

"We are sorry for the use of so many 'mail order' and other inferior separators in our territory. It seems to be almost impossible to clean them, even though the farmers do try—and a good many of them don't even try. We wish you could do more missionary work to get these rotten separators out of the country. It is impossible for any buttermaker to make good butter from spoiled or tainted cream."

Any De Laval agent will be glad to take a modern De Laval machine apart for you so that you can see for yourself its simplicity and sanitariness of construction and how much more easily and perfectly it may be cleaned than any other separator.

**DE LAVAL DAIRY SUPPLY CO., LIMITED**  
173 WILLIAM ST., MONTREAL 14 PRINCESS ST., WINNIPEG

**"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.



Write for full information. 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. Write us for complete literature today. **NEW IDEA SPREADER CO.** 1365 Vanmore Street, Coldwater, Ohio.

**PIGS PIGS**

Again we announce our popular offer of a pure bred pig, eligible for registration, which we will give you free as a premium in return for 9 new subscriptions to FARM AND DAIRY, each to be taken at only \$1.00 a year.

You have been sending out hundreds of pure bred pigs. We will send you one, a real dandy, for the little time it will take you to get these new subscribers. Write us tonight about the kind of pigs you want and get busy and secure your friends and neighbors as new subscribers.

**PIGS FARM AND DAIRY, Peterboro, Ont. PIGS**

**5** 95 AND UP -WARD

**AMERICAN SEPARATOR**

THIS OFFER IS NO CATCH. It is a solid proposition to use, as usual, fully guaranteed, a new, well made up running separator for \$125.00. This separator is made of the finest heavy or light galvanized iron, and is especially for cream. Different from the ordinary type, which illustrates the capacity machine. The level is sanitary, meets, easily cleaned. **Send me promptly from WINDSOR, ONT. to Mr. J. JOHN, N. E. 1st and 2nd Sts., Windsor, Ont.** Write your daily if large or small, write us and obtain your hands-on free catalog. Address: **AMERICAN SEPARATOR CO., Box 1700 BAINBRIDGE, N.Y.**

**The "Perfect" Steel Cheese Vat**

OUR "Perfect" Steel Cheese Vat has several unique merits. Being made of durable, having no cracks or crannies for milk to lodge in and making it sanitary. Having levers and gears for lowering and raising

ing inch by inch. It is handy. Also it is built like the last drop runs out; that is, it is an ideal separator.

Write for our special catalogue of dairy equipment.

**SPECIAL PRICE FOR CASH**  
**Steel Trough & Machine Co., Ltd.**  
TWEED, ONT.

**Creamery Department**

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

through the run we use enough water at about the same temperature to force the cream out of the bowl and pans. It is not well to separate such a heavy cream that we have to use much water to flush the bowl. The flush water thins the cream, and the result is a fat tasting cream.

**Points on Separator care**

M. F. Jackson, Lambton Co., Ont.

I believe there is no machine on the farm that is more abused, considering its delicate construction than the cream separator. Few of our farmers are mechanics, so we would advise them to go slow and select the right kind of separator when buying. We may ask ourselves, "What does this embody?" First, a machine that will give at least a 35 per cent cream with practically no loss in the skim-milk second, one which takes a small amount of power to operate but rigidly and strong and yet so simple in its mechanism that the ordinary farmer will be able to assemble and reassemble its principal bearings for cleaning purposes when necessary.

If we follow dairying as a business we will provide a separator room properly equipped. This room should be in close proximity to our power and handy to our stables. This room should be built with good tight walls and ceiling, with cement floor and foundation with plenty of sunlight. If convenient, we should have water connection, ditch and drain.

**AN EVEN TEST POSSIBLE**

If these directions are followed carefully, that is, the watching of cream and feed and temperature of milk, there should not be any great variation in our percentage of butterfat in the cream from day to day. In winter, when the supply of milk goes small and we do not want to separate twice daily, warm the first milking to a temperature of 96 degrees before mixing with fresh milk, and separate both milkings at once. We will have much better results than by separating each milking and washing the machine once daily, which practice I am sorry to state is here common with some patrons.

The washing of the separator must take place immediately. We would advise using a small quantity of Wyandotte Dairyman's cleaner and cleanser in the wash water, but by all means do not use too strong a washing soda of any description as it darkens the iron. When thoroughly washed and sealed, put the ware, skimming device and bowl out in the sun in summer, and in a dry, shady place during the winter, such as one shelf in a warm part of the kitchen. Occasionally the tires and parts will need brightening. For this purpose we would advise the use of Dutch cleanser.

**Lime for Cleaning**

Danish butter has a reputation for the British market. British dealers swear by the Danish product and so do our farmers. The Danes themselves attribute the high quality of their product to no small measure to the cleanliness of their premises, both in their stables and in their creameries.

A point that we Canadian creamery men might take from them is their appreciation of the value of lime for cleaning purposes. Lime water is almost universally preferred for cleaning the dairy utensils.

They use one pound of lime to saturate 70 pounds of water. Our commercial lime not being so pure we would need to use a greater quantity. The method followed by the Danes is simply to slake the lime with a small quantity of water and then stir the milk of lime so formed into the main bulk of water.

**SETTLERS' TRAINS**

—TO—

**MANITOBA, ALBERTA SASKATCHEWAN**

The only through line

**LOW COLONIST RATES**

For settlers travelling with livestock and stock

**Special Trains** Will leave Toronto **Each TUESDAY MARCH and APRIL 10.20 P.M.**

**Colonist Cars on all Trains**

No charge for berths

Through Trains Toronto to Winnipeg and West

Ask any C.P.R. Agent for copy of "Settlers' Guide"

**CREAMERY MACHINERY FOR SALE**

1 Sharpley Turbine Separator, 3,300 lbs. capacity

1 Key City Square Churn, 300 Gallons

1 Mason Power Roller, Work Gallon

1 Twin Cream Vat

1 Rotary Pump

1 8 H.P. Engine, "Dutton."

This machinery is practically new, only been in use a few months. Will sell in block or separately. Apply to

**JOHN B. WYLIE - ALBION, ONT.**

**100 ACRE FARM \$1,000**

Oneida County, N.Y. Buildings insured for \$1,000; 55 acres rolling fields, spring watered pasture for 15 cows; lots of wood and timber; on main road, 2 1/2 miles to village; good 7-room house, 2000 sq. ft. poultry house, wood shed, hog house; pure water, maple shade; owner very anxious to sell before planting; only \$1,000, \$600 cash, easy terms. Full details and travelling directions to see this and other remarkable farm bargains between Albany and Buffalo, N.Y. Write for catalogue to R. B. Farns, Station 267, N. A. Stralough, West 34th St., and 170 W. Bay, New York. Telephone, Greeley 3748.

**AGENTS** We will pay you well to solicit orders for your district for new subscriptions to this practical journal.

**FARM AND DAIRY, Peterboro, Ont.**

**BEHOLD AN IMPORTANT POINT**

That machine is well oiled. Whether run by hand or power, we should start evenly and carefully until the required amount of speed is reached. We put just half speed enough water at a temperature of 100 deg. to flush the bowl. When the separator has gained full speed we start the milk into it and continue a full even feed all through the run. We catch the first part of the cream that has come out during the forcing of the water out of the bowl by the milk, and empty it into the supply tank. When

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

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.

**4-Bottle Machine Complete, \$5.50**

Used by all the Gov.'s Testing Stations. This 4-bottle Tester is the same as carried by all the Canadian Gov. 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 few cut gears and they are enclosed in a cast iron case that turns easily without vibration or jar. It is neat complete with clean water bottle, brush, acid, and full directions for use. It will pay you to have this tester whether you milk 4 or 30 cows.

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

**The Beaver Babcock Tester**

Note its clever construction. The funnel is detachable. As the milk falls towards the milker, it passes direct through the strainer into the pan. All dirt falls on a deep shelf inside the funnel—not on the milk. You can use ordinary cheap cloth for straining. Capacity 14 Quarts. Price \$2.50.

Use by all up-to-date farmers and dairymen.

**Other Things You Need in the Dairy**

Decimal Milk Scale	30 lbs. by oz. \$3.50, by tenths - \$4.00
	120 lbs. by tenths - \$5.00
Straight Spring Scale	25 lbs. - \$3.00
	35 lbs. - \$3.50
Sterile Atmospheric Milk Fever Outlet	Cures 90 per cent. of milk fever cases. Complete - \$2.00
	With 1000 test tubes - \$2.50
Opener, Teat Expander and Mixing Bottle	Contains History, Teat Tester, Teat Expander and Mixing Bottle - \$1.50
Cattle Trophies for Bloat, nickered plate	- \$1.50

**Beaver Coolers and Aerators**

The cow. The Beaver Cooler will cool the milk to within 2 degrees of the temperature of the water. The Beaver Aerator and expels all foreign odors. Inures the sweeter, longer-keeping milk. Capacity 125 quarts per hour. \$17.00

**Write NOW for FREE Catalogue**

Everything you need fully described and illustrated, so you can buy the money-saving, time-saving way. Sent FREE on request if you write

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

The Dairy Car on the Ontario Government Demonstration Train was Equipped Entirely with "Drummond" Supplies.

**Points on Separator care**

M. F. Jackson, Lambton Co., Ont.

I believe there is no machine on the farm that is more abused, considering its delicate construction than the cream separator. Few of our farmers are mechanics, so we would advise them to go slow and select the right kind of separator when buying. We may ask ourselves, "What does this embody?" First, a machine that will give at least a 35 per cent cream with practically no loss in the skim-milk second, one which takes a small amount of power to operate but rigidly and strong and yet so simple in its mechanism that the ordinary farmer will be able to assemble and reassemble its principal bearings for cleaning purposes when necessary.

**Lime for Cleaning**

Danish butter has a reputation for the British market. British dealers swear by the Danish product and so do our farmers. The Danes themselves attribute the high quality of their product to no small measure to the cleanliness of their premises, both in their stables and in their creameries.

A point that we Canadian creamery men might take from them is their appreciation of the value of lime for cleaning purposes. Lime water is almost universally preferred for cleaning the dairy utensils.

They use one pound of lime to saturate 70 pounds of water. Our commercial lime not being so pure we would need to use a greater quantity. The method followed by the Danes is simply to slake the lime with a small quantity of water and then stir the milk of lime so formed into the main bulk of water.

**Homeseekers' and Settlers' Trains to Western Canada**

Via Chicago and St. Paul, April 16th, 23rd and 30th, and every second Tuesday thereafter until Sept. 17th, inclusive. Tickets will also be on the Northern Navigation Company. Special train will leave Toronto 10.30 p.m. on above dates for Edmonton and Winnipeg. Tickets will also be on Grand Trunk Pacific Railway west of Winnipeg. Through coaches and Pullman Tourist Sleepers will be carried fully equipped with bedding and porters' charge. Berths may be secured in sleepers at a low rate. This is an exceptional opportunity for those wishing to take advantage of the remarkably low one-way "Settlers' rates" round trip Homeseekers' excursions through the American cities. No change of cars. Secure tickets and berth reservations from any Grand Trunk Agent, or write A. E. Duff, District Passenger Agent, Union Station, Toronto.

**Cheese Dept.**

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

**The Small Fact**

Editor, Farm and Dairy, March 1912.

I enclose a picture of the Glenside Dairy (which is in Stormont, not Glengarry) and under that illustration that the small factory is encouraged. On this I agree with you. I think that factory.

The farmer of this time sending their hay in which the mowing itself was little work, and one more arrived at the factory, which ended career, and compelled to sell to the nearest mill.

TOO LONG A

The nearest factory is a visit Creamery, some miles distant, and is plant, equipped with manufacturing either in the sun in summer, and in a dry, shady place during the winter, such as one shelf in a warm part of the kitchen. Occasionally the tires and parts will need brightening. For this purpose we would advise the use of Dutch cleanser.



**THE CASHIER SAID**

your Butter Cheese getting bigger take buy another cow

**THE FARMER SAID**

using WINDSOR makes better butter getting better certainly does pay Windsor Dairy Sale

**THE CASHIER SAID**

it's does. Do you let some of my fr secret?"

**THE FARMER SAID**

Tell them all to use DAIRY SALT if you get the 'top' price butter!"

**WINDSOR DAIRY SALES**



**Cheese Department**

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

**The Small Factory Upheld**

Editor, Farm and Dairy.—In Farm and Dairy, March 14th, there appeared a picture of the Glen Payne Cheese Factory (which is in the county of Stormont, not Glengarry, as stated), and under that illustration you state that the small factory is not to be encouraged. On this point I cannot agree with you. I send my milk to that factory.

The farmers of this section were at the time sending their milk to a factory in which the machinery and the building itself was little better than a week, and one morning when they arrived at the factory the boiler was burst, which ended the factory's career, and compelled the patrons to send to the nearest available factory till a new factory was built.

**TOO LONG A HAVIL**

The nearest factory was the Berwick Creamery, some three or four miles distant, and is a very large plant, equipped with machinery for manufacturing either cheese or butter. This factory takes in such a large quantity of milk that farmers are often kept waiting till 10 o'clock for their turn to be unloaded. Those of us who had a four-mile drive after that lost practically the half day. And half-days are precious enough to the farmer in harvest time and fall ploughing season.

The farmers of the district resolved to build a small factory of their own for the sake of convenience, and dur-

ing the fall and winter erected the one illustrated in Farm and Dairy. It is built on a cement foundation, has cement floors, and is equipped with the very best machinery. The whey is elevated and pasteurized, and everything about the building is a type of modern convenience.

As this small factory keeps pace financially with its big rival, and as there is much less loss of time in drawing the milk, I fail to see why Farm and Dairy is knocking the small factory.—D. MacInnes, Stormont Co., Ont.

**Dairy School Examinations**

The following is the proficiency list for factory and farm dairy students in the examinations at the Dairy School, Guelph, Ont., in order of merit, maximum marks 1,200:

- H. Cotton, Albanburg, 1,018; B. W. Brown, Attercliffe, 994; G. R. Smith, Ashtimer, 961; F. A. Scott, Glasgow, 960; J. McKennie, Clifford, 922; E. Youse, Delhi, 907; A. Rogers, Leoworth, 889; E. MacDonald, Molesworth, 870; G. VanCamp, Burketon, 864; W. Duran, Hilton, 831; C. Lockner, Chesley, 819; J. R. Balfour, Guelph, 819; A. E. Hays, Bresler, 796; P. Carroochan, Palermo, 795; A. Noeb, Brookden, 790; J. A. Hill, Delaware, 786; J. A. Sheehan, Hamilton, 781; M. J. Underhill, Guelph, 767; A. Inlay, Lawrence Sta., 765; J. H. Conway, Harrington, 754; W. Owen, Egrievore, 673; H. Shepherd, Nelson, 638; J. L. Hanson, Hixson, 632; W. A. Coleman, Underwood, 611; W. Greenwood, Stratroy, 566; C. F. Runge, "3rd, 534; A. E. McNicol, Dunnville, 503.
- Farm dairy class.—R. J. Hastings, Guelph, max. 1,000, 814; W. Duncan, Vernon, B.O., 804; W. Adams, Ontario, P.Q. Practical exams only, max. 400, 334.

**Dairy Note**

Better milk supply! Keep the milk clean and cool it. Who has a better method?—W. Waddell, Middlesex

The wooden vat holds the temperature better, and in this way is more satisfactory than the more modern steel vat.—B. A. Reddie, Northumberland Co., Ont.

No one can judge of the quality of cheese until it is a week old, and I would prefer that it be 10 days.—R. W. Ward, Dairy Instructor, Peterboro Co., Ont.

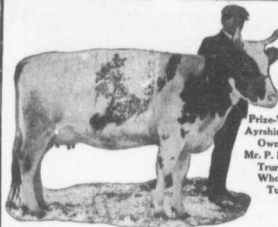
The use of ice for cooling milk for the cheese factory is just applying the same principles in summer as nature applies in winter.—J. J. Hogan, Peterboro Co., Ont.

The pasteurizing of whey is a great benefit to cheese factory patrons, and they should be willing to bear the cost of pasteurizing.—W. Waddell, Middlesex Co., Ont.

Chief Dairy Instructor G. G. Puhlow has made two appointments to the staff of dairy instructors of Eastern Ontario this season. Dairy Instructor Dool, who has retired to take a position at the Dairy School, will be succeeded by Jas. A. Mitchell, of Rednersville. Dairy Instructor J. B. Lowery, of Frankford, has resigned to go in for cow testing. He will be succeeded by C. F. Linn, who has been in dairying for 15 years. Mr. Linn has been maker in Shamrock Factory, Hastings County, for the past 10 years.

**Kingston Graduates.**—The following is a list of students who were successful in passing the final examinations at the Eastern Dairy School: H. B. Smith, John Craig, J. A. Flood, James Henderson, W. R. Linn, E. Leizert, C. F. Linn, S. J. Cheetham, Percy Rogers, W. Bitten, F. R. Pearson, W. Wheeler, C. Campbell, I. Cone, W. Tarves, S. A. Kinnard, E. In Foley, T. L. Shields, George Hall, H. Green, B. Ladoucier.

**THE WINNERS**



Prize-Winning Ayrshire Heifer Owned by Mr. P. Blanchard, Truro, N. S. Who Uses a Tubular



Dairymen making the most money realize that it pays them well to use only high producing cows and the highest producing cream separator. That is why Mr. P. Blanchard, successful dairymen and popular agricultural speaker of Truro, N. S., who owns the prize-winning Ayrshire heifer shown above, uses and recommends the

**SHARPLES Tubular Cream Separator**

Mr. Blanchard is but one of many who are equally businesslike and use Tubulars exclusively. Tubulars are prize-winners. Have twice the skimming force of other separators. Sixty faster and twice as clean. Dairy Tubulars are so clean to clean or "skim" the cream or give it a mottled flavor. By producing the best cream and the most cream, Tubulars make a profit for other busy dairymen and will make for you.



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**Mr. Dairyman—**  
Have you tried  
**Caldwell's**

**Molasses Meal**

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- 2 Cows that come through the winter in a thin condition are not in shape to do their best at the milk pail.
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- 6 And please remember that it costs you nothing extra to use as it takes the place of an equal quantity of ordinary chaps.
- 7 Caldwell's Molasses Meal and we will send you booklet and all particulars as to cost, etc., together with current copy of our magazine.

**The Caldwell Feed Co. Limited**  
Dundas, Ont.

"FARM AND DAIRY"  
Please send me booklet and full particulars as to cost, etc., of Molasses Meal.

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County.....  
Province.....



**THE CASHIER SAID—**"I notice your Butter Checks have been getting bigger lately. Did you buy another cow?"

**THE FARMER SAID—**"No, I'm using WINDSOR SALT. It makes better butter and I am getting better prices. It certainly does pay me to use Windsor Dairy Salt."

**THE CASHIER SAID—**"I should say it does. Do you mind if I let some of my friends in the secret?"

**THE FARMER SAID—**"Go ahead. Tell them all to use WINDSOR DAIRY SALT if they want to get the 'top' price for their butter" 67D

**WINDSOR DAIRY SALT**



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Capable Scotch, English and Irish maids. Also Danish girls. Parties arriving weekly.

Apply now. The Guild, 71 Drummond Street, Montreal or 47 Pembroke St., Toronto.

**MINORAS, HARRIS ROCKS, HOUDANS and BROWN LEGHORNS, winners** Joseph, Toronto, Port Huron, Sarina and many other places. Free circular of prices on Eggs for hatching. C. Dyer, Highgate, Ont.

## 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. 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."



"I'll like that," I said. "I was afraid the horse wasn't 'all right' and that I might have to waste 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 "1900 Gravity" Washer. And I said to myself, lots of people may think about my Washing Machine as I do 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.

Now, I know what our "1900 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 "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it doesn't wear the clothes, fray the edges nor 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 "1900 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 "1900 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?

Does it prove that the "1900 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. And when and tear on the cents to 75 cents. In wear it will save 50 cents to 75 cents. In washman'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 I save you 50 cents a week, send me 50 cents to till the bill. For I'll take that cheerfully, and I'll wait for my money until the machine has earned the balance.

Drop me a line to-day and let me send you a book about the "1900 Gravity" Washer and its washes clothes in 6 minutes. Address me personally—R. F. Bach, Manager, 1900 Washer Co., 357 1/2 Yonge St., Toronto.

## The Upward Look

### The Sin That Dwells In Us

For the law of the spirit of life in Christ Jesus hath made me free from the law of sin and death.—Romans viii., 2.

Most of us are so assailed by temptations at times we are prone to become discouraged by feeling that we must be very poor Christians or Satan would not torment us as he does. We forget that times of temptation are times of growth. Every time we triumph over temptation we increase in faith and our Christian character is strengthened and refined.

We forget, also, that all the great characters of the Bible, not excepting even Christ, were tempted also; and all, excepting only Christ, gave way at times to their temptations. Moses was tempted and sinned, Elijah was tempted until he thought that he only, of all the children of Israel, loved the Lord, whereas, as the Lord showed him, there were seven thousand who had not worshipped Baal and sinned. All the great kings of Israel sinned. The disciples who followed Christ sinned. Even the apostle Paul, by his own admission, we know, was led at times to do things that his conscience told him were wrong and because he was tempted he was led to make it clear to us why we too are tempted.

If, when temptations assail us, we will remember Paul's words in the seventh and eight chapters of Romans, it will help us to understand the source of our difficulty and the remedy we need. How keenly he must have been tempted when he was prompted to cry out as he did when he said, "For that which I do I allow not; for what I would, that do I not; but what I hate, that do I. I consent unto the law that I would not, I consent unto the law that it is good. Now then it is not I that do it, but sin that dwelleth in me." Again, when he said, "For the good that I would I do not, but the evil which I would not, that I do. Now if I do that I would not, it is no more I that do it, but sin that dwelleth in me."

Paul, we think, was tempted and sometimes sinned just as we are and do, but did Paul give up? Not at all. In the very next chapter, while dealing with an extension of the same theme, he was led to give expression to that glorious assurance, that all things work together for good to them that love God, to them who are called according to his purpose." He knew that this was so because, as he said in our text, "the law of the Spirit of life in Christ Jesus hath made me free from the law of sin and death." In other words, this means that if we will but strive to live near Christ and to be filled by His Spirit, His Spirit will take possession of us and drive out by degrees the law of sin and death which now leads us to sin.

It is not sinning that counts against us so much as it is loving our Satan for a while lead us into sin, but if all the while we rebel and struggle against our desires and inclinations, we are in the way of triumphing over them ultimately, for we have been told that if we will resist the Devil he will flee from us. (James iv., 7). Let us, therefore, not be discouraged by our temptations but give ourselves to earnest prayer, for prayer is the means that God has provided for us in order that we may always, if we will, gain the victory over sin. When we feel discouraged it is a sure sign that we are not praying as we should.—I. H. N.

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Not a Mark of the Weather; the same lustre and brightness as when first applied—no cracking—blistering or fading—that's the kind of Paint you want. RAMSAY'S PAINTS stand the severest tests of weather and time because they are mixed right—bone-dried oil—turpentine and coloring pigment intimately combined—the result of 75 years of practical paint making. RAMSAY'S are the best looking and best wearing paints made. Ask your dealer in your locality.

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## FREE-FARM ACCOUNT BOOK

Hickmore's Farm Account Book will be sent free to any farmer who will fill out who and more practical than trying to remember them; shows what to charge against crop production; has laborers' time record, and section for personal accounts. 64 pages, for ink or pencil. A cheap affair. Its quality is in keeping with **HICKMORE'S GALL CURIE**, a medicinal ointment for the treatment of the various and most stubborn and high saddle galls, Ring Bares, Cuts, Scarcches, Grease Heals, etc. You can't get it in the work-house drugstore or cure with the horse works. Great filling for sore teats in cows. Ask your contractor for it. Send for it freely. No obligation. Send today.

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## PLAYTIME WASHER

Times have Changed. Why should the farmer's wife have labor saving implements as well as the farmer, and over a wash board. The PLAYTIME cuts all the hard work of washing; it is operated by either Power or Hand. FOR POWER.—The balance wheel is fitted with a flange for a belt that can be hooked on to any small gasoline engine or electric motor. FOR HAND.—A Lever Handle, Foot Pedal, Tread and Combination lever, operating together, drive the balance wheel at any speed desired, with little effort. It's rubbing ball wears out the clothes but the ball is of rubber, will retain its shape and last a lifetime in ordinary use. Write for particulars of this modern and up-to-date, labor-saving machine. Price \$14

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Remember the *St. Lawrence* Sugar

Try it—test it—see for yourself—that "St. Lawrence Granulated" is as choice a sugar as money can buy. Get a 100 pound bag—or even a 20 pound bag—and compare "St. Lawrence" with any other high-grade granulated sugar.

Note the pure white color of "St. Lawrence"—its uniform grain—its diamond-like sparkle—its matchless sweetness. These are the signs of quality.

And Prof. Hesse's analysis is the proof of purity—'99 99/100 to 100% of pure cane sugar with no impurities whatever'. Insist on having "ST. LAWRENCE GRANULATED" at your grocer's.

**ST. LAWRENCE SUGAR REFINING CO., LIMITED, MONTREAL.**

**GRAND TRUNK RAILWAY SYSTEM**  
**HOMESEEKERS' AND SETTLERS' EXCURSION**

TO  
**WESTERN CANADA VIA CHICAGO**  
**April 16th, 23rd and 30th**

And every Second Tuesday thereafter until Sept. 17th inclusive.  
**SPECIAL TRAIN WILL LEAVE TORONTO AT 10.15 P.M. ON ABOVE DATES FOR EDMONTON AND POINTS IN MANITOBA AND SASKATCHEWAN, via Chicago and St. Paul, carrying through coaches and Pullman Tourist Sleepers.**

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**THE MOST POPULAR ROUTE TO MONTREAL, BUFFALO, NEW YORK, PHILADELPHIA, DETROIT, CHICAGO, via Grand Trunk, the only**  
**DOUBLE TRACK ROUTE.**  
**STEAMSHIP TICKETS ON SALE VIA ALL LINES.**  
 For Tickets and all information, apply to any Grand Trunk Agent.

**FARM DAIRYING** A New Book by Laura Rose  
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**OUR HOME CLUB**

**The Effect of Environment**

There is more truth than poetry in that last letter from "Another Hired Man." He there says that we farmers should be boosters if we could keep the boys on the farm. That statement is just a very small part of a widely applicable rule. Children are the most sensitive of all animals to environment. The average child notices all things and all things make an impression that is lasting.

I recently visited for half a day a family living several miles from here, and I am quite certain that nothing about it of a miracle will ever keep the girls on the farm. Both mother and father were slaves to the "grab" habit. They could not make enough money and they were simply working themselves and their children to death. Such thin miserable looking people I have not seen in a long time. They were constantly grumbling about not getting enough for this and that, and the other thing. These children knew that their parents were in good condition financially. They also knew that in the neighboring town, people in the same financial straits, lived well and enjoyed life. Judging from appearances, as children will, can any one blame them if they left for town at the earliest opportunity?

The same applies to the sons. They saw the boys their own age in town having a good time, getting a chance occasionally for a game of baseball, or a few hours at the lawn tennis courts. But with them there is a continual case of chores, chores, chores. These small boys are storing up their impressions and they certainly are not favorable to farming.

I join in with "Another Hired Man" when he says "Let's Be Boosters." But I would also add "Let's make country life worth boosting."—"Uncle Jim."

**Let the Boys Plan Too**

My brother farmers, take your sons in your confidence in making your plans for the season's operations. It will develop them into men of executive ability. In their tender years they will be led to take more interest in the old farm than could ever be taken on a farm where they must work and ask no questions.

I recall an instance that illustrates the foolishness of teaching boys to "do just as they are told" without questions. One of my neighbors went off on a trip to the west and left the farm in charge of his sons ranging in age from 14 to 20 years. He was the kind of a man whose very manner seemed to say "I am the boss of this ranch." As his boys had been working for him for so many years he felt that they could run that farm all right in his absence.

But they couldn't. They had always been taught to look to their father for direction on the smallest trifles of management. They had done the work over and over again that they now had to do in their father's absence. They had done it without interest. They were now completely at sea. To use an expressive phrase, the farm "ran itself" until the boss of the job got back.

When we were boys at home we thought that we knew as much about the running of the farm as our father did and he never gave us cause to think otherwise. Our suggestions were always asked for and given respectful attention. If father went off on a trip for a month or so, as he sometimes did, he was perfectly cer-

tain that all would be well at home. That's the result of giving a boy a hearing.—"Uncle Jack."

**Infinite Power**

By Elbert Hubbard

Any person, in any walk of life, who puts jealousy, hate and fear out of his life will be distinguished. All good things shall be his. They will flow to him.

Power gravitates to the man who can use it, and love is the highest form of power that exists.

If ever a man shall live who has infinite power he will be found to be one who has infinite love.

The way to free yourself from discord is not to take a grip on your discord and strive to be kind, not that. Just don't think much about it. Use yourself in your work. If your intent is right, your actions will be also. Hell and heaven are no localities—they are states of mind. Once we thought work a curse; then it came to us that it was a necessary evil; and yesterday the truth dawned upon us that it is a precious privilege. There is more joy in useful effort than in the painstaking avoidance of it. Creeping into the lives of men everywhere is the thought that cooperation is better than competition. We need each other, and by giving much will receive much. The old maxim, "Cast thy bread upon the waters," is founded on a stern psychologic law. Everything we give out comes back to us. Give out love, and love returns. To give and grab and seize is to lose.

**WOMAN'S PREFERENCES**

We are reaching an enlightened self-interest. And so there is a strong setting of the social tide toward the parasite and the elimination of knowledge that we can thrive through service and not through exploitation.

Everywhere schools and colleges are doing things, not merely talking about them. The education do luxe—the education for show—will soon be consigned to limbus. Already we say, "That man is best educated who is the most useful." And the true test of education will lie in its possessor's ability to serve.

Do not go out of your way to do good, but do good whenever it comes your way. Men who make a business of doing good to others are apt to hate others engaged in the same occupation. Sacrifice and self-abnegation are not needed.

Simply be filled with the thought of good and it will radiate. You do not have to Lother, unless it is more than you need to trouble about your digestion.

Do not be disturbed about saving your soul; it will certainly be saved if you make it worth saving. Do your work. Think the good. And the evil, which is a negative condition, shall be swallowed up by the good.

**Advice to Bachelors.**—Do not ask a girl to marry you after court when she is dressed fit to kill. Call on her, and when you leave inadvertently drop a glove on the piano. Return for it next morning at nine o'clock. If she comes to the door with one shoe and one slipper on, her hair done up in curl papers, dressed in an old Mother Hubbard, or addressed in the words "Who's there?" she appears in a neat hair dress and her hair done up nicely grab her quick.—Marionville (Mo.) Free Press.

Don't forget seeing your friends and having them join in for a club of subscribers to Farm and Dairy.

**Well, Well!**



**Used All these DIFFERENT KINDS of GOOD DYE with the SAME Dye. I used DUOLA**  
 ONE DYE FOR ALL KINDS OF GOODS

**CLEAN AND SIMPLE TO USE.**  
 NO CHARGE OF USING THE WRONG DYE FOR THE COLOR. All colors from your Druggist or Grocer. Get a color card. "FOR DETAILS" The Johnson-Richardson Co., Limited, Montreal.

**CALVES RAISE THEM WITHOUT MILK**  
 Booklet Free.  
 Steels, Bridge Seed Co., Ltd., Toronto, Ont.



**SYNOPSIS OF CANADIAN NORTH WEST LAND REGULATIONS**

ANY person who is the sole head of a family, or any male over 17 years of age, who has been a resident of the Dominion of Canada for one year immediately preceding the date of application, may apply to the Dominion Agency or Sub-Agency, for the District Agency, or may be made an agent of intending homesteaders by father, mother, son, daughter, brother or sister.

Duties—Six months' residence upon and cultivation of the land to each of three years, or the equivalent in money value of his homestead on a farm of at least 80 acres, or land not occupied by him or by his father, mother, brother, sister or other relative.

In certain districts a homesteader in section 16 may pre-empt a quarter section elsewhere in the Dominion for \$10.00 per acre. Duties—Must reside six months on the homestead or pre-emption six months on the other section. Cultivate the time required to earn home value of the section and cultivate fifty acres (including the homestead) and have exhausted his homestead right and cannot obtain a pre-emption, may settle for a purchased homestead in certain districts. Price \$10.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$50.00.

Deputy of the Minister of the Interior, W. W. ORY, P. O. Box 10, Ottawa, Ontario. This is a non-partisan publication of the Department of the Interior. It is not to be sold for profit.

**CANADIAN PACIFIC HOMESEEKERS' EXCURSIONS**

TO  
**Manitoba, Saskatchewan, Alberta**

Special Train leave Toronto 2.00 p.m. on  
**APRIL 9, 16, 23, 30 MAY 7, 14, 21, 28**  
**JUNE 4, 11, 18, 25 AUG. 1, 8, 15, 22**  
 Second class tickets from Ontario stations to principal destination points.

**LOW ROUND-TRIP RATES**  
 Winnipeg and return \$24.00, Edmonton and return \$42.00, and to other points in proportion. Tickets valid for 90 days.

**TOURIST SLEEPING CARS**  
 through to Edmonton via Saskatoon, also to Winnipeg via Regina via Lake Louise and on to Vancouver via Seattle. Comfortable heating and cooking facilities. Bed and breakfast at moderate rates through local agents. Early application must be made.

Apply to nearest C.P.R. Agent or M. C. McRURRY, Dist. Pass. Agt., Toronto.

**ONLY DIRECT LINE NO CHANGE OF CAR**



**A Good Dye**

What is the best to use in cleaning the cream separator purchasing a new hub or showing me so many has occurred to me women in the said would not have a is the best kind of a take home with the adapted to the purp using brushes of force to wash clo

Try to c

**A Good Dairy Brush**

Mrs. P. J. Armstrong, Wellington, Ont.

What is the best kind of a brush to use in cleansing apparatus such as the cream separator? I was recently purchasing a new brush and the dealer showed me so many kinds that it has occurred to me that perhaps other women in the same circumstances would not have any ideas as to what is the best kind of a brush and would take home with them one not at all adapted to the purpose. I have been using brushes of various styles in preference to wash cloths for several

years now and have tried many styles but have now settled down on what I consider the best.

I prefer a brush about four inches long with bristles on the one side and work the ordinary bristles on the side or the best. But when it comes to getting into the corners, the bristles on the end of brushes will get into the crevices where an ordinary brush would never reach. Such a brush need not cost more than ten or fifteen cents, and will outwear several dozen wash rags and is more satisfactory for washing than the wash cloths no matter how carefully used.

**Household Hints**

Sponges are great germ collectors. They should be scalded out thoroughly every little while.

Small pieces of bacon and ham fat cut up in small pieces and fried to a rich brown over which vinegar as much as is desired is poured, makes a delicious salad dressing.

Tie baby's toys with soft strings to the child's chair, and they will be easily replaced without any effort on the mother's or nurse's part.

Keep old kid gloves and use the finger tips to cover the corks of bottles when travelling. If tied on tight-

ly you need have no fear of leakage. Don't allow your marketing to stand in the kitchen, especially during warm weather, put it away at once. Meats frequently become heated, and quickly spoil.

Dusting, or rather good dusting, is an art! A slightly moistened duster in the left hand and a dry duster in the right, if well used, will collect the dust, and leave a perfectly clean surface.

Clothes should never hang longer in the kitchen than is necessary for airing them, for unpleasant odors of cooking will get into them, and cannot be got rid of without washing.

The **Robert SIMPSON** Company Limited  
TORONTO.

Have just published a new Spring & Summer Catalogue, now universally regarded as The Authoritative Style - Book

for Canadian Men and Women.

This is a book you'll hardly care to be without; it is an absolute check upon your cost of living. Whether you want a smart frock, stylish "Queen Quality" shoe or merely a spool of thread, the article is pictured for you and the price printed is what you pay for it at your nearest station. This system of

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will soon be the only way Mail Order Customers will want to buy.

Try it once, and see how efficient it is—goods from factory to consumer with never a hitch and everything paid.

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Stop all laundry troubles. "Challenge" Collars can be cleaned with a rub from a wet cloth—smart and dressy always. The correct dull finish and texture of the best linen. If your dealer hasn't "Challenge" Brand write an enclosing money 25c for collars, 50c. per pair for cuffs. We will supply you. Send for new style book.

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Sold direct to the Farmer, Freight Prepaid, to any steam railroad station South of North Bay.

### A FEW OF OUR PRICES

10 wire fence	25 1/2c per rod
9 wire fence	25.4c per rod
8 wire fence	24.7c per rod
All No. 9 wire, "The Old Reliable London High Grade Steel," 12 ft. gate, \$4.50 each, closely filled with No. 9 wire.	
No. 9 coiled wire "London High Grade," \$2.25 per 100 lbs.	
Send to Dept. A for complete price list, and guarantee order blank.	
We have a larger assortment of woven wire fencing and fencing material than any other firm in Canada.	
We receive many letters similar to the following copy:	
"I have received the fence ordered and want 400 rods more of it, 10 wires 49 inches high all No. 9 wire at 25 1/2c."	\$119.70
100 lbs. bag staples	1.25
25 lbs. box staples	2.50
Bank draft enclosed for	\$124.70

ORDERS PROMPTLY FILLED

The London Fence Machine Co., Ltd. : : London, Ont.

## SEED CORN (on the Cob)

The Practical Way for You to Buy It

Space here is too expensive to give you our ideas of the different varieties, but we would suggest that you send for our catalogue, which gives complete practical information. Secure your seed early and test it for germination. This is a very simple matter. It will pay you well. Below find prices ex warehouse, Toronto.

25 LBS. TO THE BUSHEL OF COB CORN.

BAGS FREE

Wisconsin No. 7 Ontario grown, price on cob	.. \$1.50 per bush: shelled	.. \$1.30
White Cap Yellow Dent	..	.. \$1.40
Improved Learning	..	.. \$1.25
Compton's Early Flint	..	.. \$1.25
Longfellow	..	.. \$1.50
King Philip	..	.. \$1.40
North Dakota White	..	.. \$1.50

The Eureka Hand Corn Planter, \$1.25 each.

## SEED OATS

We offer you some of the finest OATS we have ever handled in years. They test 44 lbs. to the bushel, and were grown in the great Midlothian District, Scotland. Why Scot would be proud of them. ASK FOR SAMPLE

### REGENERATED ABUNDANCE

### REGENERATED BANNER

We offer them while they last in 5 bushel lots of over \$1.20 per bush., bags free. Less than 5 bushel lots at \$1.50 per bush., bags free. Below find list of some of our Ontario Crown Oats:

Daubenny, test 35 lbs. at 1.55.
Abundance, test 33 lbs. at .85; Siberian, test 37 1/2 lbs. at .95; Bumper King, test 37 1/2 lbs. at .95; White Gemster, test 37 lbs. at .85; Lincoln, test 37 lbs. at .85. We also offer our clean Banner 90 cents per bushel. BAGS FREE.

Oats that test 30 1/2 lbs. to the bushel at per bushel. BAGS FREE

## BARLEY

O.A.C. No. 21, our best lot, test 49 1/2 lbs. at 1.15; O.E. 11, good sample, at \$1.20. BAGS FREE.

# GEO. KEITH & SONS

SEED MERCHANTS SINCE 1866

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TORONTO

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Herewith find prices good for one week from date of issue of this paper if unaltered. If you live in Ontario and order 100 lbs. we will pay the freight to your nearest station, otherwise our prices are ex-warehouse, Toronto. Outlines bags for Clover and Timothy at 25c.

Red Clover Gov't Stan. Price per bush

Sun brand	" 1	\$16.50
Moon brand	" 2	13.00
Comet brand	" 3	13.75
Alfalfa	" 1	13.00
Clover Gold	" 2	12.00
Silver	" 2	12.00
Alsyke Ocean	" 1	14.00
Sea	" 2	15.00
Lake	" 3	15.00
Timothy, Diamond	" 3	13.00
Onion	" 2	8.50
Creosote	" 2	8.50
Chlor	" 2	8.00

## FERTILIZERS

Order along with your seeds:

Marlate of Potash	.....	\$40.00 per ton
Sulphate	.....	14.00 "
Acid Phosphate	.....	19.00 "
Nitrate of Soda	.....	25.50 "

Our catalogue tells you how to mix for the different crops.

SEND FOR CATALOGUE

## THE COOK'S CORNER

Recipes for publication are requested, especially regarding cooking, preserves, etc. Answers upon request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

**BEEF TEA.**—Put one pound beef scraped into shreds, and one pint cold water in a sealer. Let stand a while, then set sealer in a boiler of water, and let come very gradually to a boil. Simmer two hours, season and serve.

**ALMOND PUDDING.**—Boil a pint of milk in a double boiler and stir in a teaspoonful of cornstarch and three tablespoonfuls of sugar beaten with two eggs. As soon as the mixture thickens pour it into a buttered pudding dish and scatter the top thickly with almonds.

**CORN FRITTERS.**—Beat two eggs into the corn from one can, add one teaspoonful salt, two tablespoonfuls melted butter, and enough flour to make a stiff batter. It will take about one cup of flour. Make into little cakes, roll in bread crumbs and fry in lard like pancakes.

**HASHED BROWN POTATOES.**—Chop cold boiled potatoes rather fine; to each half-pint add three tablespoonfuls of cream, half a teaspoonful of salt and a dash of pepper; mix, put a tablespoonful of butter into a shallow frying-pan, put in the potatoes, flatten them in a perfectly smooth layer, cook slowly until a golden brown, fold one-half over the other, and turn out on a heated dish.

**SARATOGA CHIPS.**—These are delicious if properly cooked. Scrape the peel off raw potatoes and slice them very thin indeed with a potato slicer. Sprinkle with salt, and let them stand a half hour in ice cold water. Take out and dry thoroughly by placing them in a kettle of very hot fat, salted. They will cook quickly. They can be kept hot in the oven, or can be eaten cold. Care must be taken to fry carefully so that they are a uniform brown.

SEND US \$1. Receive by return mail, post paid, three wash dresses for girls 1 to 4, one of white lawn, one of blue and white, Apron Gingham, and one of sky blue, square neck, low cut waist and full skirt, white strapping trimming. Add 15c for postage.—Standard Garment Co., 19 Standard Building, London, Ont.


## MAXWELL'S HIGH SPEED CHAMPION

is in a class by itself—the easiest running, the most substantially built, the most satisfactory washer, ever invented.

Only washer worked with crank handle at side as well as top lever—and the only one where the whole top opens up.

Ask your dealer to show you the "Champion" Washer.

"Favorite" Churn is the world's best churn. Write for catalogue to  
**MATTHEW MAXWELL & SONS**  
ST. MARY'S, ONT.



## The Sewing Room

Patterns 10 cents each. Order by number and state size. Give name, give age, for adults, give bust measure for waists, and waist measure for shirts. Address and orders to the Pattern Department.

### INFANT'S YOKE DRESS, 75c

27 Embroidery Design



The infant's dress that is so stylish in below a yoke is the accepted one, but variation is found in treatment and in the shaping of the yoke. This little model is of moderate length, in conformity with the latest decree, and can be made from any of the materials that are used for this class.

To make the dress will be needed 2 1/2 yards of material 36, 2 yards 44 inches wide with 3 1/2 yard 36, 2 1/4 yard 44 for the wide on 5 yards, 4 inches wide for edging to make as shown on the figure. 1 1/4 yards of boning 32 inches wide and 3 1/2 yard 18 inches wide and 3 1/2 yard 36 inches wide for the sleeves to make as shown in the small view.

This pattern is cut in one size only.

### GIRL'S APRON, 75c

Pretty aprons are always becoming to little girls. This one is just as attractive as it can be and so simple that busy mothers will be sure to greet it with an eager welcome. There is just one piece with an opening for the head.

For the 6 year size will be required 1 1/2 yards of material 27 or 36 inches wide with 1 1/2 yard 27 for the neck.

This pattern is cut in sizes for girls of 4, 6 and 8 years of age.



### GIRL'S MIDDY COSTUME, 75c

The middy costume is such a prettiness and becoming one that it is a general favorite among the girls. This one is exceptionally attractive, for it can be made to suit with a loose blouse finished with pocket size or it can be made with a blouse that is hemmed at the lower edge and drawn up by means of elastic.

For the 12 year size will be required 2 1/2 yards of material 37, 4 1/2 yards 36, 3 1/4 yards 44, and 1 1/2 yards 44 of banding.

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



### TUCKED SURPLICE BLOUSE, 75c

The blouse that is lapped in surplice style is one of the prettiest of the season. The one is finished with an exceptionally attractive collar and can be made with either three-quarter or long sleeves.

For the medium size will be required 3 1/2 yards of material 37, 2 1/4 yards 36, 1 7/8 yards 44 inches wide with 1 yard and 2 1/4 inches wide for the trimming. This pattern is cut



in sizes from 34 to 42 bust.

## Clip Your Horse in the "BURMAN" HORSE



B. & S. H. Thompson MONTREAL

## Don't Toss Your Farm a Gold Mine

Don't take everything and put nothing in. Every crop you field, takes with it the valuable Potash Nitrates and Phosphates that are indispensable for successful farming. These essential ingredients of the soil, must be replenished if you want to make pay.

Treat your farm—mine—but as a factory. Fertilizers are the material—soil is the ery—and wheat, oat, barley, hay, turnips, fruit, etc., are the matured products. You must keep right, by proper feed to produce crops that profit.

## Vanco Straight Fertilizer Chemicals

will double the yield. Wheat, Potatoes, etc. compared with unfertilized.

**MURIATE OF POTASH**—guaranteed 80% actual

**SULPHATE OF POTASH**—guaranteed 85% actual

**NITRATE OF SODA**—guaranteed 100% Nitrogen

**ACID PHOSPHATE**—guaranteed 14 to 16%

Write for the "Book"—it will give you for mixing Fertilizer the proper proportion each soil and crop.

Chemical Laboratories 148-158 Van Horne Street,

**Clip Your Horse in 30 Mins.**

No matter how thick or scraggly the hair  
the "BURMAN" HORSE CLIPPER



It will clip it in thirty minutes—no matter how thick or scraggy the hair. Always ready for use, easy to manipulate, as well as dependable and safe in its operation, especially in the hands of a novice.

If you have one horse or twenty this clipper will save you time and money—there is small first cost and no repair expenses.

Comes packed ready for use—clipping plates and sharp hook for holding clipper head supplied.

Ask your dealer or write direct.

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

**AYRSHIRE NEWS**

Farm and Dairy is the recognized exponent of the Dairy interest of Canadian breeders of Ayrshire Cattle and all members of the Canadian Ayrshire Breeders' Association are invited to send items of interest to Ayrshire breeders for publication in this column.

Poole Bros. King's Co., P. E. I., have a grade cow, four years old on the 2nd of January, that on the 26th of March dropped her fourth calf. In this a record—Wm. Aitken, King's Co., P. E. I.

Among the young stock of Wm. Stewart and Sons, Mesic, Ont., a particularly good heifer is White Heather, due to freshen in August. This heifer is wonderfully straight and true in her lines. Her dam is Kemmur Lady. Mr. Stewart considers her hard to fault. A son of Queen of Beauty attracted attention. He is already showing development of the right kind and will make a sire fit to head any herd and will no doubt be heard from later. But he has a close companion in his stable mate, Spring Hill. The females are all in calf to Spring Hill Gasher.

**NOTE ABOUT ELEANOR'S RECORD**

Farm and Dairy has received a letter from Mr. A. Stone, Manager of The Willowmoor Farms, Redmond, Wash., criticizing the record made in Farm and Dairy, February 29th, that the record made by Mr. Mode's Ayrshire cow, Eileen, and that of her cow, Netherhall Brownie 9th, cannot be fairly compared. In that issue Farm and Dairy stated that the owners of Netherhall Brownie 9th had refused to give any information as to the conditions under which she made her test, and that we had been told unofficially that Netherhall Brownie 9th had not been bred at all.

Mr. Stone, who has previously refused to give us this information, now comes forward with the statement that when Netherhall Brownie 9th died at the end of her test she had been bred for four months. Under these conditions, therefore, she could not have made the requirements of the R. O. P. test. Mr. Stone contends, however, that Brownie Netherhall 9th made her record under other adverse conditions that would serve to counterbalance the statement that not being bred would give her the whole of her test time. During the time of her test she was suffering from leukæmia, and had to be separated from the rest of the herd. It was from this disease that she died.

**SOME WESTERN AYSHIRE**

Editor, Farm and Dairy: We have been having a good year in our dairy district in this western country. There is a good demand for milk at five cents a quart wholesale and 10 cents retail. We have stopped retailing our milk as help is difficult to get, and all of our plowing, 30 acres, is yet to do. We have also sold a bunch of our cows to Mr. Fred J. Eddie, of Lundbreck, Alta. He got nine pure-bred Ayrshire cows in nine grades, and we got our own price for these. We now have three bulls, including Bright Lad of Burnside, imported by R. E. Ross. We also have a number of heifers that are promising heifers and 14 grades.

We find this a hard climate for this year dairying as, for six weeks, the thermometer goes down to 20 or 45 degrees below zero. The city folks, however, are willing to pay well for the milk and cream, so I for one will stay in the business. J. J. Dunfield, Dauphin Dist., Man.

**ST. GEORGE BECOMING A HOLSTEIN CENTRE**

The remarkable progress being made by Holstein cattle throughout Ontario is reflected in a pleasing degree by the interest being taken in these cattle by several farmers in the vicinity of St. George (Brant Co.), Ont. For years there has been at St. George the noted herd of Mr. G. W. Clemens, who for many years has been the secretary of the Canadian Holstein Breeders' Association. But for some time past the other interest in these cattle has been the past few years and only during the last year or two, that Holsteins have made any noteworthy progress in this district. Mr. J. M. McLean, some six or seven years ago, purchased quite a number of Holstein females and established a herd at St. George. Later, S. J. McLean secured a number of the

best of these and founded his herd, which is at Harrisburg, but two miles distant from St. George. Some three or four years ago Mr. Dan Burt established a herd of pure bred Holsteins.

These herds average from 20 to 50 Holstein females. Lately, or during the past two years, Mr. Wellington Sager has gone in for pure-bred Holsteins, he now having 14 head, all told, including a bull, "Ormsby Duke," by Sir Admiral Ormsby. Mr. Nathan Sager has also made a start, he now having eight head pure-breds, at least three of these being of Mr. Clemens' breeding. Other than these St. George men, Mr. Wm. Robb has made a start with pure-bred Holsteins, as has also Mr. Walter Patten, Mr. Oscar Roseborough, and Mr. H. E. Nelson.

With these herds increasing as they will, and with Mr. H. F. Paterson only five miles distant at Alford, and Mr. S. Lemon about seven miles away at Lynden, it will not be long before buyers of Holstein cattle will be able to drive out from St. George and get the best in Holstein cattle, and get these in numbers such as they may require.

**DEMONSTRATIONS OF USE OF EXPLOSIVES**

Demonstrations showing the use of C. L. stamming powders on the farm will be held at the following places at 1 p.m. on the date mentioned:

- Langton, Ont., Friday, April 19th, on W. P. Swain's Farm, Simcoe, Ont., Saturday, April 20th, on Lyndale Farms, St. Thomas, Ont., Monday, April 22nd, on Mr. W. Churchill's Farm, Aylmer, Ont., Tuesday, April 23rd, on Mr. J. Bradley's Farm, Bridport, Ont., Thursday, April 25th, Inneswood, Ont., Friday, April 26th; Petrolia, Ont., Saturday, April 27th, under supervision of the District Representative of the Ontario Department of Agriculture.

All parties interested are cordially invited to attend and see the quickest and cheapest way of cleaning land and improving the farm in general.

**OXFORD BREEDERS MEET**

The newly organized Oxford District Holstein Breeders' Club held a very enthusiastic meeting at Woodstock on March 26th. Sessions brought before the meeting were discussed in a manner that augurs well for the future success of the club. "We have men to make a success of our institution, and in the Holstein breed we have the right kind of cattle out of which to make our dairying interests pay," said Mr. M. L. Haley, of Springfield, president of the club. He referred to the great benefits of cooperation and advised advertising and pushing the organization to make an unqualified success. The breeders of both North and South Oxford are uniting in this club as they believe one strong club is better than two weak ones.

Mr. Geo. Rice, of Tillsonburg, addressed the meeting on the "Care and Management of the Dairy Cow," and incidentally said a lot of nice things about their own breed, the Holsteins. "Take out the Holsteins," said he, "from the County of Oxford, and what would you have left out of it?"

Considerable discussion arose over the subjects of raising funds in order to meet the expenses of the meeting. Mr. J. H. Leulser of Cassel favored asking the county council for a grant. Mr. H. Bolter, also of Cassel, said that Holstein men had always paid their own bills and he hoped they would continue to do so. It was finally decided for the present year to raise money by making strong efforts to increase their membership.

**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 3 insertions during twelve months.

**HAMPSTEAD PIGS**—Canadian Champion herd. Boars herd breeders. Sows, three months and under.—Hastings Bros., Crosshill Ont.  
**HOLSTEINS AND TAMWORTHS**—All ages, also B. O. W. Temple, Millerton, Ont., and available at any time.—J. McKennis, Willowdale, Ontario.  
**HOLSTEINS**—Young stock, for sale. Bred by Imperator, Brook Dale, whose 12 nearest dams average 2.50 lbs. butter in 7 days.—E. W. Walker, Utica, Ont.

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**CHAPMAN & STICKNEY Gasoline Engine**

No other engine so easy to "manage"—no other does so many kinds of work with so little bother. See our agent before you buy, or write for FREE catalogue of important engine facts.

Ontario Wind Engine and Pump Company, Limited  
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**RENNIE'S SEEDS**  
OF THE BEST OF THE PATCH  
Rennie's "K.K." Vegetable Seeds in germination exhibit the very highest of their respective kinds that it has possible for other content.



Lump Rock Salt, 100 for ten lots, 10 c. lb. Toronto  
Toronto Salt Works, 128 Adelaide St. E.  
G. J. Clapp, Manager Toronto, Ont

**NEWMERFIFUGE**

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 Drugs Act, June 30, 1906. Serial No. 23717.) Guaranteed to kill and bring from the body dead worms in 10 to 20 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 Newmerfifuge has removed between 500 and 800 bots and worms from a single horse. An animal whose stomach is full of worms cannot get fat or help being obstinate. Send your order to-day. Beware of imitations. 2.00 6 capsules, \$1.25; 12 capsules, \$2.00. Farmers' Horse Remedy Co., Dept. A.B. 292 - 7th St., Milwaukee, Wisconsin.

**Don't Treat Your Farm Like A Gold Mine**

Don't take everything out and put nothing back. Every crop you take off a field, takes with it some of the valuable Potash—the Nitrates and Phosphates, that are indispensable for successful farming. And these essential ingredients of the soil, must be replaced, if you want to make farming pay.

Treat your farm—not as a mine—but as a factory. Fertilizers are the raw material—soil is the machinery—and wheat, oats, corn, barley, hay, turnips, beans, fruit, etc., are the manufactured products.

You must keep the soil right, by proper fertilizing to produce crops that pay profits.



will double the yield of Wheat, Potatoes, etc., compared with unfertilized crops.

- MURIATE OF POTASH**—guaranteed 80% actual Potash
- SULPHATE OF POTASH**—guaranteed 85% actual Potash
- NITRATE OF SODA**—guaranteed 15% Nitrogen
- ACID PHOSPHATE**—guaranteed 14 to 16%

Write for the "Vanco" Book—it will give you tables for mixing Fertilizers and the proper proportions for each soil and crop.

Chemical Laboratories Limited  
145-150 Van Horne Street, Toronto.









That is going some. This one isn't the only high milking daughter he has either. Mr. P. J. Salley tested a heifer, a daughter of his, not quite two years old, that went 59 lbs. a day. And there are others.

I have just bought a bull to succeed him that I think is the greatest bull in Canada, when we consider his breeding from a milky point of view. He is not so bad either when we consider the butter fat.

We have gone wild over the subject of butter fat. We must remember that 20 per cent of the milk today is used where butter fat is really of little consideration, i. e., milk for cities, home supply and cream.

My new bull is Dutchland Pieterie Colantha. His grand-dam, Changeling, was the first cow to give 100 lbs. milk in a day and produce a daughter with a record of 110 lbs. in a day. His sire's sire has eleven daughters that average over 100 lbs. milk each in a day. One sister of his sire, DeKok Creamelle, gave 119.6 lbs. milk in a day and 790.4 lbs. in seven days produced a daughter that gave 106.1 lbs. in a day, and 792 lbs. in seven days which are world's records for mother and daughter.

There will be seen that his sire comes of ancestry on both sides that have made world's milk records.

His dam is a great producer, and comes of a long line of heavy producers on both sides. She is a grand-daughter of the champion yearling milk producer, Colantha 4th's Johanna, whose record of 274.5 lbs. stands unapproached.

He closely unites the blood of Colantha Johanna Lad, Pontiac Korndurke, Hengeroid DeKok and Pieterie Hengeroveld's Count DeKok—F. E. Came, Canaan Farm, St. Lambert, Que.

**A LEADING HOLSTEIN HERD**

(Concluded from last week)

A third daughter of the old cow was Aargie Schulling DeKok, which gave, in Record of Performance test, 15,390 lbs. of milk and 439 lbs. of butter fat as a two-year-old.

Aargie Mercedes, a fourth daughter, at four years of age, established a seven-day record of 62.65 lbs. of milk and 27 lbs. of butter, and a 30-day test of 1,661.23 lbs. of milk and 119.96 lbs. of butter. This is said to be the highest junior four-year-old record yet made in Canada. She is a fine large animal, and shows her breeding in a clean front and wide-set out to unusual width behind. Her strong top-line denotes strength of constitution, while her hindquarters provide plenty of room for her large, well-shaped udder.

The prospects are that she will beat her better high record. As a two-year-old she produced 11,890 lbs. of milk and 400 lbs. of butter fat. The following year she beat this record by producing 15,445 lbs. of milk and nearly 500 lbs. of butter fat.

Some of the Grand-daughters  
A grand-daughter of Netherland Aargie is Aargie DeKok Schulling, now five years old. She is a larger cow than her dam, Netherland Aargie DeKok, but of much

**SEED BARLEY AND OATS**

A small quantity of Siberian Oats at 75c per bu.

O.A.C. No. 21 Barley at \$1.35, bags included. Clean pure stock from selected seed.

ALFRED HUTCHINSON, Mt. Forest, Ont. C.S.B.A.

**How to Completely Cure**

farm stock ailments is told in FLEMING'S VETERINARY ADVICE. We will send you this 64-page booklet, illustrated, indexed, and well bound, free on request. It tells how to cure

**HEAVES**

Generally considered a lung or wind-pipe trouble, Heaves is really caused by stomach derangement, which, through the nerves, affects the breathing. The heaving disappears when the stomach is put right and the whole system toned up by FLEMING'S Tonic Heave Remedy.

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the same type throughout. Her milk veins are carried well up to the fore legs, and she possesses dairy type throughout. She has a seven-day record of 48 lbs. of milk and 17.56 lbs. of butter, and a 30-day record of 1,541 lbs. of milk and 70.9 lbs. of butter. In the Record of Performance test she gave 10.83 lbs. of milk and 2.84 lbs. of butter fat as a two-year-old.

Netherland Dekol Witsyde is another grand-daughter of Netherland Aargie. In the Record of Performance test, as a two-year-old, she gave 11,907 lbs. of milk and 385.23 lbs. of butter fat. She has a seven-day record of 565 lbs. of milk and 22.36 lbs. of butter, and a 30-day record of 2,337 lbs. of milk and 92.79 lbs. of butter. A daughter of Netherland Aargie DeKok is Netherland Dekol Mercedes, a three-year-old. She is a fine type, well shaped in front, broad behind with a well-sprung rib and plenty of size. She gave nearly 10,000 lbs. of milk as a two-year-old in Record of Performance, but did not calve in time for her record to be accepted. She has other sisters coming on. A second daughter of Aargie Dekol Witsyde is Aargie Dekol Mercedes. This is a cow as a yearling heifer and a calf out of Netherland Dekol Witsyde.

The third daughter of the old cow, Aargie Schulling DeKok, has a second daughter, a yearling in calf, and her fourth daughter, Aargie Mercedes, has a yearling heifer in calf, also, a heifer calf.

Another grand-daughter of Netherland Aargie, out of Aargie Schulling DeKok, is Woodland Queen DeKok, a three-year-old. This is a grand large animal, possessing abilities, as well as a two-year-old record in Record of Performance test of 11,800 lbs. of milk and 430 lbs. of butter fat. In Record of Merit she made 18.04 lbs. butter and 473 lbs. of milk.

An outstanding individual in the herd and of entirely different breeding than the old cow, is a large white cow, Vida Princess 4th. Led only by Netherland Aargie DeKok, she headed the list of Record of Performance cows in 1909 as an eight-year-old with a record of 16,500 lbs. of milk and 600 lbs. of butter fat. Her half-sister, Vida Princess 3rd, is a low blocky type of cow, with a record of 14,649 lbs. of milk and 438 lbs. of butter fat.

On the adjoining farm, owned by Mr. Van Patter, our editor saw a fine lot of light-colored heifers. They included 10 yearlings, which were vigorous and thrifty looking and a credit to the herd. Two of these heifers were sired by Dutchland Colantha Sir Albeikir, and the rest by a son of Netherland Aargie DeKok. One of the principal sires used in this herd was Woodland Sarcostic Lad, purchased originally from W. Richardson, of Caladonia. This bull was used in the herd for four years, and has left a number of fine heifers, four of which have passed the Record of Performance test with good margins to spare, and there are over 20 younger ones coming on, that will be tested as they freshen.

The present herd bull is Sarcostic Mercedes Lad, a two-year-old. This is a fine upstanding rangy bull of a pronounced milky type and masculine characteristics. He promises to leave stock the females of which should prove their merit as the bull. He is sired by Woodland Sarcostic Lad and is out of Aargie Mercedes, a 27 lb. heifer. At the time of our visit the young stock included three of his best calves, all of which showed his characteristics and coloring, possessing more white than black, and being straight and promising.

A number of the females of the herd, closely related to this bull, have been bred to Dutchland Colantha Sir Albeikir. There were also five bull calves in the herd all under one year, and out of cows having yearly records ranging from 14,000 to 16,000 lbs. of milk.

As will be seen by the foregoing, this herd is one of the strongest, as regards the possession of females, having unusually large records, that there is in Canada. Mr. Van Patter has several sons, including Charlie, John and George, all of whom are much interested in the herd, and as they feel that they are little more than started in Holsteins, more is sure to be heard from this herd in the future. Another of Mr. Van Patter's sons, Hugh, is in Queen's University, where an entering he won five scholarships, which amounted to \$650. Mr. Van Patter's farm comprises 200 acres, and as he is situated near the Aylmer Condensary, he is fortunate in that he is able to get good prices for his milk.

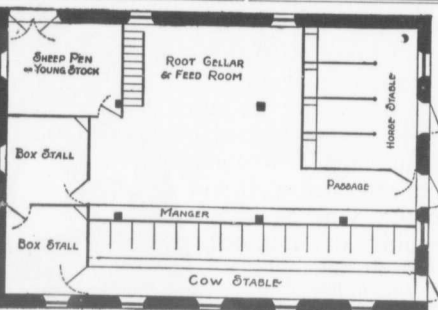
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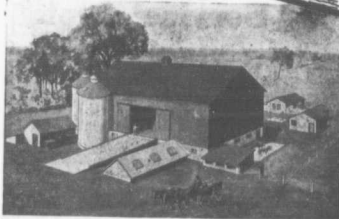
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