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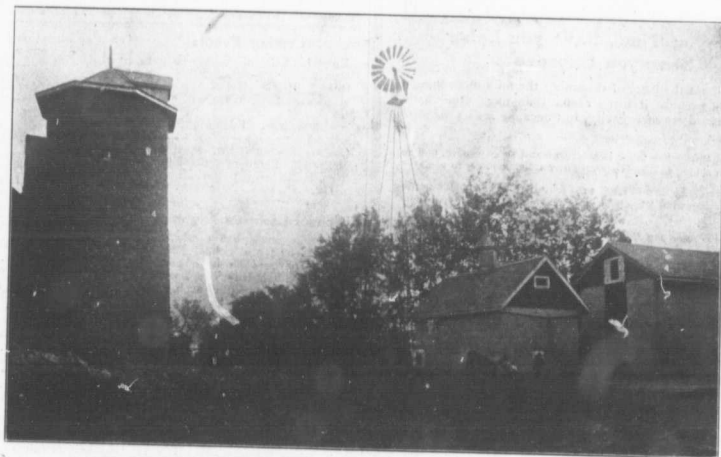
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

MARCH 13

1913



SOME WAYS IN WHICH CEMENT MAY BE USED ON THE DAIRY FARM

This has been called the cement age. In almost every kind of permanent construction cement is finding a place. This is as true of the farm as the city. In this illustration may be seen a few of the ways in which Mr. James McKenzie, a dairy farmer of York Co., Ont., has utilized cement in farm building construction. Note the splendid cement block silo to the left, the cement milk house in the centre, and the cement ice house to the right. Mr. McKenzie has used cement in numerous other ways and in all cases he has done the work himself. Another advantage of cement construction,—we can utilize home labor. Structures such as the ones here illustrated are almost as cheaply constructed as frame buildings and have the advantage of being more permanent.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

30
Dairy
Cows
and
Pigs

Cut Your Work

IN TWO

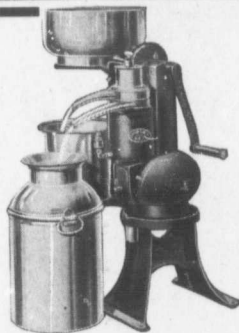
By starting in this season to

Use a Large-Capacity

"Simplex"

Cream Separator

The 1,100 lb. size "Simplex" when at speed and skimming, takes no more power than the ordinary 500 lb. size separator of other makes.



The favorite everywhere it goes. Note its beauty and heavy compact construction, with low-down, handy supply can only 3 1/2 ft. from the floor.

The large-capacity "Simplex" Hand Separator will Save you Time, Save you Labor Save you Expense

Because it will cut the labor of skimming the milk more than in two, not only because it turns easier than most other hand separators, regardless of capacity, but because it does the work in half the time.

In these busy days when labor is so scarce and so expensive, and so unsatisfactory, a saving in time is a great direct saving in money to you.

Now, while you have time to read, send for a copy of our book describing in detail, the improved "Simplex" large-capacity, Link-Blade Cream Separators.

Write us a post card to-day asking for the book.

When writing ask for an estimate on what it will cost you to put in a B-L-K Mechanical Milker to milk your cows.

D. Derbyshire & Co.

Head Office and Works - - BROCKVILLE, ONT.
Branches: PETERBOROUGH, Ont. MONTREAL and QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Start the Chicks Right

and most of your chick-raising troubles will disappear.

The critical time is the first three weeks. During this period feed—at a cost of one cent per chick—

Pratt's Baby Chick Food

It will positively grow all livable chicks and make them strong, vigorous, big-boned and husky. These are the profit payers, the kind you need. We know that this food will give you astonishing results. Test at our risk. In boxes and bags, 25c up.

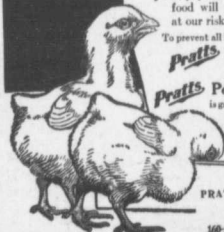
To prevent all losses from white diarrhea, use

Pratt's White Diarrhea Remedy
It will surely do the work. 25c, 50c

Pratt's Poultry Regulator

is great for the brooding flock.

It improves fertility and insures bigger hatches. 25c, 50c. 25-lb. pail, \$2.50



PRATT FOOD CO. OF CANADA, Limited.

TORONTO, ONT.

162-page Poultry Book, 10c by mail.



A Re-adjustment of Taxation Needed

All government expenditure on permanent improvements results immediately in increased land values. These increases in land values due to government expenditure, both provincial and federal, are found largely in our cities, where land is worth hundreds of thousands and sometimes millions of dollars an acre, and yet the taxes that cause these increased values, are raised largely by indirect taxes that fall on the laboring man and the farmer, and by taxes on improvements, that again must be paid out of the proceeds of the labor of the farmer and his brethren in the city. If the city land holder reaps the bulk of the benefits of taxation expenditure, why should he not bear the half of the taxes as well?

Coming Events

Holstein Sale of Wilber Prouse, March 21st.
Oxford District Holstein Breeders' Consignment Sale, Woodstock, March 25th.
Spring Show, Edmonton, Alta., April 2-3.
Calgary Spring Show, April 8-11.
Belleville Breeders' Combination Sale, Holsteins, Belleville, Ont., April 2.

School Children Organize

Waterloo county has a new organization. The Rural School Fair idea, which has been taken hold, and the schools in North Dumfries Township, which have been holding such a Fair this last few years, have organized a Rural School Fair Association. The pupils in each of these schools held a meeting for the election of directors, one from each school, and these directors met in the office of the Department of Agriculture on Saturday, March 1st, and completed the organization with the following officers:

Hon. Pres. F. C. Hart; Hon. Vice-Pres. G. R. Green; Pres. Frank McPhail, River Rd. School; Vice-Pres. Mayma Douglas, Stone School; Sec. Scott Turnbull, R.R. No. 3, Galt; Treas. Marjorie Magee, Branchton. Directors: Leslie Oliver, Little's Corners; Cecil Snyder, Dickie's Settlement; Robert Barrie, Reiderillo; Bessie Gunn, Greenfield; Mary Riddle, Wrigley's; Elmer Becker, Roseville.

In the formation of this organization, everything was carried on in a business-like way. Nominations were moved and seconded, nominations closed by motion, voting by ballot, and speeches by the directors elected, as in any properly conducted business meeting.

Heretofore the Fair has been carried on by the Department of Agriculture, but in thus placing it in the hands of the pupils themselves, the Fair will not only become more substantial and progressive because the pupils will be more vitally interested, but it will also afford an education in business methods and in conducting an association of this kind. At the first meeting on Saturday many important suggestions were offered for increasing its success.

Work of this kind is bound to be

of large educational value to the boys and girls in our rural schools.

Dairy Show Warmly Endorsed

R. J. Kelly, Tilsonburg, Ont., Sec'y, Oxford Dist. H.-F. B. Club

I have been greatly interested in the discussion that has been going on or the last few months on the question of holding a winter dairy show apart from the fair at Guelph. I know that the dairymen of this district feel that the usefulness of the dairy test at Guelph is about done, and that the time has arrived when we must have a national or international dairy show, with room for the dairymen who wishes to do so, to take a car load or two and make an exhibit worthy of the breed of his choice.

When the dairymen at the late Winter Fair at Guelph signed a statement that they would not exhibit at that fair again, unless they were provided with better accommodation for themselves and their cattle, I was very expressing what they felt and what they knew was not fair treatment for one of the best exhibits ever offered at any exhibition. I do not think it is fair to expect any breed association to give more money year after year to a fair than they receive in prize. And I believe the Holstein men have the most reason to grumble about this kind of treatment.

Does any one think for a moment that the horse breeders, the beef cattle breeders, the sheep breeders, the swine breeders or the poultry men pay in more than they receive in prize? If anyone will take the trouble to look into the matter they will agree with me that the dairymen had good cause to feel dissatisfied with the treatment they received.

It is time for the different dairymen's associations to get together and see if something cannot be done or an agreement made with the Toronto Fair Board so that when the new cattle barns are built they may be heated and made suitable for a winter dairy show. Something must be done. We have the men, we have the cattle, we have the best country under the sun, and, if it is needed, we have the money too. I hope that some of the boys whose pens run smoother than mine will keep the question alive and make this a live issue for the next few months.

Issued Each We

Vol. XXXI

Conditions that

MOST required

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*This is the best feed is written by Home Traders. I every farmer who dealers.

FARM AND DAIRY

RURAL HOME

THE TRICKS OF HORSE TRADERS EXPOSED—No. 2*

Dr. J. Hugo Reed, O.A.C., Guelph, Ont.

Conditions that give rise to "Heaves" or "Broken Wind." The Effect of Drugs in Checking Outward Symptoms. How to Protect Oneself in Buying.

MOST professional horse traders have acquired the art of temporarily checking the readily observed symptoms of heaves. Heaves, or broken wind, is a disease of the lungs, but is generally caused by stomach irritation. It will be noticed that with few exceptions a heavy horse is a deep ribbed fellow, and a very heavy feeder. Feeding hay, or grain of poor quality, habitually working or driving a heavy feeder shortly after a hearty meal, when the stomach is gorged, feeding for considerable time even moderate quantities of musty hay, etc., are exciting causes. In most cases there is probably a congenital weakness of the lungs. All that is required are conditions favorable for development of the disease.

The explanation of the fact that stomach irritation will cause a disease of the lungs, is that both organs derive their nerve supply from the same pair of nerves, viz, the pneumogastric, and that the disease is due to nervous sympathy existing between stomach and lungs. In the lungs there are very many little sacs called air cells to which the air is conveyed by very small bronchial tubes. These air cells are very closely connected and their walls are very fine and delicate. In a case of heaves many of these walls become ruptured and two or more air cells become one. This removes to a great extent the natural elasticity of the lungs, and their power of expelling the air. The remaining elasticity accompanied by the normal contraction of the thorax and abdominal muscles, expels a portion of the air but a more or less well marked secondary contraction of the abdominal muscles is necessary to complete the act. This accounts for the well marked double motion of the flank in a horse suffering from a well developed case of heaves. In heaves the symptoms are marked during expiration, while in roaring they are noticed during inspiration.

WHY SYMPTOMS VARY

There are many points about heaves that are not well understood. We know that in most cases the symptoms vary greatly in intensity. This is accounted for to a great extent by the condition of the atmosphere, a clear pure air tending to lessen the symptoms, while a heavy, muggy condition has the opposite effect. On the other hand, even without a change of atmospheric conditions the symptoms often differ greatly in intensity and that often for a considerable length of time. There have been horses suffering from well marked attacks which upon being removed to a different climate and receiving different food and conditions generally, apparently made a thorough and permanent recovery. These facts are hard to understand,

*This is the second of a series of articles that Dr. Reed is writing for Farm and Dairy on "Tricks of Horse Traders." They should be of popular value to every farmer who must necessarily patronize horse dealers.

as it is not reasonable to suppose that the broken down walls of the air cells can by any process of treatment be repaired or rebuilt.

If we admit that the trouble can be caused by stomach irritation are we not justified in assuming that the symptoms can in a like manner be influenced by drugs or food introduced into the stomach? If the disease is caused by the

Experimental Tests with Varieties of Roots

Tests by members of the Ontario Experimental Union with varieties of field roots show the following average results:

Varieties	Comparative Yield per Value. Acre (tons)
Mangels (7 tests).....	100
Ideal.....	32.08
Yellow Levitation.....	31.89
Sutton's Mammoth Long Red.....	31.65
Sudor Beets (3 tests).....	100
Rennie's Tankark Cream.....	21.65
Steel-Bridge's Royal Giant.....	19.08
Swede Turnips (5 tests).....	100
Rennie's Empress.....	29
Gardner's Resolute.....	22.44
Steel-Bridge's Good Luck.....	21.45
Carrots (10 tests).....	100
Bruce's Mammoth Intermediate Smooth White.....	100
Steel-Bridge's Improved Short White.....	90
Fodder Corn (4 tests).....	100
Hoopsgardner's Very Early Yellow Dent.....	25
Wisconsin No. 7.....	23
White Cap Yellow Dent.....	100

*The White Cap Yellow Dent was the most popular variety with experimenters than its higher yielding rivals.

effects that certain conditions exert upon the nerve supply, are we not again justified in assuming that drugs or food introduced into the stomach may and will have an effect upon the symptoms, although they cannot reconstruct or build up the broken down tissue? Hence, if food of a certain character, accompanied by air of certain character, be given and inhaled constantly, we may reasonably expect an apparent permanent cure, but if the patient be again introduced into a climate where the food and air are not so favorable, the typical symptoms will again appear. Certain drugs given in sufficient doses have effects similar to the climate and conditions noted, but while the advisability and wisdom of removing horses to districts where the climate and general conditions are favorable, cannot be questioned, the regular administration of drugs to check the disease cannot be too highly condemned. The action of a drug is of short duration, hence in order to keep it up the dose must be repeated at regular intervals, and if this be kept up for a length of time the animal's general constitution becomes disorganized and he becomes useless. We don't consider that it would be wise to mention any drugs that in certain doses would have the effect noted, as it is within the range of possibility, though hardly probable, that some reader might use the knowledge for dishonest purposes.

Many "horse traders" know that certain drugs administered in certain doses, will have the effect of to a greater or less extent disguising or checking the ordinary symptoms of heaves for a short time, in some cases for a few hours. Individuals of this class are always ready to trade or give a few dollars for a heavy horse, provided he, in other respects, is a fair individual. The new owner, after in some way ascertaining where there would be a prospect of a sale or trade, administers a dose or two of the drug, and when its action is established, shows the horse to his prospective victim, and in many cases effects a deal. Now the new owner, probably thinking that he "has done the trader at his own game," proudly puts his horse in the stable and gives him a good meal. The next morning when he goes to the stable he discovers that it is he who has "been done"; that he "has bellows to mend."

The action of some drugs in this respect are sufficient to deceive a close observer while the horse is at rest or at ordinary exercise, but if subjected to severe exercise, as a gallop for a quarter of a mile or so, the horse will show distress and difficult breathing. Hence if the prospective purchaser is dealing with a man of doubtful character, or if the general appearance of the horse indicates that he would be a likely subject for heaves, or from any cause he is suspicious and has a doubt of his own ability to detect the condition even under severe exercise, it is wise to refuse to trade or purchase.

Expert Handling of Hogs

J. Kenneth Featherston, Peel Co., Ont.

The secret of success in feeding hogs from weaning to the block, we believe, is to never allow the young hogs to lose their milk, or fall in flesh. We always keep them growing. To ensure that there will be no loss of fat at weaning, we commence feeding the youngsters milk when they are three weeks old and are still with the sow. Some of them will not drink at this age, but usually they can be taught to drink a little new milk and when they learn to gobble it up greedily, we feed warm separated milk with a little shorts. We feed them this five times a day, giving them just what they will clean up nicely.

When two months old, we feed shorts and fine ground oats. As they get older and stronger, we feed a mixed ration of say, shorts, oats and corn, and sometimes barley. We use a larger proportion of the heavier meals as we near the finishing stage. These feeds with a moderate amount of exercise, a few roots, such as mangels, or grass or clover when available, has proved to us to be the most satisfactory way of feeding hogs.

Three hundred years before Christ, Aristotle said: "The land that will produce beautiful flowers, luscious fruits, and nourishing vegetables is bound to produce a happy, intelligent and prosperous people." And Thomas Jefferson said: "They who till the soil are the chosen people of God."—Elbert Hubbard.

Age to Breed Heifers

G. A. Brethen, Peterboro Co., Ont.

The warning note re the folly of too early breeding of heifers, recently published in your paper from the pen of Prof. Barton, of Macdonald College, is timely. In these days of "Hustle up Johnny, get rich quick," etc., even the pure bred cattle are innocent victims of the craze of humans to get ahead of the other fellow.

Apparently there is a very strong temptation to breeders of the present day to have the work of re-production begun almost before the female has passed the age of calfood. I believe with some of us this is done with a well defined purpose in view of promoting early development of the organs of production, and thereby make a highly creditable showing for the heifer, when age is taken into consideration; and we would hesitate to call such an object an unworthy one. With altogether too many, however, apparently no better reason is forthcoming for early breeding than could be given by the boy with the new jackknife, "When he has the knife he needs must whittle." No aim, no definite purpose, just haphazard mating, and at any old time.

In the case of well grown heifers with a tendency to become rough, we believe it is quite proper to make an exception, and breed earlier. But we deem Prof. Barton is on the right track when he suggests deferring the breeding of the heifer until about 24 months of age, as a safe rule to follow.

ARE CATTLE DEGENERATING?

Time and again, when visiting some of the older breeders of Holstein cattle, I have been very forcibly impressed with the size, strength, and type of the early imported cattle, as displayed on the pictures hanging on the walls. Whether these pictures are true to type, I am not prepared to say, but be this as it may, cattle of this description are altogether too uncommon in these days of wonderful progress, especially along the line of almost abnormal production.

While we would hesitate to say that the persistent breeding of immature animals has worked all the evils attributed to the practice, still I think that any course which leads to deterioration in the size, strength and constitution of dairy cattle, should be carefully avoided.

In our experience, while we must admit that to a limited extent, we have been guilty of this practice of having heifers freshen at or near 24 months of age, we confess we have not seen the evils resulting therefrom to such a marked extent as has the Professor with the cattle with which he experimented. This seeming conflict of results, we believe, lies in the fact that we have always, in handling heifers in this way, made it a practice to lengthen the first lactation period to about 15 months.

ADVANTAGES OF OUR SYSTEM

Much can be said in favor of this system. We give the heifer at least a 12 month milking period with her first calf. This is conducive to the habit of persistent milking, the balance of her life. At the same time we leave a sufficient period for a rest period in which to build up the heifer before she is called upon to perform the work of her second period of production. An examination of the heifers handled in this way in our herd show them invariably of more size and depth than their dams, and their increase in production very satisfactory. It looks to us, and has repeatedly been remarked on by visiting breeders of national reputation, as a genuine case of "breeding up."

But here again we cannot attribute in full these results to practice outlined above, as we believe these heifers were better fed and better grown as calves than their dams, and this fact

must be taken into consideration in comparing them with the cows from which they were bred.

On the other hand we have had heifers that as calves were inclined to be too fine and a trifle undersized that when handled in the way suggested by Prof. Barton, that is, not allowed to freshen more than a month or two under three years, have shown wonderful development, and matured as good sized cows.

To sum up. In general I think it would be wisdom to follow more closely along the course suggested in Prof. Barton's articles, that is have heifers freshen when well on to three years of age, taking exception to this in the case of extra well grown heifers inclined to coarseness. In addition I would say take extra precautions



A Valley Scene Such as is Typical of the Province of Nova Scotia

Nova Scotia, is a land of hills and valleys. Most of the fertile soil and the great majority of the farms are located on the interval land of the valleys. The scene here illustrated was photographed by an editor of Farm and Dairy in the Stewiacke Valley, Colchester Co., N. S., and is typical of Nova Scotia's farming districts. The land in these valleys is good and in many cases farms can be purchased for little more than the value of the buildings.

in feeding and surroundings to have the calves comfortable. The most successful breeders of the present day are the men who have learned that it pays to raise the calf well. Careful attention to these simple rules will do much to uphold the breed and attach to such dairymen the proud distinction of being a breeder.

Scratches or Cracked Heels

By Dr. H. Preston Hoskins

Scratches, also called cracked heels or mud-fever, can be prevented by careful stable management. Cases are rarely met with in well kept barns, but are often seen in dirty, poorly drained stables. Dryness and cleanliness of the floor of the stall are the two most important factors in the prevention of scratches.

Horses should not be allowed to stand in piles of manure and decomposing urine. These irritate and inflame the thin skin in the fold of the ankle, just below the fetlock. The skin then becomes thickened, due to the inflammation, and breaks or cracks in it appear and if allowed to go untreated, the condition grows gradually worse. The affected area grows larger, the cracks become deeper, and the animal is in an unsightly and painful condition.

Owners of horses can prevent the trouble, in the majority of cases, by doing two things. Do not allow manure to accumulate behind your horses, and see that your stalls are so constructed that the urine will drain away promptly. If your horses show any tendency toward the condition, apply a small amount of carbolic vaseline, benzoinated lard, or zinc oxide ointment, well rubbed into the affected parts. These remedies will soften the skin and protect it from external moisture and irritating substances. During wet weather, or when the roads and streets are muddy or slushy, extra precautions should be taken to prevent the condition. Do not wash cracked heels, as water and rubbing only aggravate the condition.

How to Test Seed Corn

R. Chiffen, Oxford Co., Ont.

Is \$10 an hour good pay? I know that most of us would jump at the opportunity to earn wages such as that; and yet I and many of my neighbors had exactly that opportunity last spring, and the great majority did not grasp it. Seed corn last spring was of rather inferior quality, at least the corn we got in this district was. A few of us tested all of the seed before seeding, but a great many did not. Some of the latter had to re-seed their corn away in June, while others harvested only half a crop. Through not testing their seed I estimate that some of my neighbors lost in the neighborhood of \$50 or \$60, in the smaller crop that they

harvested. It would have taken them only an hour or two to have tested their corn and avoided all the difficulty. Hence my claim that they might have made \$10 an hour or more wages while testing their seed corn.

I always buy my seed corn on the ear. As soon as received I lay the ears out in regular rows on the table, numbering each ear with a piece of chalk. I then extract two kernels from the centre of the ear and two from each end. These kernels are then dropped on a piece of blotting paper ruled out in squares of one inch, each square marked with a number corresponding with the number of the ear of corn. A very shallow box with about an inch of moist soil in the bottom has been secured in the meantime and the blotting paper on which are the kernels is laid directly on this soil. The blotting paper itself is then soaked with tepid water and another sheet of blotting paper similarly soaked is pressed down on top of the first one. Moist cloths or any other material that will keep the kernels moist and at the same time retain heat, are then laid over the blotting paper.

This test box should be kept in a place with an even temperature. I find that the best place in my house is on top of the furnace. At the end of a few days, three to five depending on the temperature at which the seed has been kept, I carefully remove the coverings and examine the kernels. If I find that on some of the squares the kernels have not germinated at all, or that only half of them have germinated, the ears that they represent are immediately discarded and used for pig feed. If I find that the general germination is about 80 per cent., I would plan to seed a little heavier than if the germination were 95 per cent. For perfect germination I reckon a peck of seed to the acre and correspondingly greater amounts for a smaller germination.

This plan of corn testing does not take long, and when we plant our corn we know exactly what we are doing and are sure of a good stand.

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Hardening the Farm Horses

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

Are the horses ready for spring work? If not we are in a fair way to lose much time later on. Two days now are not nearly so important as one day will be a month or six weeks hence. The comparative ease with which we have been taking things for some months past, will then be changed for the greatest hustle and bustle, and to the most exacting and strenuous work of the whole year. We ourselves have been doing up the chores around, working a little in the bush, breaking roads (very infrequently this winter) to say nothing of chopping stove wood, and are fairly ready for the spring work when it comes.

But spring work is not as great in its demand on manual labor as it is on horse labor. It is of more importance that our horses be in good condition when seed time comes than that we ourselves be fit. At harvest time the farmer has much cause to complain of overwork, but at seed time it is the horse that bears the brunt of the burden. We have already started to prepare our horses for the rush.

FOOD INCREASES VITALITY

Our first move has been to increase the grain rations. We are never able to find much work for the horses in winter, and hence rations are reduced as soon as work ceases in the fall. Gradually the demands that the horse makes on its own body are reduced and by this time the horse can get along with little food and there is little strength left in them. What can we expect of horses whose vitality is at a minimum when we take them suddenly some morning, fit them with harness and start them off to the field? Such a procedure, which is a common one, reminds me of one spring when I had just returned from college where I had been taking it easy all winter, and jumping right into the hard work of spring seeding. I do not know which got the worst of it, the horses or I, but I do know that I got a new appreciation of the difficulties the horse is up against, and immediately changed our system of spring management. The increased feed that we are now giving them, even if the exercise were not increased, will put new life and vitality into the horses and give them the fire and gimp that will enable them to stand up to their work. Even if we cannot work them, when turned out in the yard they will exercise enough to keep the extra feed from doing them serious harm.

With mature horses we have a comparatively easy time getting them ready for spring work, but we usually have a team of colts, and with them it is a different proposition. Every farmer knows how a colt will prance along, fuss about everything and get covered with froth and sweat without actually drawing a pound of weight. We believe in getting this stage over before the actual work begins, and we are doing it right now. Every trip that we have to take to town with the heavy sleighs (or more generally wagon) it is the colts that go. By the time spring work starts they will have learned to go along quietly in their place without tiring themselves out by unnecessary exertion and as well their muscles will have become accustomed to the constant strain. This training of the colts is one operation above all others that we like to get through with before the spring rush begins.

A few years ago I was very strongly opposed to clipping in any shape or form. I always regarded it as an excuse for laziness, claiming that if a horse was curried as well as it should be, that there would never be any need of clipping. Probably one thing that set me against the practice was that most horses in our neighborhood that were clipped were robbed of their

hair in the fall of the year at the beginning of the season when they needed it most and it was not an infrequent thing for the clipped horses to be getting chills, cracked heels, etc. Of late years however, I have come to believe that spring clipping is an excellent practice for horses that naturally have a long, warm coat, or in fact, for almost any horse. I still emphasize, however, the necessity of having a blanket handy to throw over the horses every time they are stopped outside on a cool spring



The Most Desirable Way of Distributing Manure

even if only for a few minutes. The practice of clipping only parts of the body, above the knees and around the belly, has its good points, but for my part I would not want to be seen off the farm with a half-clipped team. I would rather take the necessary precautions with a full-clipped pair of horses.

Working on the lines that I have outlined, I expect that our teams will be good for half as much work again as they would if taken right out of the stable and started to work without any previous preparation.

The Country Boy's Creed

I believe that the country which God made is more beautiful than the city which man made; that life out of doors and in touch with the earth is the natural life of man. I believe that



Better Than Keeping it in the Barn Yard

Piling in heaps in the fields each day is good practice when the heaps are made small enough to freeze through and thus avoid fermentation. Spreading directly from the stable, as illustrated above, is better.

—Cute courtesy L. H. C. Service Bureau.

work is work wherever I find it, but that work with Nature is more inspiring than work with the most intricate machinery.

I believe that the dignity of labor depends not on what you do, but on how you do it; that opportunity comes to a boy on the farm as often as to a boy in the city; that life is larger and freer and happier on the farm than in the town; that my success depends not upon my location, but upon myself—not upon my dreams, but upon what I actually do; not upon luck, but upon pluck.

I believe in working when you work and in playing when you play, and in giving and demanding a square deal in every act of life.—Edwin Osgood Grover.

Life is what we make it, in the country as in the town.

The Flock at Lambing

R. T. Baker, Durham Co., Ont.

My sheep pen is dry and well lighted, with a yard to run outside where no other stock can interfere with the sheep. I believe many ewes are injured and lambs aborted through being chased by colts and hooked by cattle. All doors should be wide enough to allow the sheep to enter without difficulty. Dogs should be kept away from the fold unless the sheep are accustomed to having them around. I also object to strangers going in to the sheep pen when ewes are in lamb.

About a month before the lambs are due to arrive, my ewes are fed about one pound daily of oats and bran mixed and some clover or alfalfa hay. I do not approve of having ewes too fat, but my experience has been that when some grain is fed before lambing the lambs are stronger and more

vigorous.

I believe the care and attention necessary during the lambing season is one of the reasons why more sheep are not kept. A man who cannot or will not give time and care to the flock during the lambing season should never attempt to raise sheep. We may listen to Institute speakers who talk on sheep and read all the literature available, but the attributes of success in raising a good crop of lambs is a liking for sheep, patience, and practical experience.

I try to have my lambs due to arrive about the first of April, not that that is the best time, but the lambing season is then about over before the spring seeding begins. From the time the first lamb arrives until the lambing is about over, the sheep fold or pen should be visited several times during the day and the last thing at night.

A ewe will usually deliver a lamb without assistance, but in case of a false presentation, or a very large single lamb, expert assistance is required to deliver the lamb, which usually can be safely done. After a ewe lamb, it is advisable to remove her from the flock for a day or two, if possible to a small enclosure alone. If you find a young lamb that has become chilled, get a pail of water as warm as one can put his hand in, and immerse the lamb, all but the head. Keep it in the water a few minutes, then rub it dry and get it to drink. A lamb that is chilled and with a cold nose will not drink. We must first warm it. I do not give a ravenous lamb too much at the first.

There are different methods of making a ewe take her own or another ewe's lamb that she won't own. I tie such a ewe up in a small enclosure so the lamb will be near her and compel her to let the lamb drink when necessary. Usually in a few days she will take the lamb. As the ewes lamb, I take them away from those that have not lambed to warm quarters and feed more liberally on clover hay, alfalfa, pulped turnips or mangels, oats, bran. A few split peas and oil cake will improve the ration. I then provide a creep for the lambs with nice hay, bran and finely pulped mangels, and a few oats when the lambs are two weeks old. The only way to make a good sheep is to keep the lambs growing when young.

I usually clip all the wool from around the

(Continued on page 8.)



DEAR MR. FRUIT GROWER:

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HORTICULTURE

A Spray Calendar

A. P. McVannell, B.S.A., P. E. Co., Ont.

The first application of spray should be put on shortly before the buds burst. For this application the lime sulphur mixture is used. Either the commercial brand or the home-made concentrated lime-sulphur may be used at the rate of one gallon to nine gallons of water.

The second spraying should be applied just before the blossoms open. For this spraying either lime-sulphur or the old bordeaux may be used. The former is preferred and a poison should be added of at least two lbs. of arsenate of lead. In the event of lime sulphur being used, it should be diluted from one gallon to 35 or 40 gallons of water. For cherry trees it should be diluted about one to 50 gal-

lons of water, while for pear trees the mixture applied to apple trees is most satisfactory.

The third spraying should be applied immediately after the blossoms have all or nearly all fallen, and before the calyxes close. Make this application exactly the same as that for the second spraying. This is the application for the "Coddling Moth" and it would not hurt to add more poison.

Arsenate of Lead More Freely Used

Arsenate of lead, because of its sticking and non-burning qualities, has almost entirely replaced paris green among orchardists. Potato growers still prefer paris green because arsenate of lead is not effective against potato bugs, but some claim that they can find nothing better than the lead.

Arsenate of lead is much slower acting poison than paris green and for that reason many prefer to use the lead. Generally two pounds of paris green to 50 gallons of water is a strong enough solution for any emergency. This will even kill adult leaf-lice. A weaker mixture should suffice because eight ounces of paris green is used freely to 50 gallons of water. Arsenate of lead being slower acting poison it is not recommended where the grub is very large, as every hour of their activity means a loss of money.

Canadian Apples in Australia

D. H. Ross, Melbourne, Australia

The quantity of apples imported into Australia during the season of 1912 exceeded the average owing to a good demand and the advent of a second line of steamers in the San Francisco trade. The prospects are that the Tasmanian production in 1913 will be comparatively small and hence the market will likely be bare when the next Canadian shipments arrive in Australia. It is satisfactory to report that, from special inquiries made at Sydney, practically all the



Orchard Practice in a Very Cold Country

This orchard is located in a section of the West where winter temperatures frequently drop lower than 40 degrees below zero. Notice the heavy mulching to protect the roots of the young trees. In a warmer climate this mulching would not be advisable as the mulch would be a harbor for mice and the trees would be almost sure to be girdled.

British Columbia apples landed were first-class in quality and the packing was exceptionally good.

Some small shipments of Canadian pears also came forward. The fruit landed to a bare market and realized good prices, with the exception of the last shipment by the Makura (that reached Sydney on December 23) which arrived when some early Australian apples and other small fruit were available, to the detriment of the prices realized on the imported lines. British Columbia shippers were unable to fill the orders received from Australia through the want of cold storage space on the Canadian-Australian steamers. The total number of cases was 72,107, of which 45,401 cases were shipped from San Francisco and 26,706 cases from Vancouver. It is impossible to state what proportion of the apples shipped at Vancouver was of Canadian growth but, presumably, some were from Washington state.

The Best Strawberries.—At Ottawa we have tested 60 varieties of strawberries. Some have appeared promising for the time and then failed. So far, we have not found a single new variety to take the place of the old varieties. My nick of the old varieties would be: Reddewood, Splendid, Warfield, Senator Dunlop, the most popular variety in Canada, Sample, Buster and Parson's Beauty.

Ontario
Gordon M.

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Ontario Farming Interests
Gordon MacGregor, Northumberland Co., Ont.

The well being of the farming interests of Ontario, both financially and socially, should be near the heart of every farmer of the province. The more farms and the better farms and homes there are, the more pleasure is there for every one concerned.

Ontario agriculture is going back to its rural depositions in rapidity taking place. Young men leave for the cities and the western provinces almost as rapidly as they grow up. Here in Ontario we grow apples which are great revenue producers, we grow corn to maturity, we have pure spring water, our woods and hills afford shelter as well as beautiful scenery.

The west is level and in places a treeless, wind swept plain. In many places the water is not good. They cannot grow corn, that great cattle food, to the same perfection as we can. Apples there are a costly luxury. Yet with all these natural disadvantages the west is growing by leaps and bounds, while the rural population of Ontario is diminishing.

A VEXED QUESTION INDEED

What is the cause and remedy of this? The west offers 120 acres of bare, rich, level prairie for only home-stead duties. This is a valuable asset with which to start a farm. Ontario offers great natural advantages over the west, but from \$30 to \$100 an acre is asked for the land with from one to two-thirds down, balance from four to six per cent. interest. Now how is any young man to get this "down" with which to start a farm in Ontario? Very few farmers hire a man all the year and when the fall comes the young man is thrown out of employment or, if he stays at home the year round he is expected to work for his board and clothes with probably a little loose change thrown in. True, some men stay on the farm and work, and save, till they get enough to start, but they are usually away past their best before they do get a start and

they are not able to accomplish much. It is when a man is young and strong, and full of courage that he should get a start. He is not then travelling in a deep trap, his ways are not set as yet as an older man's. He tries modern methods; therefore he is more apt to succeed in building a beautiful home, a well tilled farm and acquiring a fair amount of wealth.

It is stated that in Denmark the

HOW about the ventilation in our homes? — the country school? — the country church? Scientists tell us that fully half the weight of our bodies is composed of oxygen. This oxygen comes to us most largely through the air that we breathe. Let us take care that our air food is of the purest and that, in incorporating oxygen into our systems, we do not incorporate as well the poisonous germs that infest a stuffy atmosphere.

government will grant a young man enough money at low interest to make a good payment on a farm. If he is not able he is not forced to pay it back regularly. Why can't Ontario do the same?

Farmers must cooperate. We must stop holding politicians up as such great men. They must stop talking politics and tell Mr. Politician what they want; and if he doesn't help to get them what they want his seat will be in danger of coming out from under him. Then some day when he is quietly doing through the session, he will suddenly get through his muddled brain that the farmers' bill that is going through has some connection with his comfortable seat and his comfortable living as well, and he will wake up and vote for it without a whimper.

See that the garden and farm tools are in good repair and sharpened.

Early Potato Culture

A. H. MacLennan, O. A. C., Guelph Ont.

For early potatoes the seed should be selected the year before and only those hills chosen that are still green and vigorous at the time of digging. These should then be stored in a light cellar; so that the potatoes may get green, and the temperature be maintained at 38 degrees Fahrenheit, or as near to it as possible. About six weeks before planting, the temperature should be raised to 70 degrees Fahrenheit, and the tubers set upright with the eye end up, so that the best and strongest shoot may grow — the others should be rubbed off. The system of allowing only one shoot to grow will produce fewer potatoes, but all of them will be of marketable size.

The ground should be thoroughly prepared. Three or four days before planting, the furrows should be run 28 inches apart and four inches deep. This will permit the soil to warm up more quickly and deeper. If one is using commercial fertilizer, it should be placed in this furrow and covered one-half inch with soil. The sets are then carefully placed in the furrow nine inches apart, sprouts up, and then covered with a hand rake or single horse cultivator. Care must be taken not to break off the shoots or one will lose more than the time gained.

The Early Ohio is the earliest variety, but it is not a very heavy cropper. Early Eureka is a week later and a heavy cropper.

If you grow gladioli you will find "Mr. Grub" very fond of them. I often remove the earth where a gladiolus bulb was planted only to find a large grub lying just where the growth had started. These pests can be overcome by leaving a careful watch for them and digging around the plants in the early morning — D. W. Marden, Pilot Mound, Man.

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Pointer
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FARM MANAGEMENT

Identity of Alfalfa

My alfalfa, while a good catch, is not yielding as I thought it would. The stalk and leaves are very fine. It grows to a height of 20 or 25 inches and the flowers are purple. What variety of alfalfa is this, and is there any other variety that would be better suited to my conditions?—A. B. Thunder Bay District, Ont.

The alfalfa here described is the common variety and it is quite probable that the seed traces to the Western States. The probabilities are that the variety is rather tender and that it will likely survive favorable winters in Ontario, but will probably kill out at the first severe weather which it encounters.

There are several alfalfas which have proven more hardy in Ontario than the Common variety, of which I would mention the Ontario Variegated, the Grimm Alfalfa of Minnesota, the Ballis Alfalfa of South Dakota, and the Sand Lucerne of Commerce. Each of these varieties have variegated flowers. The Turkestan alfalfa, which contains purple flowers like the Common alfalfa of the Western States, is much hardier, and the true seed of the Turkestan variety usually gives much better results than the Common variety of Utah, Kansas, Colorado and Montana, which is generally quite tender owing to the fact that it traces its history back through Southern California, Mexico and in some cases as far south as Central America, in which countries it has been grown for some time since it was first brought over from Europe.—Prof. C. A. Zavitz, O. A. C., Guelph.

Pointers on Clover*

E. D. Eddie, B.S.A., Seed Division, Ottawa

Clover is a plant food gatherer as well as a consumer. In converting atmospheric nitrogen into plant food, clover is a most valuable assistant to the farmer.

The large and extensive root system of the clover plant tends to make the soil of better mechanical texture. In decaying the roots leave channels through the soil that assist the circulation of air and water.

The majority of farmers do not grow clover as extensively as would be to their advantage. One reason for this is the high price of seed. I believe farmers have a great opportunity for improvement in the production of their own clover seed.

The farmers of Eastern Ontario are making a big mistake in depending on other districts for their clover seed. South-Western Ontario may be the home of the clover seed industry but we in the East can grow our seed to advantage.

IF SOME WHY NOT ALL?

I have heard it contended that the Ottawa Valley is too cold for clover seed production, but in that valley some many farmers who grow clover seed to perfection. In Quebec province in Pontiac county a large number of farmers save clover for seed.

Clover land must be in good heart to give the crop a start, but when the crop is started it will keep the land in fairly good condition itself.

In some countries other leguminous crops, such as peas, are grown before clover to get the land in condition. An application of land plaster is also sometimes necessary.

One of the biggest mistakes Eastern Ontario clover growers are making is in using insufficient seed. Three or four pounds of clover seed, with an "Extract from a Clover Seed in Eastern Ontario."

equal amount of timothy, is an average seeding. Three or four times this much clover would be more advisable.

In many cases the clover is allowed to stand too long before the first cutting to use the second cutting for seed. It is also allowed to stand too long to make first-class hay. Clover should not be cut later than full bloom. This leaves time for the second crop to produce seed. A better plan where there is sufficient meadow is to pasture the land intended for clover until June, and then cut, running the cutter bar high. Where this method is followed we avoid the clover midge and get a larger yield.

Always secure No. 1 clover seed and



Our Dominion Poultry Husbandman

The appointment of Prof. F. C. Eford to the recently created post of Dominion Poultry Husbandman, noted in Farm and Dairy last week, will be a source of gratification to Prof. Eford's many friends and to the poultrymen of Canada generally.

produce this kind as it is scarce and high in price. The production of low class grades is not profitable.

Manure for Buckwheat Land

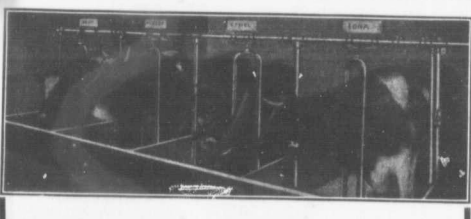
We have a piece of ground, about four acres, that we intend to crop to buckwheat. The soil is not rich and we had intended to work this piece well and manure moderately. Would manuring spoil the crop of buckwheat? Some neighbors were telling me that buckwheat does not do well when sown the same season as the field is manured.—E. F. Bruce Co., Ont.

Buckwheat as a rule does not need manure; but, where it is applied, if it be worked thoroughly into the soil, it is not likely to do any harm, provided the buckwheat is sown early enough to permit of its ripening in the fall, before frosts come. Buckwheat is very easily affected by frost, and if sown on manured land, the growth of stalk and leaf is so much increased as to considerably extend the period necessary from seeding to ripening. Hence, late or even early July seeding would hardly prove satisfactory, excepting possibly in some of the more southern parts of Bruce county, where September frosts are less likely to occur. Sowing fairly thickly would also tend to lessen the growing period. It is customary to sow one-half to three-quarters of a bushel of seed an acre; but if you sowed from three-quarters of a bushel to a bushel, it would ripen somewhat more quickly and be likely to give better results than lighter seeding where the land was manured.—J. H. G.

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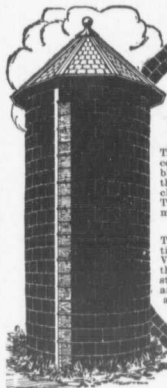
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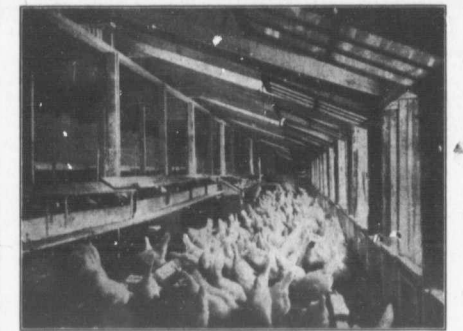
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The house here illustrated is 195 feet long and 16 feet wide. Mr. T. G. Delamere, Prop. of the Utility Poultry Farm, is making the same success with poultry on a large scale as thousands of farmers are doing on a small scale.

Cement Floors in the Stable

A. McCall, Ontario Co., Ont.

"Though cement is the most durable, and perhaps the most sanitary floor for the barn, I do not want my cows when they can carry a large udder to lie down on cement in their stalls, any more than I want them out in the cold. Cement is a good conductor of heat and cold, and when they are compelled to live directly on it disease is liable to develop. The mammary glands, especially in highly-developed dairy cows, have a thin coat of hair and skin, and there is a large circulation of blood in this region which should be shielded from radical changes."

Very good. Had I a stable in which were cement floors, one of the first things I would do would be to put a plank platform over the cement for my dairy cows to lie on. That is, if I did not have a great quantity of straw for bedding. The paragraph above, however, which I have clipped from a United States farm paper, refers to solid cement floors. I recently saw a style of cement floor which I do not think could be objected to.

Cement is not cold of itself. It is simply a good conductor of cold. Hence when we have a solid cement floor built right on the ground, the cold of the cement is due to the coldness of the earth underneath. The cement floor that impressed me so favorably, was a reinforced slab of cement resting on a concrete ridge next the gutter and on another ridge next the feed manger. Underneath the slab the warm air of the stable circulated freely. Hence the floor was just as warm as the air and not open to the same objections as the solid floor.

This style of floor has many points in its favor. It is just about as warm as a board floor. It is much more durable, and consequently cheaper, and from a sanitary standpoint is much to be preferred to the plank platform.

Items of Interest

Dr. De Laval, inventor of the cream separator, is dead. Dr. De Laval's name will go down in history as one of the greatest inventors of his time. A special course on ice cream manufacture will be given at the dairy school, O.A.C., Guelph, March 24-29. Mr. D. McMillan, who has spent some time studying this question at one of the American stations, will have direct charge of the work. The course will consist mostly of practical work. There will be no fees. Students will register at 1.30 p.m., and begin work at 2 p.m. on the 24th.

The Flock at Lambing

(Continued from page 3.)

ewe's udder after she has lambed, so the lamb will have access to its dinner without hunting amongst dirty wool. A ewe's udder should be examined daily for a few days to see that in case she has but one lamb one side of the udder is not neglected. When a ewe has a cracked teat it should be looked after and the milk drawn off and some glycerine and nutton tallow applied. In case a ewe's udder is caked and hard it should be liberally fomented with warm water and thoroughly rubbed with camphorated sweet oil or poulticed.

With the best of care there will occasionally be a case of eversion of the womb. If this occurs after lambing the afterbirth should be separated from the womb and the parts thoroughly washed with warm water in which has been added a little carbolic acid. The ewe's hind quarters should be raised, the organ replaced, and about two stitches in the valve will retain the organ in place until danger is passed. An injection of a weak solution of alum water is advisable, and the ewe should be placed alone and kept quiet for a few days.

I usually clip the ewes about the middle of April whether they have all lambed or not. We dock lambs and castrate those not kept for breeding purposes at two weeks old. A few days after the ewes are clipped I dust the lambs with insect powder and dip them later when the weather is warmer.

The Barn of To-day is Sanitary

It is clean, airy and comfortable. Under modern conditions cows give more milk and are more profitable. The best barns are equipped with Louden Stalls, Stanchions, Litter and Feed Carriers, which cost no more than poorer makes. Prices within reach of everyone.



LOUDEN Cow Stalls and Stanchions

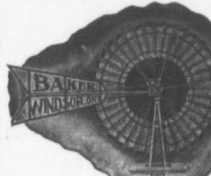
are made of light, strong tubular steel with malleable iron fittings. The stalls, bull pens, and calf pens allow the animals plenty of air and light, and promote cleanly conditions.

The stanchion is the simplest, strongest and most comfortable cow stanchion possible. Has plenty of latch, easily and quickly operated, and is perfectly secure.

Our Barn Architect will prepare FREE Plans. Write for New Catalogue.

The LOUDEN MACHINERY CO. - Dept. 78, GUELPH, Ont.

Windmill Power is Growing in Popularity



for pumping and it is not equaled by any power.

Thousands of farmers who have done their first power pumping by gasoline engine have become tired of it and are buying windmills. YOU CAN SAVE THE COST OF A BAKER IN ONE YEAR.

The cost of gasoline, oil, batteries and repairs in pumping for 100 hours of stock and the average farm home with a gasoline engine will buy a BAKER BACK CREAMED Ball-Bearing Pumping Mill every year.

You can't afford to waste both money and your time. Look into this proposition.

Send for catalogue—and list of satisfied users.

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The Best Built Roller

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

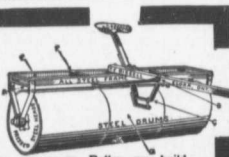
With AXLES of 2 inch solid steel revolving on cold Rolled Roller Bearings. With the MALLEABLE CAGE in one piece, holding the Roller Bearings in line on the axle.

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

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

You may be told that other Rollers are like the Bissell—but there is only one original Bissell Roller and to save our customers disappointment, we put our name on every Roller we build. Look for the name "Bissell" and write our Dept. R for catalogue.

Several styles and a variety of widths to choose from, 6 ft. up to 12 ft. Grass Sledder Attachment also furnished if required. 73



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

Bedford Dis

It was not an optimistic era that faced H. S. Foster, of the Bedford Association. Quebec, two weeks in the old, but such of the farmers took all of the, who has the start, and Burrell, who reduce the dair association. the membership the end of the for the future decidedly bright history of the was held in year's meetings first Seed Fair there were over of the exhibitors The three con Brome, Missis all represented.

In his opinion Foster drew at the growing seed weed problem, ed, threatened spersity of the tent as the rapier of notorious ment through all district. As Foster urged two sheep, but also fact that if they must give before the shee succeeded. Dr. McKinnon, of Hon. Martin Baker, Mr. G. MacKinnon, of J. A. Ruddick, missioner, were at the Thru Burrell, in his the work that ment of Agriculture promotion of agriculture and in a general whole field of agriculture to give vation of the occupation an students as well Geo. H. Barr, of Department and urged cow great step toward ment. He cla have been making With the cost of ment and the s men, butter m least three cents the two and on quarter cent extension Mr. G. H. Commissioner, of the seed fair district. It wo them to get a b through exchange of double-seeded side. The Federa a grant of \$50 a ernment a grant prize list, and of the farmer th whole-hearted, en Mr. Dan. Drun Stock Department it strange that i in the country

Bedford District Dairymen Meet

It was neither an enthusiastic nor an optimistic gathering of dairy farmers that faced their President, Mr. H. S. Foster, at the annual meeting of the Bedford District Dairymen's Association, held at Cowansville, Que., two weeks ago. This association is the oldest of its kind in Canada, but such seems to be the apathy of the farmers of the district that it took all of the influence of Mr. Foster, who has been its president from the start, and of the Hon. Martin Burrell, who was in attendance, to induce the dairymen to continue their association. A new start was made, the membership increased, and before the end of the convention the outlook for the future of the association had decidedly brightened.

This year for the first time in the history of the association, a Seed Fair was held in connection with the dairymen's meetings. Although it was the first Seed Fair held in the district, there were over 70 exhibitors, and some of the exhibits were of first quality. The three countries of the district, Brome, Missisquoi and Shefford were all represented.

SHEEP OR DOGS

In his opening address, President Foster drew attention particularly to the growing seriousness of the noxious weed problem. Nothing, he contended, threatened the welfare and prosperity of the country to such an extent as the rapid increase in the number of noxious weeds that are prevalent through all the countries of the district. As a partial remedy Mr. Foster urged the keeping of more sheep, but also drew attention to the fact that if they would keep sheep they must give up keeping dogs. In fact, the dog question must be solved before the sheep industry is introduced. Dr. Robertson, who followed Mr. Foster, told of his impressions of Denmark, and showed them on a picture of an ideal dairy country. This address will be published in full in a later issue of Farm and Dairy.

Hon. Martin Burrell, Mr. G. H. Baker, Mr. G. E. Clark, Mr. Jas. MacKinnon, of Sherbrooke, and Mr. J. A. Ruddick, Dominion Dairy Commissioner, were the principal speakers at the Thursday sessions. Mr. Burrell, in his address, dealt with the work that the Dominion Department of Agriculture is doing for the promotion of agricultural education, and in a general way covered the whole field of agriculture. He endeavored to give his hearers an appreciation of the importance of their occupation and the necessity of being students as well as workers. Mr. Geo. H. Barr, also of the Dominion Department, spoke on "Dairying," and urged cow testing as the first great step towards dairy improvement. He claimed that factories have been making butter too cheaply. With the cost of upkeep and equipment and the salaries of experienced men, butter makers should get at least three cents a pound in place of the two and one-half and two and one-quarter cents that they now get.

EXTEND SEED FAIR WORK

Mr. G. H. Clark, Dominion Seed Commissioner, urged the extension of the seed fair idea in the Bedford district. It would, he said, enable them to get a better quality of seed through exchange and avoid procuring seed of doubtful value from outside. The Federal Government makes a grant of \$50 and the Quebec Government a grant of \$25 towards the prize list, and all that was expected of the farmers themselves was a little wholehearted, enthusiastic support. Mr. Dan Drummond, of the Live Stock Department at Ottawa, thought it strange that the number of cattle in the country should be decreasing

with prices so satisfactory. Prices, he said, had increased 100 per cent in the last few years, and the cost of raising the animals had remained the same, a statement with which many of his hearers differed. Mr. J. A. Ruddick drew pointed attention to the fact that while the number of dairy cows was decreasing the total production was increasing, owing to the improvement of dairy herds largely through cow testing. "A million cows on Ontario farms," said he, "have given \$5,000,000 worth of extra milk. There was never a time in the history of this country when there was so much encouragement for farmers to increase and double the number of their dairy cows."

ELECTION OF OFFICERS

The election of officers resulted as follows: Pres., H. S. Foster; Sec., A. J. Leonard; Directors: Brome Co., H. S. Foster, H. Ingalls, D. A. Mannon; Missisquoi Co., G. P. England, L. Rochelleau, A. E. Rueter; Shefford Co., L. H. Lawrence, M. E. Dunlavy and J. A. Yages.

And how would it be encouraged in the Bedford district? What factor would brighten the prospect for the future? President Foster believes that a partial remedy at least might be found through training rural ministers in agriculture, in order that they might give advice on farming methods as well as be the spiritual guides of the community. Mr. Foster pointed out that a number of schools and colleges in the United States have provided such courses in agriculture for clergymen going to rural districts, and he desires that this scheme be adopted in Canada.

Milking Twice or Three Times a Day

Carefully conducted experimental work in Ontario supplies a contribution to the verification of the advisability of milking two or three times a day. In these experiments several groups of 20 newly-calved cows were divided into two divisions of 10 each. The cows were so divided that each division was giving practically the same amount of milk and of butter-fat. One group was milked twice a day, and the other three times a day, and then the order was changed, so that those previously milked twice were milked three times and vice versa. Where two milkings was practiced the interval between milkings was 12 hours and where the cows were milked three times daily the interval was eight hours.

The outcome of this work was that cows which yielded 28 to 30 lbs. of milk a day, milking three times, produced an extra yield of 1½ lbs. of cow as compared with the animals milked twice. Nevertheless from these experiments of brief duration no correct judgment can be formed as to the influence which more frequent milking exerts on the development of the milk productiveness of the cow. One is readily inclined to assume such an influence, particularly if the three milkings are practiced on young cows.

Though the extra yield was not so large as is usually counted on in practice, the report of the experiments ascribes this to the fact that in practice, when changing over to three milkings a day the food ration is at the same time increased as a rule, and therefore a portion of the extra yield must be put down to this increased food supply.

Any time after the leaves have fallen and before the top begins to flow, pruning may be done. By making the pruning an annual task the labor is lightened and its efficiency increased.

Seed, Grain and Potatoes

Siberian Oats, clean and pure, 70¢ per bus. No. 21 barley, from hand selected seed, absolutely pure, \$1.25 per bus. Empire State Potatoes and Satisfaction Potatoes, all from selected registered seed, \$2 per bag. Cash with order, beam free. HUTCHINSON, MOUNT FOREST, ONT.

SPECIAL PRICES ON QUANTITIES

O. A. C. No. 21 BARLEY, choice first-class seed carefully selected, absolutely pure, 85¢ per bushel lots, 45¢ cents. Best cotton bags 2¢ extra. Write early and be sure of satisfaction. H. R. NIXON, ST. GEORGE, ONT.

Your Crops don't eat enough meat

Perhaps you think this is rather a strange saying.

Not at all. Your crops eat, just as you do. Just as in your case you grow healthy and strong with good and proper food, and thin and weak with poor food, so they—your crops—with proper food will grow healthy, abundant, and strong, and bring you big returns.

The food your crops feed on consists of Nitrogen, Phosphoric Acid, and Potash, and that food which they depend upon for size and quality of their food is POTASH, which we have aptly termed the "meat" that your crops eat.

POTASH PAYS

And we can prove that POTASH pays. Hundreds of farmers in Canada have doubled their crops with the proper use of POTASH, and this is the way they have done it.

They have taken the ordinary fertilizer which they buy from their dealers and which contains less than 10% POTASH and they have added enough POTASH, under very easily followed instructions, to make that fertilizer a 10% fertilizer.

The results have brought many a penny to their pockets. YOU can do the same. Your crop, no matter whether it is oats, wheat, apples, potatoes, tobacco, corn or anything else, removes from your soil three times as much POTASH as it does Phosphoric Acid. But the ordinary low-grade fertilizer contains only 2% POTASH as against 8% Phosphoric Acid.

So, Mr. Farmer, this does not give back to your soil the proper amount of POTASH. Naturally you must increase this amount of POTASH in order to make a proper fertilizer. You don't have to take our word for this. Ask any Agricultural Expert in any part of the world and he will tell you that it is true.

So, then, if you want to raise a bumper crop—if you want to get the maximum amount of produce from your soil, use a 10% POTASH fertilizer. Insist upon it. If your dealer does not sell POTASH we will gladly ship you the POTASH which we have stored ready for immediate delivery in warehouses at Montreal, St. John, N.B., and Toronto. You can mix your own fertilizer at home if you want to, and our experts will tell you how to do this free.

Send for free booklet which will tell you how to properly fertilize the kind of crop YOU raise. We will gladly send you this important and interesting booklet free.

Send your order for POTASH through your dealer, or if your dealer has not got it, send us the dealer's name and we will quote you prices and send full particulars.

"Potash Pays." Make this year's crop a bumper crop. Ask us to help you—write for free expert advice TO-DAY.

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Why I Prefer the Ayrshires

Joseph Thompson, New Westminster Dist., B. C.

In expressing my preference for the Ayrshire I wish to do so without casting any reflection on any other of the well-known dairy breeds. The breeds of dairy animals most prominent in Canada to-day are the Ayrshire, Holstein, Jersey and Guernsey. Each of these breeds has many admirers, who stand ready to back them against the world. Hardly a week passes by but we read in some of our farm journals of some animal that has been creating new records in their respective breed, and no matter who she be Holstein, Ayrshire, Jersey, Guernsey or any other breed, every progressive dairyman will be pleased to know that the owners of these different breeds of cattle are raising the standard of production; which means mere profit to the farmer.

But why do I prefer the Ayrshire? Because, having tried several individuals of the other breeds as well as Ayrshires, and taking all things into consideration, I have concluded that the Ayrshire is the most profitable cow for me to keep. The Ayrshire comes nearest to being a dual purpose animal of any of the dairy breeds. Although not able to produce such a large amount of milk as the Holstein nor give so rich a milk as the Jersey or Guernsey, yet when it comes to actual profit (and this is what counts) she stands second to none.

No breed of cattle can surpass them in appearance, as the Ayrshire has a style and temperament which appeals to every one, and which is characteristic of the breed. None are so hardy, nor will give as good returns on poor feed as the Ayrshire. With good care and feeding, however she will respond as well as any, and as a rule they are very persistent milkers.

In fact, I find it hard to get them dry. No cattle are easier kept, or more easily fattened, so that when their days of usefulness are over at the pail (either through old-age or accidents) they can very quickly be made into good beef, and of a quality that any butcher is pleased to have. Believing as I do that these statements are true, is it any wonder I prefer the Ayrshire?

I give herewith Fairview Lassie's (No. 26,531) record, made as a two-year-old, as a sample of a persistent milker. Calving at less than two and a half years age, on September 9, 1910, her milk record is as follows:

Mo.	Day	Yield
Sep.	1910 616.5	Mar., 1911 873.5
Oct.	" 1,019	April, " 923.5
Nov.	" 918.5	May, " 1,110.5
Dec.	" 892	June, " 1,046.5
Jan.,	1911 906.5	July, " 845.5
Feb.	" 840	Aug. " 478.5

A total of 10,464 lbs. milk in 363 days.

Fairview Lassie dropped her second calf on September 30, 1911 (being then a week overdue), making a period of only 12 months and three weeks between her first and second freshening.

Two weeks after dropping her first calf this heifer left home on a three weeks' exhibition tour, bringing along at three different fairs. This certainly affected her milk record, as she was taken off good pasture, and placed on dry feed these three weeks, to say nothing of the rough handling she got whilst travelling. At no time was she forced to make any record, being fed the same as other cows that were not under test, and milked twice a day. Considering all this, what her record has been and she has been forced for 12 months? This is where I claim the Ayrshire stands supreme — her ability to make good under any condition. Fairview Lassie was bred and is owned by the writer.

"BROWNS TREES"

BROWNS NURSERIES,
WELLAND COUNTY, ONT.

Government Standard SEEDS

We buy most of our seeds directly from farmers here who grow them. Selection then twice. Our guarantee is that if seeds do not meet our approval you may ship them back at our expense.

SILVER MINE OATS, 6c bushel
SIBERIAN OATS, 5c bushel
BANNER OATS, 6c bushel.
O. A. C. No. 2 BARLEY, 5c bushel.
GOLDEN WAVE PEAS, 25c bushel.
ALFALFA, imported, 15c bushel.
RED CLOVER, 15c lb.
ALSICE, 15c lb.
TIMOTHY, 53c lb.

Bags, extra cotton 50c, jute 40c. Ask for samples. Cash to accompany order.

The Caledonia Milling Co. LTD.
CALEDONIA, ONT.

REGULATIONS

SYNOPSIS OF DOMINION LAND

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

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

Requirements—The homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price, \$1.00 per acre.

Duties—Must reside upon the homestead or pre-emptive six months in each of six years from date of homesteading entry (including the time required to clear homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchaser. Price, \$1.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

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

MONEY IN POTATOES



\$48⁰⁰ per acre OR



\$125⁰⁰ per acre WHICH?

When it comes to a difference of \$80 an acre on a potato crop, let us take off our hats to the Potato experts.

They can show a practical farmer how to turn an average crop of 120 bushels per acre into a bumper crop of 240 bushels. Simply changing a few old methods of potato growing does it. In this day of high prices, that means \$128.00 per acre clear profit instead of \$48.00—a difference of \$80.00.

The big profit is on the extra bushels because the first cost remains the same.

How experts worked it out through years of experimenting is told in simple words in our little book "Money in Potatoes." A book full of sound ideas—no theory. Every difficulty you could have in potato growing is dealt with.

With this book to refer to you can double your potato crop. Send in the \$80.00 coupon for a free copy to-day.

The Canadian Potato Marketing Co. Ltd., Salt, Ont.
 I would like to have a free copy of your book, Money in Potatoes.
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Works perfectly in all the most difficult spray mixtures.
Fully guaranteed to be absolutely tight and to outlast any other type.
When in use this ball is continually turning in its seat, while the fluid is being forced around it at each stroke, thus continually grinding the ball to its seat and assuring it, remaining perfectly round and tight in use.
In ten years use we have not had an imperfect valve.

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Write tonight for your copy of "A Gold Mine On Your Farm." It is bound in convenient pocket size, designed to be of great practical value to you; tells you as well all about what to spray, when to spray and how spray, so as to have your apples and other fruits absolutely free of worms and scales.
There is a Spramotor made especially for your needs, we will tell you about it when you tell us what you grow.

Address the particulars for this book, to
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Largest manufacturers of Sprayers and Accessories in the world.



The mark of quality. Write for booklet on line of interest to you.
THE WILLIAM DAVIES CO. LTD.
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"Good Luck" - Baby chicks feed Scratch feed and grit, beef scrap, ground bone, oyster shell, etc., and all Poultry supplies. Poultry as low or lower than elsewhere. Write **CRAMPEY & KELLY, Devereaux Bldg., Toronto, Ont.**

FOR SALE AND WANT ADVERTISING

BUFF ORPINGTON COCKERELS, bred from laying strain and Exhibition stock. Pure bred. Price, \$3.00. Apply E. R. Tate, Lakeside, Ont.

FOR SALE—Iron Pipe, Pulleys, Belting, Balls, Chain Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list, stating what you want.—The Imperial Waste and Metal Co. Dept. F. D., Queen Street, Montreal.

Baby Chicks
Order your baby chicks now from our splendid laying strain of **SINGLE COMB WHITE LEGHORNS**

Utility Poultry Farm
T. G. DeLAMERE, Prop.
STRATFORD - ONT.

POULTRY YARD

Canadian Pens Doing Well

Farm and Dairy readers who are interested in poultry may remember the close finish to last year's contest at the International Egg Laying Competition, Storrns, Conn., when the Canadian White Wyandottes, with only two eggs less than the winners, took second prize out of 100 pens competing. The 1912 second prize pen is setting. The 1912 contest, and at this early stage holds third position among the hens entered. The breeders and owners of above pen, McLeod Bros., Baulth Firth, Stoney Creek, Ont., have refused many splendid offers for them. They also have a pen of five White Wyandotte pullets in this year's contest, and the last report shows them heading the list for the week with 30 eggs to their credit.

The laying records of these hens are creating a greater interest in Canadian poultry on both sides of the line, and their exceptionally good winter laying proves that our crisp winter air is certainly no hindrance to heavy egg production.

"Cannot the farmers and poultry-keepers of this great agricultural country not make a greater effort, through improving their flocks and by increasing the winter egg yield, to keep at home the thousands of dollars that yearly go out of the country for eggs that can and should be produced here?" ask McLeod Bros. "In all our cities the winter supply of new laid eggs is far short of meeting the demand, and this at prices that should yield a good profit."

Poultrymen—Attention

As a means of furthering the policy of developing the poultry interests of the Dominion in which the Live Stock Branch of the Department of Agriculture is actively engaged, the Live Stock Commissioner is anxious to secure the name and address of each breeder of poultry in Canada who is systematically endeavoring to improve the quality of his stock, particularly from the standpoint of increased egg and meat production. The information is desired in order that the Live Stock Branch may be brought more closely in touch with progressive poultrymen throughout the Dominion and with those whose names might be eligible for inclusion in a Dominion Poultry Directory. As a means of securing this information, in part at least, all those who are interested are requested to write to Live Stock Commissioner, Ottawa, indicating:

- (a) The breed, variety and strain or family of poultry they are breeding.
- (b) The extent to which selection for increased egg and meat production is being practiced.
- (c) A brief but specific statement of what has been accomplished.
- (d) Whether or not they are actively engaged in trap-nesting at the present time. If not, what means are being used to select the most desirable individuals for the breeding pens.

Letters giving the above information should be addressed to the Live Stock Commissioner, Ottawa. Such communications do not require postage.

Farmers in need of good seed corn would be wise to write to L. H. Norman, secretary of The Canadian Seed Growers' Association, Canadian Building, Ottawa, for price list of registered and improved seed produced in 1912 by members of The Canadian Seed Growers' Association.



Join the "don't worry club!" Buy your Ford today. Thousands were disappointed last year. Don't take a chance this time. And remember that the more we make the better we make them. Insist on an immediate delivery.

There are more than 220,000 Fords on the world's highways—the best possible testimony to their unexcelled worth. Prices—runabout \$675—touring car \$750—town car \$1000—with all equipment, f.o.b. Walkerville, Ont. Get particulars from Ford Motor Company of Canada, Limited, Walkerville, Ontario, Canada.



125-Egg Incubator and Brooder Both For \$13.75

If ordered together we send both machines for only \$13.75 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead-air space between, double glass egg tray. Especially adapted to Canadian climate. Nursery under clean, copper tanks and basins, self-regulating. Nursery under your apparatus—30 days trial. Incubators shipped in natural colors showing the high grade Calumet machines with covers, we feel sure of your order. I don't buy until you do this—no 20% advance—no 10% down to investigate before you buy. Remember our price of \$13.75 for both Incubator and Brooder and covers, freight and duty charges. Send for FREE catalog today, or send in your order and save time. Write us today. **WISCONSIN INCUBATOR CO., Box 216, Racine, Wis., U. S. A.**

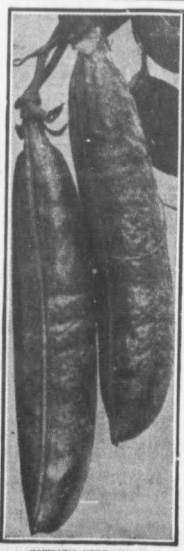
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The most desirable variety up to date
Lb. \$2.00, 1/2 lb. 75c, oz. 25c, pkt. 10c
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COPENHAGEN MARKET.—Undoubtedly without a rival as the finest round-headed Cabbage in cultivation.
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True DECARIE Selected Strain.—1/2 oz. \$1.00, Pkt. (with special culture instructions).... 25c

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RICHARD SEDDON.—We can say with confidence that there is no better all-round early variety than this. By express or mail, at buyer's expense, 10 lbs. \$3.00, lb. 35c; by mail, postage paid, lb. 40c, 1/2 lb. 15c, pkt. 10c

A NEW EARLY TOMATO
Rennie's "Ninety Day"
This northern-grown strain of Tomato is undoubtedly the very best earliest scarlet-fruited Tomato. Oz. 80c, 1/2 oz. 50c, pkt. 15c

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RICHARD SEDDON PEA

Wood or Concrete Silos, Which are best?

Over in the U. S. many experiments made by the various agricultural experiment stations have conclusively shown that silage does not keep as well in cement, stone or brick silos as in silos constructed of wood.

Furthermore, the advantage of the wood silo over cement, stone or brick is greatest in a cold climate.

The vital question is "Which silo will keep the silage in the best condition?"

If you are interested in reading the unbiased opinion of scientific investigators who have given this question careful investigation we shall be glad to send you, upon request, reprints of some of the experiment station bulletins giving in detail the reasons why wood silos make the best silage and keep it in the best condition.

We shall also be pleased to send you our catalog and give you any other silo information desired.

We are exclusive distributors in Canada of the World's Standard De Laval Cream Separators, and also carry a complete line of creamery and dairy machinery and supplies. If interested write for separate catalogs.

DE LAVAL DAIRY SUPPLY CO., Ltd.
LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
MONTREAL WINNIPEG VANCOUVER



Farm Cooling of Meat

While it is almost impossible to get the best conditions for handling meat on the farm, a knowledge of the best principles may aid in getting a better quality of meat. It is very important that the carcasses be cooled soon after slaughtering, and yet that they be not allowed to freeze. While the temperature cannot well be controlled on the farm, it is possible to slaughter when the weather is favorable to the proper cooling of the carcass. If during the winter season, choose a day when there is a prospect for cooling the carcass before the surface freezes. The most desirable temperature for cooling meat is 34 deg. to 40 deg. F., and an approach to these temperatures will give good results.

HANDLING MEAT IN SUMMER

In summer seasons it is best to dress the animal in the evening, leaving the carcass in the open air overnight and carrying it to a cool, dark place before the flies are out in the morning. Very often a cool room in the barn can be used for the purpose if made dark. There should be no fresh paint, tar, kerosene, or like substances around, however, as freshly killed meat absorbs such flavors readily.

Cooling is often hastened by splitting the carcasses into halves or even into small pieces. It is best, however, not to divide the carcass until the meat is firmly set unless absolutely necessary to prevent it from souring. Stripping out the leaf lard materially aids in quickly cooling the hog carcass. For the best results in cooling meat, the air should be dry, as well as of a low temperature; and free circulation aids greatly in carrying away foul odors and mold spores.

It is also important that flies and insects be kept away from the meat. If it is fly-blown, maggots will soon appear and it will be very difficult to save the meat.

Holsteins in Dairy Tests

"Holsteins have again made an excellent showing in the dairy tests of the year, particularly at Ottawa and Guelph," said the directors of the Holstein Association on their annual report. "At the latter fair an excellent example was afforded of the value of grading up with Holstein sires, when Mr. Ryan's grade cow Cherry won the championship over all. As usual at Ottawa, Mr. Sampson headed the list with his many-times winner, Rhoda's Queen. In one or two tests our Ayrshire friends came out first, which will be a source of encouragement to their breeders and a warning to ours not to rest on their laurels.

"When we consider that there are only 3,000,000 cows in Canada, and about 500,000 pure-bred females of all dairy breeds, there does not appear to be much ground for the fear of some timorous people that the Holstein business will be overdone. Females are always in demand at good prices, and dairy farmers are realizing as never before the value of the pure-bred sire for grading purposes.

"The extraordinary demand from the Canadian West for both pure-bred and grade Holsteins is only a promise of what we may expect for years to come. New Zealand, Australia and South Africa are all taking our cattle, and our foreign trade should increase as breeders in other countries come to realize that Canadians are producing the very best Holsteins to be found anywhere. In constitution, conformation, shapeliness of udder, as well as capacity at the pail under normal conditions, Canadian Holsteins have no superiors."

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Why not be a **WINNER** in this Contest?

We are giving away \$500 in Gold Cash Prizes to users of the Grimm "Champion" Evaporator.

Full particulars will be mailed on receipt of above coupon.

The competition will take place during the last two weeks of April, and the samples of syrup and sugar received will be placed on exhibit in the show windows of the "Montreal Star." Every purchaser and user of the Grimm "Champion" Evaporator may take part in this contest. **Now is the time to properly equip yourself to make high grade syrup and sugar—high priced and therefore profitable.** Do it now before the sap runs. State the number of trees you will tap and we will give you a price on a suitably sized outfit.

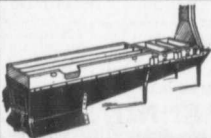


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MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until Noon, on Friday, the 4th April, 1913, for the conveyance of His Majesty's Mail, on a proposed Contract for four years, six times per week, over Rural Mail Route No. 5, from Peterboro, Ontario, to commence at the pleasure of the Postmaster General.

Printed notices containing further information as to the terms of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Office of Peterboro and at the office of the Post Office Inspector, Kingston, A.

H. MERRICK,
Post Office Inspector.
Post Office Inspector's Office,
19th February, 1913.

The Call of The North

Do you know of the many advantages that New Ontario, with its Millions of Fertile Acres, offers to the prospective settler? Do you know that these rich agricultural lands, available free and at a nominal cost, are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc., write to

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Director of Colonization,
Parliament Buildings,
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MALLORY'S SEED CORN

Improved prize winning strains.
N. E. MALLORY - BENVENUE, ONT.

Seed Corn, Barley, Oats

FOR SALE

High Grade Seed of Improved Learning Corn, Newmarket Oats from Pedigreed, hand-selected stock, and O. A. G. No. 31 Barley. Satisfaction assured. Write for samples and prices to

W. A. BARNET, Mgr., Gov. Exp. Farm,
Harrow, Essex Co., Ont.

SEED CORN THAT WILL GROW

FOR SALE

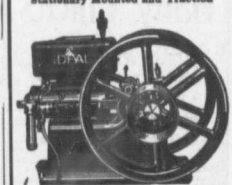
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Corn That Will Grow

Money back if not satisfied
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Spring

By Cl

The mode best posted horse owner all horses in on the tho state horses so could she sort over a since we a work on wa tor coat she same reason winter garm off rapidly, cold as easi to be affecte unclipped an holds the pe cause clipped they rest bet

Many of our splendid stock. The splen

their food and ing refreshed. Since the ad enclosed gear work of taking easy. With the be clipped all whereas with t it required sever Dairymen, a all over two The flanks and every three or easy to clean. This meat dirt and other the milk.

Classified

At the annual Ontario Associahibition a p authorizing the select a commit the proper class fairs and exhibit composed of M H. G. Reed, J. L. Bailey and J. L. February 17th following regulatio Heavy Draft should conform which they report animal should upwards. Agricultural should conform draft horses and should weigh lbs.

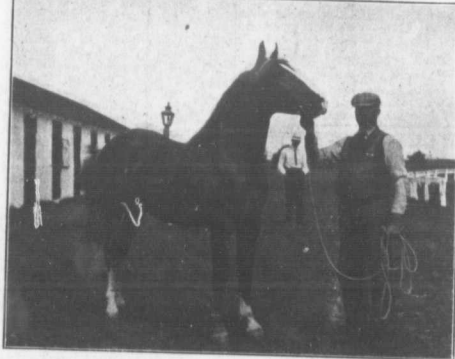
Spring Clipping of Horses

By Charles H. Touglain

The modern practice among the best posted and most progressive horse owners and farmers is to clip all horses in the spring. It is done on the theory that in their natural state horses were not obliged to work, so could shed the winter coat in comfort over a period of several weeks. Since we oblige them to do hard work on warm spring days, the winter coat should be removed for the same reason that we lay off our heavy winter garments. Clipped horses dry off rapidly, hence they do not take cold as easily nor are they so prone to be affected with other ailments as unclipped animals, whose longer hair holds the perspiration for hours. Because clipped horses dry off rapidly they rest better, get more good from

General Purpose—No agricultural society should offer prizes for general purpose stallions at exhibitions, but, if thought advisable, prizes might be offered for general purpose mares, broodmares or geldings. General purpose horses should conform in outline closely to the coach, carriage or hunter type, but should be larger and stronger and able to do satisfactory work in wagon, plow, buggy and saddle. They should be clean limbed, without excessive hair on the legs, and be able to travel seven miles an hour. Horses showing draft conformation should not be included in this class. They should weigh from 1,150 to 1,350 lbs. The minimum height of general purpose horses should be 15.3 hands.

Carriage—There should be separate classes for carriage horses and roadsters at every exhibition, and these two breeds should not be shown in



A Splendid Product of a French Breeder's Skill

Many of our French-Canadian countrymen seem to be naturally born horsemen. The splendid stallion here illustrated is owned by Anselme Gavaña, St. Outbert, Que. The splendid quality and beautiful conformation of this animal is such as is not often duplicated.

their food and come out in the morning refreshed and fit for work.

Since the advent of the lull-bearing enclosed gear clipping machine the work of taking of the winter coat is easy. With the machine a horse can be clipped all over in half an hour, whereas with the old two-hand clipper it required several hours to do it.

Dairymen, also, now clip the cows all over two or three times a year. The flanks and udders are clipped every three or four weeks, so it is easy to clean the parts before milking. This means less opportunity for dirt and other impurities to get into the milk.

Classification of Horses

At the annual convention of the Ontario Association of Fairs and Exhibitions a resolution was passed authorizing the Superintendent to select a committee to arrange for the proper classification of horses at fairs and exhibitions. The committee, composed of Messrs. Robt. Graham, H. G. Reed, John Gardhouse, C. F. Bailey and J. Lockie Wilson, met on February 17th and drew up the following regulations:

Heavy Draft—Heavy draft horses should conform in type to the breed which they represent. A matured animal should weigh 1,500 lbs. and upwards.

Agricultural—An agricultural horse should conform closely in type to draft horses but on a smaller scale, and should weigh from 1,350 to 1,500 lbs.

the same class. In judging carriage horses, style, conformation and action must all be considered. The minimum height of the animals should be 15.1 hands.

Roadsters—Roadsters should be judged in every case for conformation, style and speed.

Saddle Horses—In the saddle class horses should be tested in walking, trotting and cantering.

Ponies—The maximum height of all classes of ponies, except polo, should be 14 hands. Shetland ponies should not exceed 12.3 hands.

Of interest to importers.—The new Customs regulations in regard to the importation of pure-bred stock which come into force April 1st next, differ somewhat from those now in force. According to new regulations a person to obtain a duty free certificate must be a British subject, resident in the British Empire. A statutory certificate must be provided by the British subject to the effect that he is a British subject and resident in the British Empire. Import certificates for horses must show coloring and markings, and if there are no markings it must be so stated. Customs officials will be required to compare the descriptions given on the import certificate of the animal, and if there is any discrepancy the duty must be paid.

The bees in my orchard are invaluable. Every blossom has a bee in it and it is well fertilized.—J. W. Clark, Brant Co., Ont.

Bruce's Big Four Field Root Specialties

BRUCE'S GIANT FEEDING BEET—The most valuable Field Root on the market; combines the high qualities of the Sugar Beet with the long-keeping, large size and heavy cropping qualities of the Mangel. We offer two colors, **WHITE** and **ROSE**. $\frac{1}{2}$ lb. 15c, $\frac{1}{4}$ lb. 25c, 1 lb. 35c, postpaid.

BRUCE'S MAMMOTH INTERMEDIATE SMOOTH WHITE CARROT—The Best of all field carrots. $\frac{1}{2}$ lb. 35c, $\frac{1}{4}$ lb. 50c, 1 lb. 65c, postpaid.

BRUCE'S GIANT YELLOW INTERMEDIATE MANGEL—A very close second to our Giant Feeding Beet, and equally easy to harvest. $\frac{1}{2}$ lb. 15c, $\frac{1}{4}$ lb. 25c, 1 lb. 35c, postpaid.

BRUCE'S NEW CENTURY SWEDEN TURNIP—The best shipping variety, as well as the best for cooking; handsome shape, uniform growth, purple top. $\frac{1}{2}$ lb. 15c, $\frac{1}{4}$ lb. 25c, 1 lb. 40c, postpaid.

FREE—Our handsomely illustrated 112-page Catalogue of Vegetable Farm and Flower Seeds, Plants, Bulbs, Poultry Supplies, Garden Implements, etc., for 1913. Send for it.

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Established Sixty-three years



184

**A Fertile Farm
A Full Harvest
A Full Profit**



All these are possible by the liberal use of good fertilizers, the kind in available forms that will support the crop all through the growing season. Good seed and constant cultivation are necessary, and good weather means much, but without fertility no farmer can make his acres do their best. With a big demand and a good price for every farm product, why not get all there is in it?

The chemists we employ give their greatest attention to availability. They want the fertilizers they make to roll out the bushels at harvest time, and they do.

We have a number of factories, all located at convenient points, and wherever you live, we can reach you with the right fertilizer, the right service, and the right price. Write today for copy of "Plant Food," a practical hand book on fertility. No advertising in it; sent without cost, while this edition lasts.

Agents wanted in unoccupied territory. Liberal terms and goods that sell. It pays to sell our fertilizers as well as to use them. Ask for agency proposition

The American Agricultural Chemical Co.

Makers of brands with fifty years of quality and results behind them.

70 Lyman St., - Buffalo, N. Y.
P. O. Box 814-F - Detroit, Mich.

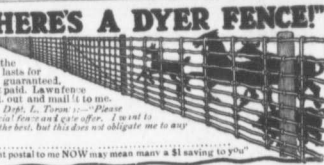
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"I saw your ad. in Farm and Dairy" when you write Advertisers. Then you get full benefit of our absolute Guarantee.

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Do you want a strong durable fence one that holds back the strongest animal, and lasts for years? DYER has it, guaranteed, 17¢ per rod (weight paid). Law in force in N. C. Cut this ad. out and mail it to me. DYER, the Fence Man, Dept. L, Toronto. Please send me your March check for one dollar offer. I will let you have dollars and I want the best, but this does not obligate me to any

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Dairy Convention at Ormston

A great convention and one worthy of the great dairy district in which it was held was the 31st annual convention of the Huntingdon Dairy Association, held in Ormston, February 29th. It was recognized to be the best convention held for years. Many new subjects were discussed, and the program was interesting and instructive enough to be enjoyed by all. The President, Robert Nees, of Howick, was in the chair.

At the morning session, Prof. H. Barton, of Macdonald College, gave a practical address on the feeding of dairy cows. He said in part that most of farms are understocked, and the stock underfed and poorly bred. Farmers are not growing the right kind of roughage. Farmers should grow more ensilage, roots and clover. He advised farmers not to start growing too large an acreage of corn at first, but to start small, and as experience was gained, increase the acreage. He considered that no dairy farmer should be without a winter crop to supplement the pasture, and recommended alfalfa, peas and oats, vetches and oats, and ensilage. He advised farmers to give more study to the making of a balanced ration, as recommended by the Scandinavian feed unit system which is in use by the Swedish Milk Producers' Association. The address of Prof. Barton was full of thought, and based on experiments made at Macdonald College.

MILK FARMING AND BACTERIA
At the opening of the afternoon session, Dr. HARRISON, of Macdonald College, gave an address on milk production from a bacteriological standpoint. He considered that the situation of the farmers in the district was linked with the milk supply of Montreal city, and he described some of the methods of delivering milk in the cities of Europe, and found that the best results were realized by companies commencing in a comparatively small way and worked upward to a large distribution. He emphasized the necessity of farmers putting up a clean milk and showed the connection of disease producing organisms between the animal and human, especially was this so in connection with tuberculosis and other diseases. Dr. Harrison considered that a great responsibility rested on the dairymen in producing clean, wholesome milk as the largest consumers were children and invalids. A few years ago at the College they investigated the milk supply of Montreal and tested a large number of samples. They found the conditions so unfavorable that they refrained from publishing the results. He advised the dairymen to pay greater attention to the cleanliness and ventilation of the stable.

Robert Brodie, of Westmount, gave a short address on the apple orchard. He said that in order to get the best results, attention had to be paid to drainage, cultivation and variety. He mentioned particularly two varieties, the Fameuse and the McIntosh Red, which were prolific bearers and most suitable for the district of Beauharnois. For first-class apples of these varieties there was always a ready market at big prices. Mr. Wm. Ewing, of Montreal, gave a short address, in which he referred to the growing of clover seed and the possibilities for the marketing of milk and other products in the adjoining city of Montreal.

A COMMERCIAL FERTILIZER ADVOCATE
At the evening meeting D. M. Matherson, of Lancaster, the first President of the Association, referred to the good work done by the Association since organization. In a lengthy address he went to show how that formally he advocated the feeding of the

cow to make soil, to grow the fall had learned was to feed produce large and thus acreage and reduction. I along with a yard many commercial cent soluble soluble phospho potash and lime. An would be a b applied had found to periments the county of G two years. Mr. H. B. and Dairy, I new subject single tax system of his the farmers an excellent and said th had a nation stockmen and Competition and Dairy.

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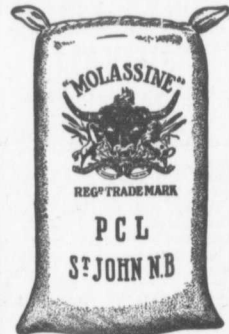
WHERE I
In referring Cowan stated suffering to-daction and indiv ers of valuable resources and of country which people. Weren to its value, and other asset. Stable rather there would no land, which biggest, stronge pecunine of the n Of the n of the conventio of the gold the successful v tional Farms Com lows; Gold n Tulloughgorum, T. O. Bourdon, Brown, Howick

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is made in England and is recognized by the leading veterinary surgeons in Great Britain—used in all mounted departments of the British Army—large Cartage Companies—Omnibus Companies—and all owners of horses having heavy work to do or for show or breeding purposes. It is



A Splendid Economical Feed for Horses, Cattle, Sheep and Pigs



"MOLASSINE MEAL" is not only a good food itself but enables the animal fed on it to obtain the full nourishment from all other food. When MOLASSINE MEAL is fed regularly three times a day, you have no waste fodder of any kind. It costs you less for feed and the animals obtain more nourishment.

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Write to the Department of Inland Revenue, Ottawa, for their Bulletin No. 241, on Registered Stock Foods, and see the Government analysis of MOLASSINE MEAL. It is better than its guarantee and away ahead of any other molasses food.

cow to make fertilizer to enrich the soil, to grow large crops. He had seen the fallacy of that system and had learned that the proper method was to feed the land so that it would produce large crops to feed more cows and thus increase the profit per acreage and lessen the cost of production. He recommended that along with a certain amount of barnyard manure the application of a chemical fertilizer with four per cent soluble nitrogen, eight per cent soluble phosphoric acid, six per cent potash and about 200 lbs. soluble lime. An application such as this would be a balanced ration to the soil, and applied early in the spring, he had found to give big returns in experiments that had been tried in the county of Glengarry during the past two years.

Mr. H. B. Cowan, Editor of Farm and Dairy, Peterboro, touched on a new subject to the convention,—the single tax system. At the commencement of his address he complimented the farmers of this district for their excellent and well managed farms, and said that Chateaugu county had a national reputation through its stockmen and Inferior Provincial Fairs. Competition as conducted by Farm and Dairy. He stated the object of

Ormatown; John Geddes, Ormatown; J. W. Logan, Howick; J. J. Milne, Riverfield; Jas. MacKell, Riverfield; Robt. McNeil, Ormatown. Mr. Thos. Drysdale, one of the judges, was present and pinned the medals on the breasts of the successful winners, after which all made two-minute speeches, including the judge. After singing "For they are Jolly Good Fellows" and "God Save the King," one of the most successful and profitable conventions of the association closed.

The following are the officers and directors for the ensuing year: Robert Noss, Howick; Pres.; Arch. Muir, Huntingdon; Vice-Pres.; W. H. Walker, M. L. A., Sec.-Treas.; Directors: D. D. McBain, Valleyfield; Wm. Scott, Valleyfield; Edward McGowan, St. Martine; Jas. Bryson, Brysonville; Thos. Drysdale, Allan's Corners; Jas. Burke, Corbin; D. H. Brown, Beth; Jas. Donaldson, Dewittville, and Thos. White, Huntingdon.

Short or Long Time Tests

Malcolm H. Gardener, Delevan, Wis.

It takes all kinds and conditions of men to give up this world; and of no man given matter the judgment of

What Have You Learned About Dairying?

The Annual Dairy Number of Farm and Dairy will be out on April 15th. We desire to fill this number with good, practical information, gained by practical dairymen through their own practical experience. In order to get the right kind of information, we herewith offer three prizes of \$5, \$3, and \$1 for the three best letters on the subject, "Some Things that I have Learned About Dairy Farming," that we receive between now and March 25th. These essays must be written from practical experience. No one need be deterred from competing because they are not practiced in the writing of letters for publication. The awards will be made on the basis of practical information obtained. We ourselves will put the letters in shape for publication. That is our business. Here is an opportunity for practical and successful dairymen to use a few evenings to advantage. We would ask prospective contributors to mail their letters to us at as early a date as possible. Photographs accompanying letters and illustrating it will be considered in making the awards.

this prize farm contest was to get down to essentials and find who were the best farmers and ascertain their systems of farming. In doing so they had made some interesting discoveries: no two of the competitors followed the same methods; the best farmers started in with little or no capital; most of them had overcome almost most insurmountable difficulties; the most successful ones were breeders of some of the pure-bred dairy breeds; nearly all grew alfalfa. The competitions had proven that the essentials of success were largely in the men themselves. He said thoughts were forces, and as men think so will they succeed or fail, and most of these men had stated their plans by having large visions and a continuity of purpose, which crowned their efforts with success.

WHERE FARMERS SUFFER

In referring to the single tax, Mr. Cowan stated that farmers were suffering to-day because of corporations and individuals becoming owners of valuable water powers, mineral resources and other large assets of the country which rightly belonged to the people. Were the land taxed according to its value, those water privileges and other assets would be made profitable rather than kept idle, and there would no longer be monopoly of land, which he considered was the biggest, strongest and most effective cobweb of the day.

One of the most pleasing features of the convention was the presentation of the gold and silver medals to the successful winners in the Provincial Farm Competition in 1911 as follows: Gold medal—Alex. Younie, Tulloughgorum, Que. Silver medals—T. O. Bourdon, Chateaugu; John Brown, Howick; Andrew Geddes,

any man is apt to be affected by his point of view. In one day's correspondence, I received three letters from breeders, each looking at the subject of testing from a different angle. The theme of the first letter was that the short-time test was worthless and the yearly test the only reliable one; of the second, that as long as there was prompt sale for cows with seven-day records, there was no need to test longer; and of the third that both tests were good, but that it needed a combination of the two to not practically in the best capacity of a cow. While I agreed fully with the last writer, I could not agree at all with the other two, and told them so.

It is quite customary for men who have climbed to eminence to kick aside the ladder which has aided them; and the short-time test is the ladder that has made the long-time test possible. The short-time test has its imperfections, as its advocates fully admit; but its good points much more than counterbalance all that can be said against it. No doubt breeders do test cows in order to make them saleable; but the perspective of any man who regards saleability as the only reason for testing is, to say the least, very narrow. Any man who loses sight of the fact that testing for advanced registration has for its main object the improvement of the breed will never attain any great success. Such a man is sure to be lacking in the enthusiasm that must be present to differentiate the man who keeps cows from the man whose cows keep him.

Window boxes will be improved by an application of liquid manure. See that all dead flowers are picked off.



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Standard Hand Separator Oil is the perfect lubricant for cream separators. Reduces friction and jarring to a minimum, so that greatest cream yield is insured.

Never gums, rusts or corrodes. Lengthens the life of the separator.

One gallon cans. All dealers.



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Learn how by writing us for this special booklet THE WILLIAM DAVIES CO., LTD., West Toronto Ontario

Seed Corn For Sale

High germination test. White Can. Yellow Dent. Grown on our own farm. Write TISDELL BROS., TILBURY, ONT. ESSEX CO.

Apply Fertilizers in Early Spring

To insure the full benefit of fertilizers to the first crop the POTASH and PHOSPHATIC fertilizer materials ought to be applied as soon as possible after the land is workable.

Where Nitrate of Soda is used as the source of Nitrogen this may be given at a topdressing at the commencement of growth.

POTASH, in the highly concentrated forms of Muriate of Potash and Sulphate of Potash

may be secured from all leading Fertilizer Dealers and Seedsmen. Write us for FREE copies of our illustrated Bulletins, prepared by agricultural experts.

If you send us the names of five (5) or more of your neighbor farmers we shall send you and them a colored Wall Placard illustrating the "After Effects of Fertilizers."

German Potash Syndicate

1102-1106 TEMPLE BUILDING, TORONTO

Consider Now

what it will cost and how much money you will save on your next season's fertilizer bill if you should buy your

Nitrate of Soda

and other Farm Chemicals and mix them yourself.

Your own brand MIXED AT HOME will be better than any patent brand and is sure to have in it just what you want. Book of formulas and full instructions for Home Mixing will be sent

FREE OF COST

Dr. WILLIAM S. MYERS Director of Chilean Nitrate Processes 17 Madison Ave., New York

No Branch Offices

FARM AND DAIRY AND RURAL HOME

Published by the Rural Publishing Company, Limited.



1. FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia and Western Ontario, and Bedford District, Quebec, Farmers' Associations, and of the Canadian Holstein Club Breeder's Association.

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

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

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 10,000. The actual circulation of each issue, including copies of the paper sent abroad and not strictly in arrears, and sample copies, varies from 15,673 to 17,200 copies. No subscriptions are accepted for less than the full subscription rates.

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

OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are carefully edited as the reading columns, and because to protect our readers we send away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our subscribers, we advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from the 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 your advertisement in Farm and Dairy.

Rogues shall not ply their trade at the expense of our subscribers or 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.

FARM AND DAIRY PETERBORO, ONT.

FARMERS MUST PAY—BUT?

One of the coolest pieces of plutocratic arrogance—we would prefer to call it plutocratic insolence—of which we have heard in a long time was the proposal advanced at the last Good Roads Convention in Toronto that the control of public highways be taken from the township and county councils and assumed by the Provincial Government. This proposal was advanced by President Walker, of the Bank of Commerce, and met with the support of the whole coterie of his automobile-owning friends.

On dissection this proposal, were it to be adopted, would amount simply to this: That the farmer who pays the taxes would still continue to do so, but he would have nothing to say about the expenditure of that taxation. The money raised in his township might be spent hundreds of miles away on roads that he might never see. The road from his

own door to his own market at certain seasons might be impassable, while his road money was being spent to perfect some other highway much travelled by automobiles, but of little value to farmers generally.

When Mr. Walker's proposal was first advanced we did not intend to say anything about it. We supposed that it was so ridiculous it would not be considered seriously. In the meantime, however, several leading journals, as well as country newspapers, have come out in support of provincial control of all public roads. The farmers of Ontario will not be easily led to give up their control of highway expenditures. But they should be ever on their guard and ever ready to oppose such suggestions as that recently advanced at the Good Roads Convention.

THE NATIONAL HIGHWAY AGAIN

Another project supported by the delegates to the Good Roads Convention was like unto the suggestion to remove the control of road expenditures from county and municipal councils, in that it was designed for the benefit of wealthy automobile owners. We refer to the proposal to build a great national highway extending from one end of Canada to the other. We are told by the advocates of the national highway that it will be of particular benefit to the farming community in that it will enable thousands of farmers to reach their market easier and will be an object lesson in highway construction to the whole country.

We are not told that the chief benefits will be derived by city automobile owners who are the only ones who would ever make use of such a highway. What farmer would ever think, for instance, of driving from Toronto to Kingston or from Toronto to London? But this trip is made regularly by big touring cars owned by city magnats, and it is with this class that the national highway project finds its chief support. The roads that the farmer desires are those that lead from his farm to his nearest market or shipping point. It is the improvement of these roads that will be of advantage to farmers generally and to the consumers of our cities and towns, and it is on these roads that public money should be expended.

Those who are so enthusiastic in support of a national highway do not propose to build it or even to specially contribute to the cost of its construction. Their proposal is that the expense be met by the federal and provincial governments and by the municipal councils of those counties through which the highway would pass. The federal and provincial governments, according to the scheme now advanced, would bear the great proportion of the expense. That is, hundreds of thousands of farmers living hundreds of miles from the proposed highway and who would never see it or derive one cent of benefit from it, would pay practically as much towards its

construction as would those living on the highway or those who use it most—the automobile owners of our principal cities. Could anything be more unjust?

The time will come when Canada is more thickly settled and when revenues are more abundant than they are now, that we will have splendid highways extending from one end of Canada to the other and to every part of every province. In the meantime, the highways in need of improvement are those that the taxpayer values most, and the only way in which this can be secured is to leave the farmers of the various municipalities in conjunction with their neighbors in town to improve the roads that they need.

FARMS OR FIELDS

Will the demonstration farm teach neighboring farmers how to farm? The Agricultural Section of the Dominion Commission of Conservation believes that it will. They have already selected farms in various parts of Canada that will be run according to the directions of the commission's experts.

Dr. G. C. Creelman, President of the Ontario Agricultural College, does not believe that these demonstration farms will accomplish the purpose for which they are being established. To illustrate his contention that farmers will not follow the methods which they see pursued on the demonstration farms, Dr. Creelman made reference at the recent Corn Show at Windsor to a small farm of fifty acres adjoining the college farm at Guelph, and surrounded on three sides by college property farmed on up-to-date principles. This farm the college was recently obliged to purchase to clean it up. A weeder or more indifferently farmed parcel of land, said Dr. Creelman, it would be difficult to find. And yet one of the finest demonstration farms in the province was not only near it, but surrounding it. To still further strengthen his case, Dr. Creelman referred to the great number of poor farmers all over Canada who have lived all their lives beside those who farm in a progressive and up-to-date manner, and have themselves made little or no progress towards more desirable systems of agriculture.

We agree with Dr. Creelman that the demonstration farms will not accomplish all the good things that its promulgators expect them to do. We do believe, however, that the principle could be applied with good results. As we stated when the Commission of Conservation first announced their plans, we believed that the demonstration field system would be much more productive of good than to extend the operations of the Commission over a whole farm. The plan outlined in Farm and Dairy some months ago was to select a field of convenient size, say twenty acres, adjoining a much travelled road. If a four-year rotation were to be followed this twenty acre field might be divided into plots of

The Polar Tragedy

The civilized world has been deeply shocked by the news which has come from the Antarctic regions of the tragic death which overtook Capt. Scott and his gallant comrades on their expedition to the conquest of the South Pole, and the hearts of the people of all nations go out in sympathy to the bereaved families and friends of the dead heroes. If money could have saved the lives of these brave men millions would have been given. And yet it is for the destruction of just such men that armies and navies are designed. The actions of the world are pouring out their millions for the building of engines of destruction which, if war comes, will be used to mangle and to kill thousands of men just as brave and courageous as Captain Scott and his gallant band. When will our statesmen see the tragedy and the wickedness of war?—Grain Growers' Guide.

five acres each, and cultivated according to rotation. A large signboard erected beside the road would draw attention to the fact that this was a demonstration field, would give explanations as to how it was being farmed, stating the rotation, amount of seed sown per acre, fertilizers used, and so forth. Everyone would be watching that field and the improving fertility and increased production would be evident to all. The passer-by would not need even to stop his horse to note the progress of the experiment. The lesson is thus brought home to the farmer traveller much more readily than if he had to stop and spend an hour or two inspecting a farm.

In the meantime the demonstration farm idea is being tried out. If it does not work as satisfactorily as expected it is not yet too late to give the demonstration field idea a trial. We believe that it would make good.

We all know how a narrow-tyred wagon and a heavy load will cut in to the average county road. Even

the best macadam roads are worn out

Desirable Legislation. heavy loads on narrow tyres than where the tyres are of a greater width. A bill recently introduced in the Ontario Legislature by Mr. Rankin proposes to regulate the width of tyres for certain loads in order to further conserve the life of the country road. According to this proposed legislation all wagons with a capacity of two thousand to four thousand pounds must have three-inch tyres; four thousand five hundred to six thousand pounds, three and one-half inch tyres; and six thousand to ten thousand pounds, four and one-half inch tyres. This bill, if it meets with the approval of the house, will come into force in January, 1916, applying from that date to newly-made vehicles. The bill also provides that no vehicle whatever shall have tyres of less than the minimum width after January, 1919. We believe this to be commensurate legislation. One of the greatest deterrents to the maintenance of good roads, however, has not yet been touched by the Legis-

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AD. TALK
XLIX

There is something noteworthy in the series of advertisements for the Spramotor Co. that have been in Farm and Dairy now for some weeks past, and will continue for several weeks to come.

You might criticize these advertisements because they occupy only small to medium space, they contain considerable copy, and small type is freely used.

And so far as they might apply to your particular business the criticism might be well taken.

But you will have noted that they are abundantly well displayed, without having gone to the expense of art work and electros. Then, too, they are well illustrated. Thus they catch the eye.

Whilst these ads. contain a lot of rather small type, not too easy to read, you will notice that the display line running through them all—"A Gold Mine on your Farm"—will catch even his who runs. The headings attract and convey a meaning. "Spramotor" is emphasized in every case.

Thus it has been made certain that anyone, even on the run, will catch the idea and the name of the Spramotor spraying equipments. Under ordinary circumstances it has been estimated that over 65% of readers who pause to read an advertisement desire some information and might not "write for booklet." Thus the information—and something new each week—is given in these ads.

The Spramotor line of sprayers and accessories is a big one. It is impossible—and certainly undesirable—to get a description of it all in any one advertisement; therefore a different subject is touched on in each ad., and thousands who will not now write and who do not yet need a spraying outfit, are being educated and being given the right impression as regards the Spramotors. Thus, in addition to immediate results, seed is being sown for the harvest certain to come into fruition later on.

These ads. vary in size from small 50-liners, and 65 lines like this week, to as big as half pages like was used last week in our great Orchard Number. When but only a fair percentage of Farm and Dairy readers are extensively engaged in Fruit Growing, it would not be the part of wisdom to make a splurge in every issue for this speciality line. With products having a general appeal it would be different. Big space would be O.K. and quite desirable.

The Spramotor Co. was assisted by Farm and Dairy. Advertising Dept., in outlining and writing these advertisements. Probably you would like to use our assistance. Consult us and have us serve you through Farm and Dairy—

"A Paper Farmers Swear By"

lature. What are they going to do with those touring automobiles that will tear up a good dirt road in a single season?

One of the finest examples of a "save the penny, swallow the dollar" policy, is the manner in which some dairy farmers purchase seed corn.

Good Seed Corn. We have grown so accustomed to paying seventy or eighty cents a bushel for our seed corn that it would be hard to convince some of us that first-class seed corn is worth three dollars a bushel to any man, and that we cannot afford to spend less than one dollar fifty cents to two dollars a bushel for the seed on which depends the success of our corn crop.

A good stand of corn for ensilage purposes is twenty-four thousand plants to the acre. If, however, the seed that we plant has a germination of only sixty per cent. (and a large part of the cheap seed corn

NATIONAL prosperity originates on the farm. The farmer is the dynamic force. This is the reason the farmer is alluded to as the "backbone of the country." The welfare of the farmer is inseparable from the welfare of the nation, and of each individual citizen of the nation. A failure of any of our staple crops is felt throughout the world. The shock of failure, however, is felt more at home than abroad; it is felt more at the pocket (or section) of failure than by the country at large; it is felt still more by the individual farmer who has failed and who takes his all to pay his debts.—D. B. Osborne

sold has about this percentage of germination), only fourteen thousand four hundred plants will grow. That is, a crop that would have been worth thirty dollars an acre is reduced to one worth eighteen dollars, or we suffer a loss of twelve dollars an acre through the planting of inferior seed. One bushel of corn seed will plant four acres. That is, in saving a dollar or two on the price of the original corn, we lose forty or fifty dollars on the crop. This is saving the pennies and losing the dollars with a vengeance.

There is lots of good seed corn produced in South-western Ontario. Also there is any quantity of inferior corn grown. If we are willing to pay a good price for our seed corn, we will get the good article and consequently the good crops. If we insist on paying the low prices to which we have been accustomed, we have no one to blame but ourselves if the seed is not satisfactory, the stand thin, and the crop short.

Repair farm machinery now. You cannot afford to stop work in the rush season for repairs that can be made now.

Sit down and think through next season's farm work step by step. A day or even a week spent in this way will make you more money than many weeks hard manual labor in the year. Make your head save your heels.

DE LAVAL CREAM SEPARATORS

No Excuse for any Cow Owner Being Without One

There is no reason why any cow owner who sells cream or makes butter should be without a cream separator and there is no excuse why he should not have the best separator.

Any creameryman or experienced dairyman will tell you that a good cream separator will give you a great deal more and a great deal better butter than you can make with any gravity setting system, and equally, of course, more and better cream, if you are selling cream.

The DE LAVAL is acknowledged by creamerymen and the best posted dairymen the world over to be the "World's Standard," and the one and only separator that always accomplishes the best results possible and always gives satisfaction.

You cannot make the excuse that you can't afford to buy a De Laval, because it will not only save its cost over any gravity setting in six months and any other separator in a year, but is sold either for cash or on such liberal terms that it will actually pay for itself.

A little investigation will prove to you that the truth of the matter is that you really can't afford to make cream or butter without the use of the DE LAVAL cream separator.

The nearest De Laval local agent will be glad to demonstrate this to your own satisfaction, or you may write to us direct.

DE LAVAL DAIRY SUPPLY CO., LIMITED
MONTREAL PETERBORO WINNIPEG VANCOUVER

Good Seed Barley O. A. C. No. 21

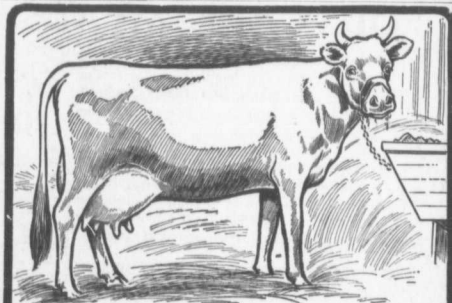
85c per bus. f. o. b. In lots of 10 bus. or over, 80c.

Special price for large quantity. Good oatmeal base, 75c each.

R. B. BROCK - BOX 10, JARVIS, ONT.



For Sale Cement, Sewer Pipe & Drains
TILES, all sizes. Counties and Townships
send in your orders to JOY & SON,
Acme Tile Machine Co., Ontario Agents for
Acme Tile Machine Co., Ltd., Toronto, Ontario.



The Feed That Makes The Cream

Livingston's Oil Cake is the cheapest feed for cows—cheaper than corn, shorts or even hay. Because it actually increases the richness of cream—and also increases the amount of butter that you get out of the milk.

Test your cows before and after feeding Livingston's Oil Cake for a month—and your "butter money" will show its economy.

Livingston's Oil Cakes contain from 8 to 12% of pure Lined Oil—are soft enough to break into small bits—and are completely and easily digested. Write us for sample and prices if your dealer cannot supply you.
Dominion Lined Oil Co., Limited, Baden, Toronto, Montreal.

Livingston's Dairy Oil Cake

The Results At The Kerwood Cheese Factory

EVERY week or so we receive letters from creameries and cheese and butter factories, reporting tests made with the Standard cream separator. For example, the Kerwood Cheese and Butter Factory reports as follows on tests made Oct. 29, 1912:

Test No.	Per Cent of Butter Fat in Cream.	In Skim Milk
1	43	.62
2	43	.62
3	45	.63

In each of the above tests the milk was fed to the machine at the rate of 80 lbs. per hour (machines listed at 600 lbs.) and the bowl was flushed, and when taken apart was free from cream and in good condition. The milk skimmed was not new milk, but had been kept over, some of it two days old. You will note by the above figures that the milk was fed to the machine nearly 100 lbs. per hour faster than the rated capacity, and that the cream skimmed contained a high per cent of butter fat, so that I consider the work done in this get exceptionally good.

(Signed) W. WADDIALL, Proprietor, Kerwood Cheese and Butter Factory.

The above test again emphasizes the superiority of the Standard in close skimming. Even old milk, fast-skimming and heavy rich cream did not prevent the Standard from skimming closer than other separators do under most favorable conditions. Figure it out. It will pay you to discard your old machines and get a "Standard" and do it now. There is no other that can give you equal results and it's results that count. Send for descriptive catalog.

The Renfrew Machinery Company, Limited
Head Office and Works: RENFREW, CANADA
Agencies Everywhere in Canada.

Creamery Department

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

Buy a Large Machine

By J. K. Van Camp

A point of great importance in buying a cream separator is what size machine to purchase. A great many make a big mistake when they figure on saving some money by getting the smaller sizes. Just compare now. A machine with a capacity of say 900 to 1,000 pounds of milk an hour will do the work twice as fast as one running from 450 to 500. That is plain. Also it is evident that the large machine will get but less wear as the smaller size will therefore have double the life of the smaller size.

Suppose it takes the small machine 30 minutes to do a run. The large machine does it in 15 minutes. You can milk four good cows in those 15 minutes you save, and in six months those four cows will make you in clear money at least \$200 at the very least and no "extra" time added. Isn't it plain to you that the big separator is the only one to buy if you ever figure on milking over five cows?

CUSTOMERS SAY SO

I have sold a great many of the smaller size machines and time after time my customers have expressed the wish that they had purchased a larger machine and offered to make a trade with me. They found absolutely no fault with the machine they had accepted the capacity, but they could see where it would be to their interest to have a larger capacity.

These customers have caused me to look into the reasons I have set down above, and they are absolutely sound. "Pay more money and get the larger machine and you will save money. Follow that advice and you will be glad that you did so before six months roll around.—De LaVal Monthly.

Trouble with Butter Color

By Jas. Sorenson

When there is anything wrong with the color of butter, there are those who at once jump to the conclusion that the butter color is to blame, and while this may be true in some instances, it is safe to say that is a rule something besides the color is to blame for off color in butter.

Color specks are, of course, communicated to the butter by the butter color, but it is due to the color not being properly cared for in the creamery. There is, of course, more trouble with color specks during cold weather than during the warmer months. This is generally due to the color freezing or chilling, and butter-makers should not allow the color to freeze, but if it does happen to freeze, it may be brought back to its natural state by setting the color can in boiling water for a considerable length of time. The vegetable butter colors should preferably be kept in a place where the temperature is moderate, and it would not be advisable to keep color where it would get too warm, as it might result in deterioration and cause trouble by imparting off flavors to the butter. It is a good plan never to buy butter color in large quantities, and there is less chance for having trouble with the color if it is bought fresh and not allowed to become old in the creamery.—Dairy Record.

Renew your subscription now.

95 AND UPWARD



AMERICAN SEPARATOR

THIS OFFER IS NO CATCH. It is a solid investment in a new trial, fully guaranteed, a new, well made, heavy-duty separator for \$15.00. Skims but of cold milk, makes rich cream, and separates small particles of dirt and grit. The best in the world. Write for literature, size large, and see how it works. Write to J. H. P. CO., 100 N. W. 10TH ST., ST. JOHN, N. B. Whether you buy it or not, write us and obtain our handsomely illustrated Address Book.

AMERICAN SEPARATOR CO., Box 100, St. John, N. B.

Creamery For Sale

Creamery, running summer and winter. Very large machine. Everything in first-class order. Large house. Good ice land and refrigerator. Large stable with sheds and other buildings. 6 acres good land. Close to town and railroad. This is one of the best dairy districts in Ontario. Write NELSON SCHATZ, - - BADEN, ONT.

FERTILIZERS

For information regarding all kinds of mixed and specialized fertilizers, write to THE WILLIAM DAVIES CO., LTD., West Toronto - - Ontario

An Experienced Butter Maker Wanted

Must understand business from A to Z. Also one with one or two years' experience. State wages, with or without board. Your own position is to right man. Apply at once to Box 113.

J. J. S. - - VIKING, ALTA



IMPROVE YOUR STOCK

It Pays to Clip

Horns, Blows and Cuts. They are healthier and render better service. They are more easily kept clean, look better, get more food from their food and are better in every way. The best and most generally used clipper is—

The Stewart Ball Bearing Clipping Machine

It turns wool, clip faster and closer and makes finer longer fleeces than other. Great for all the hard and soft wool. Made in U.S.A. They are unexcelled. Price \$975

Little friction, little wear. Size and feel of one style easy to change. Double shaft. The standard Stewart single shaft. Light and strong. Get one from your dealer or write Stewart Machine Co., 222 West Superior St., Chicago, Ill. We will ship on C.O.D. and will insure against loss in transit and transportation charges, if not satisfied, return free.

CHICAGO FLEXIBLE SHAFT CO., CHICAGO, ILL.

Write for complete new catalog showing world's largest and most modern line of horse clipping and sheep shearing machines.

Sweet Cream Wanted

Full particulars on application to

The Farmers' Dairy Co.
567 Queen St. W., TORONTO - - ONT.

CREAMERY TO RENT
In a good dairy locality, two hours distance from Toronto, on main line of C. P. R. Pure spring water on premises. Address, Box 950, Farm and Dairy, Peterboro

CREAM WANTED Highest City price paid for cream. We furnish case, pay all charges. Write promptly. Haven't paid less than 5c for two months. Write TORONTO CREAMERY CO., LTD., Toronto

MAPLE LEAF CANADIAN LINSEED OIL CAKE BRAND



"Maple Leaf" Brand OLD PROCESS

OIL CAKE MEAL

is the Best Food to fatten an animal in the shortest time; it multiplies the feeding values of all grains, and fodder fed with it, and leads all other feeds in manurial value for fertilizing the soil.

A ton of MAPLE LEAF OIL CAKE MEAL contains three times the digestible protein or muscle making element, contained in a ton of corn, and protein is the most costly, necessary and valuable element in food.

Feed MAPLE LEAF OIL CAKE MEAL—

Watch the Result

If your dealer cannot supply you, write us direct

The Canada Linseed Oil Mills LIMITED

Mills at MONTREAL and TORONTO

Did My ad. Dairy ad came out Saturday, was looking for an ad many the paper. W. H. Farmers' Co.

day threaten the dairy industry. We had dairy business as economical in the utilization of protein a high. To this, several pounds of the manufacture total of 2,667 valuable food utilized, or 80 man, woman States. From two countries that the industry more saving it is in the few facts the why factors is a common large proportion off into the every year. creameries water milk is used as it makes products contain. Here is a dairymen to we going to profitably so be placed on now is?

Cheese Department

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

The Food That We Waste

We were standing on the platform of the Grand Trunk railway station at Guelph waiting for the Toronto train. As we were waiting our hands around our shoulders and beat time with our heels against the station house (to keep warm, of course), we talked of dairy matters. Very few men," remarked Professor Dean, "have any comprehension of the vast amount of good food material that is allowed to go to waste in connection with our cheese industry every year. Look," he said, "at the immense amount of good animal food that is wasted in the way that is never used or the way that is as good as wasted through the poor care that it receives on the farm. The loss is so enormous that it will some

Did the Work O.K.

My ad. recently in Farm and Dairy did the work O.K. The ad. came out Friday. It was noticed Saturday, and I hired the man I was looking for Monday. He saw the ad. in Farm and Dairy, and many thanks to your valuable paper. With best wishes from a reader.
T. H. HUMPHREY, Proprietor,
Farmers' Union Cheese & Butter Co., Unionville, Ont.

day threaten the very existence of the dairy industry."

We had always known that the dairy business, particularly the cheese making business, was not on an economical basis as it might be in the utilization of by-products. Professor Dean's emphatic remarks, however, started us thinking afresh along this line, and we do not need absolute statistics to know that the loss must be counted in almost millions of dollars. Later we came across some figures prepared by the United States Department of Agriculture that serve to illustrate how great this loss may be. It was there estimated that the skim milk and butter milk used in the manufacture of butter in the United States, most of which is not utilized, comes in the aggregate over one billion pounds of protein and more than one billion and a half pounds of milk sugar. To this was added the \$1,000,000 in pounds of protein they left over in the manufacture of cheese, making a total of 2,567,000,000 pounds of most valuable food material not properly utilized; or over 37 pounds for each man, woman and child in the United States.

From what we know of dairying in the two countries we do not believe that the industry in Canada is any more saving of food materials than it is in the United States. There are few factories where every bit of the whey is properly utilized and it is a common thing to find that a good large proportion of the whey is run off into the nearby swamp or river every year. The same applies to the creameries where little of the butter milk is used to good advantage as it might be. These waste products contain valuable food material.

Here is a problem for Canadian dairymen to ponder over. How are we going to utilize our by-products profitably so that our industry may be placed on a surer basis than it now is?

Prosperous Oxford Factory

A live meeting was that held at the Newark cheese factory on Feb. 17th. Mr. Henry Burrell presided and the relative value of condenser versus cheese factory were discussed and the patrons decided unanimously to stay with the cheese factory. W. Merror, C. Wade and Geo. Chambers addressed the meeting. The annual report was read. The total amount of milk received for making cheese was 2,216,706 lbs.; for making butter, 230,623 lbs.; money received for cheese, \$28,369; for butter, \$28,478.38; average price per cwt. milk for cheese 104.77 cts.; average price per lb. cheese 13.10 cts. The patrons are highly pleased in the way the factory is being conducted by the proprietor, Mr. Fred Snell, and from present indications it looks as though the present year will be one of the best in the history of the factory.

Instruction Work in Northumberland

G. W. Bentley, Dairy Instructor, Northumberland Co., Ont.

I have had 42 factories under my supervision this last year, 41 making cheese and one making casing. I worked 35 full days making cheese, testing milk and giving general instructions and made 205 cal visits. I spent eight days census taking at one factory. I made 217 visits to the farms and also made 37 fermentation tests and found 20 samples either overripe or tainted. This is a slight improvement over last year, due largely (I am sorry to say) to the cool season and not to any extra effort on the part of the patron.

There were 30 new silos built in the district. There were 618 old cows discarded. The estimated expenditure in the way of improvement was \$3,560.

The total number of cows furnishing milk to cheese factories in the district was 23,323, owned by 2,738 patrons, an average of between eight and nine cows a patron. The average per cent of fat in the milk for the season was 3.54, a little less than last year. There were five factories in the group making whey butter. The average loss of fat in the whey was .30. The average acidity of whey in tanks was 1.12 and fat .08.

The cheese in the district, generally speaking, was rather better than in former years, which we would naturally expect owing to the favorable conditions, cool weather, good water and plenty of good grass. The principal defects were open and coarse textured cheese due largely to too great a development of acid at the time of the removal of the whey and not maturing curds long enough before and after salting.

I found a decided improvement in the sanitary condition of patrons' stables, which was much needed. There is still a wide scope for improvement in that direction. Stables should be clean, well lighted and ventilated.

There were one or two cheese made in my section last season not worth raving over, but the majority of my boys put up as fine cheese as were made in Canada. Only five of the makers were pinched. One got drunk on whiskey, another unjustly criticized his employer and another had an inordinate desire to survey the roads. The others were served out on all flavors and to make matters all a loss of \$162. These are some of the things the instructors bump into.—A. H. Wilson, Dairy Instructor, Leeds Co., Ont.

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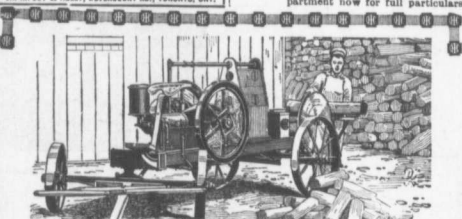
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"HE only is advancing in life whose heart is getting softer, whose blood warmer, whose brain quicker, whose spirit is entering into living peace.—John Ruskin

Rose of Old Harpeth

By MARIA THOMPSON DAVIES

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(Continued from last week)

BUT after a few minutes of most becoming reverence Stonie's eyes opened and revealed his surprise at Everett's presence as he knelt by the chair across from Tobe and almost as close to Rose Mary's protective presence as either of the two combatants. With a welcoming smile the General alighted the little brown hand of fellowship into the stranger's, thereby offering a material support to the latter's agony of embarrassment, which only very slowly receded from face and demeanor as the services proceeded.

Then as across the crackle of the fire came the confident word of David the Singer: "The earth is the Lord's and the fullness thereof; the world and they that dwell therein," intoned in the old man's reverent voice, something led Everett's glance out through the open door to see the bit of divine dominion that spread before him with new eyes and a newer understanding. Harpeth Valley lay like the tender palm of a huge master hand with the knuckles of rougher hills knotted around it, and dotted over the fostering meadows were comfortable homes, each with its morning altar fire sending up opal wreaths of mist smoke from the red brick or stone chimneys. Long creek lines marked their way across the fields which were growing tender green with the upspringing of the spring grain.

"Who hath measured the waters in the hollow of His hand," droned Uncle Tucker. "The hollow of His hand," assented Everett's conscience in artistic appreciation of the simile.

"And stretched out the heavens as a curtain and spreadeth them out as a tent to dwell in," came as another line of interpretation of the picture spread before the strangely unshackled eyes of the bowed man with the little boy kneeling beside him. Quickly he turned toward Rose Mary with almost a start of glance and with first forth the fact that had been faring forth over Harpeth Valley on the wings of Uncle Tucker's supplication as had he. The wonder about to lay his to her depths never before stirred when a fervent "Amen! I beat you that time, Tobe!" fairly exploded at his ear as the General took the final word out of Uncle Tucker's very mouth in rival to his worshippings opponent.

"I said it first, but it got blowed into Miss Ro' Mary's sleeve," avowed Tobe with a flaunt at his competitor.

"If anybody he'r'n it, it don't count," decided the General with emphasis. And in friendly dispute he escorted his rival down the front walk, while Uncle Tucker, at was his

custom, busied himself straightening hymnbook and Bible, so leaving the family altar in readiness for the beginning of a new day. And thus the primitive ceremonial, the dread of which had kept Everett late in bed every morning for a month, had resolved itself into what seemed to him but the embrace of a tender, whimsical brotherhood in which the old mystic both assumed and ac-



A Home Fit for a King

counted for a stewardship in behalf of the others assembled under his roof-tree.

But in the eyes of Miss Lavinia all forms of service were the marshalling of the hosts in battle array and at all times she was enlisted in the ranks of the church militant, and upon this occasion she bore down upon Everett with banners unfurled.

"We are mighty gratified to welcome you at last in the circle of family worship, young man," she declaimed, as reproach and cordiality vied in her voice. "I have been a-laying off to ask you what church you belonged to in New York, and have a little talk with you over some of our sacred duties that young people of this generation are apt—"

"Rose Mary," came Miss Amanda's cheery little voice from the doorway just in time to save Everett from the wish, if not even a vain attempt, to sink through the floor, "bring Mr. Mark right on in to breakfast before the waffles set. Sister Viner, your coffee is getting cold." Little Miss Amanda had seen and guessed at his plight and the coffee threat to Miss Lavinia had been one of the nimble manoeuvres that she daily, almost hourly, employed in the management of her sister's ponderosity. Thus she had saved this day, but Everett knew that there were others to come, and

in the dim distance he discerned his Waterloo.

And as he worked carefully with his examining pick over beyond the north pasture, through the soft spring-warm afternoon, he occasionally smiled to himself as the morning scene of worship, etched deep on his consciousness by its strangeness to his tenets of life, rose again and again to his mind's eye. They were a wonderful people, these Valley folk, descendants of the Huguenots and Cavaliers who had taken the wilderness trail across the mountains and settled here "in the hollow" of old Harpeth's hand. They were as interesting scientifically from a philosophical standpoint as were the geological formations which lay beneath their blue-grass and clover fields. They built altars to what seemed to him a primitive God, and yet their codes were in many cases not only ethically but economically and democratically sound. The men he had found shrewd and as a whole more interested and versed in statecraft than would seem possible, considering their shut-in location in regard to the places where the world's wheels seem to revolve. But were there larger wheels revolving, silently, slowly, but just as relentlessly, out here where the heavens were stretched "as a curtain," and "as a tent to dwell in?"

"The earth and the fullness thereof," he mused as he raised his

hands she's drinking some of Rose Mary's petting with every gulp."

Everett had just raised the glass Rose Mary had handed him, to his lips, as Mrs. Rucker spoke, and over its edge he regarded the roses that suddenly blushed out on her cheeks, but she refused to raise her lashes a fraction of an inch and went calmly on pressing the milk from the butter she had just taken from the churn.

"Granny knows that love can be sent just as well in a glass of buttermilk as in a valentine," she finally said, and as she spoke a roughish snarl coarsened the corner of her smug mouth. "Don't you suppose the kind of hemp twine would turn into a cold cord if you tied it around a bundle of true love?" she ventured further in a spirit of daring, still with her eyes on the butter.

"Now that's something in meaning like my first husband, Mr. Satterwhite, said when we was married," assented Mrs. Rucker with hearty appreciation, but practically in Rose Mary's sentiment. "He said to me two sows, each with a litter of pigs, for a wedding present, and said they'd be a heap more to me than any of the other things he could ever bought for half the money they'd bring. And they was, for, in due course of time, I sold all them hogs and bought the plush furniture in the front room, the parlor, and all. Now Mr. Rucker, he gave me a ring with a blue set and 'darling' printed inside it that cost fifty cents extra, and Jennie Rucker swallowed that ring before she was a year old. I guess she has got it growed up inside her, for all I know of it, and her Paw is a-setting on Mr. Satterwhite's furniture at present, speaking still. Sometimes it makes me feel sad to think of Mr. Satterwhite when Col Rucker spells out, 'Shall we meet beyond the river,' with two fingers on that melocoin. But then I even up my feelings by remembering how Cal let me name a Pet for Mr. Satterwhite, which is a second-husband compliment they don't many men, pass; and it pleased Granny so."

"Mr. Rucker is always nice to Granny Satterwhite," said Rose Mary with the evident intention of extolling the present incumbent of the husband office to her friend. But at the mention of his name a moment earlier, young Peter, the bond between the past and present, had sidled out the door and proceeded to sit calmly down on the rippling surface of the spring of which rescue and retirement necessitated his mother's departure and Everett was left in command of the two-alone situation he desired.

"Hain't this been a lovely, long day?" asked Rose Mary as she turned the butter into a large jar and pressed a white cloth close over it with a stone top. "To-night is the full April moon, and I've got a surprise for you, if you don't find it too soon. Will you walk over to Tilling Rock, beyond the barn-lot, with me after supper and let me show you?"

"Will I cross the fields of Elysium to gaze over the pearly ramparts?" demanded Everett with boyish enthusiasm, if not a wholly accurate use of mythological metaphor. "Let's cut supper and go on now! What do you say? Why wait?"

"I'm afraid," laughed Rose Mary as she prepared to close up the wide window and leave everything in ship-shape for the night. "A woman oughtn't to risk feeding a hungry man cold moonbeams instead of hot hooecake. Besides, I have to see everybody safely tucked in before I can leave. Aren't they all a precious household of early-to-bed chickens?"

(Continued on page 22.)

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The Upward Look

The Gospel and More

Being affectionately desirous of you, we were willing to have imparted unto you, not the gospel of God only, but also our own souls, because you were dear to us.—1 Thess., 2:8.

How many of us live up to this verse and its teachings? Perhaps the majority of us are not specially endowed with the power or talent of imparting the gospel to others in a way that will be beneficial to them. And we sometimes wish when we hear some great preacher or orator that we had his command of language to express our thoughts which seem to come to him without any difficulty.

Although much good may be done by imparting the gospel in well chosen words and pleasing manner, yet we believe much will be lost if the person does not impart some of himself in presenting this gospel. There are many opportunities for us to tell others about Jesus Christ, but if we do not give some of ourselves we are not giving enough and our work will not count for as much as it might. The great men and women of today who are doing a grand and noble work for Christ are those who are sacrificing self for others. There are many ways in which we may accom-

plish this end. By little acts of kindness or in many ways in which we can forget self in helping others in Sunday school or church work or in every-day living.

The Lord Jesus is the great Worker. While on earth he was continually living for others and sacrificing Himself in order to help His people and tell them more about His Father and His wondrous love for them. And His work did not cease when he ascended up into heaven. He is still the great Worker throughout all the ages, and we are the medium through which He may convey His love and power towards the world.

We see through Paul's letters what a great power for good he had over men, but we believe he would not have had this influence had he not given himself in many ways that were costly to him and that had no immediate connection with the gospel. And it is the same to-day. If we offer only the gospel to men to-day many will not accept it, but if we give ourselves in helpful ways we will be living out the gospel in a way they can understand. Is this verse not an incentive for us all to live the gospel as well as preach it?—R. M. M.

The best duster is a slightly damp (not wet) cloth, passed lightly over the surface, and changed for a clean one as often as it shows soil. A feather duster only disturbs and aids in distributing the dust, which settles somewhere else.

Ventilating Cellars

An unventilated cellar is a reservoir for the seeds of pestilence and death. Diphtheria and typhoid fever are not infrequently the result of miasms accumulated in close underground apartments where vegetable and animal matters are allowed to decay and decompose. Organic matters of any kind should never be kept in any room or place unless free and ample circulation of air is secured. Here is a good plan for ventilating:

A stove on the first floor may have a branch from its smoke pipe passing down through the floor, so as to receive the top air of the cellar. This pipe should be slightly enlarged at its lower end and should be supplied with a valve; when the fire is being lighted this valve may be shut and afterwards opened, so as to leave sufficient draft for the stove. Thousands of cubic feet of damp air and foul gases will pass through the chimney from the cellar daily and thus render it both clean and dry at all times. Every philosophical mind will see the truth of this statement and at the same time must admit that where such an arrangement does not exist that, to a degree at least, these foul gases must leak through the cracks in the floor; to the detriment of the health of the inmates before it passes through the fire into the chimney. Every chimney should be connected in some way with the cellar, so as to be used as a ventilator when required.—Western Farmer.

More Education

Mrs. J. T. S.

How many of our readers think they have enough education to make the most of life? Did your education stop when you stopped going to school? Have you ever heard people say, "If I had a better education I would do so and so"? They seem to think their brain unable to respond to opportunities. But why should their intelligence grow in later life as well as during the years of schooling? Do not years of experience equip us with better reasoning powers?


Many will say: "I haven't time to develop my intellect," but who cannot in the evening, after the work is done and the whole family is assembled, have each member in turn read some interesting, educational and up-lifting articles that will be an inspiration all the following day. Let the little ones have educational games these winter evenings, read good instructive magazines, take a Chautauqua course, if you can, as your reading will then be more systematic. A Shakespeare club, Dickens club or Reading Circle might be organized in many country localities, and much pleasure and profit derived therefrom.

It is a pity some people do not care to read. What a world of information and happiness they miss! By all means let us try to do some worthwhile reading this winter. Let us try to be wiser by spring.

Renew your subscription now.



"Listen, Rose."
Bud reads:
"Madam, your own white hands are the first to touch FIVE ROSES.
"For nearly one mile it travels through hygienic automatic processes—more and more spotless.
"Till in a clear creamy stream it flows into clean new packages, filled full-weight by infallible machinery—sewed automatically."
"Goodness!" said round-eyed Rose.
Bud reads eagerly:
"Hand-proof, germ-proof. Every littlest bit of machinery is bright—polished like those piano keys of yours. FIVE ROSES is healthy flour, wholesome, none like it. Unbleached, too."
"Nobody touches my flour—but me" said Rose.
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Rose of Old Harpeth

(Continued from page 20)

The old Sweeties have forgotten there is such a thing as the moon and Stone hasn't found it out—yet." And with a mischievous backward glance, Rose Mary led the way up the lilac path to the Briars on top of the hill just as the old bell sounded two wobbly notes, their uncertainty caused by the rivalry of the General and Tobe over the pulling of the ropes.

And it was quite two hours later that she and Everett made their way across the barn-lot over to the broad, moss-covered Tilting Rock that jutted out from a little blackberry covered knoll at the far end of the pasture.

"Now look—and smell in deep!" exclaimed Rose Mary excitedly as she pointed back to the Briars.

"Why—why?" exclaimed Everett under his breath, "it's enchantment! It's a dream—am I awake?"

And indeed a very vision spread itself out before the wondering man. The low roof and wide wings of the Briars, with the delicate tracery of vines over the walls and gables, shone a soft, old-brick pink in the glow of moonlight, and over and around it all gushed a very shower of shimmering white blossoms, surrounding the house like a mist around an early blooming rose. And as he looked, wave on wave of fragrance beat against Everett's face and poured over his head.

"What is it?" he demanded breathlessly, as if dizzy from a too deep drinking of the perfume.

"Don't you know? It's the locust trees that have bloomed out since sunset!" exclaimed Rose Mary in as breathless a tone as his own. "For a week I have been watching and hoping they would be out in the full moon. They are so delicate that the least little cold wind sent them back days or destroys them altogether. I wanted them so very much this year for you, and I was so afraid you would notice them before we got over here where you could get the full effect. I promised you lilacs for being good, but this is just because—because—"

"Because what?" asked Everett quietly.

"Because I felt you would appreciate it," answered Rose Mary, as she sank down on the stone that still held a trace of the warmth from the sun, and made room for Everett beside her with one of her ever-ready gracious little gestures. "And it's lovely to have you here to look at it with me," she added. "So many times I have sat here alone with the miracle, and my heart has ached for the whole world to get the vision of it at least. I've tried sending my love of it out in little locust prayers to folks over the Ridge. Did you ever happen to get one any spring?"

"Last April I turned down a commission for a false test for the biggest squeeze-out copper people in the world, fifty thousand in it to me. I thought it was moral courage, but I know now it was just on account of the locusts blooming in Harpeth Valley at Sweetbriar. Do you get any connection?" he demanded lightly, if a bit unweary.

(Continued next issue.)

Grease sweet potatoes before they are put into the oven to bake; they will bake in half the time and the skins will be soft.

Toughness of angel cake is often due to the fact that the eggs are not beaten properly. They should be beaten so stiff that they will "stand alone."

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Fresh Air

By Stephen Innes, M. D.

A wreck of a man, whose resistance to disease was reduced to about the point called ail, who not only was anemic and run down generally, but also threatened with consumption, asked a physician in a tone of despair whether there could be curing in the world that could cure him.

"There is a medicine that can cure you," replied the physician. "It has cured hundreds, thousands like you. It will cure you beyond the shadow of a doubt." The poor fellow looked up eagerly. "What is it, Doctor? For pity's sake tell me what it is. I thought I had tried everything that's known. I am not a wealthy man, but—"

"You don't need wealth for this

THE Human Body is kept in health by simple living, which after all is a test of fitness for success. Without health there can be no success, for gain of fame or gold will not profit a man who barter away his health. The wealth of the world some day will be judged by the happiness of mankind.—Elmer Lee, M.D.

medicine," answered the physician. "It's not only the best medicine in the world, it's also the cheapest. In fact, you get it without money and without price."

The man's face fell. "You're jesting with me, doctor," he said. But the doctor was not jesting. Fresh air was the means, and he went on to tell this easy victim for disease a few things about the value of fresh air as a medicine, that opened his eyes and placed him on a road that eventually led to health and strength and added life.

THE AMOUNT OF AIR WE BREATHE
How many men or women are there who know that at times of quiet, normal breathing they take into their lungs 30 cubic inches of air at each breath? There are 18 breaths a minute, approximately speaking. A very simple mathematical problem will show that 777,000 cubic inches of air pass in and out of our lungs every day of 24 hours. Is the importance of this fact fully grasped?

When it is carefully considered we can afford to pass to the next fact which is this: The heart, with its 70 beats a minute, delivers to the lungs for aeration five ounces of blood at every beat. Again we put to use mathematics, and we find that during a 24-hour day the enormous quantity of 3,400 gallons of blood is brought to the lungs for aeration. Think of it! Three thousand four hundred gallons of blood a day delivered to our lungs for aeration.

A distinguished scientist has explained what this means. It means that the lungs handle and cleanse in one day at least 125 barrels of blood.

When we reflect that this quantity of blood must be supplied with oxygen in order to make it rich and red, and able to accomplish the purpose "where to it is sent," is it not obvious that it is important for everyone, whether well or ill, to secure an abundance of fresh air? Either as a preventive or a medicine fresh air is without an equal. It is alike powerful with children and adults, and for that matter with animals too with everything that lives and breathes.

On a Wyoming ranch it was shown by the books that there was a yearly loss to the business from diseased

stock, and for a long time it was taken for granted that in such a large number of cattle some of them must be diseased, and the fact was simply carried to the profit and loss account.

But about two years ago it was suggested by a physician that loss in diseased cattle could probably be lessened if not prevented entirely. He went himself to the ranch and made an inspection.

"It is easy to see what the trouble is," he announced, on his return. The sheds were built in such a way that when the cattle were crowded in, to protect themselves from cold and storm, they kept themselves warm at the expense of open air. "It is surprising to me," he said, "that so many of them keep as well as they do."

"But Doctor, what would you ad-

vise," asked the owners. "The cattle must have protection from the rain and snow and icy blasts."

"I advise you to tear down your sheds," replied the physician. "Have only a long straight wall to protect the animals from the blasts. Otherwise let everything be open."

After location this advice was taken, and the losses from diseased cattle not only grey less with astonishing rapidity, but at the present time they are practically at the vanishing point.

THE CUR REMEDY SEEMS NEW
As with cattle, so it is with the human species. Yet the fresh air treatment for the curing of human ailments seems to be a secret which very recently has been learned, and the pioneers who within a few years have blazed this path have suffered the usual persecutions of innovators.

Only about seven years ago, for instance, children began what is called the open air treatment for pneumonia, and the physicians responsible for the new form of treatment were subjected to annoyance and abuse.

Dr. Northrup, of New York, who was probably the prime mover in the matter, was called a faddist, crank, and other names. But he went on his way, and has demonstrated and many others are now demonstrating, that fresh air is good treatment for pneumonia, whooping cough, measles and other disease of children.

The faddists have proved to be wise and sensible, for on every hand other means of obtaining fresh air by night as well as by day.

The public schools in some cities is establishing roof gardens where even in winter weather, classes are held in the open air, and with good results.

A CONSUMPTIVE SAVED
One little fellow, known to me, a delicate boy whose father was a consumptive, and who himself has shown every sign that even yet he would be a consumptive, has improved under open air study and treatment. "Why Jim, I wouldn't know you," I exclaimed the last time I saw him. "No more bed-ridden or doctored-for this chicken," he answered, refreshingly outspoken, as he came up smiling and expanding his lungs. He

(Continued on page 25.)

Think
of something hard to clean then try

Old Dutch Cleanser

Many uses and full directions on Large Sifter—Can 16¢



FARM HELP

Weekly parties of Young Men now arriving. Apply: **BOYS FARMER LEAGUE DRAWER 186 - WINONA, ONT.**

Send your Raw FURS to John Hallam

FREE I can pay you higher prices than you ever get, and see over shipments at once and get top price. We remit same day fur are received and pay express charges. Largest and oldest dealers in Canada. **John Hallam Limited** Mail Box 225 111 Front St. East TORONTO

Capable Old Country Domestic

Parties arriving about February 18th and 28th **APPLY NOW** The Guild, 71 Drummond St., Montreal and 47 Pembroke St., Toronto

GRAND TRUNK RAILWAY SYSTEM

Colonist Rates

ON SALE DAILY
March 15th to April 15th, inclusive

TO VANCOUVER, B.C. VICTORIA, B.C. SEATTLE, WASH. SPOKANE, WASH. SAN FRANCISCO, CAL. LOS ANGELES, CAL. SAN DIEGO, CAL. MEXICO CITY, MEX.

Proportionate low rates to other points in Arizona, British Columbia, California, Idaho, Mexico, Montana, Nevada, Oregon, Utah, Washington, etc. From all stations in Ontario. Ask Grand Trunk Agents for full particulars.

The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton.

Berth Reservations, Literature and Full Information From Any Grand Trunk Agent

Homeseekers' Excursions

TO MANITOBA, SASKATCHEWAN AND ALBERTA Each Tuesday March to October inclusive via Chicago and St. Paul. Through coaches and Pullman Tourist Sleeping Cars will leave Toronto 11 p.m. on above dates for WINNIPEG. No change of cars. WINNIPEG AND RETURN \$35.00 EDMONTON AND RETURN \$45.00 Ticket good for 60 days. Proportionate low rates to other points.

Settlers' Excursions

TO ALBERTA AND SASKATCHEWAN March 11th and every TUESDAY thereafter until APRIL 29th inclusive from stations in Ontario, Peterboro, Port Hope and West. LOW RATES Through Coaches and Tourist Sleeping cars to WINNIPEG without change, leaving Toronto 11 p.m. on above dates.

CANADIAN PACIFIC EXCURSIONS

To Manitoba, Saskatchewan, Alberta

HOMESEEEKERS
Low Round Trip Rates each Tuesday, March to October inclusive. **Winnipeg and Return - \$35.00** **Edmonton and Return - 45.00** Other points in proportion Return Limit 60 days. **TOURIST SLEEPING CARS** on all excursions. Comfortable berths, fully equipped with bedding, can be secured at moderate rates through local agent.

SETTLERS
For settlers travelling with live stock and effects. Special Trains Leave Toronto Each TUESDAY March and April 18.25 p.m. **SETTLERS and families** without live stock about usual Regular Trains Leaving Toronto 18.25 p.m. Daily Through Colonies & Tourist Sleepers. **COLONIST CARS ON ALL TRAINS** No charge for Berths

Through Trains Toronto to Winnipeg and West

AROUND THE WORLD via "EMPRESS OF ASIA"

The "Empress of Asia" will leave Liverpool June 14, calling at Madeira, Cape Town, Durban, Colombo, Singapore and Hong Kong, arriving Vancouver August 3. Vessel remains 14 days at Hong Kong. "Rate for Entire Cruise, \$639.10." Exclusive of maintenance between arrival time in England and departure of "Empress of Asia," and stop over at Hong Kong.

Full particulars from any O.P.R. Agent, or write Mr. G. Murphy, District Passenger Agent, Toronto

"A Godsend to People with Constipation"

A Message of Happiness from One Who Knows
Mr. T. Babin, proprietor of the Alexander Hotel, Ottawa, states that he would like you to consider this personal message from him. He cannot talk to you personally, but he has caused this printed advertisement to be in the light of cold black print, but in the light of an enthusiastic and urgent recommendation. He states:

"I cannot express myself as I feel. I do not think I could find words explicit enough. I have used the J. B. L. Cascade for two years, and it has been a great man of mine. In reality I feel that I would not sell it for all the money in the world. I could not buy another."

"Through my recommendation I know a number of my friends who have been cured by it with the same satisfaction. For people troubled with Constipation, I think it is a Godsend. I only hope that this will tend to help poor suffering humanity."

Dr. Tyrrell's J. B. L. Cascade is a simple treatment for Constipation. Biliousness and all the attendant ills. It is used by over 30,000 people, and is endorsed by physicians everywhere. It will cure YOU. You who suffer from not only Constipation, Biliousness, but the ills that Constipation - this blocking of the system with terribly poisonous waste-brings about.
The J. B. L. CASCADE is fully explained in Dr. Tyrrell's book, "Why Man of Today is Only 50% Efficient," a truly interesting treatise that you will be glad to read, and which Dr. Tyrrell is glad to send you free if you will address him - Charles A. Tyrrell, M.D., Room 674, 200 College Street, Toronto.

THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He told me it was a fine horse and had nothing the matter with it. I said, "I don't know, but I didn't know anything about the horse till he told me the man very well either."

"I told him I wanted to try the horse for a month. He said, "I'll give you a month, and I'll give you \$100 if you don't like the horse till all right."

"Well, I didn't like that. I was afraid, for I thought it was all right and that I'd be in a hole. I thought my money if I once parted with it. So I didn't buy the horse. Now, this set me thinking."

You see I make Washing Machines as the "1000 Gravity" Washer.

But I'd never know, because they wouldn't write and tell me. You see I sell my Washing Machines by mail. I sold over half a million that way. So, thought I, it is only fair money to let people know what my Washer for a month, before they part for their just as I do."

Now, I know what your "1000 Gravity" Washer will do. I know it will wash the clothes, without wringing or twisting, in less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in less than half the time any other machine ever invented can do that, without wearing the clothes. Our "1000 Gravity" Washer does the work that a child can run it almost as well as a strong woman, and it doesn't wear the clothes, fray the edges, nor break buttons, the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump right so, ask I, myself, I will do with my "1000 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good every time.

Let me send you a "1000 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after that, I'll send it in a month. I'll take back and pay the freight too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1000 Gravity" Washer must pay for itself? And you can pay me out of what it saves for you. It will save you a great deal of money in wear and tear on the clothes alone. And then it will save you 75 cents a week that the washwoman's wages, which will keep the money after the month's trial. I'll let you pay for it out of what it saves you. I'll give you 40 cents a week, send me 60 cents a week 'till paid for. I'll send you the money and give you my money until the machine finishes the balance. Drop me a line to-day, and let me send you a book about the "1000 Gravity" Washer. I will address clothes in six minutes.

Write me personally: J. T. SEEVER, Manager, 1500 Washer Co., 357 Yonge St., Toronto, Ont.

PLATIME
MAKES LIFE EASIER



HAWK BICYCLES
An up-to-date High Grade Bicycle fitted with a New Departure Center Brake, 1913 Model, 28" High Grade Equipment, Tire, Pump, and Tools. \$22.50. Send FREE 1913 Catalogue, 100 pages of Bicycles, Swaps and Bicycles, Write for your supplies from us, 37 Wolcott Street, Montreal.

W. B. BOYD & SON,
73 Notre Dame St., West, Montreal.



To lessen household drudgery and make life easier for housewives is the basis on which our establishment is founded, and the growth of our business is due entirely to the fact that we have accomplished that object.

The patented and exclusive features that make the "Plati-Me" superior is "Self-Cleaning". They are the results of years of experience and study. It is the best washing machine ever made for farm use. We would like YOUR opinion after a careful examination of its merits. See it at your dealer's or send us for full information.

Commer-Dowswell Limited,
Hamilton - Ontario, 17

Don'ts for Housekeepers

By "Sunbeam"

Don't forget to take an essential in your home. It is the first essential to success.

Don't forget to establish a system (as near perfect as possible) in your household. By being systematic much extra labor is avoided.

Don't forget that an ounce of prevention is worth a pound of cure.

Don't forget to do your work in season. Procrastination is the thief of time.

Don't forget that a good kitchen drain is an absolute necessity. A cess-pool at your door is very unsightly besides being detrimental to health. In summer it is a perfect spot to breed flies and in winter the polluted snow presents such an unpleasant appearance.

Don't forget ventilation as your health and that of your family is dependent on it.

Don't forget that a willful waste means a woeful want.

Don't forget that your clothes wear out much sooner if left out from day to day in the wind and storm. Clothes should be brought in when dry.

Don't forget to be tidy. Cleanliness is next to godliness.

Don't forget to prepare daily the very best meals possible for your husband and family. None are as worthy. Never deny yourselves the necessary nourishing food for the sake of money.

Don't forget that plenty of fresh eggs, pure cream and butter, are better than doctor's medicine.

Don't forget to make your home attractive.

Don't forget to find time for recreation.

Don't forget that "every day is a fresh beginning." If we fail today, try again tomorrow. Always aim at perfection.

Wholesome Country School Activity

A girl teacher in a country school found her pupils' studies during the long hours of the school day. The schoolyard was bare of shrub or flower, as were the dooryards of many of the homes of the children under her charge. This teacher asked the larger boys to bring spades, hoes and rakes. With them she went to the neglected yard and helped them dig up a strip along the fence. Together they worked to make the soil fine and mellow. The schoolmaster, a farmer living near by gave manure which the boys brought on wheelbarrows, and all the children helped to mix it through the freshly dug earth. Neighbors divided their stores of hardy bulbs and roots and the children planted.

There was then no lagging interest. Instead there was the greatest eagerness to go, to do and to help. Scoffing passers-by predicted that the children would soon uproot and destroy the plants. They misjudged childhood. Instead each one from the smallest to the greatest prized and protected the school garden.

FOR HOME MAKERS
This teacher learned that the girls of her school were ignorant of the basal facts of the chemistry and art of cookery. On a stove so high that she must climb on a chair to reach its top, she began to give simple lessons. Once a week part of a meal was cooked, thus to help out what the children brought in their baskets. A washing farmer came to step in and was amazed to see the children sitting in orderly placement at their little desks eating in orderly manner a meal cooked half on the old heating stove. His interest awakened; a cooking stove was procured

and placed in the school-room. This greatly helped the work and enabled the teacher to widen the field. Now once each week two of the girls take food in addition to their studies. To the astonishment of the little teacher the boys showed nearly the same interest in cookery as the girls. They have been given a part in the work.

ASSISTANCE WILL BE DERIVED

Now the teacher is asking for a small addition to her room. She has set a real dining-table with its accessories, where she can teach the little maids to set and serve meals and where might develop a vital social centre in that country district. It is said of the pupils of this school that the new sort of training given them by this teacher has resulted in

REPUTATION in itself only a startling candle, of wavering and uncertain flame, and easily blown out; but it is the light by which the world looks for and finds merit.

Their being far more gentle, courteous, intelligent and interested in the vital things of life.

These examination questions are copied from the blackboard of this school: "How high is this school-house above the sea? How many inches of rain normally fall on X county? Jason Brown sold his 40-acre field for \$80 per acre. How much of it could you have bought for 5 cents? Willie Jones grew 57 bushels of corn on his acre. He had 224 missing hills on the acre. If these had been supplied, how much should he have grown? Marian Price's mother got sick Thursday night and did not rise. Explain why. How long would it take 20 children to breathe in the air of this room which is 16 feet by 24 feet by 9 feet?"

This teacher had a rare gift, a sense of perspective, an eye for vital things.—Joseph E. Wing, in Breeders' Gazette.

Anybody can do SIXTY better than you get it. Built time. Will give Gas, gasoline or Gilson quality economy, and get trouble, delay and Every engine can try this getting for it. The "GOES IN" gives for every man to the world. HANU GILSON MANUFACTURING CO. 98 York St.

Making Home Attractive
A recent writer on "What the Farm Home Needs" makes a few suggestions for making the country home more attractive and pleasant:

Have as much music as possible. A phonograph is a good investment.

Indulge in an occasional trip either to nearby or distant points. On returning, the home will be much more attractive.

Read books, papers, and magazines. There is no company like a good book.

Replace the old household methods by modern labor-saving devices as far as possible.

Make over the house so that there may be a bathroom.

Have a better arrangement of the kitchen so that there may be running water and drainage.

Have as much modern comforts as possible, such as better lights, better heating system, comfortable furniture and home furnishings.

Arrange the home duties so that less of the hard manual labor falls on the woman. Let machinery do as much of the washing, ironing, churning, etc., as possible.

None of these things are out of the reach of the average country home and their introduction will repay their cost many times over and go a long way toward solving the country home problem.

A spoonful of brown sugar in the boiling water will improve the taste of turnips. It takes away the bitter flavour.

MAIL

SEALED TO POSTMASTER: Ottawa, Ont., April 23rd, 1913. Major's Mail for Rural Mail Co. Ontario, to be sent to the Postmaster.

Printed notice: Contract made. Tender may be of Peterboro or Office. Inspection.

Post Office: 15th Feb.

EGGS
and
For best to us, also to Dairy Butter and Cakes and poultry.

Wm. D. To

GILSON GOES

Anybody can do SIXTY better than you get it. Built time. Will give Gas, gasoline or Gilson quality economy, and get trouble, delay and Every engine can try this getting for it. The "GOES IN" gives for every man to the world. HANU GILSON MANUFACTURING CO. 98 York St.

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Wm. D. To



MAIL CONTRACT

SEALED TENDERS addressed to the Postmaster General, will be received at Ottawa, until Noon, on Friday, the 14th April, 1913, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week, over Rural Mail Route No. 5, from Peterboro, Ontario, to commence at the pleasure of the Postmaster General.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Office of Peterboro and at the office of the Post Office Inspector, Kingston.

H. MERRICK,
Post Office Inspector.
Office,
14th February, 1913.

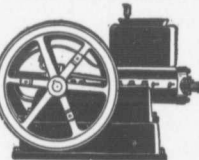
EGGS, BUTTER and POULTRY

For best results ship your live Poultry to us, also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. Egg cases and poultry crates supplied.

PROMPT RETURNS
Established 1854

The **DAVIES Co.** Ltd.
Wm. Davies, Ltd.
Toronto, Ont.

GILSON ENGINE GOES LIKE SIXTY



Anybody can operate the simple "GOES LIKE SIXTY" Engine. Ready for work the moment you get it. Built strong and solid to last a lifetime. Will give long and satisfying satisfaction. Gasoline or kerosene can be used for fuel. Gilson gives full value for your money. Dependable service, great durability, highest economy, and perfect satisfaction, freedom from trouble, delay and expense.

Every engine absolutely guaranteed. You can try this engine on your own farm before setting to it. You have no chance.

The "GOES LIKE SIXTY" Line has an engine for every purpose. All sizes and from 1 to 10 h.p. Write for catalogue.

GILSON MANUFACTURING CO., LIMITED
98 York Street, GUELPH, ONT.



Free Samples
Free Catalogues
Free Plans

If you want a roof that is durable, economical and one that can be put on quickly and easily, you will be interested in Galvalume Shingles. A post card with just the word "Roofing" together with your name and address, will bring valuable information by return mail.

The **Galt Art Metal Co.**
253 Stone Road Galt, Ontario

OUR HOME CLUB

Lighten Mother's Burden

Of course you have often thought of it that "men do not successfully fill the soil without the aid of woman. They may fight, but they will not farm unless women and children help.

As a boy here on the old farm at home I never fully realized how important the women are. Nor did I realize how much they do of actual work that simply must be done. Like unto most men who have never as yet known what it is to have thorough death, a wife, I little realize a fraction of what women mean in the economy of the farm household and home.

Recently I was visiting at a distance and amongst some farmer friends; then it came home to me strongly how great is the burden of work which many of our farm women carry. Little time there was for reading, little time for recreation. Meals and regular household work took up the day. Then there were the children. And after they were safely tucked in bed—well there was the mending!

I wondered, as I noted the men, who enjoyed more leisure, if it ever occurred to them ever to help out a little more at times. And especially to the boys. They seemed to take it as a matter of course and quite the Divine right of their mothers to do most things.

Let's take a little thought on these things. Let's help mother a little more and lighten her load and make her life a little brighter! — "The Son."

Her Accomplishments

By Mrs. C. E. T.

A woman of my acquaintance is noted for the amount of work she does. She is past middle age and although she milks six or seven cows a day, makes butter or cream or nine, feeds calves and other stock, tends her garden, raises and dresses chickens for market and does her housework besides, she keeps remarkably well and happy. She said something to me about resting one day and said "Why! Mrs. —, I didn't suppose you ever rested."

She replied, "Don't you think I ever rest? Well I do, and I could not do it if I did not." In the summer I can go into the garden and hoe a couple of hours; then I come in, remove my shoes and stockings, take a foot bath and lie down and sleep like a baby. I wake much refreshed and can go at my milking and evening work with so much interest."

While we are not all called upon to do this kind of work, the same principle will hold good in any work. A man who goes out to plow does not drive his team to do it, but continually, but stops them to rest occasionally before they are completely exhausted. If he did not, before night they would be lagging so that not nearly so much would be accomplished and the team would be in poor condition for the next day.

Human beings are very similar in this respect to animals and should be treated with as much intelligence. Another woman who has a large family of little folks to care for and who goes along remarkably well, takes an hour each day to lie down and rest and can always get up time to sit down and look at the mail.

I really sometimes get out of patience with some women who, it

seems try to kill themselves working. It is uncalled for and never pays. A woman owes it to herself and those dependent on her services to take care of herself. When she works beyond her strength she is doing her family an injustice just as much as if she left some things go undone.—Indiana Farmer.

Fresh Air

(Continued from page 23.)

showed how in seven months' time he had increased his chest measure one inch and a half, and he had accomplished it by merely taking long, deep inhalations of open air as he studied his lessons.

Fresh air is a remedy we have at hand. We do not need to go away. The air is our heritage. It is about us where we are. What we need is to fill our lungs—not merely a part of them, but fill out lungs with open air, tier on tier of cells until the last lung-cell is swept, cleaned and aired, and then enjoy life as only a vigorous, healthful man or woman can. The breath is life, the vital principle itself.

Dr. Lytton says: "To all animate bodies there must be one principle in common, the vital principle itself. What if there be a certain means of recruiting this principle? What if that secret can be discovered?"

Perhaps the discovery is beginning to be made. At any rate, whatever the secret may be beyond our horizon to it is to be found in the healthiest, overflowing abundance of open air.

Life, more life! was Goethe's pathetic, dying cry. The way to get more life, whether air be wanted or otherwise, the way to have our life and youth renewed and increased, the way to achieve health and keep it after it has been obtained, is first to remember that 125 per cent of venous blood must be aerated in our bodies every day, and then to see to it that we breathe fresh air.—Health Culture.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, reading, or any matter, on request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

Date Filling—Chop the dates fine and add to warm boiling icing. Pipe high of the cake and press the next layer gently down on any remaining.

Cold Slaw Dressing—Two teaspoons sugar, four teaspoons vinegar, two teaspoons cream, pinch mustard, salt and pepper to taste. Have cabbage cut fine and bruised, and pour dressing over and serve.

Masked Chops—Dip lean pork chops into beaten egg, then sprinkle over them equal parts of salt and sage mixed together. Roll in flour and fry in a nice brown.

Salmon Loaf—Take the large can salmon, freed from skin and bones, one cup cracker crumbs, two tablespoons melted butter, three eggs beaten separately, salt and pepper to taste, milk to moisten. Bake one hour in moderate oven. Take immediately to table from oven.

Nut Patties—Two cups walnut meats, two cups toasted bread crumbs, one-half cup browned flour, one small onion, salt, pepper and sage, sweet milk to moisten. Put bread and nuts through food chopper, add flour, minced onion and other seasonings to taste, moisten with sweet milk sufficient to shape into patties. Fry in butter till brown. Serve hot.

The Sewing Room

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

HOUSE JACKET WITH FITTED BACK, 7885



Pretty, attractive and becoming house jackets always are in demand. This one combines the best of both worlds and chest to be obtained by their use, but this jacket can be made with open neck and big collar or with round collar and high necking blouse. This pattern is cut in sizes from 34 to 44 inches bust measure.

SURFICE BLOUSE, 7838



This surfice blouse that is full at the shoulders is an exceedingly attractive and exceedingly fashionable one. It is made with one-piece neck and sleeves that are made longer or shorter as preferred and the model is a charming one both for the separate blouse and for the gown. The blouse is made with full fronts and plain back and the sleeves have a very slight fullness at the shoulders. The chemistette is separate and closed at the back. This pattern is cut in sizes from 34 to 40 inches bust measure.

GIRL'S NORFOLK DRESS, 7629



Every variation of the Norfolk idea is fashionable for little girls. This dress includes the characteristic box plait and can be made very plain and simple or more dressy in design as the neck and sleeves are finished in one way or another. The blouse is made simply with front and back pieces which are set in box plait and set in style. The skirt consists of four pieces with box plait laid in over the seams.

This pattern is cut in sizes for girls from 8 to 14 years of age.

CORSET COVER WITH STRAIGHT UPPER EDGE, 7612



The main portion of the corset cover is cut all in one piece and, since the upper edge is straight, it is especially well adapted to bonneting. There are no under-arm seams and the bonneting is made at the centre front by means of buttons and buttonholes. It can be finished at the waist line with a poplin belt or with a belt only as preferred.

For the medium size the corset cover will require 1 3/4 yards of material 36 or 44 inches wide; or 1 3/4 yards of bonning 55 inches wide; with yard of bonning 15 inches wide; 1 1/2 yards of edging, 1/4 yard of binding and 3/8 yard of plain material 3/8 inches wide for the poplin belt. This pattern is cut in sizes for a 34, 36, 38, 40 and 42 inch bust measure.

NEW GOAL OIL LIGHT

Beats Electric or Gasoline

Powerful white incandescent mantle light. Replacing common oil lights everywhere. Burns 70 hours on one gallon of coal oil (kerosene). No odor or noise, simple, clean. Tests by Prof. McKergow, McGill University, Montreal, on leading oil burning lights show this gives over twice as much light as the Rayo and other round wick lamps and uses less than half as much fuel. Thousands of satisfied users endorse it as the best light in the world. To introduce this modern white light quickly, we will let you



TRY ONE TEN DAYS At Our Risk

We want one customer in each locality to whom we can refer customers. Write quick for agents wholesale prices and special introductory offer, which entitles you to **FREE**.

MANTLE LAMP CO.

724 Aladdin Building, Montreal and Winnipeg.

AGENTS WANTED

Experience unnecessary. Make Money evenings or spare time. Write quick.

"Here is the New Way to Get a Better Barn at Lower Cost"

"I have seen an astonishing thing happen in Canada, the land of lumbering. This is it. Lumber is getting so poor and costly, and labor so high priced, that you actually save money by using corrugated iron (galvanized) for your barn walls, and metal shingle for the roof. This is the new way to build barns."

"Use my galvanized, corrugated iron in 8 ft. sheets, and my big 'George Shingle' instead of wood and cedar on your barn. At one stroke you get a lower cost than a wooden barn painted. This is because I save you repairs in erection, make leaky roof and walls impossible, make painting unnecessary, and give you a lightning-proof, fire-proof barn into the bargain. Write me."

"I Want to tell you about the new 'George' Shingle for Barns"

YOU can now buy my big 'George' Shingle. It makes a quick-laid metal roof that is good for 100 years, is easy to lay, and non-corroding. It makes a perfect roof for any building of large size. It is Lightning and fire-proof; it needs no skilled labor; each

shingle locks into the others around. "Use it. Lay it, and your barn will not leak. Lay it, and you save days of wages against cedar shingle. Lay it, and you are done with repairs or further attention. Your barn is perfect."

"I want to save you money. My roof for barns is the most economical made. It is sold all over the world in 16x20 inch size, but from now on, you can buy it in 'George' Size, 24 x 24 inches to a single shingle, as well. Write my nearest branch and learn about why I made it."

"Remember, I make metal cutters, managers and troughs, portable buildings and granaries in metal, metal tile, metal walls, ceiling and siding for farm houses, etc. Write me if you need any of these things."



SEND FOR MY NEW PEDLAR BOOK, FREE

"I have written a little book telling how a modern barn is built, and showing it, step by step, in pictures. It uses my galvanized, corrugated iron and 'George' Shingle, instead of wood. Send for the book to my nearest branch. It may save you thousands of dollars. Write to-day, friends, and read about a barn that saves cost."



The Pedlar People Limited

TORONTO 113 Bay Street
 MONTREAL 321-3 Craig St.
 WINNIPEG MEDICINE HAT LONDON EDMONTON HALIFAX
 SASKATOON CALGARY CHATHAM QUEBEC
 VANCOUVER 198 Alexander St.
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 164 King Street
 434 Kingston St. 1262 1st Ave. So.
 OTTAWA 45 Cumberland St.
 432 Sussex St.
 16 Prince St.
 209 King St. W.
 127 Rue Du Pont
 OSHTAW, CAN.

Address nearest Office for "George Shingle." Book No. 152

HOLSTEIN-FRIESIAN NEWS

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

A. E. HULET'S HOLSTEINS IN OXFORD SALE

The right spirit is prevailing on the part of Holstein cattle in the Oxford District Holstein Breeders' Sale to be held Tuesday, March 26, at Woodstock, Ont. They are determined to have their consignments excellent and that their consignments shall be deemed most desirable representatives from their respective districts. They are also out to boom the Oxford District as the leading centre for Holstein cattle. This spirit manifests particularly strong with A. E. Hulet, the 10 head of Holsteins that he is consigning are mostly show stuff which is backed by attractive records of production at the pail, representing both milk and butter fat, these cattle being from the 1908 sound. One of the editors of Farm and Dairy, who saw these cattle during the last week of February, says Mr. Hulet: "Why you could sell these cattle to splendid advantage alone at private sale." Mr. Hulet replied: "But, I do not wish to be selfish. I could sell better alone but our club is a better veritas our district. If all of our breeders would stick together we could make our Oxford sales really wonderful events. It is, however, there are a lot of people who will know that this splendid stock of mine will be at the sale and can be purchased at their own price, absolutely without reserve." Through the efforts of Farm and Dairy I will let many more people, who will come to buy, know about this sale. I am contented to abide by their judgment as to price at the sale." Mr. Hulet's consignment consists of six three-year-olds, one two-year-old, one yearling, one heifer calf six months old, and one two-year-old bull, Count Ladaga Canary, which has been heading his herd and was second prize bull in his class at Toronto; he ought to sell well since there is a great demand for good bulls and he is a "cracker." Also proposed to sell a three-year-old in the lot are daughters of Madam Foch Pauline, now on the Colony Farm, B. C., and recently made over 100 lbs. The three-year-old is a very fine one. She has been milking four months and is a regular 40 lbs. butter in 7 days. With the right buyer on deck it would not be too much to ask for the price of \$500 for this cow. Pedigree, records, etc. of Mr. Hulet's entire consignment are given in the catalogue obtainable from the secretary of the sale, Mr. H. G. Benford, Woodstock, Ont.

Mr. Hulet is planning to consign to the Winnipeg coming summer. He will have some right good stuff that will take a lot of business. Amongst the many interesting cattle that he showed us was his coming herd sire out of the three-year-old Pauline Orlantha Towner, the champion in her class at Toronto and bred and shown by Mr. Hulet. It speaks well for a breeder when he can raise his own herd sires good enough to use so high class a herd as Mr. Hulet's. The calf in question is exceedingly straight, deep, long and open in body, and is of most pleasing length and set up or rump. His granddam is also in Mr. Hulet's stable—Pauline Orlantha Towner, and as you could want to see, now milking over 70 lbs. a day at two milkings and setting near four per cent. big butter since freshening. She has never tested lower than 37 per cent. butter.

A sister of this bull, Pauline Orlantha Mercera, 23 months, we also saw in Mr. Hulet's stable. She is a really good type and stable. This it appears that this coming herd sire will have a strong pedigree to back him and be even better some day.

WILBER C. PROUSE'S HOLSTEINS
 Probably the photographs reproduced in this issue showing some of the Holsteins dispersed at public auction at Tilsonburg, on Good Friday, the 1st of March, are the high class of Holsteins that he has in his herd. Mr. Prouse got his first Holsteins from pure blood, by selling his grades to his father-in-law and his brother-in-law, and taking over the pure bred. The first year he had the pure bred he did not think so very much of them as he did the next year, however, he started in to feed them so well as he was known and as he was taking care of the cattle himself he endeavored to see just what he could make them do. It was then that he caught the Holsteins ever, like all progressive men do, and ever since he has been making a name for himself and good name it has been with Holstein cattle.

This herd which he is now about to sell. (Continued on page 79)

H. G. BENFORD'S HOLSTEINS

Like unto it containing Holstein-Friesian breeders' March 25, Mr. Hulet's consignment will be proud to buy. She is since spring, as a day. She is Count, to calving and persistently consistently, calf but has been Mr. Benford's bank Butter Oire, whose daughter Dairly Two, a fine to be, and his stable, in 1912 he was in 1912 for her sired by Wopkele individual drops, and is a He is a muscled such a bull as ment are chosen growing into me to be heard from not yet have Oxford Breeders to Mr. Benford for getting.

MARTIN MCGEE'S

Not many you well for the as has Martin is Some few years with home, he try for himself has an excellent stock, severely noters, as a through Winton he captured my of the best prize four animals to the great Oxford stock. Tuesday, bull, about Howrie, first in Winton Fair is a good strain bone, and in call head and Another bull, out of Princess test dam, 22-04. He is a big Rock Maple by a "Foch" Foch. She is, but not tested, time of sale, cow in Mr. McGee in the open lot in Toronto due to calve at signment of Mr. H. G. Benford, wherever they go.

M. BOLLEA'S

While Mr. Bolle's first mate to bring try, and has for a leading cow, happened that no age has one of Dairy ever for sale Mr. Bolle's seven milks, we were expecting to in his herd. We saw her 4-10 in type, and her unusual big capacity, yielding five cups a day to year-old heifer tried Broders' 8-1 day, March 25. I heard Mrs. Sirri tionally fine due to be tested, she Hengerveld, six 13 and his dam, Creola, a good butter.

For six days he surprised Holsten through this time never failed to see his customers have so better than we thought the signing we note five years old, to call to King, being by King P. Lyons De Kol, S. The grand-dam of

COTTON SEED

45. Protein. Very very best feed to milk. Priced low. Free room. 4. A. G. 1. ONT. Poole and

H. G. BENFIELD'S CONSIGNMENT

Like unto the other breeders who are consigning Holsteins to the Oxford District Breeder's Sale at Woodstock, Tuesday, March 25, Mr. H. G. Benfield of Woodstock, who is also the secretary of the sale, is consigning a number of which may well be proud. He is putting in Netherland Prize, a five-year-old right over the top spring, and is now giving over 35 lbs. a day. She is heavily spotted, butter and Count, to calve in June. She is a heavy and persistent milker, has milked almost continuously since she dropped since she calved, but has never been tested officially. Mr. Benfield is also putting in Springfield, his two-year-old heifer, a sire, whose dam is Queen's Butter Girl, the averageable cow at the 23rd Ottawa Dairy Test, and claimed by Mr. Geo. Howe to be one of the best that ever left 34 lbs. butter in 7 days, her owner refused \$50 for her as a four-year-old. He is a very stable, and is a record of over 34 lbs. butter in 7 days. He is a most excellent individual of great substance, depth, and is straight and nicely marked. He is a masculine individual, and just such a bull as one would want to buy.

The others in Mr. Benfield's consignment are choice young heifers, which are proving into money and are as well as heard from in the future. Should you not yet have sent for your copy of the Oxford Breeder's Sale Catalogue, address to Mr. Benfield. He is the man responsible for getting a catalogue to you.

MARTIN MEDOWELL'S CONSIGNMENT

Not many young breeders have done so well for the opportunity they have had as has Martin Medowell of Oxford County. Some few years ago, not being satisfied with his home, he pulled up stakes and set up for himself on a rented farm. He now has an excellent herd of pure-bred Holsteins, several of them being registered elsewhere, as he demonstrated at the Winter Fair last December, when he captured with his Holsteins a couple of the best prizes going. He is consigning four animals, two cows and two bulls, to the great Oxford District Sale at Woodstock, Tuesday, March 25. These are: a bull, about one year old, named Gainsborough, first in his class at the Guelph Winter Fair; a very fine individual, strong in bone, and in capacity having an excellent head and neck; and a cow, named Another bull, about a year old, and out of Princess Abchirk Pauline—a fine cow, 2½ in. in butter and 2½ in. in milk. He is a big strong cow, and is sired by Rock Maple Albany bull.

Another bull, about a year old, and out of Princess Abchirk Pauline—a fine cow, 2½ in. in butter and 2½ in. in milk. He is a big strong cow, and is sired by Rock Maple Albany bull. A young cow, named F. Favorit, another untested cow, but not tested. She will calve about time of sale. Her dam is a grand good cow in Mr. Medowell's stable. The other cow in the consignment is to be Charles P. Favorit, another untested cow, but not tested. She will calve about time of sale. Her dam is a grand good cow in Mr. Medowell's stable. The other cow in the consignment is to be Charles P. Favorit, another untested cow, but not tested. She will calve about time of sale. Her dam is a grand good cow in Mr. Medowell's stable.

H. BOLLETT'S CONSIGNMENT

While Mr. Bollett is one of our first men to bring Holsteins into this country, and has for many years been known as a leading Holstein breeder, it has not happened that until a couple of weeks ago he has one of the editors of Farm and Dairy ever found an opportunity to get to see Mr. Bollett at his farm, some six or seven miles from Tavak. One of the things we were expecting to see the best of cattle in his herd. We were not disappointed. These are 4 big cattle, close to perfection in type, and having quality udders of unusual big capacity and alphasone, one of seldom sees. From this herd he is consigning five head, two cows and three bulls, to the great Oxford District Sale at Woodstock, Tuesday, March 25. He is also consigning the two sire, Creamelle, sire of exceptionally fine daughters, too young as yet to be tested, he being by Duchess Ormsby Hengervold, sire of six A. H. G. daughters, and his dam, Creamelle Hengervold-gilt, 6½ lbs. in butter.

For six years Mr. Bollett sold all of his surplus Holsteins by correspondence through the Metropolitan Electric Railway, and during this time never had a customer on his place who did not say "invariably" his customers have said "well selected, stock better than we had expected."

Amongst the things that he is consigning we note Maple Grove Mercers, five years old, to Freshen after sale, and also call to King Lyons Hengervold, he being by King Pater, a son of Blanche Lyons De Kol, 33½ lbs. butter in 7 days. The grand-dam of King Pater is Abby

Hartog Clothide, 32½ lbs. and dam of Adelle De Kol, at four years, 35½ lbs. butter in 7 days. Thus both the dam and the grand-dam of King Pater, in each, of better than 30-lb. cows. Maple Grove Mercers was sired by Mercers Sir Poch. As a two-year-old at the Guelph Winter Fair her milk averaged 35 in fat, and she made a record of 11 lbs. butter as a two-year-old. She has not been tested since, as she has always freshened at a time that people test her. She is a very rich and deep milker, light in color, and all that you could ask for as an individual. Mr. Bollett refused \$30 for this cow when she was a two-year-old. Another cow that gives ample evidence of Mr. Bollett's determination to put into the sale some of the best heifers he has—lose some money on it. She has a record of over 12 lbs. in a four-year-old, and will test an average level udder, and is in every way a fine cow as a man would want to set a bull under.

Pauline Mercedes De Kol, fresh at two years and 15 days, and has milked up to 47 lbs. of milk a day in official work, making 116 lbs. butter. She has been fresh one month. She has what may be called an excellent head and neck, and square, carried well ahead and attached well up behind. Mr. Bollett believes her to be one of the best heifers ever sold, a very thick, deep individual. She is now running in a record of Performance work, and the man who has her can guarantee her in the best, securing the earlier figures from Mr. Bollett.

Another heifer is a half-sister to the foregoing, Inka Mercedes De Kol, bred to King Lyons Hengervold, and she is also after sale. "Don't like to see her go," said Mr. Bollett, "but I am determined to sell her for something that is worth while." This heifer has something about her that is an udder. She has everything required in the way of constitution and conformation to stand up to the highest demands in hard work.

The other heifer is Mercedes Pierette, bred to King Lyons Hengervold, and she is being bred for the coming year, two years and one month. This heifer is a very fine individual, and being half-sister, will make a great buy for the cow, no matter what the price at the sale.

Did space permit we should like to say much more about Mr. Bollett's consignment, and about his farm, in the Guelph and Woodstock. Before concluding we must thank Mr. Bollett for his kind invitation to visit his farm, which made his milk in his best day on poor feed, when she got no confidence in the bottom of a cow on old hay out of the bottom of a cow. Mr. Bollett expects her to go over 100 lbs. a day when she next freshens. She possesses all of the points one could reasonably demand, and, furthermore, has that development rarely found, and which is known as the umbilical or centre milk vein, and which is a very big one. Another cow possessing this same desirable characteristic of the umbilical vein, in addition to her other strong points, is yet-purchased recently by Mr. Bollett, being his pick out of a herd of 30. Mr. Bollett's herd numbers 23 head all fine spotted, and is in a bright, cleanly kept, ventilated stable. His place makes a fine spot for a man to read as one drives up. His cattle bear the closest inspection, and are such that even the best might covet.

T. L. DUNKIN'S CONSIGNMENT

Mr. T. L. Dunkin is putting in but three head of Holsteins from his excellent herd. One of these is "Trion's Jewel," his very best, and she is to be tested. His cow in many ways that will be in the sale. While she is now into a year, her prime she is apparently good for a great many years. She will leave her impress on her next owner even as she has done with her number of her superior type and great size are now to be seen. She has a record of 28½ lbs. in butter, and 30 days. She appears to be the next time to freshen. Mr. Dunkin is expecting the top price for her, and as she is a very fine individual, it is not surprising enough as a price, which anyone knowing her would be glad to pay. She is now in calf to a son of May Echo Sylvia.

We were rushed for time at Mr. Dunkin's place, and did not see him at the farm, so do not get any more information from him as we should have liked for Farm and Dairy readers. The other two cattle which he is consigning are a son of the cow above mentioned, Shadewell, Count Saxary of Oakdale, and his dam, Lammie. The bull has been the herd sire now for some little time in Mr. Dunkin's herd. He has a big number of most excellent heifers, carrying the markings characteristic of it. A young cow and giving much promise of coming her in capacity.

Important Credit Auction Sale

of 18 PURE BRED HOLSTEINS

Having sold the farm, I will offer my Gentile herd of 18 head

On March 28th, 1913

at "Sunnyside" Farm, 's Boston, Ont. (Norfolk Co.)

A chance to get good foundation stock at your private Catalogues sent on application.

M. C. R. and C. P. R. trains met at Waterford, morning of sale.

FRANK M. JOHNSTON, Proprietor Boston, Ont.

JNO. A. HARRIS, Clerk COL. W. ALMAS, JAS. DUNLOP, Auctioneers



HOLSTEINS--SELL YOUR Surplus Pure Bred Holsteins

by advertising them in these columns of Farm and Dairy.

Cows you only \$1.40 per inch. Takes your message to upwards of 15,000 possible buyers. Farm and Dairy will send your other pure bred stock also. Make up your mind to act in this progressive way. It will pay you to fix up ad. to-night and send it to us for next issue. Have it in Farm for several weeks and be convinced that it will pay you as it pays others in Farm and Dairy.

LINCOLN OATS field. Won first at Guelph in 1910 and 1912. Also first at Central Fair, Ottawa, 1910, 1911 and 1912. Price, 50c. per bush. Buff Orlington Eggs, from choice selected stock. Price, 15c. per dozen. W. G. RENNIE, ELEMERS P. O., ONT.

WANTED—Assistant for Payne's Mills Cheese Factory for the coming season. Experienced man preferred.—C. M. Firby, Payne's Mills, Ont.

BUTTERMAKER WANTED

Must be good man, with some experience. Steady job to the right man. Apply to H. A. MCINTOSH, FENELON FALLS, ONT.

FREE catalogue giving descriptive list of rural books for farmers, stock raisers, poultrymen, etc. Write for free. Book Dept., Farm and Dairy

THE MANOR FARM HOLSTEINS

The young stock from my great herd bull, PRINCE HENGERVELD OF THE PONTIACS, is coming along in great shape, better than we expected.

In official tests now being made his heifers are doing remarkably well. As soon as official returns are received from headquarters we shall let you know about them in the columns of Farm and Dairy.

You will make a wise choice in getting a son of my great bull to raise up as A HERD SIRE TO HEAD YOUR HERD.

Write for descriptions and prices of those I have available.

The Manor Farm is but a few miles out from North Toronto, easily reached from the Metropolitan Electric Railroad. I invite you to come and inspect my herd and make your selection personally of the good ones, I will price very reasonably for you. Over 100 in the herd to choose from.

Write now for early selection of coming crop of bull calves.

GORDAN S. GOODERHAM

The Manor Farm, - Bedford Park, Ont.

COTTON SEED MEAL "FARMER"

4% Protein. Several tons on hand. The very best feed to make your cows give milk. Priced low to clear at once and make room. Write if you can bargain.—G. A. GILLESPIE, PETERBORO, ONT. Feeds and Seeds, Dairy Supplies

You Can Sell

Your pure bred cattle, any surplus stock you have, by advertising in these columns of Farm and Dairy. We take you rest upwards of 17,000 possible buyers, and at a cost very small to you for this great service—only \$1.50 per inch.

Send your advertisement to-day for next issue.

Farm and Dairy, Peterboro, Ont.

CAMPBELLTOWN HOLSTEINS

A few sons of Koradys Verma Pontiac for sale. Also a number of Owms and Heifers bred to him. Come to Tillsonburg if you want to buy Holsteins and I will see that you get them. Farm, North Road west, Tillsonburg.

R. J. KELLY, TILLSONBURG, ONT.

HAMILTON HOUSE DAIRY FARM

The Home of Lake Kears, the World's Record Sander 2 Year Old Cow

WE SELL BULLS AND BULL CALVES ONLY

and offer now

A Bull Ready for Service

Write or come to see him. His Pedigree showing High Records sent on request.

THE PRICE IS RIGHT

D. B. TRACY
COBourg, ONT.

MR. HARDING SELLING OUT Editor, Farm and Dairy—Having sold Maple View Farm, I am selling my entire outfit of stock and implements included among the stock is a choice bunch of Hol



The New Country

W. A. Clemons, St. George, Ont., who has succeeded his father as Secretary of the Canadian Holstein Breeders' Association, has a training that will be invaluable to him in his new position. Along with his father he established the well-known Maple Hill herd of Holsteins. After leaving the farm he was successively Secretary to the Live Stock Commissioners and official supervisor of the National Live Stock Records. For the last year he has been working his own farm.

The Dorsete are from my noted show stock, which has met with such marked

success for the past 21 years. While what I have left is mostly young, they are mostly from imported stock, and are the kind that will please you better as they develop.

I invite Farm and Dairy readers to come and get a start for the early lamb trade, and to get in right on dairy lines. Single fare on the H. R.—H. Harding, Thorncliffe, Ont.

Note—Mr. Harding has long been one of the best Dorset breeders on the American continent, and an international competition has more than held his own. He is also known as a successful dairyman, his farm standing high in the first farms competition conducted by Farm and Dairy. We can assure our readers that they will get a square deal when doing business with Mr. Harding—Editor.

CENTRE AND HILLVIEW FARM'S CONSIGNMENT

Mr. P. E. Ede, of the Centre and Hillview Farms, Oxford Centre, Ont., is consigning four choice individuals to the Oxford Breeders' Sale at Woodstock, Tuesday, March 25. These are all selected for stock back through three and four generations. Two of them are out of the famous Starlight strain, which traces right back to the old Brookbank Sutter Baron. One of the heifers is a three-year-old out of "Maude of Kent" strain. Mr. Ede sold her dam last spring at \$650. Another heifer is out of the "Oocle" strain, she being sired by Mr. Ede's Oorocopia bull and bred to his King Sedge heifer sire.

The cattle in this consignment, coming as they do from old Brookbank Sutter Baron, and now with the Oorocopia and King Sedge blood are just about all that one could ask for. They are a good straight lot of excellent stock, such as Mr. Ede is prepared to stand right back of and have people account them as an advertisement from his great herd.

SPECIAL PRIZE FOR CARLOAD OF BUTCHERS' STEERS

In order to encourage the feeding of choice cattle, suitable for slaughter, the Harris Abattoir Company, Limited, will offer \$10,000.00 in cash prize for cattle exhibited at Toronto Fat Stock Show, which is an annual event held early in December at the Union Stock Yards, Toronto.

A special certificate of \$500 is offered for a carload of not less than 16 steers, and all to be poll or dehorned, weighing under 1,300 pounds each. The cattle to be (Continued on page 3)

CHOICE YOUNG HEIFERS

A five-year-old, Netherland Fries, and my two-year-old Herd Sire.

I am consigning to the great Oxford District Breeders' Consignment Sale at Woodstock, Tuesday, March 26.

HERD SIRE

Sprinkbank Butte COW, two years old, by Wopke Parma, and dam, Queen's Sutter girl, the sweepstake cow at the 1910 Ottawa Dairy Test, is the bull I am consigning. His photo was reproduced on page three, Farm and Dairy Special, last June. He is an excellent individual. His breeding is the very best, his dam having been sold by Mr. Geo. Rice to be one of the best that ever left his stable. Her owner returned \$450 for her as a year-old.

Plan to buy this bull. He will prove invaluable on any good herd. Write now for catalogue and study up particulars of breeding. Keep your eye open for the individuals in my consignment at the sale.

H. G. BENFIELD, Woodstock, Ont.

"PROOF OF THE PUDDING"

Stanford, March 6th, 1913
Mr. R. F. Hicks
Newton Brook

The bull calf arrived last night at six o'clock, in fine shape.

I am more than pleased with him, was very much surprised at his size and if I can only keep him doing as well as he is now he will go beyond any expectations.

You will find enclosed a marked cheque for the amount One Hundred and Fifty Dollars. Thanking you for the splendid animal.

Yours very truly,
John C. Brown.

NOTE!—I have one of the satisfactory kind for you. Write for description, etc.
R. F. HICKS, Newton Brook, Ont.

Another Worthy Lot from Belleville

Standing right back of the most enviable reputation, which we have built up at the previous Annual Sales conducted by our Belleville District Holstein Breeders' Club, we will this year do even better than hitherto by offering

100 Head of Holsteins

of top-notch

of richest breeding

SALE DAY **WEDNESDAY, APRIL 2nd,** As usual at BELLEVILLE

May Echo, Sara Jewel Hengerveld, and Pontiac
Hermes blood predominating in the cattle to be sold.

Offering will also include the out-and-out dispersion of two extra fine herds in our district, these cattle being of the choicest breeding

The feature of the sale will be DE KOL PLUS, she being the second highest record cow in Canada, exceeded in record only by May Echo

Look out for further notice and full particulars next week in Farm and Dairy. This Belleville Annual Sale is the only large sale catalogued this spring in the Eastern part of the province. You will want to attend it. Write now for your catalogue and arrange to be on dock and be a buyer at the sale.

F. R. MALLORY, Secretary of Sale FRANKFORD, ONT.

N. B.—When you buy at Belleville District Sale you get animals with a future to supplement their already attractive records and backing—the breeders in Belleville District are the ones that are regularly producing the champions, and they are back of your buying.

Free

What would cure anyone when it is sold in the Horse?

It would save you some of one of your which might be driving for you. You can learn all the disease Sheep, Swine

Gleason and Hore

It contains gives all the remedies—just know even if Horse Doctor.

Paper bound one New substance send us for Free come extra to Handmade cloth quality paper. Get the New promptly. Only those valuable FARM AND DAIRY

A FARMER

15 without realising many thousands. They think it is too in any number with less work and some for the quantity. In fact, tons at \$2.00 to \$15.00 per ton. "Gardener's new book" "Gardener's with Modern Tools" copy our paper. "Age Farm and Dairy" which are the

IRON AGE

Now made to do all of the welding, forging, welding, burrowing in any number with less work and some for the quantity. In fact, tons at \$2.00 to \$15.00 per ton. "Gardener's new book" "Gardener's with Modern Tools" copy our paper. "Age Farm and Dairy" which are the

LUMP IN UDDER

Cured by Sample Bottle of Douglas' Egyptian Liniment

It is not much wonder that Mr. Allan Schiele, of New Hamburg, Ont. is a staunch friend of Douglas' Egyptian Liniment. Here is what he writes about its work for him.

"I have now used Douglas' Egyptian Liniment for 2 years, and find it gives the best of satisfaction for man and beast. I tried the liniment on 4 cows during the winter for lump in udder, and a sample bottle cured each case in 36 hours. I also found it good for Muscular Rheumatism and for Lambsage.

"It's a great thing to always have on hand a bottle of Douglas' Egyptian Liniment. It stops bleeding at once, prevents blood poisoning, and removes all inflammation, soreness and swelling in man or beast."

Get it at all druggists. Free sample on request. Douglas & Co. Napanee, Ont.

CRUMB'S IMPROVED WARMER STANCHION

No barn that has been burned is safe until it has Crumb's Warmer Stanchion. It is the best of its kind. It has been tested by those farmers who have used it in the past. It is made of the best material and is built to last. It is the only warmer stanchion on the market. It is the best of its kind. It has been tested by those farmers who have used it in the past. It is made of the best material and is built to last. It is the only warmer stanchion on the market.

WALLACE H. CRUMB, Box 103, Westville, Conn., U.S.A. All correspondence should be addressed to the above office. See inquiry if a prefer booklet in French or Spanish.

WILBER C. PROUSE'S HOLSTEINS

(Continued from page 28)
di posed at untimely auction, because of deciding to go over to New York State to live, numbers some 30 head. They are such good individuals and of such rich and popular breeding and backed by good official records that they recently branched out and bought a son of the great Fourlas Koradyke, with which to further improve and enhance the value of his herd. The picture of this bull, now 10 months old, is given in this issue. He will make a fine sire.

His dam is an imported heifer bred by Harry B. Post and sent over to Ontario by Mr. Gordon S. Gooderham, of the Ontario Farm, at Bedford Park. Amongst other good individuals worthy of special note in addition to those mentioned and illustrated in this issue of Farm and Dairy is a heifer out of the dam of \$1,500 bull the price being paid as a calf by Sir Lyons Hengervold Segis. The dam of this heifer made a 17.15 lb. butter record and she is a grand daughter of old DeKol 2nd. There is a heifer out of Grace Irene DeKol, a sister of the famous young heifer, Grace Irene DeKol No. 6, in the illustration of Mr. Prouse's advertisement. Out of Sir Corbin's 3 young bulls Sir Merces Abbott, out of Mr. Prouse's best by him, one out of Mr. Prouse's best heifer, Grace Irene DeKol; another is by the big cow Frank D. Prouse, let prior cow at Tillsonburg in a class of 14 and a most excellent individual; 3 daughters of Jacco Price Corbin and the cow and her calf, she being a grand dam of the first prize and champion at the Pan American. She made a three-year-old record, 16.44 lbs. butter, four-year-old record, 22.16.

Every full-grown cow in the herd has an official record. Everything in the barn has two individual cards, and these are established, have been given records. They are in full breeding and are of first-class. From the catalogue, free on request from Mr. Prouse.

The Holsteins will be held at 3.30 p.m. on day of sale. Bear in mind that Mr. Prouse's entire equipment will be sold, including the farm of over 100 acres, fertile loam soil, most desirable and located close to the city. There are good big prizes are current for milk and the ordinary.

Just as our representative was boarding the train at Tillsonburg he met Mr. J. Kelly of the Campbelltown Herd of E. C. Holstein, living not far from Mr. Prouse's place. Mr. Kelly said, "We are so sorry to see Mr. Prouse sell out in this district. He has the confidence of everybody. He is an excellent breeder. He is a fellow who goes to work in his line in excellent shape to go ahead with him and has an eye for everything. He is a man who will make the things he does." Those who buy Mr. Prouse's Holsteins will be able to carry them to the big things, which Mr. Prouse has hitherto had in view.

LEUSZLER & BOLLERT'S CONSIGNMENT

We were not anticipating seeing stock of such excellent individuality and the richest in breeding as the founding of the stables of Leusler & Bollert, at Tavistock. When they started in to Holsteins some three years ago these partners went over to Michigan State and imported a car load of Michigan's best. These men are doing a big business in this district and are keeping right up to date, and in their consignment to the Oxford Breeders' Sale, at Woodstock, Ontario, March 25, they have cattle that will redound to their credit. Included in their consignment are:

Dairy Isabella, a grand strong cow of excellent type and does a very good equal to a 55-lb. record when she freshens at time of sale. She is bred to Sir Creamline is a daughter of the Oxford breeders to make a very high class sale. The two best in this consignment will measure up well with the best at the top.

Eduz Poesch, new fresh and milking 50 lbs. a day, tests average 3.60 per cent. B. O. P. She is a three-year-old and will be bred before sale to King Iron Hengervold.

The top cow in this consignment is Rachmel Lee. She is a candidate for a 30-lb. record. She is one of those strong cows of unusual size and very perfect type. She made nearly 22 lbs. last year and through over-feeding missed her opportunity to do something real big. She struck the 30-lb. clip at the start. She will weigh over 1,500 lbs. at the sale, and will freshen about that time. This cow has a persistent habit of dropping heifer calves. Her daughter, young Eschkeles Lee Abbe Kirk, sired by Abbe Kirk DeKol 2nd, will also be in the consignment.

Others included in this consignment are of A. G. Hallman's breeding, and which will be tested before the sale should be a big freshen in time, and would make a big mark if all goes well. Content Housewife DeKol No. 1, a daughter of the sire of the show cows, is a good producer she traces Sadie Vale Concordia, her grand-

(Continued on page 32)

Holstein Cattle

Dorset Sheep

Will be sold without reserve at Public Auction, at Mapleview Farm, Thorndale, Ont.
(On Stratford to London Branch G.T.R.)

Thursday Afternoon, Mar. 20

Consisting of 1 Registered Clydesdale Mare in calf, 11 Head of high-class Registered Holsteins, consisting of 3 Bulls and 8 Females (in calf), 1 Registered Shorthorn Cow, 5 years old, in calf, 18 High grade Holstein Cows in calf, 18 High grade Shorthorn Cows in calf, 22 Dorset Sheep; Also farm horses and implements, etc.

TERMS—7 months' credit without interest (on amounts over \$10.00) on furnishing approved security; 4 per cent off for cash.

Single Fare Rates on R. R. Trains met on morning of Sale.

R. H. HARDING, Proprietor THOS. CLARK
THORNDALE, ONT. Auctioneer

BREEDERS' DIRECTORY

Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines nor for less than six months, or 15 insertions during twelve months.

YORKSHIRE PIGS, all ages, either sex. Choose young Boars, fit for service. Also show all ages, bred and heavy with pig—H. C. Bendish, Woodstock, Ontario.
FOR SALE—2 Some of King Payne Segis Clubbids, from R. O. P. cows. Also three Clyde fillies and 5 Shablos, Yearling pig—H. M. Holtby, Manistowick, Ont.
FOR TARKWORTH SWINE—Write John W. Toak, Oshkosh, Ont. R. F. D. No. 1.

FAIRVIEW FARMS HERD

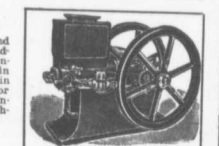
Offers a splendid son of Bag Apple Koradyke, the young bull we recently sold for \$5,000, and out of a 56-pound daughter of Pontiac Koradyke (record made at 4 years).

Can be improved on, nicely marked and straight as a string, and I will sell him. Will work the money.
WRITE ME FOR PRICE, ETC.

E. H. DOLLAR, Heuvelton, New York (Near Prescott)

"Monarchs" Make Farm Life Easy For You

Buy a "Monarch" on easy terms, and have it do the drudgery—pumping, grinding, feed-hopping, wood sawing. Astonishingly big work done for a few cents in fuel. "Monarch" farm engine come in sizes 1 1/2 to 8 H.P., with far superior bearings, equipment and design to ordinary farm engines. Your wife or daughter can operate it.



Get our "red-circle" folder for a post-card. Sent free.

CANADIAN ENGINES Limited, DUNNVILLE, ONT.
East of Peterboro, Ont., our Sole Selling Agents in Canada.
THE FROST & WOOD CO., Limited, SMITH'S FALLS, ONT.

FREE STYLE BOOK FOR 1913 OF "Quality Line"

VEHICLES AND HARNESS

NINETEEN YEAR OF SELLING DIRECT TO THE USER
Our Catalogue will help you to choose just the Vehicle or Harness you desire, and SAVE YOU MONEY. It describes each picture many styles, giving prices, FREIGHT PREPAID, and fully explains our method of Selling Direct and saving you the Middleman's Profit. Remember, we pay the freight in Ontario and Eastern Canada. The Catalogue is Free, for the asking. Send for It Today.

INTERNATIONAL CARRIAGE CO.
Dept. "D" Brighton, Ontario

Free Farrier Book Given Away

What would you give to know how to cure anyone of your horses, or cows, when it is not without having to call in the Horse Doctor?
It would save you many dollars. It would sometimes mean saving the life of one of your valuable horses or cows, which might otherwise die while you are driving for the farrier.
You can learn how to treat and cure all the diseases of Horses, Cattle, Sheep, Swine and Poultry from

Gleasons' Veterinary and Horse Taming Book

It contains 500 pages, illustrated, gives all the medicines, doses and remedies—just what you want to know even if you do call in your Horse Doctor.
Paper bound edition given free for one New subscription that you will send us for Farm and Dairy, and 10 cents extra to cover cost of mailing. Handsome cloth bound edition, of fine quality paper, 5 cents additional. Get the New subscriber and send promptly. Only a limited number of these valuable books are available.
FARM AND DAIRY, PETERBORO, ONT.

A FARMER'S GARDEN

It is without real serious meaning to many thousands of farmers because they think it is too hard work or it is not convenient to work a garden. So many farmers fail to understand what truly wonderful possibilities there are in modern hard tools



IRON AGE Wheel Hoes and Drills

(Now made in Canada)
All of the sowing, hoeing, cultivating, weeding, furrowing, planting, etc. done in the garden with the Iron Age wheel hoe and drill, with the best results. The Iron Age wheel hoe and drill are now combined in one of the most valuable tools at \$20 to \$18.00. Ask your wheel hoe dealer for the new and write us for our "Modern Tools" also a copy of our paper "Iron Age in the New Farm and Garden" free of charge.
The Pateman-Wilkinson Co., Limited
402, Springville Ave., Toronto, Ontario.

ABSORBINE

Removes Bursal Enlargements Thickened, Swollen Tissues...

CALVES RAISE THEM WITHOUT MILK Booklet Free...

AYRSHIRES

RAVENSDALE AYRSHIRES

Special offering of a splendid lot of Young Bulls from two to six months old...

TANGLEWYR AYRSHIRES

Special offering Yearling Bull; dam, Primrose of Tanglewyr End. R. of P. as a yearling...

WOODSIDE BROS. - ROTHSAY, ONT.

Burnside Ayrshires

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

R. R. NESS. - ROWICK, QUE.

AYRSHIRE BULLS

Of choicest individual merit, sired by Duke of Arr, the particularly good son (one of the best bulls living) of the champion E. of P. cow...

R. R. No. 2. - STRATFORD, ONT.

AYRSHIRE CATTLE AND YORKSHIRE PIGS

For Sale—Ayrshire Calves and Bulls, fit for service. Yorkshire Pigs, \$5.00 each or, if registered, \$6.00.

HON. W. OWENS, Prop., c/o ROBERT SINTON, Man. Riverside Farm, West-Beleu, Que.

MISCELLANEOUS

CATTLE AND SHEEP LABELS

Size Price 50 Tags 75 Cattle 60 75 Light Cattle 60 85 Sheep or Hog 40 1.00 No postage or duty to pay. Cattle sale with name and address and number of hog sale with name and numbers. Get your neighbors to order with you and get better price. Circular and sample free.

MAXWELTON FARM

Has some of the BEST JERSEY CATTLE in the land. Also BERKSHIRE SWINE. Make your wishes known to the Manager.

MAXWELTON FARM STE. ANNE DE BELLEVEU, QUE.

Clydesdale Fillies and Stallions

We have a choice lot of the best action, prize-winners, of confirmed and approved conformation and the best of popular breeding. Write for details. Price of stock and full particulars of our many years of successful experience as breeders and improvers.

Smith & Richardson, Columbus, Ont.

with 66.78 on the first of February. There is no change in price to note here, but the market on the other side is stronger, and during this week the official quotation in Liverpool was 1-40 a pound. The trade generally is looking forward to the new season, and there is every indication of fairly high prices ruling during the first half of the season. The market for the butter is firmer and prices are advanced again, especially on the cheaper grades, and there is practically nothing available on this market early under 26s a pound. Fatty Receipts for October are quoted at 30s and fresh receipts from New Zealand at 30.13c to 30c. The stock of butter in Montreal at the first of the month was published as 33,034 packages, as compared with 34,092 packages on the same date last year.

A WORLD'S AYRSHIRE RECORD

On March 2nd, 1913, the Ayrshire cow, Daisy of Fernalda, 2973, qualified in the Canadian Record of Performance test with 55,535 lbs. milk and 578.17 lb. butter-fat, equal to 697 the butter, giving 248 days, and is due to freshen April 25th next. This cow is owned by Mr. J. Tully, Athol, Stan. Que., and was slightly over four years of age when she entered in the test. Tully is a young man who started selecting and breeding Ayrshires two years ago, and is to be congratulated on his success, as he has also a number of other cows making good records. This cow is bred by a forty-year-old clerk and butter in the very record class, outstripping Jessie of Rosemont, owned by Geo. A. McFadden, Bryn Mawr, Pa., that held for some time the world's record with 14,102 lbs. milk and 578.17 lb. fat.

SPECIAL PRIZE FOR CARLOAD OF BUTCHERS' STEERS

(Continued from page 23) Judged with regard to quality, general uniformity and suitability for market demands. The entire load is to be exhibited by the owner who must have fed and owned same, himself, for a period of not less than six months preceding the opening date of the Toronto Fat Stock Show in each year that this prize is offered. With the exception of the right of ownership the entry is to conform to the rules of the Toronto Fat Stock Show. This prize is to be offered annually for five consecutive years, beginning with the 1913-14 season. A further cash prize of \$1000 will be awarded the feeder winning the annual prize above three times in succession. Attention is directed to the fact that no particular breed of stock is specified, making the competition open to all breeds. This is the right kind of encouragement to the feeder who will doubtless bring out best competition.

AYRSHIRES IN R. O. P.

The following Ayrshire cows and heifers have registered in the Record of Performance Test since our last report: Evergreen Maid Ind. 27,277, Edwin A. Wells, Sardinia, B. C., 12,012.76 lbs. milk, 69.58 lbs. fat, 3.72 per cent fat. Waite Farm, B. C., 12,012.76 lbs. milk, 69.58 lbs. fat, 3.72 per cent fat. W. Owens, 11,444.5 lbs. milk, 442.37 lbs. fat, 3.96 per cent fat.

Boney, 15,129. Hon. W. Owens, 10,800.5 lbs. milk, 443.06 lbs. fat, 4.07 per cent fat. Little Queen of B. C., Edwin A. Wells, 10,538 lbs. milk, 374 lbs. fat, 3.65 per cent fat. Miss Blanche, 24,658. Joha. Amner, Lower Montague, P. E. I., 9,690.75 lbs. milk, 442.1 lbs. fat, 4.49 per cent fat. Boney, 15,129. Hon. W. Owens, 9,390 lbs. milk, 345.45 lbs. fat, 3.71 per cent fat. Little Queen of Hickory Hill, 15,533. N. Dymen, Hamilton, Ont., 9,139.9 lbs. milk, 349.0 lbs. fat, 3.84 per cent fat. Queen of Fairly-w., 25,259. J. Thompson, Sardinia, B. C., 8,913.25 lbs. milk, 347.50 lbs. fat, 3.89 per cent fat.

4-Year-Old Class May of Stockwell, 29,563. Hon. W. Owens, 3,077.5 lbs. milk, 356 lbs. fat, 3.63 per cent fat. Beauty of Monte Bello, 24,566. Hon. W. Owens, 10,025.5 lbs. milk, 349.94 lbs. fat, 3.48 per cent fat. Dentonia's Arpeggio Ind. 25,446. Edwin A. Wells, 9,996.5 lbs. milk, 376.01 lbs. fat, 3.76 per cent fat.

1-Year-Old Class May of Stockwell, 29,563. Hon. W. Owens, 9,645 lbs. milk, 343.33 lbs. fat, 3.63 per cent fat. Stone's Croft Lady Helen, 25,446. Alex. Hume & Co., Mont. Ont., 8,260 lbs. milk, 377.85 lbs. fat, 4.27 per cent fat.

3-Year-Old Class Springhill White, 24,563. Edwin A. Wells, 12,502.25 lbs. milk, 593.75 lbs. fat, 4.66 per cent fat. Violet of Hillview Ind. 29,944. N. Dymen, 10,236 lbs. milk, 421.94 lbs. fat, 4.12 per cent fat. Silver Maid of Eden, 36,937. Edwin A. Wells, 9,827.5 lbs. milk, 359.35 lbs. fat, 3.66 per cent fat.

(Continued next week)

Important Auction Sale

40 Head of Pure Bred Cattle

The Maple Stock Farm will offer for sale at their Barns, Bealton, Ont.



WEDNESDAY, APRIL 2nd

1913

As I have purchased the entire herd of the estate of J. G. WYCKOFF, I will offer the whole herd, except calves and yearlings, 32 HEIFERS AND COWS, EITHER FRESH OR IN CALF, bred to the herd bull of this herd, Sir Distingue Paul Posch, which is getting fine strong vigorous calves, with the best of quality. This fine sire, which is two years old, rising three, will be sold in the sale. He is a beauty, light in color, and will make a 2000-lb. bull. He is as quiet as a cow.

Seven Yearling Bulls, nearly all from Record of Merit Dams, making good records. They are a good lot. This herd of cattle are of the large, broad, deep-bodied cows—the show kind that everybody likes. The foundation of the larger part of this herd is sired by Prince Abbecker Pauline, a son of J. G. Wyckoff with 28 lbs. each of butter in 7 days. He has 2 sisters (Never before have we been able to offer such a choice lot of the right kind. Don't miss this opportunity of getting good foundation stock to start or to improve your herd.)

Catalogues will be ready by March 25th, be sure and send and get the breeding of these cattle. All trains will be met at Waterford and taken back for evening train. Lunch at noon for those coming a distance. Sale held under cover. Terms cash or time up to six months on approved notes, with interest at six per cent.

WM. SLAGHT, Prop. BEALTON - ONTARIO COL. WELBY ALMAS, Auctioneer

As we have done before everything will be sold straight. Sale at 1 o'clock sharp.

Auction Sale Without Reserve

40 Registered and High Grade Hotheinstens



At the residence of John S. Rutherford, Tullochgorum, Chateaugay Co., Que., 1 mile east of McCaig's Corners

Tuesday, March 25th, 1913

19 Head Registered. [21 Head Grade

The foregoing stock are from sires as Canadian Netherlands (1913), Minto De Kol (2430), whose dam was Lady Colantha De Kol (2056), who won the champion milk test at Ottawa for three years; Senator De Kol (3812), whose dam was Maudie De Kol (3805), won the champion milk test at Ottawa, 1912; also holds the world's record in public milk test. ALL BREED BY NEIL SANDER.

Stock Bull Senator Lad De Kol, 4 yrs. old (8013), will be sold at the sale; is a grandson of Maudie De Kol, and on the dam side a grandson of Lady Colantha De Kol.

Sale without reserve, at One o'clock p.m. Will meet morning trains at Bryson's Station.

TERMS: TEN MONTHS CREDIT. Catalogues sent on application.

JOHN S. RUTHERFORD Tullochgorum, - - - Quebec

ANDREW PHILIPS, Auctioneer

HOLSTEINS

INKERMAN DAIRY FARM

Offers in HEIFERS, rising 1 yr. old, in HEIFERS, rising 2 yrs. 6 Bulls rising 1 yr. old, sired by son of FORTIC KORSNYK
Also Bull and Heifer Calves. Punched in pairs not skinned. Write, phone or come and inspect.
WM. HIGGINSON, INKERMAN, ONT.

LAKEVIEW HOLSTEINS

We are now testing some of the daughters of Count Hengerveld Fays de Kol, and they are running from 35 lbs with first calf to 30 lbs with second calf. There are still a few young bulls from those heifers that we are offering at half their value, in order to make room. They are sired by Dutchland Calantha Bir Mona, come to the farm and see the dams of those bulls and their dams.
E. F. OSLER. BRONTE, ONT.

Purshed Registered **HOLSTEIN CATTLE**
The Greatest Dairy Breed
AS SHOWN BY FREE LITERATURE SOCIETY
Holstein Frisian Assn. Box 148 Banteloro Vt

Avondale Stock Farm

A. C. HARDY, PROPRIETOR.
HERD SIRE
Prince Hengerveld Pletsje, 9290 (50,987).
Dam, Pletsje 2nd Woodcrest Lad.
Mrs. Pletsje Hengerveld De Kol, A. B. O. 2382.
Highest record daughter of Hengerveld De Kol.
King Pontiac Artia Canada, 19,842 (72,394).
Sire, King of the Pontiacs.
Dam, Pontiac Artis, 117 lbs. butter 7 days, 1878 lbs. 385 days.
Daughters of King Pontiac Artia.
We are offering bulls from those great sires and high record dams, and also a limited number of cows in calf to them. No heifer calf will be sold at any price. Address all correspondence to:
H. R. LOGAN, Mgr., BROCKVILLE

LEUSLER & BOLLERT'S CONSIGNMENT

(Continued from page 79)
sire is also a broodmare sire. Her former world champion cow, Grace Fays de 2nd Woodcrest. This cow placed 900 lbs. of milk in this herd, and Mucha also was one of those selected to go in this sale. She was at 17 1/2 months old, and was one of four years. This cow has great vet development, and is of good quality all over. Nettie Dewitt and also one of the best of good ones. She is a daughter of Nettie R. O. P. record 130 lbs. butter. She is a big strong two-year-old of good quality, due to freshen in May. She too is a descendant of that grand cow, Side Vale Concordia.
From the foregoing it is apparent how richly bred the cattle in this consignment are.

The following are some of the cows still retained in this herd: Amiga Anna (Imp.), A. B. O. at four years, 22 lbs.; Hengerveld (Imp.), A. B. O. 22 lbs. butter, R. O. P. 11,032 lbs. milk, butter 46 1/2 lbs.; Gladys Artis at three years, 20 1/2 lbs. butter; Maple Grove Lida, 20 lbs. butter at three years; Hengerveld Alice (Imp.) and Hengerveld Alice (Imp.) are bred to King Lyons Hengerveld, and the other, a four-year-old, to Veeman Beauty Harog. These young cattle are of the correct type. The four of them would make a grand start for anyone and a valuable addition to any herd.
Mr. Ruby has a farm of 100 acres. He believes that when a man has a farm on such a farm, and has Holstein cattle, he is O. K. He has great confidence in pure-bred Holsteins, as he might well have after his experience with them which has been so favorable.

ELIAS RUBY'S CONSIGNMENT AND HERD
When Mr. Elias Ruby, of Tavistock, Ont., commenced with pure blood Holsteins some five years ago, they started to dry her off. She is of the extreme dairy type and one of the best feeding cows in the herd. Canary Rose Vale DeKol (Imp.), a three-year-old, soon to freshen and expected to produce a calf, was sired by Queen Nancy (Imp.), having a 23 lb. record. Trinidad Tracer 2nd (Imp.), record over 200 lbs. at four years; Helen Jane's 2nd Sady, raised once to Hengerveld DeKol and three times to Pontiac Korynkje; Gritty Hengerveld, Kows, calved 1 yr. and 11 months, and now milking under 14 months, over 39 lbs. a day—H. H.

from this herd that he is consigning four females and one bull to the great Oxford Breeders' Consignment Sale at Woodstock, Tuesday, March 25.
The four foundation cows, which he has in his herd, are exceedingly choice. In seven-day tests, which he has made on them, and which were the first he ever saw made—all he knew about the work being what he had read about in papers like Farm and Dairy—he got records of 2,39 lbs. butter in 7 days on Dutchess De Kol Canada (Imp.) on Belle Woodcrest (Poseh); Stacy Dewitt close to 18,000 lbs. of milk in one year and over 800 lbs. of butter—he has a daughter of hers, Fanny Dewitt De Kol, from which he may well expect big things.
The bull in his consignment to the big sale is from Stacy Dewitt, the cow mentioned in the foregoing, having the 22,000 lbs. in R. O. P. He is by Veeman Beauty Harog, whose first five sisters at 2 years averaged over 16 lbs. butter in 7 days.
Three of the females in this consignment are coming 2 years in May and June, and are in calf to a son of a 2 1/2 lb. cow, and Mr. Ruby's former herd sire, Veeman Beauty Harog, who is bred to King Lyons Hengerveld, and the other, a four-year-old, to Veeman Beauty Harog. These young cattle are of the correct type. The four of them would make a grand start for anyone and a valuable addition to any herd.
Mr. Ruby has a farm of 100 acres. He believes that when a man has a farm on such a farm, and has Holstein cattle, he is O. K. He has great confidence in pure-bred Holsteins, as he might well have after his experience with them which has been so favorable.

NORFOLK HOLSTEIN MEET
Under the joint auspices of the Department of Agriculture and the Norfolk Holstein-Frisian Breeders' Club, a dairy industry and stock judging convention was held for the Norfolk dairymen on Jan. 20. The judging was in charge of A. C. Hallman, who explained the good qualities of a good dairy cow. He also gave an instructive address on "Selecting a Sire for the Dairy Herd." Dr. Arthur Burt addressed the meeting on the subject of "Bovine Tuberculosis and the Use of the Tuberculin Test," emphasizing the need of more sanitary conditions in our dairy herds.
After the annual meeting a banquet was held. There are now over 40 members in the club.

HOLSTEINS

HIGH QUALITY RECORD BULL

Priced Right for Quick Sale
Owner of the dam of Lulu Keyes. He has a full sister, untired, and her cows will not average less than \$500 for her. This is a valuable herd head, 11 mos. old, sired by a son of Dr. Kol 2nd Butter Boy 3rd; dam is Diamond 2nd Lulu, also being dam of the great Lulu Keyes. He is light in color and a fine straight calf. Should be worth, easily, \$500. First check for \$150 gets him!
E. B. MALLORY, BELLEVILLE, ONT.
Phone. BOX 66, R. F. D.

GLENDALE HOLSTEINS

Entire crop of Pure-bred Holstein Bull Calves and a limited number of Heifers, whose three nearest sires have sired May Belle Sylvia, over 2 lbs. butter in 7 days, R. O. M. at 1 year 11 months (world's record). Lulu Keyes, 13,940 lbs. in R. O. P. as senior two-year-old (world's record), and Jewel Fox Poseh De Kol, 25 1/2 lbs. butter at 4 years (world's record). Prices reasonable. All correspondence promptly answered.
WM. A. SHAW, BOX 31, FOXBORO, ONT.

Holstein Dispersion Sale

Watch Farm and Dairy for big announcement
Dispersion Sale—Horses and Implements, Feb. 20th; Holsteins Cattle and Tansworth on the 12th of March.
J. McKenzie, Willowdale, Ont.

Alfalfadale Holsteins

We offer Male Calf, born Dec. 1912. Dam has a record of 227 lbs. milk and 14.6 lbs. butter at 1 yr. 8 mos. old. Her dam is now giving over 60 lbs. a day and 22 lbs. butter a week. He has E. of Merrit sire. All our cows in R. of M. Will send address for particulars.
WILBER C. PROUSE, TILLSONBURG, ONT.

Oxford County Holsteins

AT PUBLIC AUCTION

65 Some of the Best Breeds of Holsteins in far-famed Oxford County, Ont., and Cattle from some of the best and most noted herds—(including H. Bollert, Bollert and Leusler, A. E. Hulet, P. D. Ede, Jas. Rettie, and others), will combine to make probably the best sale ever held in Canada, for Holstein Cattle, the Sale to be under the auspices of THE OXFORD COUNTY HOLSTEIN BREEDERS' CLUB, on TUESDAY, MARCH 25th, 1913

Every man in this sale is laying out to do his best to boom our Club and make his stock known as exceedingly high class through this sale. They are contributing of their best. Many of the cattle are much better than most breeders would care to risk selling at auction.

PRACTICALLY ALL FEMALES—IN VALUE UP TO \$700 A HEAD

The breeding of this stock is of the choicest imported and Canadian-bred strains. Mostly all tested stock. Our sale will afford you the opportunity of buying Holstein females from great herds. They will go absolutely at your own price.

Amongst the contributors are: H. G. Benfield, Woodstock; H. Bollert, Tavistock; Bollert & Leusler, Tavistock; T. L. Duskin, Norwich; P. D. Ede & W. Sebbl, Oxford Centre; A. E. Hulet, Norwich; Martin Monnowell, Oxford Centre; Jas. Rettie, Norwich; Elias Ruby, Tavistock; A. Walker, Norwich, and others.

Signed Transfers for each animal will be in Secretary's hands before sale day. Everything must be sold to highest bidder. No reserve.

Catalogue gives full particulars and pedigrees

Write Now for your copy

An Editor of Farm and Dairy, who inspected most of this stock the last week in February, pronounced it to be superior to his most sanguine expectations of it. The stock will set a new high mark up most difficult for succeeding sales to surpass. All stock must be choice specimens, with udders right. Our inspection is rigid. Cattle are guaranteed.

PLAN TO COME

SALE AT WOODSTOCK

CATALOGUES AND PARTICULARS FROM

H. G. BENFIELD, Woodstock, Ont.

P. D. EDE, Oxford Centre

Secretary of Sale

President of Association

Notice is hereby giving notice of five Pen Annual Consignment stock. I. R. O. P. Heifer 1; O. M. Heifer 1; Daughter of who is a daughter. She will produce this year. Also a son of my former herd former sire ELIAS RUBY, Owner Graceland Farm

Specimens
As Farm and Dairy
well known to
sire a number of
the male. No
conditions of
Prouse over
in a man could
Thirty
Holsteins
Horse,
most desirable

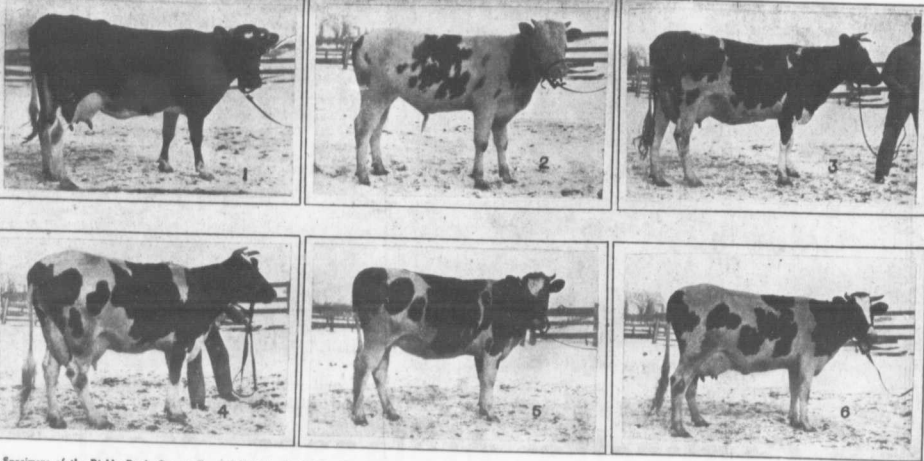
High Testing
Bulls. At first a
ated Lady De K
son of Lulu Ke
Calves. I
no any Femer
Write or
S. LEMON.

Ourvill
Only one son
Kor the 2nd B
want him. I
year old. Write
LALDAW BRO

RIVERV
9 Young Bulls
sired by King
sister of his dam
sire average for
R. O. M. and R

P. J. SALLEY -
YOUNG CO
SAFE IN CALF TO A
Kol the 2nd B
Also yearling I
Bull Calves for
specimens.
W. W. GEORGE.

GRACEL
HO
Notice is hereby
consisting of 5 Pen
Annual Consign
stock. I. R. O. P. Heif
1; O. M. Heif
1; Daughter of
who is a daughter
She will produce
this year.
Also a son of m
my former herd
former sire
ELIAS RUBY,
Owner
Graceland Farm



Specimens of the Richly Bred, Correct Type of Holstein Cattle That You May Buy at Public Auction, "Good Friday," March 21st, at Mr. Wilber Prouse's Sale, Tilsenburgh, Ont.

As Farm and Dairy readers will have learned from Mr. Prouse's advertisement and Holstein reading notes in Farm and Dairy last week, and from these pictures, well-known to Farm and Dairy readers. This bull at auction on the other side would bring from \$2500 to \$2600, or more. (Mr. A. C. Hallman, of Breslau, has on his herd the sale. No. 4, TRIXIE BELL, 2 yr. old, out. A. R. O. and her 3-year-old record 16.4, four-year-old record 16.6, butter, 187 lbs., A. R. O., made under unfavorable conditions of retained afterbirth. No. 4, ISOBOD PRIDE CALAMITY, full sister, TRIXIE BELL, 187 lbs., A. R. O., made under unfavorable conditions of retained afterbirth. No. 5, SARA JANE'S POSCH, coming two years, her dam made 22.12 lbs. butter, being first grand-dam and sweep are included in Mr. Prouse's sale. No. 5, GLANCE IRENE DE KOL, record at one year 22 months, 34 lbs. A. R. O., over 16 lbs. this year. One of the best three-year-olds a man could buy. Note her grand type and pronounced veining on udder.

Thirty grand good Holsteins are included in this sale. Catalogues giving full particulars as to breeding, etc., sent on application to Wilber Prouse, Tilsenburgh, Ont. Forest, wine, poultry, etc., complete line of farm implements, etc., all to be sold on sale day, without reserve; also farm, over 100 acres, fertile loam soil, most desirable and with suitable buildings, near to Tilsenburgh Condensory, where wood products are to be had for milk. Write for catalogue and attend this sale. (Adv.)

LYNDEN HERD

High Testing HOLSTEINS For Sale

Bulls, fit for service, one a son of Spotted Lady De Kol, 27.26 and all sired by a son of Lulu Gleaser, 25.77. Also Bull Calves.

Also any Female of a milking age has a price. Write or come and see them.

LEMON, LYNDEN, ONT.

Ourvulla Holstein Herd

Only one son of Dutchland Colantha sir Abbeokark left. Speak quick if you want him. A dandy for a \$4500 4 year old. Write for pedigree and price.

LIDLAW BROS., AYLMER WEST, ONT.

RIVERVIEW HERD

9 Young Bulls, from 2 to 12 months, sired by King Isabella Walker, whose sister, 3 nearest officially tested dams, a sister of his dam, and two sisters of his sire average for the eight 30.34 lbs. from R. O. M. and R. O. P. dams.

P. J. SALLEY, LACHINE RAPIDS, QUE.

YOUNG COWS AND HEIFERS

HOLSTEINS of different ages

Safe in calf to a son of the great bull De Kol the 2nd's better boy the 2nd.

Also Yearling Heifers, and Heifer and Bull Calves for spring delivery. Write for prices.

W. W. GEORGE, CRAMPTON, ONT.

GRACELAND FARM

HOLSTEINS

Notice is hereby given, that I am consigning 5 Females and 1 Bull to our Annual Consignment Sale at Woodstock.

1 R. O. P. Heifer, 3 yr. old.
1 R. O. M. Heifer, 2 yr. old.
1 Daughter of the above R. O. P. cow.
1 Daughter of another R. O. P. cow, who is a daughter of "Suey the Will," she will produce about 600 lbs. of butter this year.

Also a son of Stacy De W. A., sired by my former herd sire, A. E. O. bred See former ads.

ELIAS RUBY, TAVISTOCK, ONT.
Owner and Manager
Graceland Farm and Holstein Herd.

OUR FARMERS' CLUB

Correspondence invited

PRINCE EDWARD ISLAND
KING'S CO. P. E. I.

QUEBECAN, Feb. 20—We are having old-fashioned winter at last. Some days last week were as cold as 48 below zero. The past two days it has been snowing and drifting, making roads almost impassible. Farm stock is wintering well so far. Prices: Hay, \$15 to \$18; straw, \$5 to \$6; oats, 26c to 40c; pork, 9-10c to 10-14c; beef, 5c. Fat cattle are in good demand, bringing from \$25 up to \$35. Butter, 26c to 28c; eggs, 18c. Our Annual Seed Fair and Poultry Show takes place at Georgetown on March 7th.—H. F.

ONTARIO

HASTINGS CO. ONT.

SIDNEY CROSSING, March 3—Splendid catching prevails. This gives farmers a good opportunity to do the winter hauling and every one is busy. A Platon company is offering to make factory whip butter on a three years' term contract, the machinery to be the property of factory at the end of the time. There are quite a number of pure-bred Holstein youngsters, two-year-olds, that are fairly good performers, and would have several good sires in our neighborhood, and nearly everything is grade J. K.

WELLINGTON CO. ONT.

QUELPIE, March 3—The Guelph Fat Stock Club held a most successful sale here yesterday, buyers being present from the United States and the Canadian West. Brown and McCulloch, cattle ranchers at Guelph, and W. G. Edwards and Co., of Rockland, were the largest sellers. "Clipper Prince," a four-year-old, brought the highest price, \$225.—C. G.

ESSEX CO. ONT.

ARNER, Feb. 28—We are having our first sleighing, and those having legs to haul are taking advantage of it. Some of the farmers have been shipping in tile by the car load, which looks like more underdrainage. Stock of all kinds is wintering well, and feed is plentiful; the mild weather is partly responsible for both. There has been a large number of auc-

tion sales, and stock of all kinds bring high prices. Prices are: Hay, \$10; hogs, \$10; wheat, 50c; corn, 45c, and oats, 30c.—A. L. A.

THE CONSORTION FROM JAMES

RETTIE

The fact that cows are from James Rettie's herd at Norwich, and have been bred by him, is sufficient introduction for them anywhere to cause informed people to sit up and take notice and realize that something interesting is before them. Rettie is placing five cows in the great Oxford Sale at Woodstock, March 25. These cows are:

Canary Butter Girl, a five-year-old, to freshen in May. She has an official record of 33.5. She is a grand good, strong in dairy characteristics, and of constitution. She has those great strong muscles that mean so much in a dairy cow as indicating her capacity.

Jessie Posh—a good show cow and one that has captured quite a few prizes. She is straight and good to look upon, as may well be imagined, and she has that congenial and general strength indicating capacity throughout that can stand up through lots of hard work and abuse.

Olive Schulland—a great straight, deep cow that will be tested, as one would be again, before the day of sale. Elmore and, recently calved when we saw her. Her mother won first at Guelph two-year-olds, and again as a three-year-old. She is a cow of tremendous capacity, and with an udder so shapely, and in such good condition, it would cause anyone to stop and take notice.

Olive Mercant—a daughter of Olive Schulland, she being her first daughter. She has an A. R. O. record, 14.45. She is a very good cow, and with a very persistent milker, and was not dry over a month. She has just calved.

Mr. Rettie's stock, as Farm and Dairy readers may well suppose, was looking in a 1 shape. We were much taken with a number of heifer calves, and his young stock, from his herd sire, Francey 3rd's Calantha De Kol, his dam having a record of 29 lbs. in 7 days. His set are striking evidence in the way of testimony to the fact that blood surely does tell.

The new bull as a coming herd sire, which Mr. Rettie has recently procured from Ohio, Royal 17 De Kol, also selected us greatly. He is out of a cow with a record of 19 lbs. milk in 7 days, over 5000 lbs. milk in one year, and 30 in 30 days. Backed with a record like this and good blood, it is hard to see what could you expect but that he would attract.

Lilac Holstein Farm

Offers young Cows and Yearlings at moderate prices.

W. F. STURGEON
Halloway St., C. P. R.
Brockville, G. T. R. Glen Buell, Ont.

Lyndale Holsteins

Offers 3 Young Bulls, fit for service, sired by "Prince Hengerveldt, Fletch" and "King Pontiac Aris, Canada." Good individuals, nicely colored. The records of these carrying nearest dam average over 27 lbs. butter each in 7 days. Females, any age.

BROWN BROS., LYN, ONT.

ELMDALE DAIRY HOLDINGS

A few Females for sale. Calves, Yearlings or Cows to be selected from. Most of the young stuff sired by Faldina Ormsby (H.D.). Service bulls, Faldina Ormsby and Highland Calantha (Calantha 15-26).

BRED CARR. BOX III. ST. THOMAS, ONT.

Registered Holsteins

FOR SALE!

To make room I offer for sale 15 Heifers, due to freshen in March and April. They are coming 3 years old and are carrying their 2nd calf, and a son of a 20-1b. 5 year-old cow.

R. CONNELL, R. R. No. 2, SPENCERVILLE
Grenville Co., ONT.

GOOD ONES FOR SALE

1 A Young Bull, fit for service, sired by Sara Jewel Hengerveldt's son, and out of dam, Flora Korndyke Pieterse, 15.26 lbs. butter in 7 days.

2 A Young Bull, 10 months old, sired by Sara Jewel Hengerveldt's son, and out of dam, Flora Korndyke Pieterse, 15.26 lbs. butter in 7 days, at 1 year 9 months 15 days of age.

Sara Jewel Hengerveldt's son's dam, Sara Jewel Hengerveldt, was first cow to make over 100 lbs. milk in one day, in official test she produced 22.15 lbs. butter in 7 days; her daughter, Sara Jewel Hengerveldt, 22.15 lbs. butter in 7 days.

Also a few daughters of this bull and young cows for sale. For full particulars, write

B. E. HAGERMAN, R. M. D., HAROLD, ONT.



GRISELDA

WE might follow the example of some advertisers, and make all the claims in the calendar regarding the **marvelous nutritive and milk-producing** qualities of

Caldwell's Molasses Meal

84% Pure Cane Molasses and 16% Edible Moss

but that wouldn't satisfy you **unless we tabled** the proofs of the truthfulness of these claims. You will note from time to time that we make strong claims regarding the value of **Caldwell's Molasses Meal** as a **stock-conditioner and milk-producer**; but we always stand ready to prove our claims true. Read the letters reproduced in this advertisement and form your own conclusions. Then, if you have any lingering doubts regarding the value of **Caldwell's Molasses Meal**, put it up to us to prove our case beyond dispute.

You can buy **Caldwell's Molasses Meal** at your feedman's or direct from us. Write anyhow.

CALDWELL FEED COMPANY, LIMITED, Dundas, Ontario

Still More Evidence

The Caldwell Feed Co., Ltd., Dundas, Ont.

Dear Sirs,—I wish to express to you my appreciation of your Molasses Meal. I have been feeding it for over a year, and as to results, the best way for me to show them is by stating that my Holstein-grade Cow, "Cherry," won the sweepstakes in the Ontario Provincial Winter Fair, held at Guelph in December, over 69 cows, also first in her class; first for total number pounds of fat, Norfolk County Special, and silver cup given by the Holstein-Friesian Association.

She gave 206.6 lbs. of milk in three days, making 252 pounds, testing 3.08 in butter-fat, also winning the prize for greatest number of pounds of solids. "Cherry" is seven years old, and has been fed daily on Molasses Meal, which, in my estimation, has helped materially to make the wonderful showing she has made.

"Cherry was sold to Messrs. Reid & Co., of Ottawa, and has since been awarded first prize at the Ottawa Winter Fair. I would highly recommend your Meal to dairymen.

Yours truly,

(Signed)

G. B. RYAN.



If you are interested in milk production, read the following letter:

Rockburn, Quebec

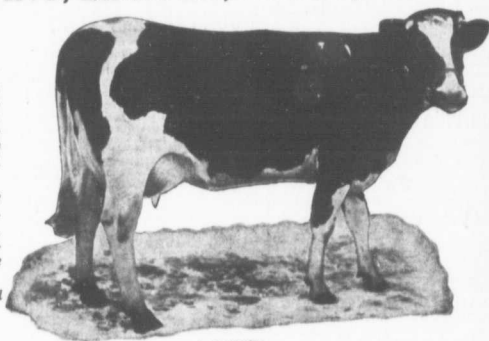
The Caldwell Feed Co., Ltd., Dundas, Ont.

Gentlemen,—In reference to the benefit I have derived from feeding Caldwell's Molasses Meal to Milk Cows, would say that I have found it second to none to complete a balanced ration, and consider it absolutely indispensable in Making Milk Records.

My Champion Cow, "Griselda," which gave 105 lbs. of Milk in one day and over 10,000 lbs. in less than four months, dating from the day she freshened, giving 2,700 lbs. In her Fourth Month. Ate Caldwell's Molasses Meal during the time she made these records, especially when she produced 2,700 lbs. in August, For No Cow (to my knowledge) In The World, Regardless of Breed, Has Ever Produced that Amount of Milk in Her Fourth Month on Grain and Grass alone, and the grain ration contained Six Lbs. of Caldwell's Molasses Meal Daily.

I highly recommend this Meal to every dairyman interested in producing milk either for market or record-making.

Respectfully yours (Signed) GEORGE WINTER.



CHERRY

The Elastic Cultivator

On any cultivator when the front and rear teeth are fastened to the same section or tooth frame the back teeth are bound to cultivate deeper than the front ones, or perhaps the front row of teeth do not enter the ground at all. On the **PETER HAMILTON** the sections or tooth frame are divided into rows, and each row of teeth swing or move independent of the others. What is the result? Even cultivation on every square inch of field and better crops. This is only one of our exclusive good points. Ask our agents about others.

The Peter Hamilton Co., Limited

Peterborough, Ontario

Sold by THE JOHN DEERE PLOW CO., 77 Jarvis St., TORONTO, Ont