

# FARM AND DAIRY & RURAL HOME

DEVOTED TO  
BETTER FARMING  
AND CANADIAN  
COUNTRY LIFE

Peterboro, Ont., April 27, 1916



Capacity

Lulu Keyes—Owned by D. B. Tracy, Cobourg, Ont.

**The Development of the Dairy Heifer**

By Prof. Barton, Macdonald College.

**The Control of Contagious Abortion**

Hygienic Measures Recommended

**The New Dairy Act**

An Outline of Its Features.

**Success With Alfalfa**

Some Practical Suggestions.

**Interior Decoration Scheme**

For Farm and Dairy House, No. 6.

**Many Practical Articles**

On Timely Subjects.

## The "SIMPLEX" Cream Separator

As shown in the illustration herewith, is a convenient machine. It is of convenient height to operate. It supplies can is low down, and yet the discharge pipes are high enough up to discharge into standard sized milk cans.

The machine is easily accessible for cleaning. It is substantial and heavy. It will last almost a lifetime.

It will pay you to know all about the "Simplex." There are exclusive features on the "Simplex" not to be had on any other separator.

In addition to the mechanical construction which is all to the good in your favor, we are sure that there is no manufacturer using a higher grade of material than we use in the "Simplex" separators. Take for instance, the bowl spindle. It is made of a special formula, furnished by one of the best metallurgists in the country. In fact, the consulting metallurgist for the leading manufacturers of American automobiles.

This steel is subjected to a special heat treatment, whereby it has an elastic limit, three times as high as ordinary steel. The same is true of the bowl cover, and of the middle point or pinion, that meshes with the larger spur wheel. It is made of Vanadium steel, or nickel steel, of the same kind that is used in the transmission gears in the best grade of automobiles. We believe that we are the first to use these special alloy steels in cream separator construction.

The "Simplex," as far as we are able to judge, represents a higher manufacturer's cost than any other separator on the market. The two Hess-Bright Bearings that go in every "Simplex" Hand Separator, cost more than all the bearings put together in most other cream separators. And yet on account of the large number that we import, single orders covering over 10,000 bearings at a time, we are able to furnish them as extras at a reasonable price, so that the cost of replacement, if needed, is not more than in other machines.

We believe that "the proof of the pudding is in the eating."  
We allow you to try out the "SIMPLEX" on your own farm.

Write us to-day for free illustrated literature about the "Simplex." Arrange to have a "Simplex" Cream Separator on your farm. Then you will make sure that the "Simplex" is the best cream separator for you.

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## Milk Fever and Its Treatment

Irving M. Avery, in H. F. Register

NOT so many years ago the words "milk fever" and "total loss," were almost synonymous. This disease was pretty generally considered fatal, and the unfortunate dairyman took his loss resignedly and said "Kismet," or perhaps other words to the same effect. To-day, however, the situation is changed and authorities claim that less than five per cent. or one out of every twenty only, of the animals afflicted die of this disease; and so this dread malady, which in the past has been the cause of heavy losses in the dairy herds of this and other countries, because of the wonderful efficacy of the so-called sterilized air treatment, and the increasing familiarity of dairymen with its every-day, no longer has the power of inspiring the fear in the mind of the average man that it once had.

In a few simple words which everybody may understand I will try to call attention to this comparatively new treatment and to consider the disease, its causes and effects. It is almost impossible in a short article of this kind to do anything of any particular interest to experienced breeders or anything that has not already been said, in some form or other, many times before. That is not the idea, but, rather, to outline my own experience as clearly and simply as possible for the benefit of the layman.

The average man reads about "parturient paresis," or a "plethora" of blood plasma containing an excessive percentage of glycogen, and he is apt to become discouraged, and no wonder. Well, all this is only a very high-sounding and, to the layman, difficult way of saying just plain "milk fever," although to be exact, the disease is not really a fever at all, but anemia or lack of sufficient blood in the brain, brought on (or as a technical treatise might say "superinduced") at the time of parturition, or calving, by an excess of blood in the udder with a consequent uneven distribution throughout the circulatory system, resulting in anemia of the brain and a form of apoplexy.

### The Theory of Treatment.

The theory of successful treatment is so simple as to be readily understood by every dairymen once a clear comprehensive and thorough explanation has been made him. It consists merely of the proper inflation and distention of the udder by pumping in sterilized atmospheric air, thus relieving congestion and bringing about a return to normal distribution of blood throughout the body. So far as I know, no animals other than milk cows are subject to this disease and it usually attacks only those in the best condition and the heaviest milkers. It rarely makes its appearance until the animal is at her best, usually from about five to seven years of age, and cows having had one attack are predisposed to the disease and more liable to affliction than in the case of those that have never suffered from it. Heifers with first or second calves are almost entirely free from it and I believe it is rarely manifested in cows over eight or nine years old whose milk yield has commenced to decrease somewhat.

The symptoms are luckily very well defined, and to be recognized, once one becomes thoroughly familiar with them. The animal is conscious, because of the approaching paralysis of the bowels; is extremely restless; looks wild and staring from the eyes and, after a time, begins to "tremble" and stamp. Later on she will stagger and show signs of increasing weakness, especially in the hind parts, until finally she collapses completely,

invariably dropping upon the right side, with the head drawn around to the left and almost touching the hind quarter on that side. Later still, paralysis by this time having become general and if the attack is severe and far enough advanced, the animal appears to be all intents and purposes unconscious and may be handled at will. The eyes are observed to be fixed and glassy, and the body apparently insensible to any pain. The limbs may be placed in any position desired without the least resistance and the victim appears to be the inexperienced very close to death. Right here it would be advisable to send an S. O. S. call for a veterinarian unless you are familiar with the handling of such cows and have at hand the necessary appliances and help, in which event expert assistance may hardly be necessary.

### First Stage of Treatment.

If a competent veterinarian is summoned the proceedings on his arrival will be somewhat as follows. He will first of all order plenty of clean bedding and have the animal propped up from underneath the right side by means of bags filled with straw or some such contrivance, so that she may rest as nearly as possible upon the breastbone, the object being to take the weight off the right lung and thus relieve her respiratory action. Next he will carefully wash the udder with antiseptic soap, placing a clean bag or cloth underneath to keep the parts clean; after which he will thoroughly disinfect the parts with a four or five per cent. solution of lysol, pure carbolic or other equally good agent.

The apparatus used for injecting air into the udder is very simple and consists of a rubber bulb to be compressed by the hand, and to which comes an air chamber or reservoir of about the same size to regulate the pressure, and then comes several feet of ordinary rubber pipe or tubing half-way of the length of which is included a small metal cylinder filled with carbolized cotton through which the air passes, and on the extreme end of the rubber pipe is fixed an ordinary milking tube. The utmost care should be taken during the operation to avoid all danger of infection and thus prevent inflammation of the udder or caked bag, with the possible loss of one or more quarters later on. This point cannot be too emphatically emphasized. The milk tube should be boiled for at least ten minutes before use and then placed in a jar containing a five per cent. solution of the antiseptic solution at hand and allowed to remain for several minutes prior to insertion in the teat.

Be certain to avoid drawing any milk or water into the teat when commencing operations. In fact, at Auray Farms, we make it a rule never at any time, whether sick or well, to milk a cow completely out until at least twenty to thirty minutes she has dropped her calf. The resulting complete distention of the udder has somewhat the same effect as the artificial distention by the air treatment and acts as an excellent preventive against an attack of milk fever. In the event of a very large and badly swollen udder a little milk may be taken if the cow seems all right, but only enough to relieve the pressure, as never milked out clean the first day.

### The Pumping Process.

When all the parts, including the operator's hands and the apparatus itself, have been thoroughly cleaned, carefully introduce the milk tube into one of the teats and commence pumping air into the quarter, meantime tapping and gently massaging the

(Continued on page 6.)

## An Apple Lost at Every Tick

Every tick of your watch from now till the end of June records the loss of valuable apples. This enormous waste can be prevented, and it is a duty every farmer owes to himself and to his country to prevent it.

The Empire Needs This Fruit.  
Now is the time to act. A thorough spraying now with



### SOLUBLE SULPHUR

will make the crop into a marketable product instead of a hog food. Use 10-15 lbs. to 40 gallons of water.

After the leaves and buds come out use 20-25 lbs. to 40 gallons of water.

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1 1/2 lbs. to 40 gallons of water and add

### ARSENATE OF LEAD.

Write to us to-day about your Sprays and Pumps. Tell us your problems and we will advise you fully.

BURLINGTON, ONT.



# FARM AND DAIRY



Welcomes Practical Progressive Ideas

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

VOL. XXXV.

PETERBORO, ONT., APRIL 27, 1916

No. 16

## The Development of the Dairy Heifer

### Poor Development May Account For Low Production From Well Bred Stock

WE Canadian stockmen have not made the most of our opportunities. This is emphasized by the low production of much of our really good stock. We are not thorough enough as compared with the Old Countryman. I like to look upon ourselves as past the point where we need be told that the pure-bred sire is the one economical road to progress. I like to believe that even pure-bred is not now good enough. We are reaching the point where we must have more live stock, and it must be better live stock. Our margin is smaller. The old cow will eat her head, or quicker than ever before. The right kind of stock involves development as well as breeding and it is on development that I will dwell.

I want to start developing before the calf arrives. Ten months of work, two months' rest, with the cow calving in good vital condition, gets us a good, vigorous calf. When the calf arrives we should be ready for it. Many a stunted calf and three-quartered cow can be traced to carelessness at this time. Every stable should have disinfectant handy for use at this period.

#### Fall Calves Advised.

Where a man can raise fall calves I advise him to do so. I have seen many cases where fall calves have overtaken calves dropped the previous spring and passed them. Flies, heat and oftentimes neglect, retard the growth of the spring calf. In feeding the calves, whether fall or spring, they must first have their mother's milk. There is a great tendency to try and feed the calves more milk than is good for them, when great development is desired. The calf is a very willing victim to this over-feeding, especially if he has been starved a while. I should say that the maximum amount of whole milk to be fed to a big calf should be 10 lbs. a day. When selling whole milk, there is a tendency to skimp the calf's allowance. Two weeks should be the minimum length of feeding on straight whole milk. Then we would change to skim milk if we have it, and again I would advise—don't over-feed. The maximum amount here is 20 lbs. of skim milk a day, or to an unusually large calf, 24 lbs. Where there is no skim milk we must feed some whole milk. Five months is the minimum period of milk feeding and, in-

duced many stock men to go into roots, and they now realize their value.

Clover and alfalfa are ideal for dry roughage, but sometimes we haven't got it. We are in that position at Ste. Anne's. Growing peas and oats, however, let us out. We haven't fed a pound of clover hay to a calf, bull or cow this past winter. Our sowing mixture is two bushels of oats to one of peas. We cut in the milk stage and cure. Care must be taken to get it cured well. Some of ours got too far along, but in feeding we soaked it with molasses solution and got on fine. This is the force of feed molasses.

I would not advise going to the extreme in housing and forcing. Even a spring calf should get a run on fall pasture. I don't like the round, tidy appearance of exclusively stall-fed calves.

#### Winter Development.

When it comes to wintering a heifer, many come out in the spring, poorer than they went in in the fall. The winter ought to afford us our best chance for development. At least at Ste. Anne's we look for greater winter development than summer development. For this purpose the cheap feeds are the best. Silage comes first and has no equal as a general stock food. Turnips and ensilage make an ideal combination. I have

induced many stock men to go into roots, and they now realize their value.

Clover and alfalfa are ideal for dry roughage, but sometimes we haven't got it. We are in that position at Ste. Anne's. Growing peas and oats, however, let us out. We haven't fed a pound of clover hay to a calf, bull or cow this past winter. Our sowing mixture is two bushels of oats to one of peas. We cut in the milk stage and cure. Care must be taken to get it cured well. Some of ours got too far along, but in feeding we soaked it with molasses solution and got on fine. This is the force of feed molasses.

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#### Age of Breeding.

Many give all of these attentions to the development of their heifer calves, but the cows don't turn out as well as they should. Why? I believe in many cases it is due to the owner being in too great a hurry to get the heifers in milk. I wouldn't have a heifer bred to drop a calf before she was 30 months of age, and most of them come a little late. There is a little risk at the other extreme in deferring freshening to three years.

I was speaking on this subject at a meeting in a dairying district in Quebec. After the meeting I accepted the invitation of one of the audience to go home with him for the night. As is usual we first went out to the stable to look over the stock. First we looked over Laura. She was a big fine cow. Beside her was another, small and pinched. I was surprised to hear that she was Laura's daughter. Laura first freshened at 35 months, her daughter a little over two years.

I want to see the heifer freshening for the first time, get a good chance. She should come in in good condition. Heavy feeds must be avoided, and she should have lots of exercise. Preferably she should freshen in a box stall. For feeding previous to calving I would advocate a little bran and oats, and perhaps brewers' grains and a little oil cake. A dose of Epsom salts, one and one-half pounds at least.

—Synopsis of an address.

### Cow Testing as a Road to Herd Improvement

BY C. F. WHITLEY, OTTAWA

Some Sample Increases in Three Years' Cow Testing, Both in Number of Cows and Yields of Milk.

| Herd.   | Last Year.           |           | Three Years Ago.     |           | Increase per Cow |           | Percentage Increase |
|---------|----------------------|-----------|----------------------|-----------|------------------|-----------|---------------------|
|         | No. of Average Cows. | Lb. Milk. | No. of Average Cows. | Lb. Milk. | Lb. Milk.        | Lb. Milk. |                     |
| A ..... | 9                    | 7,225     | 5                    | 6,287     | 938              | 14%       | 28%                 |
| B ..... | 14                   | 7,574     | 8                    | 5,894     | 1,680            | 28%       | 78%                 |
| C ..... | 9                    | 8,404     | 5                    | 4,704     | 1,700            | 36%       | 60%                 |
| D ..... | 11                   | 7,285     | 6                    | 5,266     | 1,989            | 38%       | 37%                 |
| E ..... | 7                    | 4,844     | 2                    | 2,811     | 2,033            | 72%       | 350%                |
| F ..... | 16                   | 7,268     | 12                   | 4,572     | 2,697            | 58%       | 33%                 |
| G ..... | 8                    | 10,935    | 5                    | 7,489     | 3,246            | 42%       | 60%                 |
| Average | 73                   | 7,392     | 45                   | 5,405     | 1,987            | 36%       | 60%                 |

TOTAL YIELDS, 296,459 lbs. MILK MORE, 122% INCREASE.

Your attention is particularly invited to the fact that cow testing makes for better and bigger things, as evidenced by these seven Ontario herds, samples of very many others.

After three years of application of this simple tally system, cow testing, we see these herds increasing in the yield of milk per cow from 2,890 lbs. to 4,800 lbs., from 4,500 to 7,200, from 7,600 to 10,900 lbs. Here are gains of from 14 to 72%. The man with 5 cows three years ago now keeps 9, each one better; the owner of 8 now has 14.

As these figures show, the general average increase is 1,987 lbs. of milk per cow, or 36%; while in place of 45 cows these men now own 73, or 62% more. So much better is the general average of the cows kept that the total milk yield is increased by 296,459 pounds, 122%.

May I submit that better proof, not simply of possibilities, but the actualities of cow testing could not reasonably be demanded.

# Knowledge Essential To Success With Alfalfa

BY TOM ALFALFA

THE first essential to success with alfalfa is a knowledge of the crop and its requirements. Lack of knowledge accounts for more failures than adverse climatic conditions or unsuitable soils. I was fairly jumped upon recently by a man who, lacking experience, had spent his good money on alfalfa seed and hadn't gotten a crop. He expected me to shoulder the full responsibility for his failure, as it seems my advocacy of alfalfa growing had had something to do with his attempt to grow the crop.

I enquired as to the soil on which this experiment had been made, and found that it was suitable—a nice loam, naturally well drained. I then asked a question which I always put first, and which usually reveals the source of error, what variety he had sown. He assured me that he had made no mistake. He had secured "northern grown seed."

Northern grown seed in 99 cases out of 100, means nothing more than grown in the northern hemisphere, anywhere north of the equator. An examination of a map of the world will reveal that seed grown in the hottest parts of South America might be northern grown seed under this definition. There are thousands of farmers in Canada who have been taken in by this designation of "northern grown," and I would warn all who are planning to seed to alfalfa in the spring of 1916 to leave northern grown seed strictly alone. The two varieties that will prove successful are the Canadian Variegated and the Grimm alfalfa, and of the two, the Grimm is to be preferred, although the seed is rather high in price for general sowing.

The man whose experience I am relating, had inoculated neither his seed nor his soil. He assured me that he took no stock in such nonsense. His lack of knowledge was remarkable. He did not know that all clovers, which include alfalfa, feed on the nitrogen of the air through the medium of nodules which grow on their roots, and that these nodules will not grow unless the soil is first inoculated with nitrifying bacteria. There is one class of bacteria which acts on red clover and another which acts on both alfalfa and sweet clover. There are two ways of inoculating the alfalfa field—by spreading a few hundred pounds of earth to the acre from an old field on which alfalfa has been successfully grown, or inoculating the seed with the laboratory culture secured from our agricultural college. Inoculated soil or inoculated seed, should be sown on a cloudy day and harrowed in immediately. This inoculation is one of the pivotal points on which success in alfalfa growing swings.

## He Did Not Lime.

Another mistake made by the friend of this story was in the matter of liming. His soil, I should judge, is not particularly sour, but at the same time the district in which he lives is of the limestone belt. As red clover and sweet clover grow well, the chances are there is plenty of lime in the soil and alfalfa would succeed. I have found, however, that alfalfa requires more lime than either of these hay crops, and there are comparatively few sections in Ontario, or in any of the other easterly provinces, where liming will not pay. Very finely ground limestone, where it can be had, is to be preferred to quick lime, as it is milder in its action and does not tend to burn up rapidly the humus of the soil. The rate of application usually recommended is about five tons of limestone to the acre. Where burned lime is applied, an application of 1,500 lbs. to the acre will usually be sufficient. If all the other points have been observed without success in growing alfalfa, try liming.

The final point that I mentioned to my un-

successful alfalfa grower was the rate of seeding. Most farms in the east have their fair share of weeds, and alfalfa in the early stages of its growth cannot compete with the weeds. In particularly weedy land, I would recommend summer fallowing right up to the first of July, in order to kill the weeds, and then seeding at the rate of 20 lbs. of good seed to the acre. If a nurse crop must be used, try three pecks of barley to the acre. A heavy seeding of alfalfa tends to keep down the weeds and give the crop a chance. For fertilizer, I would recommend basic slag. It has the fertilizing element most needed, phosphorus, in good quantity, and it also has a good content of lime. The constituents of basic slag are only moderately available, and to get best results it should be applied the previous fall.

## Eradication of Twitch Grass

Norman Ballantyne, Perth Co., Ont.

ERADICATION of twitch grass is a problem we expect to solve by a new implement which we have come to appreciate, the Smith cultivator. This is one of the newest additions to our farm equipment, and so far it has done excellent work. It cuts seven feet wide and its



A Firm Seedbed is of Prime Importance for Proper Germination.

The roller pulverizes as well as firms the soil. It should always be followed by the harrow to restore the loose surface mulch, which prevents evaporation.—Photo on the farm of A. W. Wright, Seaton, Ont.

usual feature is its depth. The various rows of teeth are separated so far that they absolutely will not clog. We expect to use this cultivator mostly for after harvest cultivation, as it is at this time that we can fight twitch most effectively.

In the past we have been growing buckwheat and endeavoring to smother this weed. This method was fairly effectual, but it gave us a bad crop to handle. We would follow the land until the end of June and then the buckwheat would be so late that it would be hard to cure. With our Smith cultivator, and after harvest cultivation, we will do away with buckwheat altogether. We have found that the teeth of this cultivator will stay right in the ground under almost any conditions and pull the twitch out. The ordinary stiff tooth cultivator has only two rows of teeth

not enough clearness for sowing work. Last year we had such a wet summer and late harvest that we did not do much after harvest cultivation.

## Keeping the Cows Off the Grass

Joe Irwin, Dufferin Co., Ont.

ONE of the quickest ways I know of to run a herd of cows down, both in flesh and in milk production, is to let them chase all over the farm in the early spring, looking for grass. A cow may be coming along fine and be as contented with her winter fare, as if she had never seen a green field in her life, but just let her get nosing along a fence or a roadside looking for fresh vegetation and she becomes like a thing possessed. What with the taste of the new shoots of grass, the smell of the fresh earth, and perhaps the stirring up of recollections of the luxury of good pastures, nothing but a stake and rider fence will keep her from exploring every corner of the farm, and perhaps the farms of the neighbors. If she is allowed to roam at will over the sod field while the soil is still soft, she cuts it up and does not end the damage. When finally she is turned into her stable for the night, which is always under protest, she is as gaunt as a greyhound. Her taste for her winter feed is all gone and she is so pernickety about what she eats that nothing but roots or silage will tempt her. If the farmer has none of these, as the majority have

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not at this time of year, she goes decidedly off her feed. Her contentment all vanishes, and as it vanishes, the milk flow shrinks in proportion.

This is what happened to our cows every spring until a few years ago, when I came to the conclusion that it didn't pay. I like to let my cows out in the sun and the warm spring air, but I take good care that their liberty is confined to the barnyard. I am always particular to see that the fences and gates surrounding the yard are kept in the best of repair, and that the gates are kept closed. These gates in the fence paid for themselves the first spring after I put them up. My cows now never get a taste of grass until well on in May. I take particular care to keep them contented during the early spring, as I have found from experience that it is only the contented cow that will fill the milk pail.

## Contagious Abortion, Its Spread and Control

Hygienic Measures are Effective If Faithfully Carried Out

BY PROFESSOR W. L. WILLIAMS, CORNELL UNIVERSITY, N.Y.

THOSE dairymen and breeders who are willing to undertake and faithfully carry out permanent hygienic measures may with reasonable security expect to control and minimize the disease, but the work must be permanent, sincere and intelligent.

We advise, first, that the newborn calf be cared for in such a manner as to insure it against serious infection from abortion and other organisms and thus to guard its health and vigor. When the cow has reached her 270th day of pregnancy, or sooner if earlier calving seems probable, give her a thorough bath with warm water and soap, lathering the skin repeatedly until thoroughly clean. Rinse off the soap and water with a 2 per cent. solution of carbolic acid or cresol compound. Place the cow in a clean, disinfected stall. After the bathing, wash the tail, vulva, thighs and udder daily with warm one and a half to two per cent. solution of bacterol, cresol, lysol, carbolic acid, or other similar disinfectant, and douche the vagina daily with a 0.25 per cent. Lugol's solution. Lugol's solution, or compound solution of iodine, consists of 6 Troy dram of iodine crystals and 1½ Troy ounces of potassium iodide dissolved in 1 pint of water.)

### Preserving the Calf from Infection.

When the calf is born, rub it dry and disinfect the stump of the navel cord. Do not tie it. Do not touch the navel stump with the hands. Fill a goblet or glass to the brim with 1-1000 corrosive sublimate solution, and, having the calf held on its feet, push the goblet against the navel region so as to submerge the navel stump completely, and keep it submerged for 15 minutes (Corrosive sublimate tablets can be purchased of a size that one to one pint equals 1-1000). Then dust the navel stump over heavily with a powder composed of equal parts of powdered alum and boric acid, and repeat every 30 minutes until the navel stump is dry. Place the calf in a clean, dry, comfortable stall, and keep it alone until two or three months old. Do not permit the calf to suck.

In feeding the newborn calf, select the milk of a healthy cow which has calved promptly and naturally in thirty minutes or less, has expelled her afterbirth quickly and naturally within two hours, and has no discharge from the uterus. Milk from cows which have calved slowly or had inflammation of the uterus, with discharges, and especially with retained afterbirth, is dangerous.

Before drawing milk from the cow to feed to the calf, wash her vulva, tail, thighs and udder and douche the vagina according to the plan recommended prior to birth. The milker should first disinfect his hands and should use a sterilized pail. The first milk from each teat should be discarded. Repeat the washing of the vulva, tail, thighs and udder immediately before each milking. Repeat the vaginal douches daily until all discharges from the vulva have ceased.

The first milk, or colostrum, is not necessary for the calf.

Ideally, it would be best to feed calves upon boiled or sterilized milk. The process is yet in the experimental stage. Some

calves grow thrifty upon boiled milk from the first; others die. In the meantime, calves grown under the conditions recommended are reasonably safe, and at eight to ten days of age may be placed with safety upon milk boiled in a water bath. The milk which is boiled may be drawn from any economic source, mixed milk from the dairy, milk from tubercular cows, skimmed milk, or whey from creameries or cheese factories.

These recommendations have a triple purpose:

(1) We minimize the infection of the newborn calf with abortion bacilli and thus obtain the greatest security at present available against abortion, inflammation of the uterus and retained afterbirth two years later in first pregnancy.

(2) Combined with reasonable cleanliness of calf stalls and prudence in feeding, they have proven in extensive trials largely to eliminate white scours.

(3) Their application eliminates largely that very extensive and destructive group of cases of mammitis (uagert) immediately following calving. The infection of the udder is apparently due chiefly to discharges coming from the uterus and oozing down the thighs, tail and udder. The infection thus reaches the orifices, chiefly of the hind teats, and, passing up the canal, establishes the mammitis.

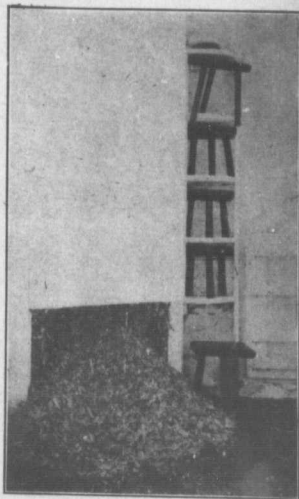
When all discharges after calving have disappeared, decrease the douchings of cows in the dairy to three times a week, though it would be profitable to continue the external washing of vulva, tail and udder daily in the interests of clean milk, as well as of the health of the cow.

When ready to breed a halifer or a dry cow, douche the vagina three times a week with 0.25 per cent. Lugol's solution (one ounce Lugol's solution to three gallons and one pine of water) for 21 days, or one heat interval, and then breed. Continue the douching for another three weeks, when, if the animal appears to be safely in calf, the douching may be decreased to once a week until time for calving approaches, when the care above outlined for the cow at that period should again be applied.

When abortion or retained afterbirth occurs, each case should be handled individually by a skilled veterinarian and the genital organs should be restored to health as promptly as possible.

### Treating Valuable Breeding Herds.

In valuable breeding herds, according to our researches, if the breeder desires the most efficient



A Corner in a Well Kept Stable.

Shavings or cut straw for bedding is delivered right behind the cows through the shoot with the minimum of dust. Shelves are provided for the milking stools.

practical control, it can be obtained reliably only by regarding each breeding animal as a suspect and introducing, as a permanent practice in breeding hygiene, a course of uterine douches of, say, two per cent. Lugol's solution once a week for three or four weeks just prior to breeding, in conjunction with the other measures above advised. Such cows then usually breed safely and carry their calves well.

It is imprudent to sell cows that have aborted. They are just as safe to breed, after proper handling, as are other cows. The popular rule of holding an aborter for three months or for six months after aborting or for a period of three months after the date when she should have calved is imprudent and illogical. The cow which has aborted should be bred when her genital organs have been brought back to health. This may be in one month, it may be never, and the time elapsing after the disaster has nothing whatever to do with it. If a cow aborts during the first four months

of pregnancy, the membranes usually come away with the fetus, there is no afterbirth, and no notable discharge follows. If left to herself the cow may be in good condition to breed in fifty or sixty days, or if her uterus is carefully disinfected three or four times she may be in excellent condition for breeding in thirty days. If the cow has suffered from retained afterbirth and been neglected or even given the best possible attention, she may never again be fit to breed.

When sterility occurs, an expert veterinarian should be called early to examine the genital

(Concluded on page 13.)



Hog Raising is the Dairyman's Most Profitable Sideline.

With quotations as high as \$11 at country points, those who have stayed with the hog in less prosperous seasons are now reaping their reward. Of course, the bacon hog is the one desired, and show ring standards in Canada have changed to conform to this demand in so far as Berkshires and similar breeds are concerned. The ones here illustrated are between the fat type and the most desirable bacon type.

## Fencing? Yes, but what kind?

The farmer who thoroughly examines the relative merits of the various brands of wire fences offered to him will not have any difficulty about deciding upon the one he ought to have. Let him decide by that most unerring of all tests—weight. Why judge by weight? Because weight means strength, and strength means durability and long life. Of the different makes of wire fences, there must naturally be one that will weigh heavier than the rest.

### The heavy-weight among fences is the "Ideal"

The reason is that all the wires are full gauge No. 9 hard steel wire; every wire is full of life and strength, and heavily galvanized to properly protect and preserve that strength. You therefore get longer service from "Ideal"—most for your money in strength, durability and all-round satisfaction.

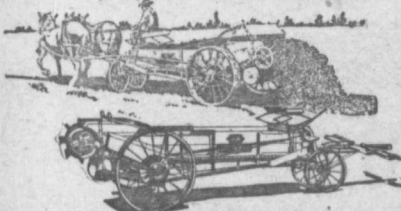
## Ideal Fence

It is to your interest before buying fencing to get a copy of our catalogue; a postal will bring it.

The McGregor-Baywell Fence Co., Limited  
Walkerville, Ontario, Canada. 23



## McCormick



## Own a McCormick

**F**OLLOW a McCormick manure spreader at work in the field, and you will say that no device, human or mechanical, does better work in the proper and even fertilizing of the soil.

This year all McCormick spreaders can be had equipped with a most efficient wide-spread attachment. This will spread smoothly and evenly to a width of 8 feet, or more, as desired. Yet it has a narrow box, convenient to handle in stable, yard and field.

McCormick spreaders are strong and durable, correctly designed, simple in heater and apron mechanism, with good traction, light draft and plenty of clearance.

Ask your McCormick local agent who handles them to show you a McCormick manure spreader. If the agent can't do it, drop us a line. We will send you a copy of our booklet, "Why You Should Use a Manure Spreader," and will tell you where you can see one. Send us a card and we will do the rest, but—don't stop until you have seen a McCormick spreader.

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## Milk Fever and Its Treatment

(Continued from page 2.)

part, so that the remotest recesses may become distended. When all the air possible has been injected, withdraw the tube gently, being careful to pinch the teat immediately upon its removal so as to prevent any outflow of air. Then carefully tie the teat about in the middle with a piece of hard tape—the hard so that no air can leak out. Again disinfect the milk tube by immersion in the antiseptic solution and repeat the operation upon the remaining quarters.

One good feature (and so far as I know the only one) of the disease is this: The afflicted animal either succumbs or completely recovers in a comparatively short time—you get quick action and are not kept long in suspense and there is no tedious convalescence. I have known cases where a cow survived a severe attack and was up and eating hay, apparently none the worse, a few hours after treatment. A great deal depends upon promptness in recognizing symptoms and combating the disease. For this reason every progressive farmer should equip himself with a milk fever outfit and thoroughly familiarize himself with the theory and practical method of treatment, because it is frequently impossible to secure the services of a competent veterinarian at short notice. Outfits may be obtained at a very small cost, some, I believe, as low as \$3, from any reliable dairy supply house.

### Second Treatment Sometimes Necessary

Sometimes in aggravated cases if the air becomes absorbed and no improvement is apparent after three or four hours a second treatment identical with the first is necessary. Generally, however, if the case has not been neglected too long before beginning she will get on her feet in a few hours after treatment. The tapes should not be removed at once but allowed to remain in position for an hour or so after recovery, after which time the contracting muscles at the extremity of the teats will retain the balance of the injected air. When satisfied that the patient has completely recovered, and under no circumstances until after about 24 hours have elapsed, gradual milking may commence. It will probably be several days before satisfactory results are obtained in the way of milk production—however, it is surprising how quickly cows will sometimes recover under careful handling and come up to their proper milk flow. I have had a cow survive a bad case of milk fever and later go on an R. O. test, afterwards making a satisfactory record, less than three weeks from the time of being attacked.

It is somewhat difficult for a progressive dairyman to wholly avoid milk fever. If a cow is to do her level best at the pail she must certainly be well fed up to the time of calving and in tip top condition. This, of course, increases the chances of contracting the disease. On the other hand, by taking away all feed and practically starving a cow for a considerable period before parturition, the chances of milk fever are materially lessened, but at the expense of decreased efficiency; because the milk flow will undoubtedly be somewhat reduced in consequence and it becomes doubtful if the animal, for that year at least, will ever attain her maximum production.

**Precautions in a Producing Herd.**  
In the case of purebred animals intended for A. R. O. work and expected to sire one of the finest importance that they be in the very best possible physical condition in order to do their utmost in the mat-

ter of performance. Therefore, at Aury Farms, we feel justified in running all chances of milk fever for the sake of attaining maximum production; but at the same time we take every precaution to prevent, and, if necessary, to combat the disease. A week before calving all grain feeds except bran are discontinued and the mash, with plenty of salt added. In addition, cooling laxative feeds are given—green grass, green oats or green corn, if possible, but if not available we feed a liberal supply of cut beets or beet pulp, etc., and a "dra or clover hay ad libitum. Also once daily a handful of oil meal, which we consider very beneficial. Immediately after parturition we give a drench of 1½ lbs. Epsom salts with one ounce of creolin added which restores the normal movement of the bowels and prevents any fermentation. No feed is offered for six or eight hours and then only a bran mash with oats and salt.

The following day, if the animal seems all right, we commence with about four pounds of a mixture of equal parts of bran, dried brewery grains and crushed oats; and later on as she begins to come to her full flow we substitute our regular ration, a little at a time until finally after about a week, she is taking 10 to 12 pounds daily of her regular feed mixture. If she continues to increase as she should the feed is gradually increased to correspond—generally about one pound of feed for every four pounds of milk. We have never lost a cow because of milk fever, although we have had several severe cases. We do not particularly fear it, but we certainly do not welcome it.

### Milk Fever Cured.

In conclusion, I might add a few "don'ts" which I trust will meet the approval of all those experienced in handling milk fever cases and which, I hope, may be of some use to those as yet unfamiliar with the disease and its treatment:

1. Don't forget to act promptly if you intend handling the cow yourself—send for help p. & q. in case you do not. Delays are dangerous.
2. Don't attempt to milk out the cow in order to relieve her—it will help a great deal if you resist the temptation.
3. Don't try to give a drench after the cow is down—the muscles of the throat are by then probably paralyzed and some of the dose may enter the lungs with disastrous results.
4. Don't neglect a simple precaution in the way of cleanliness and disinfection—a lost quarter or a spoiled udder is too great a price to pay for a late calving season.
5. Don't think of leaving the calf with the dam after the first symptoms appear—both are better off away from each other anyway.
6. Don't be in any hurry to commence milking and feeding after the cow recovers—give nature a little opportunity to help you.
7. Don't forget to remember next year that she had milk fever the year before—"an ounce of prevention," etc.

### Black Leg or Black Quarter

**A**MONG the many things our Ontario farmers have to contend with is the apparently all too common and spreading disease known as Black Leg of the stock. Its prevention is affecting live stock. Its prevention is simple. All that is neces-

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Years from now the Bissell Silo will be giving good service. It is built of selected lumber, treated with wood preservatives, the strongest design. It has strong rigid walls, air-tight doors and hoops of heavy steel. To open it is easy, simply because it can't very well do anything else. Our folder contains more fully—write Dept. R., T. E. BISSELL CO., Ltd., ELORA, ONT.

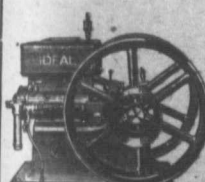


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**GOULD, SHAPLEY & HAIR CO., LTD.**

ary to permanently guard against the disease is a knowledge of its workings and the measures necessary to wipe it out. The following are several things that every livestock man should know regarding this disease:

It is caused by bacteria and the only way that infection can take place is through abrasions of the skin, as wounds caused by barbed wire, thorns, awns of grains, or teething trouble in young animals. In low-lying lands are particularly likely to be infected, and infected areas remain so indefinitely, and in pasturing on, or being fed on fodder from these lands, are liable to infection, though horses and older cattle are to a great extent immune. The development of the disease is quick, and it is practically always fatal.

The symptoms are very noticeable. There is a lameness, with the presence of a tumor or swelling, usually upon one quarter of the animal. These tumors are characterized by the fact that when they are touched, or when the hand is rubbed over them, a peculiar cracking sound is produced. Loss of appetite and general depression follow with a high and quickened pulse. Finally, the animal goes down and becomes weaker and weaker, the extremities get cold, and death results in from 4 to 48 hours.

There is practically no effective treatment. Preventive inoculation, which is simple and inexpensive, is the best and surest method. It consists of inoculating all the younger animals in the infected area with a vaccine prepared for the purpose. This can be done with a hypodermic syringe, or by the use of a specially-prepared needle, and is inoculated through the threads. The latter method is very simple. It can be performed by almost anyone and is quite effective.

The needle and threads can be purchased from the Veterinary Director General at Ottawa, who will send them full directions for performing the operation. The cost is so small that no stockman can afford to neglect his animals and run the risk of loss.

**Veterinary Department**

**Pigs Cough**

I HAVE several pigs that, after eating, will stand and cough. Can you tell me what is the cause?—G. W. W., Hastings Co., Ont.

The symptoms indicate that they eat too greedily and practically choke. Feed out of a trough with a large bottom, so that the food will not be deep enough for them to get large mouthfuls.

**Abnormal Appetite**

WOULD like to know what my cows require. In the summer they would hunt for bones to chew, and lately they have taken to sticking bits of hemlock lumber and saw bits of leather they can find.—R. E. Dushman Co., Ont.

Allow free access to salt, feed liberally on bran and give each two drams of calcium phosphate three times daily until the habit ceases.

**Uterine Discharge**

I HAVE a young cow about four years old that almost has calved at least two weeks ago. Since then she has been losing a great deal of slimy substances with it, staining in flesh. Would like some advice as to the cause and how to cure. Am giving her bran mash and drinks. An early reply will be appreciated.

Flush out the womb once daily with about a gallon of a warm one per cent solution of eosin. Give one ounce tincture of iron in a pint of cold water as a drench twice daily until blood ceases to pass. Feed well

on hay, bran, chop and roots. If she shows symptoms of constipation give one pint raw linseed oil.

**Rumination**

I HAVE a pure bred cow that I have never seen chewing her cud. She seems to be in good health. Is there such a thing as cows losing their cud? What treatment should she receive?—W. F. C. Perry Sound Dist., Ont.

Your cow certainly ruminates or chews her cud. You say she is in good

health, hence do not worry because you have not seen her chewing her cud. The cud is simply a bolus of the imperfectly masticated food re-accumulated to the mouth for remastication. As a rule sick cows do not ruminate, but there is no disease or condition known as "losing the cud."

A large proportion of fatalities among dairy cows are due to two causes—carelessness or ignorance. Both are remediable.



**This Book Helped Me Improve My Farm**

It is the most valuable book I own and it cost me nothing.

It has saved me time, labor and money and I've got better looking, more durable and more serviceable buildings than I ever had before.

The first cost of concrete farm improvements is also the last cost. There's no after expense for paint or repairs—no danger from fire, rot or rust—no trouble of any kind. Besides concrete lowers the insurance rate.

If you haven't a copy of "What the Farmer can do with Concrete", send for one to-day. There's more than 150 pages of valuable building information, 52 practical plans, illustrated by diagrams and photographs, and dozens of other interesting farm facts.

A copy will be sent to you free of charge, immediately upon receipt of coupon below.

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Here's positive proof of the strength of Peerless Fencing. This actually happened. We don't ask you to take our word for it. Read what the owner says. Here's his letter:

Dear Sirs: I am writing a testimonial as to the strength of your Peerless Junior Chicken Fencing. Mine is four feet high. It turned two horses, each weighing 1400 pounds. They ran full tilt into the fencing about 2 rods from each other at the same time. The result was that they turned a somersault over the fence, alighting on their heads and necks, scratching them up some, but the fence remained intact. Yours truly,

Joe Boothroyd, Surrey Center, B. C.

Think of it! A dead weight of nearly a ton and a half coming with violent force against our poultry fencing—not a field fence—and yet

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What greater test can you ask? We built it stronger than is necessary under ordinary circumstances. We built it of Open Hearth steel wire with all the impurities burned out and all the Peerless Lock. Top and bottom wires of Peerless Fencing are heavy—extra strong. Consequently fewer posts are required. Peerless fencing can't be "got out of shape"—can't be giving absolute satisfaction.

Catalog giving details on request. Describes our poultry, farm and ornamental fencing, also Peerless farm gates.

Agents almost everywhere. Agents wanted in all unassigned territory.

**The Banwell-Hoxie Wire Fence Co., Ltd.**  
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**THE GREAT COAL TAR DISINFESTANT**

**ZENOLEUM**

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Hogs require every attention to prevent their catching and spreading diseases. Zenoleum is especially good for Hog Cholera, Swine, Guinea Swine, Hog Cholera, Typhoid, and other diseases. It is also used for the treatment of swine. It is also used for the treatment of swine. It is also used for the treatment of swine.

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Particulars from any Canadian Pacific Ticket Agent, or write W. B. Howard, District Passenger Agent, Toronto.

**HORTICULTURE**

The Growing of Cabbage  
A. W. Cook, Norfolk Co., Ont.

THIS cabbage plant is a rank feeder, requiring large quantities of nitro-phosphates and moisture. Frequent cultivation is essential. Cabbage is planted in rows wide enough apart for horse cultivation, the distances varying according to the nature of the plants' growth, but generally about 18 inches. There is probably no plant that will give as much in return for cultivation as the cabbage.

The profit varies according to the soil. The cost per ton of production is about five dollars per ton, and under an average season one can expect a crop of about 15 tons. Allowing \$15 per ton, this will leave a profit of \$75 an acre. This is a very good profit when one is growing it on a large scale, but where one grows it on an acre or so where he can do nearly all the work himself, the profit will be seemingly somewhat higher or if one is going to dispose of his crop upon a local market at a much per head, the profit increases. Cabbage growing is a profitable branch of gardening under average conditions. It is an industry which will stand expansion.

**Potatoes and Their Culture**

W. T. Macoun, Dominion Horticulturist.

GERMANY affords us a wonderful object lesson on the value of potatoes. To-day that country is depending to large extent on its potato crop. She produces 1,250,000,000 bushels a year. If we could destroy all the potatoes and potato products in Germany, the war would end shortly.

We, too, can afford to grow potatoes; taken one year with another they will pay as well as any crop on the farm. The average crop of potatoes in Ontario is 125 bushels per acre. Mr. Carmichael, editor of the Rural New Yorker, once offered a prize for the highest yield from a one-twentieth acre plot. Two contestants grew at the rate of over 1,600 bushels an acre. One boy in Middlesex has grown over 500 bushels on a whole acre. These yields illustrate the possibilities of increased production through improved culture.

**Ideal Potato Conditions.**  
The ideal place for potatoes is on a clover sod. They grow best in a climate where the days are warm and the nights are cool. The Maritime Provinces and British Columbia, therefore, have an advantage over Ontario in potato growing. If the surface soil is allowed to become dry, the tubers will not develop even if the tops and roots are good. Hence one of the advantages of plowing down clover: the moisture is held near the surface and constant cultivation should be followed to retain the moisture. It would cultivate potatoes when in blossom and at all other times. I have known a difference between six cultivations in the season and three to make a difference of 40 bushels in the crop. The explanation is the importance of moisture in the surface soil where the tubers develop from underground stems.

At Ottawa we plant in rows two and one-half feet apart with the sets 12 inches to 14 inches apart in the row. We use seed potatoes of good size, cutting each tuber in four parts, one cut lengthwise and one crosswise. We believe the grower is well repaid

\*Synopsis of a portion of an address by Mr. Macoun at a Patriotic and Production conference.

**TOP DRESS all your Crops with Nitrate of Soda alone, no matter what other fertilizers you may have used. 100 pounds to the acre for seeded, and 200 pounds to the acre for cultivated crops will do the work. The increase will yield large profits over the cost.**

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Spendley Poultry Pen. Thirteen for \$1.00. Five Penns show stock. \$1.00. E. T. Thompson, Yorkville, Ont. Extra value \$1.00 to \$1.50.  
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**Single Comb White Leghorns**  
Single Comb White Leghorns, "Ironheart strain," of beauty and utility, bred to lay. Eggs, one-fifty per brood, 97 per hundred. Chicks, 210 per hundred. Fertility and live chicks guaranteed.  
Research Poultry Farm, Richmond Hill, Ont.

**White Wyandottes**  
Hardy, farm raised, bred to lay stock founded on three of the best strains in Canada, namely, Gold, Royal and McLeod blood. Proven winners in Canada. 100 eggs \$3.50, 100 eggs \$4.00. Hatchery sets, 5 cents per egg. Hatchery sets, 20 cents each. 25 cent deposit covers delivery on any date. Delivery charges prepaid on orders of over 50 eggs.  
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**WHITE WYANDOTTES**  
"First class laying strain. Send for a setting of 13 eggs, and 10¢ have pullets to lay next winter."  
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next year by investing a few dollars now in eggs for hatching from our extra heavy laying strains of Barred Rocks, White Wyandottes and Buff Orpingtons. Fifteen years experience in breeding heavy egg producers combined with superior quality. Our free range stock produce large and vigorous chickens and excellent laying records. Single, \$1.25 per fifteen; \$6.50 a hundred; delivery and postage included. Catalogue free on application guaranteed. Catalogue free.  
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## Production and Thrift

"TO win the war with the decisiveness which will ensure lasting peace, the Empire will require to put forth its full collective power in men and in money. From this viewpoint it is our true policy to augment our financial strength by multiplying our productive exertions and by exercising rigid economy, which reduces to the minimum all expenditures upon luxuries and non-essentials. Only in this way shall we be able to make good the loss caused by the withdrawal of so many of our workers from industrial activities, repair the wastage of the war, and find the funds for its continuance. It cannot be too frequently or too earnestly impressed upon our people that the heaviest burden of the conflict still lie before us, and that industry and thrift are, for those who remain at home, supreme patriotic duties upon whose faithful fulfillment our success, and consequently our national safety, may ultimately depend."—  
SIR THOMAS WHITE, Minister of Finance.

PRODUCE MORE, SAVE MORE.  
MAKE LABOUR EFFICIENT.  
SAVE MATERIALS FROM WASTE.  
SPEND MONEY WISELY.

### LET US PRODUCE AND SAVE—

The war is now turning on a contest of all forces and resources—men, munitions, food, money. The call to all is to produce more and more. It may be necessary to work harder. The place of those who enlist must be taken by those at home, men and women, old and young. The more we produce the more we can save. Produce more on the farms and in the gardens. Save more and help to win the war.

### LET US NOT WASTE OUR LABOUR—

In this war-time all labour should be directly productive or should be assisting in production. Make it as efficient as possible. If your labour is on something that can be postponed, put it off till after the war and make your labour tell now. Making war is the first business of all Canadians. Efficiency in labour is as important as efficiency in fighting.

### LET US NOT WASTE MATERIALS—

Begin at home. The larger portion of salaries and wages is spent on the home—food, fuel, light, clothing. Are any of these things being wasted? \$20.00 a year saved from waste in every home in Canada will more than pay the interest on a war debt of \$500,000,000.

### LET US SPEND OUR MONEY WISELY—

Are you spending your money to the best advantage? What do you think of extravagance in war time? Tens of thousands of Canadians are daily risking their lives for us at home. Is it not our duty to be careful and economical? Canadian dollars are an important part of the war equipment. Make them tell. Have a War Savings Account. Buy a War Bond.

THE GOVERNMENT OF CANADA

3

THE DEPARTMENT OF AGRICULTURE

THE DEPARTMENT OF FINANCE

every day. Strict regularity is observed in feeding and watering and in the cleaning of droppings boards and floor litter; in fact, every detail of the business is carefully looked after and promptly attended to. Mrs. Hooker personally oversees everything.

About 1,000 bushels of wheat are bought annually, generally direct from the farmers. Corn, bran and middlings are purchased in large quantities, as there is ample storage capacity in overhead bins. From these bins the grain is drawn through spouts below and is distributed through the long building to the fowls at feeding time from a carrier that runs on an overhead track. The dry mash is in the hoppers at all times.

#### The Water System

A system of piping carries water through all the pens and buildings. This is so arranged that during freezing weather the pipes may easily be drained. Rye straw is preferred for scratch material in the pens, but often wheat and oat straw are used. The straw is usually bought in car lots and must be perfectly free from mud or dampness. This is always specified.

The droppings are cleaned out every day and carried through the building in a car operated on the same track as the feed carrier. Most of the bones and scrap feed are cut on the place, the material being obtained from the town markets. A small gasoline engine is used for this work, as well as to chop the alfalfa and crack the corn and wheat for the chicks.

A part of the land is planted to corn each year, in which the young chicks and pullets are allowed to run. This arrangement answers three purposes: It keeps down the weeds and provides a considerable amount of grain, gives the chicks needed shade, and prevents deprecations by hawks.

Improving the stock is the aim. As the business is based on egg production, great care is taken in weeding out the weaklings. In this way the vigor of the stock has been greatly improved. The effect of this breeding up and weeding out shows in the size and the color of the eggs. As the product is marketed where pure white eggs are in demand particular attention is given to this feature. If there occur any lapses in the regular and systematic feeding and watering, a reduction in size of the eggs is noticed. All eggs as gathered are graded to a two-ounce standard—though they overrun this, usually weighing about twenty-six ounces to the dozen—and are wiped perfectly clean in a manner that does not destroy the natural luster of the shells.

A contract is entered into with a dealer whereby he takes the eggs at the farm each day, meeting all express charges and paying for the eggs a certain percentage above the general market price at that season. This sliding scale of prices seems to give the best general satisfaction. The culls and ill-shaped or off-color eggs find a ready market in local stores as strictly fresh-laid eggs.

#### Three Acres of Alfalfa

Three acres bordering on the street are devoted to alfalfa. From this, after using all that the poultry need, hay is sold some years to the amount of \$100. Part of this land sloping to the east was too wet for alfalfa, but the best results from alfalfa. It all this was thoroughly underdrained and plowed for reseeding.

This business is so managed that the net proceeds from each hen average from a dollar and a half to two dollars, according to price conditions for grain and eggs. At certain seasons more orders for eggs for hatching purposes are received than can possibly be filled. These excess orders

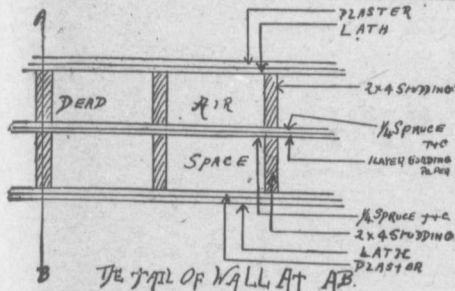
are returned with the money, as it is the rule of the farm never to substitute from other flocks. Some seasons a great many day-old chicks are sold. Five 800-egg incubators are used, while a 1,300-egg size machine has just been installed. Gasoline heat is used in all the brooders.

"From ten to twelve acres are required where from 2,000 to 2,500 birds are to be kept. This allows ample space for building and also for a rotation of crops which brings a part of the land under the plow annually, so that necessary alfalfa can be grown and some corn. In this way the soil is kept sweet and free from disease germs. The returns from such fruits as peaches, plums and cherries help out running expenses."

**A Sound Proof Wall**

An installing an up-to-date water system along with all modern conveniences in my farm home. Would you kindly instruct me how to construct a sound-proof wall to surround the bathroom on two sides—Pool Co. Ont.

The diagram herewith explains the construction of a sound-proof wall better than words could do. As will be seen starting at one side there



Construction of Sound Proof Wall for Bathroom

A desirable addition to bathroom is a sound-proof wall around it. This diagram prepared by the Architectural Department of the London Machinery Co. of Guelph, shows how such a wall may be constructed.

is plaster, lath, two by four, studding with a dead air space, one-quarter inch spruce, building paper, then another layer of one-quarter inch spruce, studding and air space and again lath and plaster. This is a style of sound-proof wall that is popular with architects and successful in practice.

**School Fairs and Rural Uplifts**

"I am very pleased to tell you that our school fairs are a great improvement over last year, and from the interest manifested in them this year upon the part of pupils, teachers and parents, it means well for another year. Words cannot express my gratification over the way in which the four fairs passed off. The quality of exhibits has been excellent, and the manner in which the children have been putting up their exhibits shows that great pains have been taken in selecting and preparing them for the fair. I am firmly convinced that this time and energy spent by this department visiting plots and schools, encouraging the children practically all summer, has been well spent and will have its desired effect as time goes on. Too much time cannot be spent in making school fairs the success they should be, as there is no work in the county that will do more to encourage progressivism among our eastern farmers. First of all, the most vital question of the hour is to keep the boy on the farm and the school fair, when properly conducted, is one means which will assist

I find that men who have hitherto looked with scorn and indifference on this department, in some cases fairly good farmers, are beginning to see that it is something which means a great deal to them after all. We find them at the school fair, the most enthusiastic on the grounds, and taking a deep interest in the children's winnings. I believe the school fair is having the desired effect of bringing about the proper relationship of father to son and mother to daughter; namely, the parents taking more interest in their children, and bringing them more and more into the partnership in their business. It is arousing an enthusiasm among the people that will tend to lift them out of the proverbial rut, and with their children keened up and awakened to the possibilities in life, will tend to more progressiveness in the future."—P. S. D. Harding, Lanark county.

In North Gower, we have all noticed a great improvement in our fields where registered seed is sown—Member, North Gower Banner Oats Centre.

There is no business in Ontario where the inexperienced middleman is

doing more harm than in the wool business. The farmers should deal directly with the consumer or large wool merchant.

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AND RURAL HOME  
PUBLISHED EVERY THURSDAY

47

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The paid subscriptions to Farm and Dairy exceed 21,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears and sample copies, varies from 22,000 to 23,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

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We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers, you state "I advertise in Farm and Dairy." Requests shall not be made to trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

**The Rural Publishing Company, Ltd.**  
PETERBORO, ONT.

"Read not to contradict and to confute, nor to believe and take for granted, but to weigh and consider."

## More Silos Needed

THE gradual decrease in the acreage devoted to root crops, and the rapid increase in the amount of land used for fodder corn production, shows that farmers generally follow the line of least resistance and apply their labor where it will bring them the greatest returns. The necessity of succulent feed for winter is recognized, the only question being, whether corn or roots, the two main sources of such feeds, will supply the greatest amount of it for the least labor. It is now generally recognized that corn silage is the most economical source of succulence. Although roots have a place and will always be grown to a considerable extent, still it is practically certain that the acreage devoted to corn will continue to rapidly increase.

The scarcity of labor that prevails at the present time is a strong inducement for swinging over still further to corn production. The men who already have ample silo capacity are in the best possible position to get along with a minimum of labor. Those who have not yet built silos could probably not put their time to better advantage than to build one this summer, as there is no prospect of relief in the labor situation for some time to come. To increase or even maintain production of food stuffs, every known labor-saving device will have to be utilized. Away up near the top of the list of labor-saving devices is the silo. We in Canada are only beginning to realize the value of silos, and there is urgent need that their numbers be increased as rapidly as possible.

## A Field for Public Service

ONE of the benefits of direct legislation is that it gives an opportunity for public minded citizens to interest themselves in the initiation of progressive legislation, and to devote some of their time to public welfare. Under our system of so-called representative gov-

ernment, law making is left entirely in the hands of the members of legislative bodies. That these men hold a monopoly of law making ability no one, not even they themselves, would have the hardihood to claim. There are amongst the great body of private citizens men eminently capable of taking a leading part in devising and promoting beneficial measures. Amongst these are many who for business reasons are unable to devote so large a part of their time to public work as is necessary for men engaged in public life. Under the representative system, these are debarred from taking an active part in the shaping of legislative policies.

That there is a field in which the ability of these men can be utilized for public good, was amply illustrated in the recent temperance propaganda in Ontario. The Committee of One Hundred was composed of public minded private citizens. So thorough and business-like was the propaganda they conducted that the signatures of over 85 per cent. of the voters of the province were secured to the petition for prohibitory liquor legislation. In the campaign was utilized the ability and only the ability, of men who, under ordinary circumstances would have no active part in influencing legislation. Under a liberal measure of direct legislation, however, the field would be continually open for the public spirited activities of such men. There would always be an opportunity for them to give their time for public welfare.

## The Farmer and the War

NOW that the rush of spring work has begun in earnest, and with so many of the sons and hired men that we had to help us this time last year, now in training or on the firing line, the temptation is greater than ever to reduce the work put on the land. Even in years when labor was, comparatively speaking, plentiful, the manner in which we did our general spring cultivation was not what it should have been. This year, in the presence of work greater than ever, there is a grave danger that much of the crop will be sown in a poorly prepared seed bed, and that the result of this lack of cultivation will be reflected in the yields of harvest time.

Though it might be neither wise nor possible to put as much work on the land as is advocated by some intensive farming enthusiasts, still it is easy to err on the other side and to make insufficient preparation for the seeds. Perhaps no farming operation pays greater dividends than an extra stroke of the harrow or disk. Any increased effort at this time will increase the yield without adding much to the work that will be required at any other time during the season. The reward of such effort, both from the extra returns received and from the sense of duty well done, will be great. It should greatly encourage the farmer to know that every ounce of increased effort that he expends in making provision for greater crops will ultimately be registered on the firing line, and that the disk, the harrow and the grain drill are just as effective in a war of exhaustion as the howitzer and the machine gun.

## Sisal Monopoly and Twine Prices

EVERY indication points to the probability that farmers will have to pay a high price for their twine this year. The price of sisal, the raw material from which most of our twine is made, is now well over seven cents a pound, or about equal to the wholesale price of the manufacture twenty five years ago. As is usual in such cases, these high prices are the result of a monopoly. It appears that a series of circumstances, including the Spanish-American war, the subsequent revolutions in the Philippines, as well as a severe drought in those islands last year, has so interfered with the supply of sisal from that source, that reliance is now made almost altogether on the province of Yucatan in Mexico for

the supply of raw fibre. The exportation of sisal from that province is a government monopoly, and is financed by American capital. Representing this combination is a regulating committee which practically controls the world's output of fibre, and can set any price it pleases on the product. As a result, prices have advanced rapidly, every advance of one cent per pound, representing an additional \$2,500,000 that the monopoly can extract from the pockets of Canadian and United States farmers.

Since the province of Yucatan is not subject to the government of either Canada or the United States, these countries are helpless in controlling the monopoly, and it is not likely that the monopolists are losing any sleep over the loss they are imposing on our farmers. They are more likely to be planning how to still further increase the price. The only consolation to be found is that the growing of fibre will be stimulated in other parts of the world by the high prices now ruling, with the result that competition and reasonable prices may eventually be restored.

## A Successful Experiment in Taxation

THESE are the days of experiments in taxation. The demand for money to meet the large expenditures due to the war has caused Canadian politicians to vie with one another in discovering new methods of raising revenue. Some of the methods devised, however, are far from being above criticism. They are purely expedient, making no pretense of being founded upon scientific principles, their chief characteristic being that they tend to check industry and to place a premium upon dishonesty.

There is, however, at least one exception. Alberta, along with elder methods, has been experimenting with land value taxation, and with very gratifying results. In one year that province has collected \$700,000 by means of a tax levied on wild lands. The Calgary Herald, the leading Conservative organ in the province, has recently commented favorably upon this method of raising public revenue, and has strongly urged the extension of the principle of taxing land held from productive use by speculators. The tax has had a double effect, both of which will be looked on with favor by the real producers of wealth, in the sunny province. Not only has \$700,000 been raised without imposing any additional burden on those who are using the land, but it has also had the effect of inducing those who hold wild lands to let go at reasonable prices.

Around all our large cities and in all our new districts are large tracts of land and other valuable resources held from legitimate use for speculative purposes. Our government should not be slow to see that here is a source from which taxes can be raised without checking industry, and that such taxes cannot be evaded or passed on to the productive worker. The success that has attended Alberta's experiment in taxing unused land corroborates the contention of those who believe that the land-hog should not escape the tax collector.

The well-being of a people is like a tree; agriculture is its root; manufacture and commerce are its branches and its leaves; if the root is injured the leaves fall, the branches break away, and the tree dies.—Chinese Philosopher.

Once the corn is off to a good start, we cultivate very shallow. One year we had the crop on the side hill. There was much rain, and all surface earth between the rows washed off. Then there lay exposed a perfect net work of corn roots. They could not have been more than two or three inches below the surface. Anyone who has had such an object lesson as this can easily see the folly of deep cultivation of the corn crop.—Norma Ballantyne, Perth Co., Ont.

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## Ontario's New Dairy Legislation

**T**HE Dairy Standards Act, which has been placed on the statute book by the Ontario Legislature is one of the most radical pieces of dairy legislation ever introduced in the province. The feeling that milk and cream should be paid for on a quality basis is one of long standing. Time and time again the question has come up at dairymen's conventions, and though it was usually agreed that the pooling system was unsatisfactory, still the demand for legislative action was not pressed, matters were allowed to drift, and it was left for patrons, factory owners and makers to voluntarily adopt whatever system they wished.

Of late, however, new influences have been brought to bear on the dairymen of the province regarding this question. Amongst these have been the widespread adoption of payment on a quality basis in other provinces, especially in Western Canada. The rapid improvement in the quality of dairy products consequent upon the introduction of the improved methods, wherever adopted, has been forcibly brought to the attention of Ontario dairymen of late. The fact that no corresponding improvement has taken place in the dairy products of Ontario, that percentage of fat in milk has continually decreased, and that the pooling system so widely followed has not least encouragement to farmers to improve the quality of their milk, has finally led to the introduction of an Act to improve the quality of dairy produce. The Act is here given in full:

**The Bill.**  
His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

1. This Act may be cited as "The Dairy Standards Act."

2. In this Act—  
(a) "Factory" shall mean and include a cheese factory or butter manufactory, condensed milk factory, creamery, milk powder factory, milk or cream buying or receiving station or other premises where milk and cream is collected for sale or shipment or manufacture;

(b) "Patron" shall mean one who habitually sells milk or cream at a factory.

3.—(1) All milk and cream received at a factory shall be paid for—  
(a) on the basis of its fat content as determined by Babcock test; or  
(b) on the basis of its fat content as determined by the Babcock test, plus the factor 2.

(2) In determining the fat content of milk supplied to a factory, the measuring pipette shall have a capacity of 17.6 cc. officially stamped.

(3) In determining the fat content of cream supplied to a factory, the sample of cream taken for testing shall be weighed into a test bottle officially stamped and shall weigh 9 or 15 grams.

4.—(1) For the purpose of determining standards of grades of cream for buttermaking purposes, at a factory, the basis of grading shall be—  
(a) first grade cream to consist of cream suitable for making first quality butter;

(b) second grade cream to consist of all other cream accepted by the buttermaker for making butter; and payment for the cream shall be based on the proportion of these two classes.

(2) This section shall come into effect upon proclamation of the Lieutenant-Governor in Council, and the Lieutenant-Governor in Council may establish additional grades.

5. Any patron who over-reads or under-reads the Babcock test shall upon summary conviction thereof, be liable to a penalty of not less than \$10 nor more than \$25.

6. When the whey from a factory is returned in the same milk cans in which the milk is handled to the factory,

the whey shall be properly pasteurized. 7. For the purpose of carrying into effect the provisions of this Act, according to their true intent, the Lieutenant-Governor in Council, on the recommendation of the Minister of Agriculture, may make such regulations as may be deemed necessary, advisable or convenient, and may impose penalties for the violation thereof, and such regulations shall have the same force and effect as if incorporated herein.

8. Nothing in this Act shall apply to milk sold or offered for sale for human consumption.

9. The penalties imposed by or under the authority of this Act shall be recoverable under "The Ontario Summary Convictions Act."

10. This Act shall come into force on the 31st day of March, 1917.

It will be seen from the bill that it is left optional with the patrons and makers whether they adopt the fat basis or the fat plus 2 basis of paying for milk. Dairy authorities have not been able to decide whether or not the extra accuracy of taking the casein content into consideration is worth the extra trouble involved. It is probably because of this lack of agreement on the matter of selecting the basis to be used has been left optional. The reason for leaving the grading of cream so indefinite for the present is because it is to be seen that the gathering methods in vogue do not allow of the establishment of a satisfactory system of grades. Where cream is in bulk gathered in individual cans, the grading is a comparatively simple matter, but since in Ontario a large amount of cream is gathered in large cans, each containing several patrons' cream, the grading is not so easy. A small sample might be taken and carried to the central station, but this sample might not correspond in quality to the patron's cream as delivered. It is proposed to do some experimental work in cream grading this season, with the object of endeavoring to discover a satisfactory basis, to be adopted at a later date.

### The Two Methods Compared.

Seen by a representative of Farm and Dairy, G. A. Gillespie, M.I.A., of West Peterborough, a former president of The Eastern Ontario Dairymen's Association, and a dairy farmer and factory owner of wide experience, gave the following figures, which were presented in the Legislature when the bill was under discussion:—  
100 lbs. milk, testing 3.0% yields 3.0 lbs. butter fat; 100 lbs. milk testing 3.5% yields 3.5 lbs. butter fat; 100 lbs. milk testing 4.0% yields 4.0 lbs. butter fat. Total, 10.5 lbs. butter fat.  
One lb. butter fat is equivalent to 2.6 lbs. cheese.

100 lbs. milk, testing 3.0% would make 7.8 lbs. cheese; 100 lbs. milk testing 3.5% would make 9.1 lbs. cheese; 100 lbs. milk testing 4.0% would make 10.4 lbs. cheese. Total, 27.3 lbs. cheese at 10 cents a lb. (net to patron) is worth \$27.30.

Milk containing 10.5 lbs. fat is worth \$27.30 for cheese making purposes; milk containing 9.1 lbs. fat is worth 78 cts.; milk containing 3.5 lbs. fat is worth 91 cts.; milk containing 4.0 lbs. fat is worth \$1.94.

Calculated on a fat plus 2 basis:  
100 lbs. milk, testing 3.0 plus 2 equals 5.0 lbs. fat and casein; 100 lbs. milk testing 3.5 plus 2 equals 5.5 lbs. fat and casein; 100 lbs. milk testing 4.0 plus 2 equals 6.0 lbs. fat and casein. Total, 16.5 lbs. fat and casein.  
16.5 lbs. fat and casein are worth \$27.3; 1.0 lb. fat and casein is worth 16 2/3 cts.; 5.0 lbs. fat and casein are worth 91 cts.; 6.0 lbs. fat and casein are worth 99 cts.

100 lbs. milk paid for on the pooling system at above price is worth 96 cts. The above figures show that either

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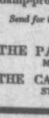
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of the systems allowed by the Act comes nearer giving the patron the real value of his milk than the pooling method. On the latter basis each patron receives the same price—90 cents a hundred—for his milk, whereas the four per cent milk is in reality worth nearly a fifth more than the three per cent milk for cheese making purposes.

Although the legislation is a distinct step in advance, it may meet with considerable opposition throughout the country. The owner of the Jernyn factory in Peterboro County, a man of wide experience, who besides being a graduate of the Kingston Dairy School, has had considerable experience in milk testing, made the statement when interviewed by Farm and Dairy that he approves of the measure. He believes, however, that no matter how fairly a maker may endeavor to make the test, there will be some patrons who will be suspicious of the

# OUR FARM HOMES



**VICTORIES that are easy are cheap. Those only are worth having which come as a result of hard fighting.**—Beecher

## God's Country and the Woman

(Continued from last week.)

SHE was not looking at him, but beyond him. In her face she saw again the strange light of hope that had illumined it at the pool.

"If I could believe," she whispered, still looking beyond him. "If I could trust you, as I have read that the maidens of old trusted their knights. But—it seems impossible. In those days, centuries and centuries ago, I guess, womanhood was next to—God. Men fought for it, and died for it, to keep it pure and holy. If you had come to me then you would have levelled your lance and fought for me without asking a question, without demanding a reward, without reasoning whether I was right or wrong—and all because I was a woman. Now it is different. You are a part of civilization, and if you should do all that I might ask of you it would be because you have a price in view. I know. I have looked into you. I understand. That price would be—me!"

She looked at him now, her breast throbbing, almost a sob in her quivering voice, defying him to deny the truth of her words.

"You have struck home," she said, and his voice sounded strange to himself. "And I am not sorry. I am glad that you have seen—and understand. It seems almost indecent for me to tell you this, when I have known you for such a short time. But I have known you for years—in my hope and dreams. For you are at the end of the world. And I can do what other men have done, centuries ago. They called them knights. You may call me a man!"

At his words she rose from where she had been sitting. She faced the radiant walls of the forests that rolled billow upon billow in the distance, and the sun lighted up her crown of hair in a glory. One hand she clung to her breast. She was breathing evenly, more quickly, and the flush had deepened in her cheek until it was like the tender strain of the crushed lake-reed. Philip rose and stood beside her. His shoulders were back. He looked where she looked, and as he gazed upon the red and gold billows of forest that melted away against the distant sky he felt a new and glorious fire throbbing in his veins. From the forests their eyes turned—and met. He held out his hand. And slowly her own hand fluttered at her breast, and was given to him.

"I am quite sure that I understand you now," he said, and his voice was low, steady, fighting voice of the man new-born. "I will be your knight, as you have read of the knights of old. I will urge no reward that is not freely given. Now—will you let me help you?"

For a moment she allowed him to hold her hand. Then she gently withdrew it and stepped back from him.

"You must first understand before you offer yourself," said "I can-

not tell you what my trouble is. You will never know. And when it is over, when you have helped me across the abyss, then will come the greatest trial of all for you. I believe—when I tell you that last thing which you must do—that you will regard me as a monster, and draw back. But it is necessary. If you fight for me, it must be in the dark. You will not know why you are doing the things I ask you to do. You may guess, but you would not guess the truth if you lived a thousand years. Your one reward will be the knowledge that you have fought for a woman, and that you



The Town of Sir... in the heart of the fruit district.

have saved her. Now, do you want to help me?"

"I can't understand," he gasped. "But—yes—I would still accept the inevitable. I have promised you that I will do as you have dreamed that knights of old have done. To leave you now would be—he turned his head with a gesture of hopelessness—"an empty world forever. I have told you now. But you could not understand and believe unless I did. Love you."

He spoke so quietly and with as little passion in his voice as if he were speaking the words from a book. But their very quietness made them convincing. She started, and the color left her face. Then it returned, flooding her cheeks with a feverish glow.

"In that is the danger," she said quickly. "But you have spoken the words as I would have had you speak them. It is this danger that you must bury—deep—deep. And you will bury it. You will urge no questions that I do not wish to answer. You will fight for me, blindly, knowing only that what I ask you to do is not sinful nor wrong. And in the end—"

She hesitated. Her face had grown as tense as his own.

"And in his end," she whispered,

"your greatest reward can be only the knowledge that in living this knight-hood for me you have won what I can never give to any man. The world can hold only one such man for a woman. For your faith must be immeasurable, your love as pure as the withered violets out there among the rocks if you live up to the tests ahead of you. You will think me mad when I have finished. But I am sane. Off there, in the Snowbird Lake country, is my home. I am alone. No other white man or woman is with me. As my knight, the one hope of salvation that I cling to now, you will return with me to that place—as my husband. To all but ourselves we shall be man and wife. I will bear your name—or the one by which you must be known. And at the very end of all, in that hour of triumph when you know 'that you have borne me safely over 'the abyss, at the brink of which I am hovering now, you will go off into the forest, and—"

She approached him, and laid a hand on his arm.

"You will not come back," she finished, so gently that he scarcely heard her words. "You will die—for me—for all who will know you."

"Good God!" he breathed, and he stared over her head to where the red and gold billows of the forests seemed to melt away into the skies.

### CHAPTER IV.

Thus they stood for many seconds. Never for an instant did her eyes leave his face, and Philip looked straight over her head into that distant radiance of the forest mountains. It was she whose emotions revealed

happo in those years of centuries ago that lived women like you to fight and die for. I no longer wonder at men fighting for them as they have sung their stories in books. I have nothing to do but have a woman who have called civilization—nothing except the husks of murdered hopes, ambitions, and things that were once joys, died. I have you to love, to fight for. For you cannot tell me that I must not love you, even though I swear to live up to your laws of chivalry. Unless I loved you as I do there would not be a heaven for me.

"Then you will do all this for me—to the end—when you must sacrifice all of that for which you have struggled, and which you have saved?"

"If that is so, then I trust you with my life and my honor. It is all in your keeping—all."

Her voice broke in a sob. She snatched her hands from him, and with that sob still quivering on her lips she turned and ran swiftly to the little tent. She did not look back as she disappeared into it, and Philip turned like one in a dream and went to the summit of the bare rock ridge, from which he could look over the quiet surface of the lake and a hundred square miles of the unpopulated world which had now become so strangely his own. An hour—a little more than that—had changed the course of his life as completely as the master-strokes of a painter might have changed the tones of a canvas epic. It did not take reason or thought to impinge this fact upon him. It was a knowledge that engulfed him overwhelmingly. So short a time ago that even now he could not quite comprehend it all, he was alone out on the lake, thinking of the story of the First Woman that Jasper had told him down at Fond du Lac. Since then he had passed through a lifetime. What had happened might well have covered the space of months—or years. He had met a woman, and like the warm sunshine she had become instantly a part of his soul, flooding him with those emotions which make life beautiful. That he had loved her with his love as calmly as if she had known of it slumbering within his breast for years seemed to him to be neither unreal nor remarkable.

He turned his face back to the tent, but there was no movement there. He knew that there—alone—the girl was recovering from the tremendous strain under which she had been fighting, a knowledge that engulfed him. He sat down, facing the lake. For the first time his mental faculties began to adjust themselves and his blood to flow less heatedly through his veins. For the first time he had had undertaken—began to impress itself upon him. He had thought that "in asking him to fight for her she had done what he had never dreamed of that word in mind. But at the outset she had plunged him into mystery. If she had asked him to draw the automatic at his side and leap into battle under which she had been fighting, he would have been surprised. He had expected something like that. But this other—her first demand upon him! What could it mean? Shrouded in mystery, it was like the abyss of a world made no effort to uncover her secret, he was to accompany her back to her home as her husband! And after that—at the end she was to go out into the forest, and that he would never see her had known him. He wondered if she had meant these words literally, too. He smiled, and slowly his eyes ceased the lake. He was already beginning to understand, and in mystery which she had told him he could not unveil if he lived a thousand years. But he could at least work out the edges of it.

(Continued next week.)

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April 27

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No matter how her washing was. Some mornings they spied the chimney. But the snow-white would be, fresh and wooling in her. And the neighbors and their dogs. One of them was—there was a birth a 1907

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- Does it Wash? The "1907" water soluble dyes drives the dirt thoroughly clean.
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- Is it Safe? The "1907" water soluble dyes 50 years' experience wood for material is not damaged and will give you the best of all on important

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**She was the  
Riddle of the  
Neighborhood**

No matter how early her neighbors got up, her washing was always first on the line. Some mornings 'twas nearly seven before they spied the smoke curling slowly from her chimney. But within the hour—up went her saw-white washing. Then they would stamp her, fash and fuss, feeling her chickens or wading in her garden. And the neighbors wondered, and they plotted, and they found her cost. One of them went to borrow clothes-pins, and—there sat my lady, grating pushing-back and forth a "1900" Gravity Washer.

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C W MORRIS, MANAGER  
1900 WASHER COMPANY  
357 YONGE STREET, TORONTO

**The Upward Look**

**Travel Thoughts—No. 29**

*Aims in Life.*

"WHENEVER do ye spend money for that which is not bread? and your labor for that which satisfieth not?" La. 6:2.

At Skagway we left the ship to take the Alaska-Yukon Railway to Lake Bennett. The scenery all the way was so grandly thrilling that the impression it made upon me was for the first time I had difficulty in taking a full breath.

Most of the way we could follow the old trail, taken by the gold-seekers. One could not but think of the thousands tramping it night and day, each with his load, hurrying, hastening to strike the claim, the earliest possible; for the gold that perished. We talked with a woman that had subsisted it with two hundred strange men, three hundred and fifty miles into the interior, for the sake of this gold. We heard of two other women that did the same. When they had to return, having lost all, they attempted to take a shorter trail ninety miles long. They went without food and blankets, shooting game by day and sleeping between fires at night. They had almost made it when they reached a great glacier which they had nearly crossed, when they came upon a deep crevasse with a raging glacier stream circling at the bottom. Over this they could not go, so were forced to return those long, weary miles in addition to the three hundred and fifty. At the end no one could recognize them, they were so black and gaunt and spent; all for this gold!

One old prospector had dug for years in vain, but was confident that that then unexplored land must contain gold. But at last, discouraged with his fruitless quest, he started back over the mountains. When he reached the summit and looked down into the valley with a groan, he sank into the ground. The thought, the long loneliness and disappointment must have afflicted his reason, because where he had expected to find gold, were hundreds of tents and shacks and men. Gold had been discovered and these were the seekers.

As these people had staked all in this, their search for gold, how many are doing this all the time the world over! Gold is necessary to a certain extent, but never when the possession of it is the main object in life, for the mere material things it will purchase.

One of the saddest of modern trends is that in choosing their life-work our youth and their parents decide upon that which brings in the most money, not upon that which brings the truest happiness or that by means of which one can do the most good. The great question in life which is asked so often is, "How much is he worth?" Our Creator asks not, "What has he?" but "What is he?"

What each must ask himself more often is not "What have I?" but "What am I?"—J. H. N.

**Light on Scriptural Prophecy**

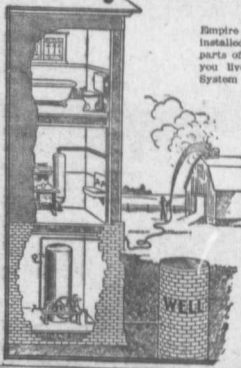
**The Lord's Return**

If the Lord is going to return to the earth, again, what should our attitude be to that event? We should earnestly desire it. 2 Peter 3, 12-13; 2 Timothy 4, 8. We should pray for it. Rev. 22, 20. We should be ready for it. Math. 24, 44; Luke 21, 34-36; Math. 25, 1-10; 1 John 2, 28. We should be watching for it. Luke 12, 36-37; Heb. 9, 28; Math. 24, 42-44. Math 25, 13.

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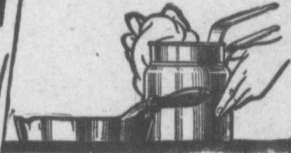
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### Does God Bless the Righteous

MOST Christians seem to hold the belief that if they walk according to God's will He will bless them in worldly matters as well as spiritually. What foundation is there for this belief?

We are assured in Math. 7:11, that God is willing to give good things to them that ask Him, but we are also told in Math. 6:19-21, not to lay up treasures on earth, but in heaven, for where our treasure is there our heart will be also. The people of Israel, before Christ came, while they were still under the law, were promised blessings on earth, nationally and as individuals, if they served God with their whole heart according to the law. In this manner they were to be the means of revealing to the nations around them the blessings that followed from serving the one true God. They sinned and later refused to accept Christ as their Messiah. Therefore, they have been cast off temporarily, but are to be restored to favor again. (Acts 15:14-17.)

When the Jews were cast off the age or dispensation of law ended, and the age or dispensation of grace was ushered in. We are living in this last age. The rewards promised to us are spiritual rather than earthly. They are better in every way than those given to the Jews. (Hebrews 8:6.) "As believers born again, we have a new nature and belong no longer to the earth, but we belong to heaven." "If, therefore, you have been raised with the Christ, seek the things which are above, where the Christ is sitting at the right hand of God; have your mind on the things which are above, not on the things that are on the earth." (Col. 3:1.)

"In the world ye shall have tribulation." (John 16:33.) "Let your conversation be without the love of money, satisfied with your present circumstances." (Heb. 13:5.) "For here have we no continuing city, but we seek one to come." (Heb. 13:14.) God delights to bless His children on earth, but because He wants us to occupy our minds with Him and with thoughts of how best we may serve Him on earth, the emphasis now is not on earthly, but on heavenly rewards. "The natural man lives for the earthly things, and strives for the things which are seen. His delight is in treasures which are here below, and connected with this life is care, worry, anxiety and at last the loss of that which was cherished." (Note Luke 12:15 to 21.)

### Lessening Housecleaning Terrors

By "Aunt Fanny," Peterboro Co., Ont.

ONCE upon a time, housecleaning days were the maddest and the saddest days of the year. "No, that scraping sound isn't one of my own invention, but I read it some place not long ago and it appealed to me as being very expressive." In the days of our mothers and grandmothers, the advent of the spring season was the signal to commence turning everything topsy-turvy from garret to cellar, and there would be such a siege of dust-washing, papering and painting, that the house would be in a state of confusion for probably weeks at a time.

We don't clean house that way now, days though, for which we should be truly thankful. I got one, however, have not yet worked out a plan to follow when house cleaning, so satisfactory that it cannot be improved on, and I imagine there are plenty of others the same. I am sending along a few of my suggestions, however, with the hope that other readers of this department will follow suit.

My first raid this spring was made on the attic, in one part of the house that I don't like particularly to clean, as there are always a number of articles which have accumulated during the year to dispose of in some way. I picked up courage on a bright, sunny day last week, brought and set to work. Really it wasn't such a big job after all. The things which required airing were taken down and hung on the clothesline, while I swept up, washed windows, sorted the articles of clothing and put them in their proper places, or discarded those no longer useful. I also went through the summer clothing and arranged to have it cleaned by my hands on the various articles whenever they are needed. The boxes and trunks in which I keep the winter clothing and bedding, were cleaned and aired, ready to receive the articles when the weather is warm enough to discard them.

To-day I cleaned the ceiling. It may seem rather ridiculous to do the attic, then the cellar, but I like to get the worst jobs done first, and the cellar can be cleaned any day if the weather is cool and wet. Some housewives might object to cleaning the cellar before the furnace fire is out. I don't consider, however, that much dust and dirt will accumulate from now on as far as the furnace is concerned. Our furnace is in a small room in the cellar separated from everything else, so that dirt and dust is reduced to a minimum at all times. Any vegetable and apple still in the cellar were picked over and all decayed matter removed, shelves were washed off and as a finishing touch I gave the floor, which is cement, a good cleaning. As the cellar floor slopes slightly to one end, so that the water runs off into the drain. My cellar smells sweet and clean again and I am exceedingly thankful that I have some of my housecleaning out of the way at least.

If nothing intervenes, I intend cleaning the pantry tomorrow. One has to put in so much time cleaning the pantry and kitchen without getting showy results, that I don't like leaving them till the last. But then, we have talked ice cream, and must get a good rest to-night, so that I will be "feeling fit" for to-morrow's duties.

Poast Omelet: Soak a slice of bread in half a cup of fresh milk. Beat two eggs, whites and yolks separately, and turn on the milk and bread, together with a half cup prepared russets and a little salt and pepper. Pour in buttered pan and cook as usual.

WHITE DOTTES,  
 Michael N.J.

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**THE CANADIAN FAMILY COOKBOOK**

After carefully considering the merits of many cook books, we have come to the conclusion that the needs of Our Women Folks is, in practicality, containing only recipes that do not demand rare and expensive ingredients and is just the recipe required in the farm kitchen. For this reason, it is Recommended By Our Household Editor.

It contains 150 recipes with recipes for preparing soups, fish and meat vegetables, pastries, preserves and jellies, candies, beverages, dishes for the sick, toilet preparations, etc., with blank pages for writing recipes, a chapter on dinner giving and a complete set of tables.

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**CIRCULATION DEPARTMENT,**  
Farm and Dairy, Peterboro, Ont.

**Blue Jay**  
THE blue jay is a conspicuous member of our bird population east of the Plains, especially in autumn, when his brilliant plumage contrasts vividly with the brown foliage. Even in winter he stays with us along our northern border. In spring and summer, while by no means uncommon, the blue jay is not so often noticed, as the retiring disposition which he assumes during the breeding season assists in protecting him from enemies. This also allows him to carry on with considerable impunity that inglorious practice of nest robbing of which, in a measure, he has been rightfully accused.

Examination of 530 stomachs collected at all times of the year in 30 of our Eastern States and Canada, shows that insects comprise about 23 per cent of the yearly sustenance. About three-fourths of these are injurious, the remainder being neutral or beneficial. Of the injurious insects grasshoppers form the largest portion; in August nearly a fifth of the food. Caterpillars are conspicuous in July



and August and at this time average about a tenth of the stomach contents. In the consideration of the vertebrate food of the blue jay we are confronted with the problem of the destruction of wild birds and their eggs. Special search was made for every possible trace of such material in the stomachs, and in 6 of the 530 were found the remains of wild birds or their eggs. As this trait of the blue jay appears to be most pronounced during its own breeding season, it is justifiable for many birds which have suffered from his boldness early in the season, to raise another brood unimpeded.

Complaints that the jay is the source of considerable damage to corn in the fall has been verified to a certain degree by stomach examination. This grain is taken in every month of the year, but in greater quantities during winter and early spring, when much of it is necessarily waste, and it forms about 18 per cent of the yearly food. Cultivated fruits of various kinds are eaten from June to the end of the year, and the 16 per cent taken in July apparently justifies this score. The favorite vegetable food of the blue jay is made of various kinds, acorns predominating, but bechnuts, chestnuts, chinquapins, and hazelnuts also are relished. Wild fruits are eaten during the summer and fall and constitute about 7 per cent of the yearly sustenance.

The blue jay probably renders its best services to man in destroying grasshoppers late in the season and in feeding on hibernating insects and their eggs, as they do in the case of the tent caterpillar and brown-tail moth.

The blue jay's vegetable food, with the exception of some cultivated fruit and corn in the fall, is largely neutral. The severest criticism against this species is the destruction of other birds and their eggs.

—Horseshadish roots should be planted as early in the spring as possible. Small straight roots the size of a lead pencil and six inches long may be used. Set them twelve to eighteen inches apart in the row.

**Ontario's New Dairy Legislation**  
(Continued from page 13.)

tests and start complaints. At first he was out and out opposed to the Act until he heard that they had the option of adopting the flat plus 2 basis. He did not know as yet how his patrons would look upon compulsory testing. The question of payment on a quality basis had been discussed at three of their annual meetings, and had been voted down by a majority of five or six to one on each occasion. Makers might be so surmised with the regular work that the testing would be left to assistants, with the result that suspicion might be aroused. He was in favor of the government sending out official testers. If makers had to do the testing, it would mean added expense and extra work, the latter no small item when competent makers are hard to secure.

The Act does not come into force until March 31, 1917. This is to allow makers ample time to qualify themselves for making the test and to educate the public regarding the proposed change. Instruction will be given by official cheese factory instructors. On this point Mr. Gillespie stated that he did not anticipate that much difficulty would be met in having the makers qualify. A large number of them were already proficient in the use of the Babcock test, and any man with sufficient intelligence to secure his diploma as a cheese maker should have little difficulty in qualifying under the Act.

**Pure Seed Raises Yields and Profits**  
By P. E. Miller.

**PURE-BRED** seed grain, adapted to the conditions under which it is growing will increase crop yields very materially over common or unimproved seed. Any farmer can grow his grain seed at little cost. A few dollars spent for pure-bred, improved seed grain will be sufficient to grow enough seed to plant several acres the following year. This improved seed should be put in a plot by itself or at one end of the regular field. Care should be taken in harvesting so that it is kept separate from the rest of the grain. If the main field is growing a different variety, it is well to put this seed in a plot by itself. The seed should be well prepared and clean. When harvested the grain should be well shocked and capped to avoid damage by the weather. This will insure seed grain of higher quality and stronger germination.

The next year the seed produced on this pure-bred seed plot may be used in the general fields, and in two seasons' time the farmer will be growing pure-bred grain. This kind of grain, thoroughly cleaned, treated for smut and grown on clean land, will enlarge the yield and improve the quality of the small-grain crop, and a larger crop will be obtained at little increase in the cost of production. The sale of pure-bred grain for seed will make a profitable side line, too.

This spring is a good time to begin making the change so you will put the farm upon a pure-seed basis.

**Dairy Notes**

THE time to feed dry cows liberally is when they are milking well. Don't wait until they begin to fall off in their flow.

Pure, fresh water is one of the first essentials to a good milk flow during the hot, summer weather. It should be where the cattle can get it at any hour of the day or night.

Successful dairying is a three-sided affair—breed, feed, weed. Upon close application of these three principles, depends the success or failure of amateurs and professional alike.



**A handy book on home decoration**  
(With furnished rooms in colors)

Think of the time saved in worry and experimenting. Think of the possibility of avoiding serious mistakes. Some of the sub-headings show just how practical this book is: "The Influence of Color"; "Light and Shade"; "Harmony in Colors—How to get the Right Effect"; "Value of Conventional Designs"; "Plain Tinting"; "Color Values."

**Alabastine**

**Sanitary Wall Tints**  
If you are going to decorate a room or your whole home, exclude it from a coin or stamp and get a copy of "Homes Handful and Beautiful." It gives many a useful hint for the treatment of bed-rooms, living-rooms, dining-rooms, halls, parlor, including even the kitchen.

THE ALABASTINE COMPANY LIMITED  
89 Willow Street Paris, Ontario

**CLOVER SEEDS**

|                                     | Per Bus.    |
|-------------------------------------|-------------|
| No. 1 Red Clover                    | ..... 12.00 |
| " 2 Red Clover                      | ..... 15.50 |
| " 1 Alsike                          | ..... 12.50 |
| " 2 Alsike (Northern)               | ..... 11.00 |
| " 1 Alfalfa (Northern)              | ..... 16.00 |
| " 2 Timothy                         | ..... 5.50  |
| (This seed grades No. 1 for Purily) |             |
| " 3 Timothy                         | ..... 5.00  |
| White Blossom Sweet Clover          | ..... 13.00 |
| O.A.C. No. 72 Oats                  | ..... 30.85 |
| Marquis Spring Wheat                | at 1.20     |
| O.A.C. No. 23 Barley                | at 1.25     |

—Terms—Cash with orders.  
Bags extra at 25c. each, on all orders East of Manitoba of \$25.00 or over we pay the freight.

We Guarantee Seeds to Satisfy or ship back at our expense. Ask for Samples if necessary.

**Todd & Cook**  
Seed Merchants  
STOUFFVILLE ONT.

**ATTRACTIVE DINING CAR SERVICE.**

Probably nothing helps more to make a railway journey really enjoyable than a visit to the "Dining Car," especially if it be a Canadian Pacific Dining Car, where the passenger is assured of the highest form of efficiency in the culinary art, the choicest provisions the market affords, prepared on the scientific principle known as "Dietetic Blending."

Your favorite dish, as you like it, may be enjoyed at reasonable cost, amidst ideal surroundings, while travelling on the Canadian Pacific.

# Independent of Hired Men



That is the happy position of the Dairy Farmer who has an

## EMPIRE MECHANICAL MILKER

In half an hour one man can milk from 10 to 15 cows with a small "Empire" outfit consisting of one double unit. One man can operate two double units. This makes milking a "snap".

With an "Empire" you can keep more cows—milk them regularly and uniformly—be independent of hired men—and still be free of the old-time drudgery of milking after a hard day's work.

The action of the "Empire" scientifically imitates that of a suckling calf, drawing the milk in sports, and in most cases it actually increases the flow of milk. It cannot harm the cow, and it protects your milk from dirt, germs and six's odor.

We have an interesting booklet illustrating and describing the "Empire" mechanical milker which we will send you on request. Write Dept. 5

The Empire Cream Separator Co. of Canada, Limited  
MONTREAL, TORONTO, WINNIPEG.



### Contagious Abortion: Its Spread and Control

(Continued from page 5.)

organs—vagina, uterus, oviducts, and ovaries—and learn the character of the disease. If it is curable, the necessary treatment should be applied; if incurable, the animal should be sent to the butcher.

When mammitis, or "parget", of the above described type occurs, each case should be handled by a competent veterinarian. The dairyman should always bear in mind the danger of this infection being transferred from the diseased quarter to the healthy quarters of the same cow, and to the healthy udders of other cows, through error on the part of the milker. A diseased udder should be the last in the stable to be milked, and the diseased quarters should be milked last. The diseased milk should be drawn into a pail partly filled with a strong antiseptic solution and safely disposed of, and the udder, as well as the hands of the milker, carefully washed and disinfected.

#### Treatment for Bull.

It is essential, in carrying out any plan of sexual hygiene, to include the bull. His sheath and penis should receive the same care as the vagina and vulva of the cow. In general, the sheath of the bull should be doctored two or three times a week throughout the year when not in active use. At the time of breeding, the parts should be doctored shortly before and immediately after each service.

The most practical method for carrying out the doctored of the vulvae of cows and the sheath of the bull and washing the vulva, tail, thigh and udder, from the standpoint of efficiency and economy, is as follows:

For the irrigation of the genital organs and the tail, vulva, thigh and udder of the cow, we recommend a gravity apparatus consisting of an ordinary galvanized pail of about six gallons capacity (for large herds), fitted with a stopcock. To this stopcock attach a pure gum rubber stomach tube. Having filled the pail with the desired solution, elevate the apparatus to about three feet above the cow, thus securing sufficient gravity pressure to cause the solution to flow freely. This is most conveniently accomplished by running the pail on a manure track or special track constructed for the purpose. The end of the stomach tube is inserted into the vagina and the solution allowed to flow into it by gravity until it is completely filled. Any tinner can make the pail to order. The stomach tube may be obtained from any dealer in veterinary instruments.

The tube recommended for cows is too large to enter the sheath of the bull freely. Instead, one should use a pure gum rubber catheter. Since the catheter is too short to afford the desired gravity pressure, its length should be increased by the addition of a piece of ordinary rubber tubing of about the same size. The pail recommended for cows is unnecessarily large for bulls, and should be replaced by a vessel of one gallon capacity. In doctored the bull, the tube is first to be filled with the fluid, the end of the catheter introduced well inside the sheath, and the sheath opening compressed by the hand until the sheath is completely distended.

"The pig that is being grown and fattened for market," says the Indiana Farmer, "should have between six-tenths and seven-tenths of a pound of digestible protein daily, per 100 lbs. of live weight and this should be fed during the growing period. During the fattening period about half of this amount is sufficient. The reduction, however, should be made gradually, and extended during a period of four weeks time."

### Better Butter— Bigger Profits!



If you wish your butter to be smooth and uniform, use the

## "BRITISH" Butter Worker

Adopted by the best dairies in Great Britain and Canada. Makes the butter firm—even consistent all through. Results in better butter and bigger profits!

Sold by dealers everywhere. These come—10 lbs., 25 lbs., and 50 lb. sizes. MAXWELLS LTD. St. Mary's, Ont.

SHIP YOUR BUTTER & EGGS to us. We are not commission merchants. We pay market prices and remit promptly.

THE DAVIES COMPANY LIMITED  
Established 1854. TORONTO, ONT.

A Sure Prize Winner Windsor Dairy Salt

THE CANADIAN SALT CO. LIMITED

BOOK ON DOG DISEASES and how to feed H. Clay Glover, V.S. 118 West 3rd St., N.Y.

ASK our sales office near you for prices and terms on fertilizers adapted to your soil and crop.

Sold for Canada Booklet-Free The American Agricultural Chemical Co. New York, Boston, Buffalo, Detroit.

THE FARMERS SEEDSMAN SEEDS FIFTY YEARS SERVICE 1866 1916

We pay railway freight on all orders in Ontario and Quebec over \$25.00. Write for our Complete Price List. It is free.

|  |                                     |                     |
|--|-------------------------------------|---------------------|
| Gov't Standard Bush  | Seed Corn (Bags free)               | Per bush.           |
| No. 1 Red Clover, Almost Extra No. 1 for purity, \$38.50   | 1914 or 1915                        | 70 lbs.             |
| No. 1 Red Clover ..... 15.50   | Ontario Beans                       |                     |
| No. 2 Red Clover ..... 14.75   | Wisconsin No. 7 \$3.00 \$3.80       |                     |
| No. 1 Alsike ..... 11.00   | Golden Glow ..... 3.00 1.75         |                     |
| No. 2 Alsike ..... 11.00   | Baldy ..... 2.00 1.75               |                     |
| No. 1 Timothy (Almost Extra No. 1 for purity)..... 8.75  | Lemming ..... 2.00 1.75             |                     |
| No. 2 Timothy, slightly hulled but Extra No. 1 for purity (bargain)..... 8.75  | White Cap ..... 2.00 1.75           |                     |
| No. 2 Timothy ..... 8.25   | Longflow ..... 2.00 1.50            |                     |
|  | N. Dakota ..... 1.90                |                     |
|  | Comstock ..... 1.90                 |                     |
|  |                                     |                     |
|  | Grain—Sacks Free.                   |                     |
| Ontario Variegated No. 1   | O.A.C. No. 72 Oat—Registered        | Per bush.           |
| ..... 35.00  | Improved                            | \$3.40              |
| Ontario Variegated No. 2   | O.A.C. No. 73 Oat—registered        | ..... 3.00 and 1.00 |
| ..... 30.00  | American Banner (Reg.)              | ..... 1.25          |
| Montana (Northern Crown) No. 1   | (In sealed bags of 24 bush.)        |                     |
| ..... 17.50  | Am. Brown Banner (Unreg.)           | ..... .83           |
| Loyman's Grimm, No. 1, 15 lb.  | Siberian Oats ..... .83             |                     |
| ..... 75c  | O.A.C. No. 21 Barley, Registered    | ..... 1.40          |
| Alberta Grimm, No. 1, 15 lb.   | O.A.C. No. 21 Barley, un-registered | ..... 1.10          |
| ..... 65c  | Marquis Spring Wheat                | ..... 1.65          |
| Allow 20c for each cotton bag required for Clover & Timothy.   | Blue Eyed ..... 1.65                |                     |
| Manuel Seed.   | Golden Vio. Peas ..... 2.25         |                     |
| Pritsaker, Shadupur and LeVidain   | Canadian Beans ..... 2.15 and 2.50  |                     |
| No. 1 lb. package, postpaid, at 30c; 5 lb. express or freight collect, 25c lb. in bulk.  | Early Britain Peas ..... 2.50       |                     |
| 2 lbs. or more ordered of one variety, 25c lb. Same postpaid, 25c lb. Yellow Intermediate, M. A. in 6 of 4 lb.                           | Prussian Blue ..... 2.25            |                     |
| Long Red, Plant No. 1, 2 lb. 25c, 2c per lb. lower than above prices. White Intermediate Carrot, 25c per lb. Ask for complete catalogue. | Black-Eye Marrowfat ..... 2.15      |                     |
| Potatoes, per bag, wire, and Green Mountain  | Spring Eye ..... 1.70               |                     |
| ..... \$2.75   | Hope (Dwarf) Peas ..... 1.90        |                     |
| Early Ohio ..... 2.00  | Thousand headed Kale, per lb.       | ..... .22           |
|  | Sorghum, per 100 lbs.               | ..... 5.00          |
|  | Catch Beans, per 100 lbs.           | ..... 10.00         |

Geo. Keith & Sons, 124 King St. E. Toronto

You'll find the Advertiser in FARM AND DAIRY are advertising reliable seeds. They want to know you; also want to know where you saw the Ad. When writing them don't forget to tell them you saw the Ad. in FARM AND DAIRY.

April 27  
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Western oats  
is being don  
Barley ports  
ground 44c;  
45c; food 4  
American, 5  
to 77c; food  
58c.

# With Labor Scarce This Year the Standard is a Real Necessity

The scarcity of farm labor is a very pressing problem. Every means must be taken to save both time and labor, because there are fewer to do the work on the farms this year. Certainly, the old-style gravity method of separating cream should be replaced by the labor and time-saving modern method. It only takes 15 minutes to skim the milk (if you buy the right size) with a

## Standard Made in Canada Cream Separator



—and only a few minutes to wash the separator thoroughly; a mere fraction of the time taken by tedious gravity method.

The Standard will save you more time than an ordinary cream separator. It is an exceedingly light and quiet machine, and a person therefore does not feel placed exactly at the right height for easy turning, and it's a short lift to pour the milk into the most comfortable time and labor, as well as to establish remarkable skimming records. Even the oiling is done automatically, the oil reservoir only requiring to be filled

every two months. Just think of what such a machine would mean to you this busy year.

Think, too, how much extra money it would make for you. Government Dairy School Tests show that it skims down to .01 per cent., which means that it loses but one-tenth of a pound of butter fat, or 2½ cents worth of cream (at 25c a lb.), in every 1,000 lbs. of milk skimmed. You lose about \$12 per cow per year by using gravity methods instead of the Standard cream separator.

Don't delay your purchase. Now is the time to get a Standard. These are prosperous times on the farm, and almost every farmer can afford to own a high-class

separator. In fact, from a dollar and cents standard-point no-dairy farmer can afford not to own a Standard.

Write for our separator catalog showing Government tests, skimming tables, etc. It's well worth having, and is free.

## The Renfrew Machinery Co., Limited, Renfrew, Ontario Agencies almost everywhere in Canada

### Market Review and Forecast

**TORONTO, Monday, April 24.**—The spring season is late, but not too late to interfere with production. A hard frost that fell when has come through the dangerous month of April with little damage. The dairy season is now on with a greater volume of production than at this date in any previous year.

Changes in quotations have not been important. Wheat is lower, coarse grains a trifle stronger, eggs promising a reduction, and other products steady.

#### WHEAT.

The wheat market has changed but little during the week. When the enormous supplies of wheat that are now being held in the United States and in Canada are taken into consideration, the situation would appear to favor reductions in price rather than an advance. Quotations on No. 1 Northern at Port William are \$1.13; No. 2, \$1.12½; No. 3, \$1.08½; Ontario wheat, No. 1 commercial, \$1 to \$1.02; No. 2, 98c to \$1; No. 3, 95c to 97c; feed wheat, 85c to 87c.

#### COARSE GRAINS.

The coarse grain trade has been firm, and prices have advanced somewhat, especially on Western oats. Quotations: Ont. C.W. No. 2, 77c; Wm. 46½c; No. 3, 44½c; No. 1 extra, 47c; No. 1 feed, 43½c; Ontario oats, No. 1, 41c to 42c; commercial, 43c to 44c; American corn, 85c; Canadian, 79c to 77c; peas, \$1.05; No. 1 barley, matting, 63c to 65c; No. 2 feed, 58c to 62c; hickory nut, 83c to 79c; rye, No. 1 commercial, 92c to 91c; remainder, 82c to 85c. At Montreal, a feature of the export grain trade is the good demand from foreign buyers for Canadian Western oats and considerable business is being done for shipment via United States ports. Data 1½c. No. 3, are quoted 41½c; No. 2, 40c; No. 1 feed, 42½c; local white, 63c to 65c; corn, American, 85c to 87c; barley, matting, 75c to 77c; feed, 63c to 71c.

#### HAY AND STRAW.

Orders are being on track as follows: Beland hay, best grade, \$19 to \$20; low grade, \$14 to \$17; balad straw, \$8.50 to \$7. At Montreal, No. 2 is quoted \$20 to \$21.

#### MILL FEEDS.

Quotations are: Bran, 32½c; shorts, 32½c; middlings, 33½c; good feed flour, bag, \$1.69; shorts, 15c; middlings, 12c to 13c; molasses, 20c to 22c.

#### POTATOES AND BEANS.

Potatoes are selling at the same levels as last week. Best, Ontario, \$1.50, out of store; Delaware, \$1.25 to \$2; in cartons,

15c less. Montreal quotes Green Mountains at \$1.75 to \$1.85.

#### SEEDS.

Wholesalers are selling to the country trade:

|                             |         |    |         |
|-----------------------------|---------|----|---------|
| No. 1 red clover, ewt. .... | \$25 00 | to | \$28 00 |
| No. 2 do. ....              | 24 00   | to | 26 50   |
| No. 3 do. ....              | 23 00   | to | 25 00   |
| No. 1 alfalfa, ewt. ....    | 21 00   | to | 22 00   |
| No. 2 do. ....              | 20 00   | to | 21 00   |
| No. 3 do. ....              | 19 00   | to | 20 00   |
| No. 1 alfalfa, ewt. ....    | 18 00   | to | 19 00   |
| No. 2 do. ....              | 17 00   | to | 18 00   |
| No. 3 do. ....              | 16 00   | to | 17 00   |
| No. 1 timothy, ewt. ....    | 12 00   | to | 14 00   |
| No. 2 do. ....              | 10 00   | to | 11 00   |
| No. 3 do. ....              | 9 00    | to | 10 00   |

#### HIDES AND WOOL.

Calfskins were the strong point on this market, advancing two cents a pound for country grades. Wholesalers are buying for country hides as follows: Hides, 12c; 17½c; green, 14c to 15c; part cured, 17c to 22c to 23c; part cured, 21c to 22c; deacons or bob oak, \$1.75 to 18½c; horses, lake off, \$3.00 to \$5.00; sheepskins, 55c to 57c. The wool market has been very quiet. Unwashed wool being practically off the market until warmer weather sets in. Unwashed brings 25c to 30c.

#### DAIRY PRODUCE.

Receipts of butter are rapidly increasing, and the market is uneasy in proportion. On this market, creamery prints have been reduced to 56c to 58c; creamery solids, storage, 53c to 55c; choices prints, 27c to 28c; bakers, 26c to 28c. At Montreal, choice creamery is quoted 52c to 54½c; second, 50c to 51½c. The cheese market needs to dullness. Montreal quotes Swiss Emmentaler, 18½c to 19½c; best Eastern, 17½c to 18½c.

#### EGGS AND POULTRY.

Lower prices for eggs are predicted for this week. 30c to 32c at country stores. Here, special candied (Ontario), new-laid, are quoted 32c to 34c; some-laid, candied, 25c-centa, 24c to 25c. Montreal quotes

#### POULTRY.

Old-laid, pound ... 18c to 20c 25c to 27c  
Chickens ... 17c to 19c 22c to 24c  
Milk-fed, frozen ... 17c to 20c 20c to 27c  
25c to 26c

#### LIVE STOCK.

Butter buyers were still a feature of the market, although the run of cattle was lighter than last week. Packers had moderate needs to fill, about sufficient to clean up offerings, and prices held steady throughout the week. Trade was active

### GREENFIELD HOLSTEINS

Offers a fine show bull, 16 mos. old, weighs 1,200 lbs. Dan, Lady Colan this De Kol, 23 lbs. in 7 days. Sire, Silverdale Walker Seta, whose dam made 23.75 lbs. in 7 days. Price cheap for quick sale. Apply to JOHN STEINACKER, R. R. 5, STRATFORD, ONT.

### HIGH LAWN HOLSTEINS

Only 2 bull calves left. They are bred by a son of "May Echo," and are fine individuals. Write us. JOSEPH O'REILLY, R. R. 9, PETERBORO, ONT.

**SIMMERS' NEW ADANAC PRIZEWINNER ONION PACKET 20c 3 FOR 50c**

If you want to grow LARGE ONIONS try this one. Start them early and you will be surprised and pleased with the result. CATALOGUE FREE ON REQUEST.

**J.A. SIMMERS, LIMITED TORONTO, ONT.**



THE KETTLE DISPERSION SALE.

In this issue notice is given of the complete Dispersion Sale of cow herd (The Kettle) the property of C. C. Kettle, Wilmerville, Ont. In this offering are 15 head, sired by Grace Payne and Sir Marcus, brother of the late Gushie Carnegie, that are an exceptionally fine lot. Among the older ones are Countess Wynne French, an 8-year-old cow with an official record of 21 1/2 lbs. at five years of age. Out of her are four granddaughters, Countess Maude French, with a private milk record on a 2-yr.-old of 10,260 lbs. in 12 months, another sister, Countess Wynne Schulling, official seven day record as Jr. 2-yr. of 135 lbs. butter (these two heifers won third prize as producers of cow herd in Toronto in 1914); also Queen Wynne Schulling, first prize prize yearling at Toronto in 1915 in strong competition. Another of her heifers was fine in London in 1915, as junior calf. Her granddaughters were first in London in 1915 as senior calf. Countess Wynne French is a very large and fine individual. All of the above are included in the sale. Wynne Schulling's official record for seven days at 4 yrs. was 1477, 3 mos. after calving, and her best day's milk when fresh was 13 lbs. Daily average 12 1/2 lbs. and record at 4 yrs. was 13 1/2 lbs. the butter, and Lady Maroon Schulling's 2 yrs. was 13 lbs. (official). She is a fine show cow. Won a prize winner at Toronto and London in 1915. A daughter of hers was one of four that won first in the calf herd at London in 1915. The whole herd are large producers of milk and fat. The sire, Grace Payne and Sir Marcus, is a large of Merionis Acridilla, whose official seven day record is 27 1/2 lbs. butter. Her first calf, a daughter with an official seven day record, at 1 yr. 10 mos. old, of 17 1/2 lbs. butter. All the daughters are two-year-olds, so have not had a chance to test, but their dams have freshened, and are doing well. He was sire of the first prize senior heifer calf; first prize junior heifer calf and first prize bull herd at London in 1915. The thirty-six head are all selected by high breeders and are in the pink of condition. This is an entire dispersal of Mr. Kettle's herd. The man who made world-beating choice Holsteins will not fail to be on hand. Drop a postal for a catalogue and note the rich breeding offered.



over 23 lbs. 5 others over 21 lbs. and 8 from 19 to 21 lbs.—all as 2-yr-olds, and 2 of them 3 with records were made in other hands, a list that satisfied us as to this Bull's great worth. Many are bred to May Echo Sylvia's son "CHAMPION," for whose single services we have for \$5,000.00. Several others bred to her other son, Avondale Pontic Echo, sold last year. We shall also offer several young bulls with dams from 18 lbs. to 32 lbs.—all with extended backing, and good individuals. This is an all day's sale—from 10.30. Lunch at Farm.

A. C. HARDY, Proprietor

BROCKVILLE, ONT.

AVONDALE FARM'S SECOND PUBLIC SALE

BROCKVILLE, ONT., MAY 17th, at 10.30 a.m.

This notice just marks a few of the high points. Our newest Herd bull is CHAMPION MAY SYLVIA PONTIAC, a son of May Echo Sylvia and Spring Farm Pontic Cornucopia, Francis M. Jones' son of the great 44.18 pound cow, K. P. Pontiac Lass. Note that May Echo Sylvia (still in test) already has over 41 pounds butter in seven days and 364 lbs. of milk, the best day so far 145, being a record in the breed. We shall offer May Echo Sylvia's year old grandson from her daughter by King Pontic Artis Canada and sired by the great 44.18 lb. bull of P. M. Jones; the only bull in America having both granddams with over 40 lbs. Average 42.60. CANADA from 6 mos. to 3 yrs.—all milking, have records 16 to 21 lbs. as 2-yr-olds.

Six (at least) daughters of WOODCREST SIE CLYDE—all youngsters of surpassing quality. ALICE TENSEN, with record of 29.12 and 117 pounds in 7 and 30 days, and over 100 lb. milk in 1 day, will be offered; she is bred to "CHAMPION." Several others with records from 25 to 28 lbs.

Remember, that King Pontic Artis Canada has now 32 tested daughters—the most in Canada—among them 2 with records were made in other hands, a list that satisfied us as to this Bull's great worth. Many are bred to May Echo Sylvia's son "CHAMPION," for whose single services we have for \$5,000.00. Several others bred to her other son, Avondale Pontic Echo, sold last year.

We shall also offer several young bulls with dams from 18 lbs. to 32 lbs.—all with extended backing, and good individuals. This is an all day's sale—from 10.30. Lunch at Farm.

BROCKVILLE, ONT.

JAS. BENNING'S DISPERSION SALE.

A CHOICE lot of Ayrshire cows, half-bred and bulls from the bloodstock at the sale of Jas. Benning, held at Wilmerville, April 18. Sixty-four head were disposed of by Auctioneers, Phillips, of Huntingdon, Que., for a total of \$115, an average of \$1.80. The highest price paid was for Torra Cony 2nd (imp.), an eight year old purchased by R. C. Nease for \$120. The average price for the different classes was as follows: Cows over 3 yrs. 175; heifers two and three years old, \$205; heifers under one year, \$175; bulls over one year, \$222; and yearlings, \$16. Mr. Benning expressed himself as being well satisfied with the results of the sale, and following is the list of the animals sold for 1918 and over:

- Cows 4 yrs. and over: Redhill's Sally, \$175; R. H. Nease, Howick, Que.; Springhill Sally, \$150; Alex. Wynn, Lancaster; Glenhurst White Bath, \$150; R. E. Nease; Swiftslike Mountain, \$120; Conn. Hurley; Vaalbeck Hill; Glenhurst Phoenix 2nd, \$120; Albert Nease; Howick; Torra Cony 2nd, \$120; R. H. Nease; Glenhurst Torra Lorely, \$120; Albert Nease; Glenhurst Queen, \$120; John A. MacDonald; Williamson, Ont.; Glenhurst Wood, \$100; Hector Gordon; Housick; Cranley Fanny 2nd, \$100; Geo. Finlayson, Oranstown, Que.; White Polly of Glenhurst, \$100; Alex. Wynn; Glenhurst Pittmore 2nd, \$100; A. H. Graham, Hawke; Mrs. Mollie Ray, \$100; E. H. Maynard, Dexter, N.Y.; Loomisbeck's Drovers, \$100; E. H. Maynard; Pancy, \$100; B. J. Macmillan, Kirkhill; Glenhurst Queen, \$100; R. A. McInnes, Dalnaukie, Ont.; Glenhurst Flora 7th, \$100; Wm. Leitch; Cornwall Joan, \$100; B. J. Maynard; Helen 3, \$100; E. Wynn; Lancaster; Loomisbeck Flora, \$100; D. C. Thompson; Albert Que.; Queen, \$100; J. Brillingham; Cornwall; Polly, \$146; Wm. Thompson; Graham; Arvinton; Loomisbeck; Andie, \$175; Ernest Dufco, Aultsville.

- Heifers 2 and 3 yrs. old: Glenhurst Queen Flora, \$200; Conn. Hurley; Glenhurst Brown Pary, \$140; R. J. Dufco; Glenhurst Wynn Belle, \$120; Wm. Leitch; Glenhurst Lady Pearl, \$100; G. H. McInnes; Lancaster; Glenhurst Flora, \$100; Geo. Clarke, Myrtlebeach; Glenhurst Lady Mary, \$100; Geo. Clarke; Glenhurst Pancy, \$100; David Tait, Belvidere; Glenhurst Betty's Marie, \$100; E. A. Macmillan.
- Heifers under 2 yrs.: Glenhurst Cranley Fanny, \$200; W. Leitch; Glen Maple Belle, \$150; D. A. McInnes; Williamson; Scottish Gem, \$130; E. W. McElwray; Dalnaukie.
- Bulls over 1 yr.: Glenhurst Torra Mayor, \$50; J. H. Edder, Graham, Ont.; Glenhurst Torra, \$125; A. H. Graham, Hawthorn.
- Bulls under 1 yr.: Bull calf of Glenhurst Torra Lorely, \$117.50; W. Leitch; Glenhurst Redhill's Britannia, \$102.50; R. McDonald, Kirkhill.

**Wickmore's Gall Cure**  
 I will cure that Bettle  
 or Collier Gall whether  
 the horse is idle or at  
 work. At 25 cents, 50c and  
 \$1.00 or direct from  
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 Offers a few yearling Holstein heifers—Korndyke breed. Will sell right for quick sale. Apply to  
**ALBERT MITTFELFELDT, Port Davison Stn., T.H.B., Welfandport, Ont.**

**HOLSTEIN BULLS FOR SALE**  
 NO. 1—Born May 21st, 1915. A splendid individual, mostly white, sired by King Lotus Housewife. His own, grandson and one sister all have R. P. records.  
 NO. 2—Born Sept. 11, 1914, sired by King Lotus Colantha, mostly black. His milk, 800 lbs. butter. Grand dam gave at 4 yrs. 17,500. If you want good some write to  
**JACOB MOOK, R. R. 1, TAVISTOCK, ONT.**

"NATIONAL" Separator Owners NOTICE!

AS SUCCESSORS of the Raymond Manufacturing Company, Limited, of Guelph, Ont., it is absolutely necessary for us to revise the list of names and addresses of all owners of "National" Separators. This will enable us to give prompt service and attention in supplying parts for the "National" Separator—a machine that in the last twenty years has given remarkable satisfaction. We are anxious that the change of ownership should ensure full protection of the interest of every Owner of a "NATIONAL" SEPARATOR.

If it is your own interests, then, that we ask you to mail the coupon, properly filled out, TODAY. We will gladly send you the new book on "Superior" Separator facts, showing the improvements we have made in the new machine we now offer under the name of

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The ball-and-socket spindle, ensuring an absolutely self-balancing bowl, is but one of the new and exclusive features which place the "SUPERIOR" in the very front rank of cream separators. Even if you are not a "National" owner, mail the coupon today for the booklet.

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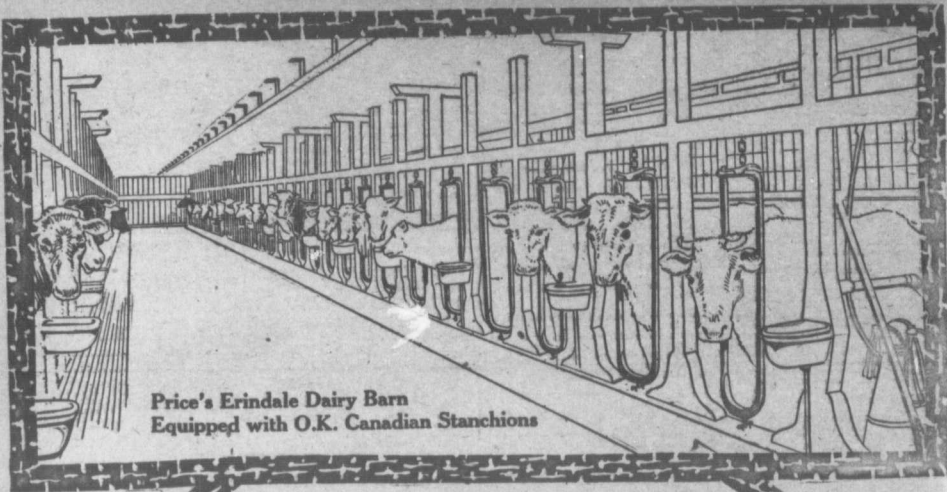
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Agents wanted for unrepresented territories.

I own a National Separator, Number \_\_\_\_\_  
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 NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_  
 Please send me catalogue of "Superior" Separators.  
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Price's Erindale Dairy Barn  
Equipped with O.K. Canadian Stanchions

## A Barn to Be Proud Of

It surely is a dandy! One of the finest and biggest in the country! Yet, why shouldn't you be equally proud of your barn? It's a mighty big source of profit to you, and well worth careful attention. Up-to-date equipment means more efficiency in handling the cattle, and, consequently, more profit for you. Every Dairy Barn in the country should be equipped with O.K. Canadian Stalls and Stanchions. Because results have proven them to be the most satisfactory barn equipment from every standpoint.

### OK CANADIAN Make Profits Sure

O.K. Equipment keeps your cows healthy and contented, thus increasing both the quality and quantity of your milk supply, and, consequently, your profits. Gives the cows plenty of room and freedom to shift around. Puts no weight on their necks. Does not tug or jerk their heads. Big knees or bruised shoulders are unknown with this equipment.

Some Stanchions have a weak lock, but the O.K. combination gravity and spring lock is certainly a dandy. It is wide at the mouth, and tapers in towards the notch. This makes it easy to insert the swing-bar. The catch is very strong and secure, but simple to operate. Yet no cow can open it, once it's fastened.

The swing-bar on the O.K. Stanchion is hinged high, making it impossible for the bar to sag. The small clevis at the hinge prevents the swing-bar from falling to the floor when open. Experience has proven that the most serviceable way of attaching the Stanchion to the Stall is by electrically welded steel chains. This is the method used with O.K. Equipment. It gives the cows more freedom and wears much longer than a swivel.

### U-Bar Stanchions and Stalls

O.K. Stanchions are made of the very best steel, in the U-Bar shape, which is the most rigid construction possible. This ensures great strength and long service.

#### Save Money, Space, Time and Labor

O.K. Stalls are made of 3-inch steel tubing with patented "T" clamp of malleable iron. This clamp is also used at all main joints. Only a bolt is needed to fasten it. This saves time in putting up stalls and makes a rigid joint. All parts are interchangeable. You can stable more cows in the same barn if you change your wooden stalls to O.K. Equipment. Yet each cow will have the same amount of room as before. This often saves the expense of building a new barn.

O.K. Equipment gives you a choice of 8 different designs! You can choose any design according to the amount you wish to spend.

Then, too, O.K. Stalls and Stanchions mean a big saving in the time and labor necessary to keep the stable clean. Their open construction makes it easy to finish out the stalls and bed them down. They keep the cows lined up over the gutter, keeping the manure out of the bedding. This means a big saving in the amount of bedding used. It also does away with the constant scrubbing of the cows' flanks and udders. In this way, much valuable time is saved for other, and more important, work.

### And Here's the Proof

Beaver, Que., Aug. 20, 1916.

Dear Sir—  
While I was building a barn for a man in Franklin Co., N.Y. State, I was telling him about the Stanchions I brought from you last year. He came and inspected them and likes them so much better than those made on the American side that he is willing to pay duty on them. So please ship 1 6-in., 25 7-in., and 1 3-in. Stanchions to James O'Neilly, White Station, Franklin Co., N.Y.

Yours truly,  
(Signed) James O'Neilly.

Owen Sound, Ont., Nov. 20, 1911.

Gentlemen—  
We have between 350 and 375 Stanchions in steady and find them to be all they are cracked up to be. Yours truly

(Signed) J. H. McCorkindale, Agent.

St. Thomas, Ont., June 27, 1913.

Dear Sir—  
I should have written to you people regarding these Stanchions received last Fall. I have now tested and tried them and have found them perfectly satisfactory. I take pleasure in recommending them to my friends.

(Signed) George H. Cross.

Sirs.—Datin, Ont. Dec. 17, 1912.

Received your catalog some time ago for O.K. Stanchions, and acting on your reference to your agents, Kent & McDougall, I visited their shop and examined your Stanchions and found them to be the best I ever saw. I have installed a number of them and they have proven to be all you recommend. They greatly assist in keeping the cattle clean.

Yours truly,  
(Signed) Alfred M. Risch.

### SEND THE COUPON TO-DAY

Our FREE book tells all about O.K. Stalls and Stanchions.

You should certainly have a copy if you really want the most for the money you spend for Barn Equipment.

Use the coupon to-day.

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Do you intend building or re-modeling?

If so, when? .....

How many cows? .....

Name .....

Address .....