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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE  
SUCCEED  
FOUNDED 1875

Census and Statistics Dec 31, 11  
Dept. of Agriculture

\*AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.\*

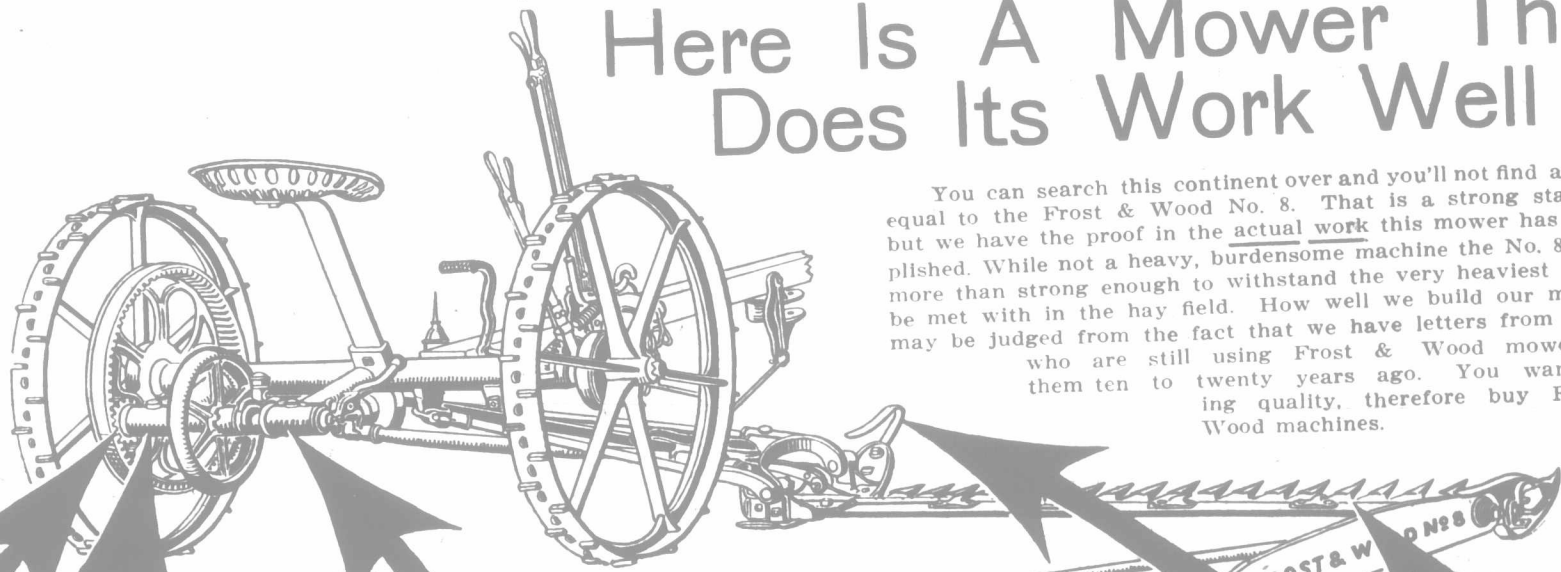
VOL. XLVI.

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LONDON, ONTAR'O, APRIL 6, 1911.

No. 967

## Here Is A Mower That Does Its Work Well

You can search this continent over and you'll not find a mower equal to the Frost & Wood No. 8. That is a strong statement, but we have the proof in the actual work this mower has accomplished. While not a heavy, burdensome machine the No. 8 is built more than strong enough to withstand the very heaviest work to be met with in the hay field. How well we build our machines may be judged from the fact that we have letters from farmers who are still using Frost & Wood mowers sold them ten to twenty years ago. You want lasting quality, therefore buy Frost & Wood machines.



### No Flying Start Required With No. 8

Thanks to the Internal Gear on Frost & Wood, No. 8 Mower, it's not necessary to back up several feet and get a "flying start" before the knives will cut—as must be done with mowers designed on the External Gear Principle. Look at illustration A and you'll understand what we mean by the Internal Gear. You see that the small gear wheel is inside the large. When outside it is the external gear.

Notice that two cogs are always in full mesh and at least one other in touch. External gear never has more than one cog in mesh, which leaves so much "slack" to be taken up between the Main Drive Wheels and the Pitman that the horses must travel several feet before the knives can commence cutting. But the Internal Gear, being nearly three times as fully in mesh there is no slack to be taken up. The knives commence cutting directly the horses begin to move. And the Internal Gear cannot slip a cog even in the heaviest part of your hay field.

### Double Brace and Roller Bearings

On illustration B the arrows point to our Double Brace. We use this Double Brace to fully protect the working parts from the jars and jolts resulting from bumping over rough ground. This is a very important feature, as it prolongs the life of the machine. Yet on other mowers only a single brace is used. Look again at B and see the Large Roller Bearings placed at the points where wear might possibly occur. When we started to build this machine we determined to make it the easiest-running, longest-wearing—and we succeeded, as its records with progressive farmers have proven.

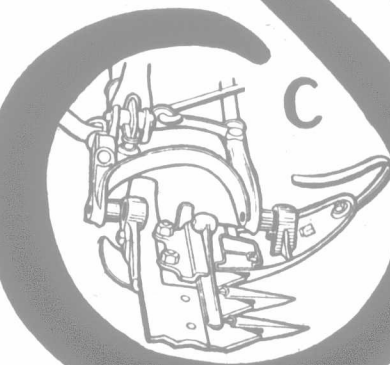
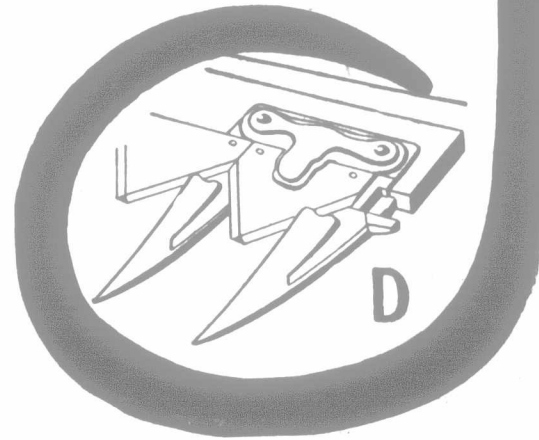
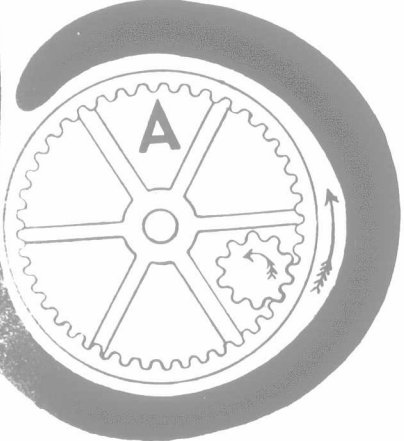


Illustration C shows you the Large Bearings used in our "stay-tight" connection between Cutter Bar and Main Frame of Mower. Unlike Small Pins used on other mowers, they do not wear down hurriedly and permit connection to work loose. Instead, they fit precisely together and have no chance to wear. That's why it is called the "stay-tight" connection. That's why there is no time lost on the field—no blacksmiths' bills to pay.

## Frost & Wood No. 8 Mower

Study illustration D, because we want you to remember that we put a Steel Wearing Plate under the Clips that hold the Knife in place. With this Plate, the Cutter Bar is fully protected against the wear that would otherwise occur by the pressure of the knife against it when in action. This is just another life-prolonging feature on the Frost & Wood No. 8 Mower. Just one more reason why you should accept nothing less than Frost & Wood Quality. In fact, there are enough reasons why you should purchase the No. 8 to fill a book. Ask for catalogue F 45 and read them all.

FROST & WOOD COMPANY, LIMITED, SMITH'S FALLS, CANADA







### Are You Awake To Opportunity?

EVERY man, some time or other, has Opportunity's door opened to him; but the great difficulty is knowing when it comes and being convinced to act.

THE BUCKEYE TRACTION DITCHER offers you an opportunity of unusual merit. Dig ditches in your neighborhood and net from \$15.00 to \$18.00 a day. Many are doing it. There is no trouble keeping the machine busy. Every farmer needs ditches; the old, expensive method of hand labor is a thing of the past. Our machine saves you from 25% to 50%, and digs from 100 to 150 rods a day. Farmers are insisting upon BUCKEYE ditches, because they are truer, of more perfect level and economical. Be the first in your territory to own the BUCKEYE TRACTION DITCHER. Our catalogue T will explain all. Write to-day for it.

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Low Rates Every Day To:

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Be Sure

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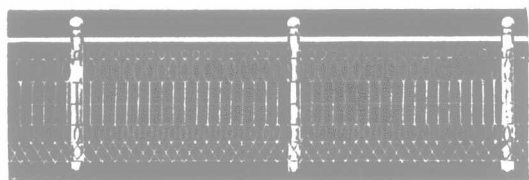
When you buy seeds you are investing not the price of the seeds only, but the value of the land for a year and the season's work as well. That makes it most important that you should buy

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That is the first and perhaps the most important step towards a good crop. Ewing's Seeds are clean, vigorous, healthy, true to type, and sure to grow if they get any kind of a chance. For over forty years they have been making Canadian farms and gardens famous.

Write for our handsome Illustrated Catalogue, and if your dealer hasn't Ewing's Seeds buy from us direct.

WM. EWING & CO., Seedsmen  
McGILL ST., MONTREAL. 12



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NEXT TIME you are in need of a Tub or a Pail or a Fire Bucket, see that your dealer shows you the ones made of

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POSITIVELY WILL NOT TAIN LIQUIDS.

Makes an A1 Pail for carrying milk.

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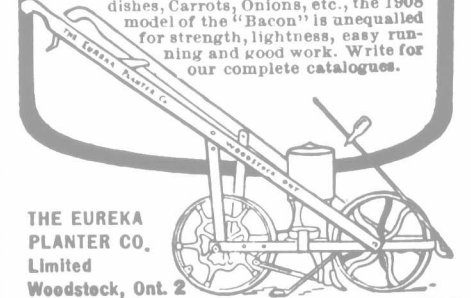
you secure one with the charming tone of a pipe organ, and at a price that will please you. Buy a Bell and get the best made. We are the only makers of the patent Pipe Tone Reed Cells. Send for free catalogue No. 40.

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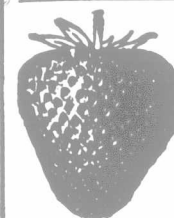
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Kills Codling Moth and Leaf-eating insects every time.

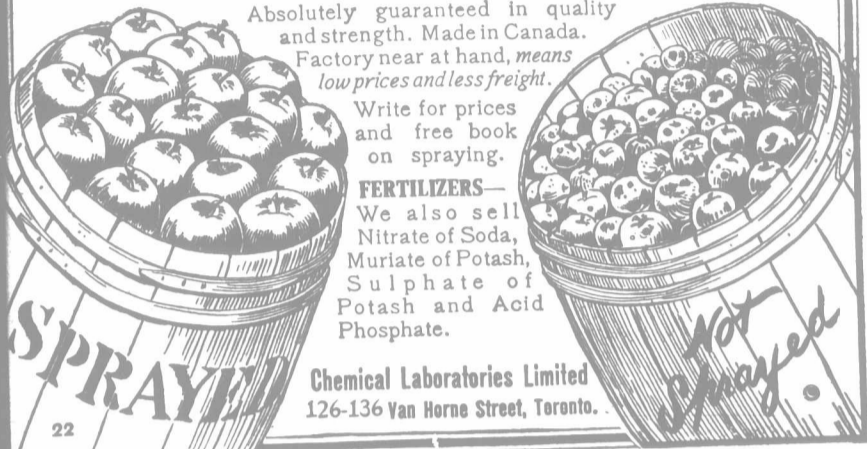
VANCO contains a guaranteed amount of Arsenic Oxide. Simply mix VANCO LEAD ARSENATE with water and you have a spray that is sure death to Codling Moths, Potato Bugs, Cabbage Worms, Asparagus Beetle and all other leaf-eating insects. Easy to spray—will stand two or three rains without washing off—and will not burn the foliage.

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Write for prices and free book on spraying.

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"The Kids from Galt" will stick in your mind until you send for a free copy of our book "Roofing Economy". Better write for it today and get it off your mind. We'll send it by return mail.

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Watch for the advertisements with The Kids from Galt.

## Cows Produce More in BT STALLS

Our cows will produce more, because BT Stalls give them perfect freedom and comfort and make possible greater cleanliness.

BT Stalls protect your cows against disease, worry and accident. Our catalogue explains how this equipment lessens abortion and does away with the principal causes of big knees, ruined udders and many other injuries. Further, it explains how our individual mangers prevent overfeeding and underfeeding.

If you are building or remodelling your stable, write at once for the BT Catalogue on Barn Equipment. No other investment will pay as big dividends as BT Equipment in your barn. Your barn is your profit-centre—HAVE IT RIGHT INSIDE.

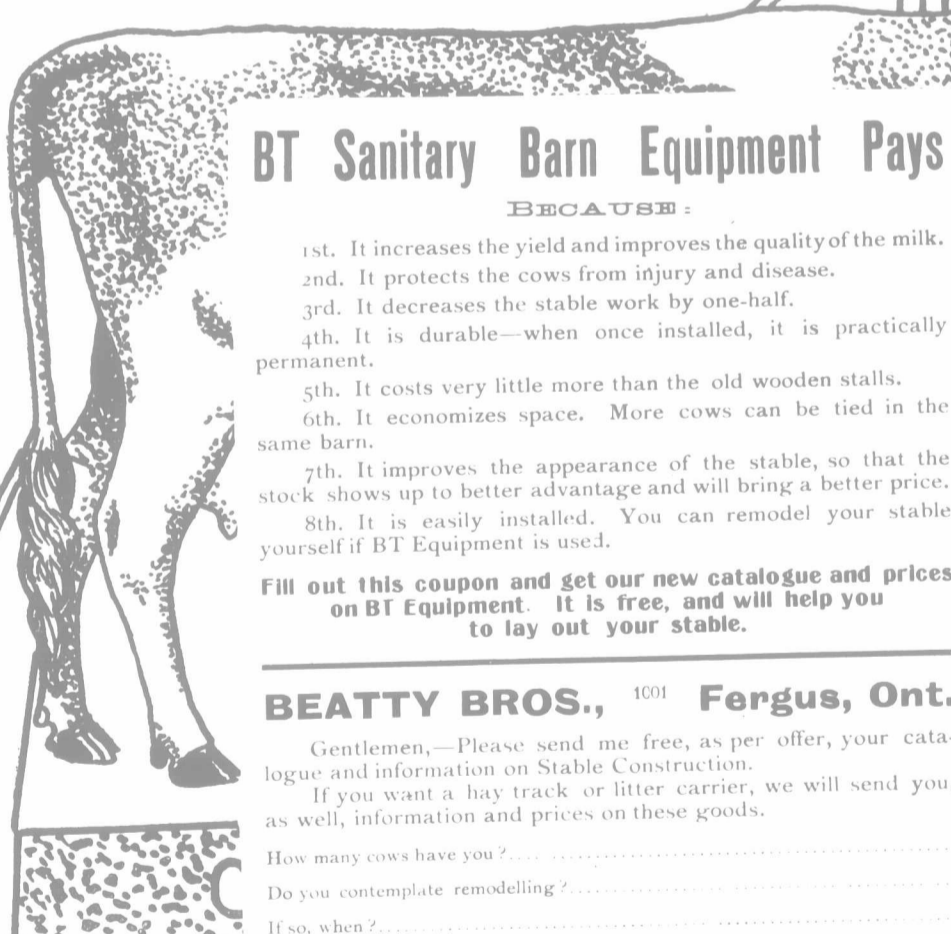
Remember, there are five exclusive features on BT Stalls, in which they excel all others. For instance, BT Stalls are the only ones by which you can line up all cows, whether long or short, on the gutter. No droppings will fall on the cattle-stand. Your cows will remain clean if tied in BT Stalls. Let us tell you about our other exclusive features: Our Sure-Stop Post—our Self-Cleaning Manger—our Swivel Stanchion—our Cross Chain—and our Calf and Bull Pens.

The interior arrangement of your barn is important, and, if properly arranged, it will save much time and labor in doing the stable work. We will help you to get the best possible layout. If you use BT Stalls you can economize space and tie more cows.

The New BT Catalogue on Sanitary Stalls tells how the cement floors should be laid for stables, the proper measurement and shape for the cattle-stand, the manger, the gutter, etc.

If your stable is equipped with BT Stalls you do not need to be afraid of any inspection. They will be as sanitary as it is possible to make them, and a pleasure to see and to work in.

Write for our catalogue today. It will be sent free if you fill out the coupon.



### BT Sanitary Barn Equipment Pays

BECAUSE:

- 1st. It increases the yield and improves the quality of the milk.
- 2nd. It protects the cows from injury and disease.
- 3rd. It decreases the stable work by one-half.
- 4th. It is durable—when once installed, it is practically permanent.
- 5th. It costs very little more than the old wooden stalls.
- 6th. It economizes space. More cows can be tied in the same barn.
- 7th. It improves the appearance of the stable, so that the stock shows up to better advantage and will bring a better price.
- 8th. It is easily installed. You can remodel your stable yourself if BT Equipment is used.

Fill out this coupon and get our new catalogue and prices on BT Equipment. It is free, and will help you to lay out your stable.

### BEATTY BROS., 1001 Fergus, Ont.

Gentlemen,—Please send me free, as per offer, your catalogue and information on Stable Construction. If you want a hay track or litter carrier, we will send you, as well, information and prices on these goods.

How many cows have you? .....

Do you contemplate remodelling? .....

If so, when? .....

What size of barn? .....

Will you want a hay track? .....

Will you want a litter carrier? .....

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We also build BT Unloaders for Steel, Wood or Rod Track, and the BT Litter Carrier.

## Barn Work is Reduced by BT STALLS

They will about cut in two the stable work.

BECAUSE:

- 1st. The cows can be tied or untied in quarter the time with BT Stanchions than when chains are used.
- 2nd. When BT Alignment Stanchions are used all the manure is confined to the gutter. None falls on the cattle-stand. The cows remain clean, and much time is saved, which otherwise would be required to clean them.
- 3rd. The manure being confined to the gutter, is easily removed, especially if a BT Litter Carrier is used.
- 4th. BT Stalls are made of steel tubing, so that there are no cumbersome wooden partitions to collect dirt or to work around. It is easy to bed-up a row of cows tied in BT Stalls.
- 5th. The mangers are self-cleaning, and the same manger can be used for watering, thus saving the turning out of cows.
- 6th. BT Mangers are large and capacious, so that they are easy to feed in, and each cow can be fed separately, as desired.

Investigate, and you will be surprised at the saving with BT Stalls.



## BEATTY BROS.

Fergus, Ontario.



# The Economy of Paint on the Farm



I am rather a crank about the care of farm buildings and implements because I've seen so much money thrown away through the neglect of proper care of the things which the farmer uses in his work. I figure that a man who gives proper care to his farm implements and buildings is making money for himself because he is really *saving* it; especially so as the price of lumber is rising so fast. One of the good ways to take care of the things which you use in your everyday work on the farm is to have a pail of paint handy. Good paint is the best preservative that is known, not only on wooden surfaces, but for steel and iron as well. It means longer life to both. It prevents the water from getting into the lumber with the ensuing result of decay, and it also keeps the rust from eating away the steel and iron parts of your implements and machinery. A little paint and varnish keeps everything ship-shape and looking fine. Write for our free booklet, "Paints and Varnishes for the Farm," to 893 Centre St., Montreal, Que. It contains some valuable facts about painting.

*The Little Paint Man.*

## SHERWIN-WILLIAMS

COVER THE EARTH

### PAINTS & VARNISHES FOR USE ON THE FARM

#### Your House

If you want to paint your house, use Sherwin-Williams Paint, Prepared, SWP. It is made of pure white lead and pure zinc and pure linseed oil, necessary coloring pigments and driers. All of these are combined in correct proportion with the aid of powerful machinery of our own special design. SWP will cover more surface, look better and last longer than cheap mixed paint or hand-mixed lead and oil. Put up in full Imperial measure.



#### Your Windmill

If you want a protective paint for your windmill and metal sidings and roofing, use S-W Metalastic No. 2. It is made with a combination of Graphite and other materials mixed with pure linseed oil, and has greater durability than many of the so-called graphite paints. It dries rapidly and gives a hard, impervious paint film that protects the surface very effectively. It is fine for use on all metal surfaces exposed to the weather.



#### Your Barn

A well-painted barn will be good at the end of 50 years, an unpainted one will go to pieces in 20 or 25 years. Paint your barns with S-W Commonwealth Barn Red—a bright, handsome red. Works freely under the brush and has great covering capacity. Is put up full Imperial measure and is therefore more economical than many short measure, poor quality barn paints sold at a lower price.



#### Your Fence

Keep your fences in good condition by protecting the wood with S-W Creosote Paint—a moderate-priced paint for rough fences, outhouses, etc., for protecting all kinds of structures made of rough lumber. It is good quality, spreads easily under the brush and wears well. It contains a sufficient amount of creosote to act as a wood preservative and also has a sanitary effect when used on poultry houses or any place where livestock is kept.



#### Your Wagon

Before your wagons and the wooden parts of your implements show signs of cracking or checking, use S-W Wagon and Implement Paint, a durable oil gloss paint, made especially to resist hard usage. It protects the wooden parts against dampness and the iron and steel parts from rust. Brushes out evenly, covers well and is permanent in color. Comes in six shades.



#### Your Buggy

If you want to make your old buggy look like new, use S-W Buggy Paint, a varnish gloss paint made to withstand wear and tear and outside exposure. It colors and varnishes at one operation and any surface finished with it can be washed without injuring the gloss or the durability of the paint. S-W Buggy Paint is a high-quality product and should not be confused with many of the cheap grades on the market today. Comes in nine handsome colors.



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## THE SHERWIN-WILLIAMS CO.

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When writing for booklet, address 893 Centre St., Montreal, Que.

MONTREAL, TORONTO, WINNIPEG, VANCOUVER





Vol. XLVI.

LONDON, ONTARIO, APRIL 6, 1911

No. 967

## EDITORIAL.

"A great while ago the world began, with, heigh ho, the wind and the rain."

A Dominion conference of fruit-growers, and another of dairy experts, are promised for 1911.

It isn't a question of whether or not we can afford to take care of the orchard. We can't afford not to do it. Better neglect the oat field than the orchard—if it is worth keeping at all.

Since "The Farmer's Advocate" took up land in Westminster Township, things are on the move. An 85-acre farm in Halton, 3½ miles from Oakville, sold the other day for \$25,000, for dairying and fruit-growing.

When it takes five and six words, and thirty-five letters, to designate a mangel, someone should call a halt on the vocabulary of the seedsmen. The field-root catalogue will soon outdo the Holstein-Friesian Herdbook in length of names.

Every lover of nature and good farming should second the appeal of W. E. Saunders for protection and encouragement to our native birds. With more birds, we should have less trouble with insects, and they do not ask for 35-per-cent. protection, either—just to be let alone, and a bit of bush to live in.

According to the census of April, 1910, the population of the United States is given as 91,972,266, exclusive of Alaska and other non-contiguous territories. The population of the United States and all its possessions is about a hundred and one millions. The population per square mile of the United States, excluding the District of Columbia, is 30.9, as compared with 25.6 in 1900, and 21.2 in 1890.

There were probably more silos erected in Canada in 1910 than in any other one year, says Dairy Commissioner J. A. Ruddick, who is in a good position to judge. Steadily the logic of economy dislodges the prejudice expressed in such epithets as "pickled cornstalks" and "sauerkraut corn." Both beef-makers and dairymen are coming to recognize that, while they may make money without the silo, they can make more with it.

Three hundred and seventy-two questions were answered through "The Farmer's Advocate and Home Magazine" during March, as many as 84 replies being published in a single issue. In addition, quite a number were unavoidably held over for later publication, while several questions were answered by mail (see rule 9 in the standing announcement, printed on the second page of reading matter each issue). In addition, quite a number of inquirers were referred to the answers already given to questions similar to their own. The Questions and Answers Department, while valuable, is becoming a severe tax upon both space and time. We cheerfully attend to all inquiries of general interest, especially those touching new points, but would request our readers to exercise consideration, by refraining from asking unnecessary questions about points that have already been covered in general articles or in answer to other people's inquiries. Have mercy on a hard working staff.

An old farmer, now deceased, who never made much fuss about his work, but yet seemed to have the knack of getting it done in season, and who was steadily prosperous, did not believe in jumping from one thing to another. He remarked one day that a motto he had read long before was one of his principles of action. The words, as given in his North-of-England vernacular, were: "When everybody else is rinnin', you staund." There would be less complaint on the part of the pork-packers, and more money in Canadian farmers' pockets, if more of us acted on the same principle.

Chasing novelties among varieties of farm crops is poor business. Stick to the well-proven ones until experiment stations find better. Watch carefully the published results, note the experience of fellow farmers, and confine your experimenting pretty largely to the testing of the best well-known sorts. We believe farmers stand to gain much more by improving strains of good varieties than by consuming time in a dubious quest for phenomenal kinds. A little experimenting by each farmer is an excellent thing, but it may be done to best advantage in the light of the knowledge gleaned by men whose business it is to experiment for the community.

Commenting upon a recent editorial paragraph on this page, regarding the incongruity of an irresponsible Second Chamber, the Windsor Record observes:

"The Farmer's Advocate" is right. The people who discuss senate reform are accustomed to reason in a circle. There can be little 'reform' short of extinction. Two elective, and, therefore, co-ordinate, houses are an absurdity, a paradox, and a needless multiplication of the machinery of legislation. Let there be one chamber, and shorter parliamentary terms, and the 'check' will be in the hands of the people, who, in theory, at least, are the rulers of this country. When legislators know that the people are watching them with intelligent judgment, they are not likely to be either 'hasty' or venal."

"The best laid plans o' mice and men gang aft a-glee," sings Burns. There is an error in the statement, however. The poor little mouse whose nest Burns had thrown out with the plow may not really have made plans; she had probably acted on instinct. But man, though he lacks instinct, is divinely gifted with the power of thought and imagination. The dog knows something of the difference between himself and his master. He looks up into his master's face with appealing eyes, eyes which are not only wishful for what he feels he lacks, but which are worshipful of the being whose powers he realizes are so far beyond his. Man's mind with ease reaches back over centuries and aeons uncounted, and with scarcely a moment's interval will leap forward and speculate what is to be after millenniums shall have passed. How despicable for a being so endowed to let his powers atrophy for lack of use. The practical application of the above should be evident to every farmer. The crops with which his fields shall wave the coming summer depend not so much on the number and quality of his teams and implements as on the plans he forms. The man who thinks is the man who does. If your plans for the season are not perfected, get your thinking cap on. Get busy.

## Ontario Crop Improvement.

From his position as Experimentalist at the Ontario Agricultural College, and director of the work of the Ontario Agricultural and Experimental Union, Prof. Chas. A. Zavitz enjoys favorable opportunities of judging as to what progress is being made in the production of field crops, and the methods employed. Noting the fact that the prosperity of the people of the city, as well as country, depends largely upon the success of the latter, he observes that the agricultural prospects of Ontario were never better than at the present time. There is a distinct awakening in the business of the farm, not only by those engaged in it, but by professional men, many of whom are taking it up as an occupation or as a side issue. He also notes a tendency to smaller farms and a more intensive system. He sees encouragement in the fact that, while, for the ten years, from 1898 to 1907, inclusive, pasture and hay lands showed an increase, there has been a gradual decrease in the grass lands of the Province during the past two or three years. Land is too valuable for so much of it to be kept under grass. More can be made of it by growing other crops. During the first period named, the increase was, according to the Bureau of Industry returns, some 1,427,764 acres, but during the past two years the decrease was 225,577 acres. This is happily offset by an increase of 113,703 acres of corn, and increases of the acreage of potatoes, mangels and five classes of grain crops. And then, what is still more encouraging, is the fact that the yields per acre of leading crops are increasing from year to year. Three most extensively grown cereals have increased, on an average, about one-fifth for the past twelve years, compared with the twelve years previous, due to better methods of farming and the use of better varieties. The soil is not playing out, but improving in its fertility, and we are evidently at the dawning of finer opportunities than ever, with possibilities practically unlimited.

## Farm Bookkeeping, Again.

Prompted by the interest taken in our recent discussion of farm bookkeeping, we return to the subject to advise every farmer-reader who is not already keeping his accounts in a more or less systematic manner to try it this year. Our aim in offering the prizes was to call forth actual experiences, and reports thereon. The response has left no room to doubt that the systematic keeping of farm accounts and records is practicable, profitable, and interesting.

The factors involved in carrying on the business of mixed farming may be as numerous and diverse as those of a large factory. Besides the cash, wages, personal and expense accounts, inseparable from almost every business, the farmer may keep accounts with every field, with every kind of crop, with every tree in his orchard, and with every cow in his dairy. Indeed, it was to accounts of these kinds that several correspondents referred when they testified to surprises experienced on finding out that factors supposed to be good payers were really unprofitable, while others, thought to be indifferent, were returning good dividends.

The farmer who feels entirely ignorant of the science of journalizing accounts can start with a combined cash and daybook, and from time to time make an inventory of his assets and liabilities. If he has boys, let them assist him in making, two or three times a year, or at least annually, a carefully-itemized statement of his



# THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL  
IN THE DOMINION.

PUBLISHED WEEKLY BY  
THE WILLIAM WELD COMPANY (LIMITED).  
JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"  
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
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13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD COMPANY (LIMITED),  
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effects; nothing else can be better practice for them. To keep a single-entry ledger, with a small number of accounts, requires hardly any knowledge of the art of bookkeeping. Self-critical practice in this, as well as in other things, makes for increasing skill and efficiency.

The simplest kind of bookkeeping, if it can be called by that name, is the taking and keeping the record of an annual, or shorter period, inventory. Debts, if any, are to be subtracted from the total of the assets; the difference shows what the farmer is worth at the time. The next similarly-discovered difference will show, by comparison, his gain or loss for the year, or whatever the period that has elapsed since the preceding inventory was taken. For example:

March 1st, 1910.		
<b>Assets:</b>		
Farm, 90 acres, and buildings		\$5,600 00
Stock (itemized and valued):		
Horses		\$
Cows		
Hogs		1,500 00
Produce on hand (itemized and valued):		
Oats		312 00
Implements (itemized and valued):		
		880 00
Cash on hand		64 00
<b>Total</b>		<b>\$8,056 00</b>
<b>Liabilities:</b>		
Mortgage and interest		\$838 00
Note due McConnell on binder		50 00
<b>Total</b>		<b>\$888 00</b>
<b>Present worth</b>		<b>\$7,168 00</b>

(In the above statement each horse and cow is supposed to be mentioned by name or number and valued separately.)

If a similar inventory, taken on the first week of March, 1911, shows the total assets to be \$8,849.00, and the liabilities \$1,013.00, then the present worth is \$7,836.00, and the gain in the year is \$1,138.00.

While this periodical taking and comparison of inventories shows the total gain or loss, it does not show upon what parts of the business gains have been made or losses incurred, or the relative gain or loss among the different parts. To arrive at this knowledge, which is manifestly of the highest importance in making plans for the future, what is practically a ledger account must be kept with each factor whose effect upon the total result it is desirable to know.

A farmer may keep a ledger, without any other kind of book. In it he will record his inventories and open accounts with the factors, in which he wishes to keep track; for example,

sheep, cows, poultry, potatoes, alfalfa, barley, etc. Under the appropriate heading he will enter on the left-hand side every item of cost, investment, labor, etc., incurred on behalf of such factor, and on the right-hand or credit side every item of revenue from it, whether sold or used on the place. It need hardly be added that the difference between the debit and credit sides shows the loss or gain, for example:

Dr.	MAPLE SYRUP.	Cr.
March.		
Inventory of pails, spiles, pans, etc.	\$108 00	
Time, as per time book:		
Man, 40 hours, @ 20c	8 00	
Horses, 12 hours, @ 15c	1 80	
Repairs to pails, cash	1 20	
Estimated value of fuel used	6 00	
Profit	79 40	
	\$204 40	
		\$204 40

Date Year	ENTRIES	Ledger page	Cash received Dr.	Cash paid Cr.
March 1	<b>Assets:</b>			
	Farm 100 acres and buildings			\$5,600
	Stock (itemized):			
	Horses			etc 1,030
	Produce (itemized):			
	Oats			etc 312
	Implements (itemized):			
				etc 880
	Cash			64
	<b>Total</b>	1		<b>\$7,586</b>
	<b>Liabilities:</b>			
	Mortgage and interest			838
	Bill payable on binder, McConnell			50
	<b>Total</b>	1		<b>\$ 888</b>
" 1	Weather stormy; good sleighing. First lamb arrived.			
" 2	Bought of Geo. Gray, 24 bush. seed oats, @ 70c			\$16 80
" 3	Fine, cold.			
" 4	Hired C. Clark, @ 30 a month, to come on 21st inst.			
" 5	Fine, milder.			
" 6	Cloudy; wind east, raw; 29°F.			
" 7	Hauled wood.			
" 8	Fall of soft snow; warmer.			
" 9	Traded at Smith & Green's—			
	20 lbs. butter, @ 28c	4		\$5 60
	5 bags potatoes, @ 70c	3		3 50
	<b>Total</b>			<b>\$9 10</b>
	For groceries as per bill	5		4 20
	Cash		4 90	
	<b>Total</b>			<b>\$9 10</b>
	(This means that in the ledger, on page 4, there is an account or statement in which products from the dairy or a particular cow will be credited; also that on page 3 of the ledger there is an account with a field or with the potato crop or sundry farm products, into which the \$3.50 will be posted. The statement of household expenses is on page 5 of the ledger.)			
" 6	Sunday, weather pleasant; thawing.			
" 7	Heard Rev. M. Brown, collection.			50
" 8	38°F. at noon. L. Kerr reported seeing a robin.			
" 9	Returned a half day's work to C. F. Ray.			
" 10	Roads getting bare in spots.			
" 11	Bought a chopper at McClure's sale for \$12; discounted my note for cash			11 00
" 12	Also 2 heifers, red \$19, spotted \$17; gave my note, payable 8th October, for \$36			
" 13	(This assumes that I have a statement of notes—payable on the 9th page of the ledger.)			
" 14	etc., etc., etc.			

A time record is indispensable to proper ledger-keeping. On the page or pages devoted to the time report, special columns may be devoted to factors, such as cows, that take time daily. The totals in hours may be transferred monthly to their appropriate accounts. For example:

TIME RECORD (In Hours)					
Date	Cows	General	Man	Horse	
May 1	2.5	Rolling the barley field	6	12	
" 2	2	Plowing corn field	7	14	
" 3	2.7	Hauling manure, field No. 4	3	6	
" 4	2.5	Spraying	2.5	5	
		Plowing, field No. 4	8	16	

In part of the month of March and part of the month of April, the second column, which is here left blank, might be headed "Maple Syrup."

Dr.	COWS		Cr.
	Day-book page		
March 1, per inventory	1	\$67 00	
" 2, cash	2	26 00	
" 3, cash	3	42 00	
" 4, month's feed, estimated	4	37 00	
" 5, 60 hours time, @ 20c	5	12 00	
<b>Gain in month</b>		<b>\$74 00</b>	
		51 40	
March 5, 20 lbs. butter, @ 28c	1		\$ 5 60
" 12, 22 " " " @ 25c	4		5 50
" 18, 28 " " " @ 25c	7		7 00
" 24, 2 gallons cream, @ 50c	8		1 00
" 30, 25 lbs. butter, @ 22c	13		5 50
" 26, 10 " " " @ 27c	13		2 70
" 26, estimated value of manure			7 00
" 26, estimated value of herd			785 00
(The last entry is usually written in red ink.)			
			<b>\$818 30</b>

It is obviously an easy matter to keep a dated statement of every item of cash paid out and received, a time record and ledger accounts with each of the important factors of the business, but it will pay to add to these a daybook. Several of our bookkeeping correspondents strongly recommend combining a diary with the daybook. A

diary is almost as useful as a daybook, and while there may be good reasons for keeping these in separate books, the farmer who wishes to have as few books as possible to handle may combine cash-book, diary and daybook in one. Ledgers in stationery always carry in stock books that are ruled on the right-hand side of the page with double money columns. Such a book, containing about 125 pages, 9 by 13 inches, can be purchased for about 50 cents, or one of about 400 pages, in stronger binding, for \$1.25. In such a book, all cash received may be entered in one of the columns, and all cash paid out in the other. For example, see large table below.

The cash may be carried forward from page to page until the end of the month, and the totals, or the difference between them, then transferred to the ledger (cash) account; or the cash may be balanced at the foot of each page. The excess on the debit side, in either case, should agree with the cash on hand. The greater number of the farmer's financial transactions are, or should be,

By entering these in the manner just described, the time of posting the several items in the ledger will be saved. The inexperienced bookkeeper, at the beginning, will do well to minimize the number of accounts in the ledger. On page 184 of "The Farmer's Advocate" (February 2nd issue), J. H. Coatsworth shows how he posts a set of transactions into only nine ledger accounts, namely: Capital or self; real estate, implements, farm products, William Brown, cash, expense, bills payable, and loss and gain. By using the small number of accounts, a farmer can more easily learn the method, but when he feels he has skill enough to handle the ledger intelligently, he will find it advantageous to increase the number. For example, "farm products" account may be divided into accounts with dairy, orchard, poultry, corn, grain, horses, honey, and "Sundry Farm Products." The following is given as an example of one of such accounts, supposed to be posted from the diary-daybook and time record:

The inference from the above account is that, on the ninth page of the diary-daybook, there is a record of the purchase of a cow for \$42 cash, and on the thirteenth page a statement of the exchange of two lots of butter for cash or merchandise. There is also an implication that the tenth, and probably the two following pages, are to be used for a time record.



### The Side that Can't be Seen.

Editor "The Farmer's Advocate":

I feel it would be a great injustice to "Farmer's Son" and many other young men of Canada to let his letter go unchallenged. I think there must be something out of place or radically wrong for any boy, especially an only son, to feel as he does, but I well remember the time when, as a young man, I figured out this same problem, and came to just the same conclusion as "Farmer's Son" has come to.

Now, I am writing this because I have been over the same road that "Farmer's Son" is thinking of going on. I was born on a farm in the County of Oxford, Ontario; but, not being satisfied with my prospects, I left the farm early in life, at nineteen years of age, and went to the city. I worked hard, trying to get something ahead for a rainy day, but, after I paid my board and other expenses, I had very little left. Not being satisfied with work in the city, I took up railroading, thinking I was then on the right road to success. Well, after working from the foot of the ladder up to conductor, I still was very little ahead financially of what I possessed when I commenced, and I have on several occasions drawn one hundred dollars and over for a month; but a railroad man's money is very easily spent.

Now, "Farmer's Son" may say that was my lookout. Not always; I never spent a cent in my life for whiskey or tobacco, but I found that, by the time I equipped myself with the different articles required of me by the company, and clothed myself so as to be up to the standard expected, and paid my board at both ends of the division over which I was running, I had very little left in comparison to what I had earned.

Then, you must remember, on the railroad a trainman is paid by the number of miles he runs. If you hear of one making one hundred dollars, you must understand he has worked very long hours, because a man can't make big mileage in short hours—not ten to twelve hours per day, as on the farm, but sometimes twenty and thirty, and even forty hours, on duty continually. I have seen times when it would be the next thing to impossible to keep my eyes open on duty; I have felt more dead than alive, and all for trying to make the almighty dollar. You may say it is not necessary to work like that. Well, if you want to hold your job, you must not refuse to go at the call of duty. Remember, even when you hook off, and are enjoying yourself at your home, you are still under the hand of the company, and are their servant. Not one hour of the twenty-four can you call your own. Go to a railroad man who has given the railroad company the best of his life, and ask him whether he would advise you to go railroading. In nine cases out of ten he would warn you faithfully to steer clear of railroading. He would tell you that it was a dog's life, at best.

Now, seeing I was still making progress very slowly along money lines, I began to get homesick for the good old days on the farm, so, after considering the matter, I decided to quit the railroad and go to farming. I bought 200 acres of land near a large town, and had to borrow the money to make my first payment on it, but I was beginning to feel that I must do something desperate, or I would be a servant for others all my life. I started in the retail milk trade. I had enough money of my own to buy four cows, but for my rig and horses I had to go on credit. But, by the help of a good wife and a kind Providence, we pulled through, paid for our outfit, paid back the money we had borrowed, and increased our business, until now we have twenty-five cows, besides our horses and other stock, and implements. We are meeting our payments on our farm, which amount to over four hundred dollars per year. Now, this has all been done in the short space of four years, and we attribute our success to being diligent in business. We have worked hard, but we see the fruit of our labors, and are working for a better firm than a railroad company, and I am working shorter hours.

I would say, in conclusion, it is not all gold that glitters. Far-away fields look green. But, for me, give me the farm. And I am proving every day what Paul meant when he said, "Godliness with contentment is great gain." Hardly a day goes by that I am not told by some of my old work-mates that I did a good act when I quit railroading. Hoping these few lines of my experience will reveal to "Farmer's Son" and others who are thinking of leaving the land the side of railroad life that can't be seen, but must be experienced to be realized.

"ONE WHO KNOWS."

There is a revival of interest in the question of paying by test at cheese factories, and many will adopt the system this year for the first time, while others will resume this method of declaring dividends. J. A. Ruddick, Dairy and Cold-storage Commissioner.

### Railroading and Farming as They Are.

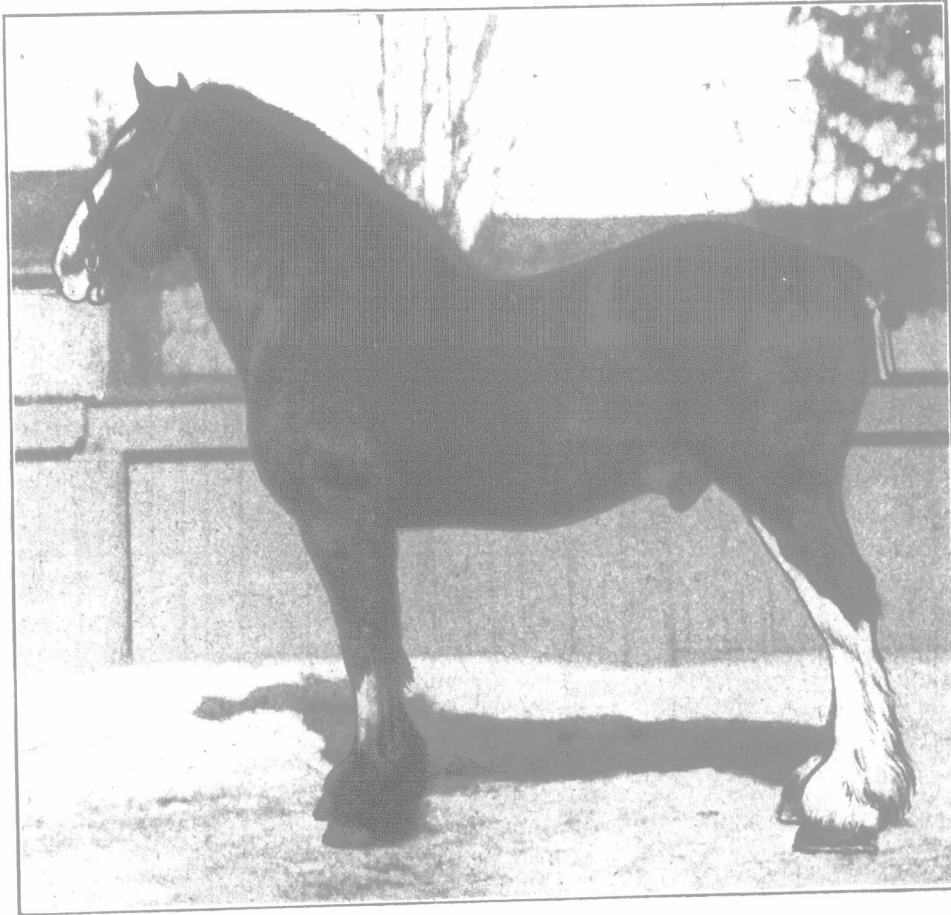
Editor "The Farmer's Advocate":

After reading and considering "Farmer's Son's" letter, "The Boy on the Farm vs. Railroad Life," I must say his opinion is very biased; he is under a delusion. "Far-away hills look green." The pith of his dissatisfaction lies in the summing up of his argument, viz., that your paper, its editorials, its experiments, and its correspondents' opinions, also all other literature pertaining to farm matters, are written for cheering the toilers who toil without hope.

Now, allow me to say that what has caused your correspondent to err is because he is too well done for. If any young man can reach the age of 25 years, and not make his personality felt on a farm of 140 acres of good Ontario land to a greater extent than \$200 a year, then, possibly he had better go railroading, as there must be something radically wrong with his calibre.

Has your correspondent studied this question from the standpoint of the average, or has he formed his opinions from the hilltop, as it were, from the despatcher's pivot chair, or some road boss's private car, or some vice-president's carpeted office? Where does the average railroad man end, with all his salary, whether he be an engineer in a pumping station, or an engineer on some mogul locomotive? I say they all end, with but a few exceptions—those who fill the aforementioned points of vantage—dependent upon their pensions. It has been so in the past, and will continue to be so in the future.

If railroading is no more hazardous an occupation than farming, then why do insurance companies place them as the most hazardous of all risks? Statistics do not equivocate.



Celtic Guard (imp.) (12897).

Clydesdale stallion; foaled 1904. Imported and owned by T. H. Hassard, Markham, Ont. Sire Baronson, by Baron's Pride; dam by MacKinley.

Now, as to the savings side of this question. I have lived close to one of the largest railroad lines in Ontario, and this is the first time I have heard of railroad people being held up as examples for their thrift. On the contrary, you may place them as the least saving of all classes in our land. Possibly they have rare opportunities; but if they have, they do not, as a class, use them. In the first place, a man embarking on a railroad career carries, to begin with, whether he wills or no, a varying but large accident policy, usually five thousand dollars, which his employers pay for him, and withhold it out of his wages. Then, too, there is his union and his union fees, which, together with his accident policy, cannot be kept up for \$150 a year.

After we consider the style of life partner a railroad man is likely to take, we cannot but marvel where Farmer's Son sees the remotest possibilities of ever reaching his hoped-for goal, viz., "Easy Street." Why, the veriest girls—the fly girls who are opposed to the rigor of a farm kitchen—aspire for a banker or a railroad man. Some may here take exception, and say matches are made in heaven, but observation has taught me to believe more are made in parlors; and, after becoming firmly affixed to one of these allur-

ing and beautiful butterflies, what are his chances for his vaunted savings?

Rather let him read Prof. Zavitz's experimental reports for the past few years. The Department will be pleased to supply him with these missing links to complete agriculture; and start reading "The Farmer's Advocate," not as solace, but as an advocate, and his day-dreams of railroad life, and then the president's chair, will all disappear as a thin vapor. Then let him look around him and see the sturdy farmers who were once hired men, and he will be surprised how steep an ascent those neighbors of his have had to climb, and possibly he will appreciate his opportunity before it is too late. Young man, begin this spring with an ideal, which is one essential to success. Let it be to double the output of that 140 acres of good Ontario land. It is possible if you are now only worth \$200 a year. Better varieties of grain, thorough cultivation, drainage, more attention to detail, and an earnest study of your calling, are a few ways to attain this end. Have a pride in your home; it is pardonable. Successful farmers do not pine because their parents do not die; they have not time. Tear the beam out of your own eye, and make yourself worth while.

"FARM BOY."

York Co., Ont.

## HORSES.

### The Mare and Her Foal.

As the foaling season is approaching, a few words on the subject may be considered timely. The mare about to foal should be in fair condition, and, if she has been regularly exercised or used for light work during the winter, the prospects of producing a smart, strong foal are greater than if she has spent the winter and early spring months in complete or comparative idleness. As the period of gestation approaches the end, special care should be taken. She should be fed liberally on laxative, easily-digested food that contains a large percentage of nutritive material, such as good hay, bran, rolled or whole oats, a little linseed meal, and a few raw roots. Of course, if the grass has reached sufficient growth, it will, with the addition of a small grain ration, supply all wants, unless she is worked, in which case grain should be given in proportion to the amount of work performed. It should be remembered that she has not only herself to nourish, but a foetus nearing maturity, hence she requires more food than a non-pregnant mare living

under similar conditions. Daily exercise, light work, or a run of several hours daily in the field or paddock, should be given until she foals. If she is to foal in the stable, she should be provided with a roony box stall in which there are no mangers or boxes in which the foal might drop if she should give birth to it while standing. The stall should be well disinfected by washing with a warm, 5-per-cent. solution of carbolic acid or other disinfectant, or by giving a coat of hot lime wash. The stall should be thoroughly cleaned out daily, and the floor sprinkled with slaked lime each time before a fresh supply of dry, clean bedding is scattered. These antiseptic measures are advisable in order to destroy germs which, if present, may cause joint-ill or other troubles in the foal. When the time arrives at which she is expected to foal, she should be carefully watched. In most cases she shows certain symptoms which indicate that the act of parturition will take place in a short time. These symptoms generally are a more pendulous condition of the abdomen, an apparent shrinking or drooping of the muscles of the croup, a fullness of the mammae and of the teats, at the point of which, in many cases, a small lump of inspissated colostrum, which is called "wax," appears. There



is usually, also, an enlargement of the lips of the vulva, and often a parting of the same, with a discharge of a small quantity of a viscid substance. It must, however, be remembered that in some cases these symptoms are not well marked, and that in some cases a mare foals without showing any well-marked symptoms indicating that parturition is about to take place; and in such cases we are surprised to find that birth has taken place in a normal manner, or else parturition is difficult, and may have reached that stage in which the saving of the foal is out of the question, and the dam's life may also be in imminent danger. While we know that the average period of gestation is about 335 days, we are also aware that the period differs greatly in different mares, and also in the same mares at different periods. Mares have been known to produce foals at apparently full term in a little over ten months, while in others the period of gestation reaches over twelve months. Under these circumstances, it will be seen that we cannot tell by the length of gestation when parturition will take place; and, when the ordinary signs of approaching parturition are absent, she may foal unexpectedly. The immediate symptoms are, of course, the appearance of "labor pains." These are exhibited by an uneasiness, and especially in primi-para (a mare producing her first foal), a nervous or excited state; she walks around the stall, stamps, lies down, and usually strains. This may be followed by a period of ease, which is succeeded by another attack, the attacks becoming more prolonged and severe, and the periods of ease shorter, until the pains become almost or quite continuous. If in the field, the mare usually seeks solitude, by wandering away from the other horses. In some cases parturition is completed in a few minutes after the first appearance of pain, while in others, even when everything is normal, the pains continue for hours. Again, in some cases there are false pains, and, although well marked, they pass off, and parturition does not take place for a few days, or longer. Some of the reasons why we consider it wise to watch a mare about to foal are: (1) She may lie down so close to the wall that delivery is impossible. In such cases the attendant can either shift her position or cause her to rise. (2) Birth may be very easy, and the foetus and membranes may be expelled without rupture of the latter, in which case the foal will suffocate. Instinct is supposed to cause the mare to rupture the membranes with her teeth, but we find that in most cases, even following an easy birth, the mare lies for a few minutes after the act, and in the meantime the foal perishes. The attendant, in cases of this kind, can rupture the membranes with his fingers, or cut them with a knife, and liberate the foal, and save its life. (3) The membranes may be ruptured, but remain attached to the foal by the umbilical cord, and interfere materially with its movements. Instinct here again is supposed to cause the mare to sever the cord with her teeth, but in many cases it fails to act. The attendant should tie the cord with a strong string that has been soaked in a five-per-cent. solution of carbolic acid, about an inch from the foal's abdomen, and cut it with a scraping motion of the knife about an inch below the ligation. (4) The foal may be too weak to rise and nurse, and, if neglected for several hours, may perish. The attendant, in such cases, can assist it to rise and nurse, or can draw a little milk from the mare and give to the foal with a spoon or out of a narrow-necked bottle. (5) The mare may be cross with the foal, and, if left alone, may kill it. The attendant, of course, in such cases, must interfere, and, if necessary, remove the foal and go for assistance. (6) There may be malpresentation of the foetus or other causes which prevent parturition. If the pains have been frequent and severe, and still no progress is being made towards delivery, the attendant should examine, and, if possible, ascertain the obstacle to delivery. If he has sufficient knowledge and skill to remove such obstacles, he must proceed to do so promptly; but if the complication be beyond his skill, he should at once send for an obstetricist. Prompt action in such cases is necessary in order to save the life of the dam and, if possible, of the foetus. There are other reasons, but those mentioned are sufficient. Many claim that it is not wise to watch a mare under such conditions, as in most cases nature effects delivery and after attention. Fortunately, this is a fact, but all breeders know that difficulty in or after parturition is not by any means uncommon, and we think that the liability of such occurring is sufficient to warrant the inconvenience and time required to watch. Under normal conditions, no attention is required after birth, other than removing the wet bedding and supplying fresh, keeping dam and foetus excluded from drafts, seeing that the foal gets nourishment, and giving the dam a nice warm feed of scalded bran and chopped oats, and attending generally to the comfort of both. When complications arise in either dam or foal, if the attendant does not understand them and know how to treat, he should at once send for an obstetricist, as the season of parturition is a critical time for mare and foal. "WHIP."

### Contracted Feet.

Naturally narrow or upright feet are often found on Thoroughbred horses, on mountain ponies, mules, and asses, and must not be confused with contracted feet. Nor must the "odd" foot so frequently observed in the blood horse. By contracted feet, we mean such as have narrowed between the heels from what was their original size and shape. Very old horses have upright feet which might be called contracted if it were not as much a well-known senile change as

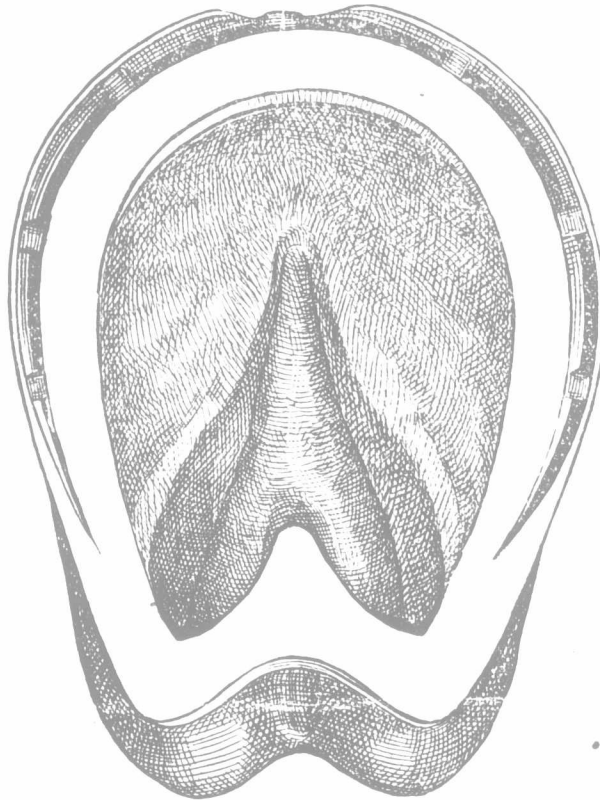


Fig. 1.—Contracted Foot-bar, Shoe-nails forward.

the "slipping down of the chest" in men getting into years. In these very old and upright feet, the coronary band will also be found wasted. For shape, quality, hardness, and good-wearing properties, the Hackney can challenge all breeds, but he is not immune to foot troubles. The young horseman should get into his mind a certain standard for front and hind feet, examining closely the prize animals, and noting their conformation, so that others of imperfect shape will at once engage his attention, and cause him to examine them more closely if a purchase is intended.

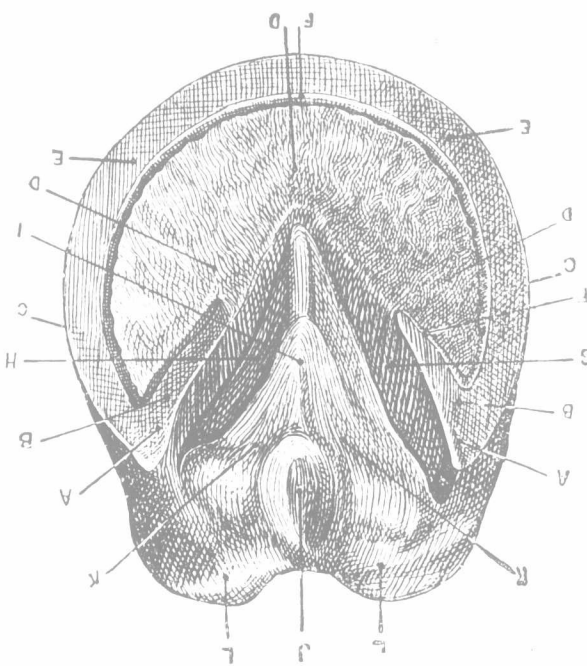


Fig. 2.—A A, commencement of bars. B B, bars. A-C, the quarters. D D D, the sole. E, the wall. E E, the toe. F F, Leafy layer. G, lateral cleft of frog. H, lateral lacuna of frog. I, body of the frog. J, middle cleft of frog. K K, branches of the frog. L L, horny bulbs of heel. L E, the side walls.

### THE CAUSES OF CONTRACTION.

Every horse that is shod is exposed to the chief contraction. This remark is not to be construed as a charge of bad shoeing, but the shoe is contrary to nature. Shoeing affects the foot prejudicially for various reasons and to a varying extent, according as it is a thick or thin shoe, the bearing it takes, the time it remains on, and the manner in which the smith deals with the foot at the forge. If we except the sunk tip or Charlier shoe, every iron rim nailed upon a horse's foot takes off to a greater or less extent the pressure essential to healthy function of the frog, sole, and bars. Fig. 1 shows these parts in an off fore

foot. In the unshod colt, all these parts take a share in supporting the weight of the animal. All are practically level, the frog flattened out, and almost as hard as any part of the foot, although resting on an elastic cushion. Shoeing imposes all the weight on the crust, or nearly all. The plain stamped shoe that is wider than the crust bears upon the outer margin of the sole, but the crust takes the bearing entirely with many kinds of shoes, and all (with the exception of the one mentioned above) lift the bars or cover them from ground pressure. Unless the frog is a very full one, it does not touch the ground at all. So far, we cannot help ourselves, while horses must be shod. If we let everything grow down to its utmost, and let the shoes wear very thin, a moderate bearing on the frog may be got, and a harder, sounder frog, free of thrush, may be expected. If, on the other hand, the old-fashioned farrier cuts out the sole, and lowers the bars and trims away the frog, everything tends to contraction of the foot. The frog that is not used obeys the universal law of atrophy. At first, probably the secretion of soft, imperfect horn decomposes, and the discharge is known as thrush. The next mistake is to use some drying remedy which "cures" thrush by shrivelling up the sensitive frog underneath—hurries up the process of wasting, in fact. The same man who trims away frogs has most likely a theory of "opening the heels" or making a "V" between the crust at the heel and the heel of the frog. Then, with the middle of the foot wasted away, what should happen but the falling in or approximation of the heels? "Wiring in," it is called.

Then, you have the foot shaped as in Fig. 2. It is exactly what would be expected by anyone acquainted with the anatomy and physiology of the foot. Standing in the stable upon rotted or wet moss-litter or other bedding contributes to thrush and wasting, but absence of natural pressure through the shoe and by the maker of it, causes contraction of the foot. Standing in the stable, though clean, helps to contraction for want of use of the foot generally. Navicular disease, brought on by concussion in hunting or upon hard roads, has been recognized as a cause of contraction, as the subject of it forbears to use his heels and points his feet.

### NAVICULAR DISEASE FROM CONTRACTION.

On the other hand, navicular disease may be caused by contraction, as the joint is gradually deprived of necessary room and functional exercise. To the latter class belong those cases of cure of navicular lameness when blistered and turned out without shoes. There never was ulcerated bone, but there was congestion and discomfort in the contracted foot, and when a blister has made a bigger ring grow down, and the frog, bars, and sole have been restored by pressure exercised in the best possible way, by standing on grass, the navicular joint recovers. Habitual dryness of the hoof is a cause of contraction. A wild horse stands in the water from which he drinks. His feet are, therefore, frequently wet, although he may live in a very dry country. Alternate wetting and drying is the best treatment of the hoof—not greasy applications, which prevent water from being absorbed, or, if absorbed, from being evaporated again. Water in the horn tubes of which hoof is composed makes them tough, as well as elastic. A dried hoof, such as can be found in museums, will be so brittle as to break when it falls to the ground. The same hoof put in soak will regain its density, and be unbreakable as one newly removed from a dead horse.

### EFFECT OF ACTION.

Action has something to do with contraction of the foot. A horse that goes on his toes, as we say, allows the heels to fall in for want of use. All navicular subjects go on their toes. All the subjects of fever in the feet try to put weight on their heels, and a wired-in heel will never be found in a horse that puts his heel to the ground slightly in advance of his toe. The horse with contracted foot goes best up hill, goes short on the level, and down hill with much difficulty. The fevered foot, with its hypertrophied heel, allows the subject of it to go down hill with the greatest comfort. Disuse causes wasting. Excessive use causes abnormal growth, hence our comparisons between the navicular subject, with contracted heels, and the foundered or fevered subject, with enlarged heels. If the reader had any previous doubts, he should be convinced by comparing horses affected with these two changes of conformation which result in altered action—or altered action, we might say, results in changes of structure. Horses with turned-out toes do not take an equal bearing, hence the unshapely foot, contracted on one side. Since horses must be shod, we should take every opportunity of removing the shoes, and during holidays in the stable let them stand on level, paved floors for a part of every day, in order to afford equable pressure to the plantar surface of the foot. If clips must be worn to prevent rested horses from breaking the crust, then they should be very narrow, and sunk into the crust to the level of the sole, as in the Charlier or South's "rational" shoe.—"Vet." in Farmer and Stock-breeder.



APRIL 6, 1911

**Breeds of Horses.**

Please explain the difference between a Standard-bred horse, a Thoroughbred horse, and a pure-bred horse; and to which class does each belong, and how is each crossed to get the different breeds?

Ans.—A Standard-bred horse is a horse eligible for registration under the rules of the American Trotting Register, or the similar record for such horses in Canada. It may be recorded in either the trotting or pacing division of the register, according to the registration of its recorded ancestors.

A Thoroughbred horse is a horse eligible to registration in one of the studbooks established for recording the breed of English running horses.

A pure-bred horse, in the sense in which the term is commonly accepted, is a horse eligible for registration in a recognized studbook for any given breed—Thoroughbred, Standard-bred, Hackney, Clydesdale, Percheron, etc. No horse is made to conform to any of these definitions by crossing. A great variety of types are produced by mingling the blood of the different breeds, almost as much depending upon the individuals with which one works as upon the lines of breeding he follows. In broad generalities, we might merely state that Thoroughbred sires are usually chosen to get hunters and saddle horses; Standard-bred sires or Thoroughbred sires to produce fast harness horses, and Hackney or Coach stallions to produce high-stepping carriage horses.

**To a Work Horse.****I.**

Thou faithful servant of thy master, man!  
Compact of brawn and sinew, strong of limb  
Art thou, O toiler, and thy whole life's span  
Is but one round of servitude for him  
Who doth too oft, alas, hold thee as naught  
But beast of burden; how thy steaming flanks  
And straining tendons speak of thy hard lot.  
"The poorest service is repaid with thanks,"  
Our Shakespeare said, and thou, O patient beast,  
Requited by mere shelter and thy food,  
Dost well deserve thy master's thanks, at least—  
Aye, more, his love as well as gratitude;  
No chattel thou, merely to serve man's need,  
But helpful friend, O sturdy, trusty steed.

**II.**

No fiery Bucephalus art thou;  
Thy rugged form, thy slow and plodding gait  
Adapt thee to the humble dray and plow,  
But in the ease thou bearest mighty freight  
There is a power akin to majesty;  
Thy quivering nostrils and thy glowing eyes  
Denote thy quick response to sympathy,  
The word of loving praise that thou dost prize  
Ofttimes more than thy provender perchance.  
Ah, patient beast, as daily thou dost go  
Upon the wearying rounds that circumstance  
Hath set for thee, no creature here below  
Should in man's true esteem hold higher place  
Than thou, O noblest server of our race!

—Louella C. Poole.

**LIVE STOCK.****Manitoba Winter Fair.**

The 1911 Winter Fair at Brandon broke the record in the horse division, and was strong in most departments. In the aged Clydesdale stallion section there were fifteen entries forward. The judges were: Alex. Mutch, Lumsden; Jas. Z. McLay, Janesville, Wis.; and Stephen Benson, Neepawa; and the prize awards were given in the following order: 1, J. Perdue's Black Ivory; 2, Van Horne's Lord Ardwell; 3, Holland Association's Gay Sprig; 4, W. I. Elder's Cowden's Prince; 5, Bryce's Perpetual Motion.

In the three-year-old section the winners were in this order: 1, Faber's The Bruce; 2, Bryce's Revelanta's Heir; 3, Elder's Sailor King; 4, Andrew Graham's Johnston Count.

In the class for stallions foaled in 1908, W. J. McCallum, Brampton, Ont., was first with Lord Buchlyvie, and John Graham second and third with King's Class and Sertorius.

McCallum was again first in stallions born in 1909, with Scottish Choice, by Royal Treasurer. R. H. Faber was second, with Royal Jubilee, by Royal Favorite, and Andrew Graham third with Albion, by Vigorous.

For stallions foaled in 1910, Taber had first on Gay Robert; Bryce second on Doune Lodge Montrose, and Frank Brookes, of Brandon, third on Baron of Brookside.

The fight for championship was between The Bruce and Black Ivory, and, after much comparison, a ballot was taken, which stood two for The Bruce and one for Black Ivory. McCallum's two-year-old, Lord Buchlyvie, was the favorite with many of the ringside talent.

The entries in the Canadian-bred Clydesdale division were more numerous and of a better quality than in any former year, indicating that Ca-

nadian farmers are breeding, as well as buying, high-class stock.

Percherons made a very strong showing, this breed having increased more largely in numbers the past year than any other draft breed that made a showing, and their popularity is growing rapidly in the West. Belgians and Shires were shown in less numbers, but included some very fine specimens.

In the cattle class, entries were fewer than in the previous year. The pure-bred two-year-old Aberdeen-Angus steer, Glencarnock, shown by J. D. McGregor, won the grand championship.

The sheep show was the largest and most representative yet seen at a Manitoba Winter Fair. Western farmers are becoming more interested in sheep. A. J. MacKay, of Macdonald, Man., president-elect of the Manitoba Sheep and Swine Breeders' Associations, was the principal exhibitor of Leicesters, Jas. M. Douglas & Sons, Tantalton, Sask., being the next strongest. The grand championship for the best pure-bred or grade ewe or wether was won by an entry by J. D. McGregor, Brandon. The same exhibitor was the winner of the first award for the best three ewes or wethers of 1910, pure-bred or grade.

Entries in swine were larger than at any previous Manitoba Winter Fair. The grand champion hog was a Yorkshire, shown by A. B. Potter, Langbank, Sask., who made, as usual, a strong showing.

**Sheep Breeding and Rearing on a Scottish Farm.**

No hard-and-fast system is followed in sheep-rearing in this county (Kirkeudbright), but I will give you an account of the particulars of management, which I have come to consider the most profitable under the circumstances in which I am placed.

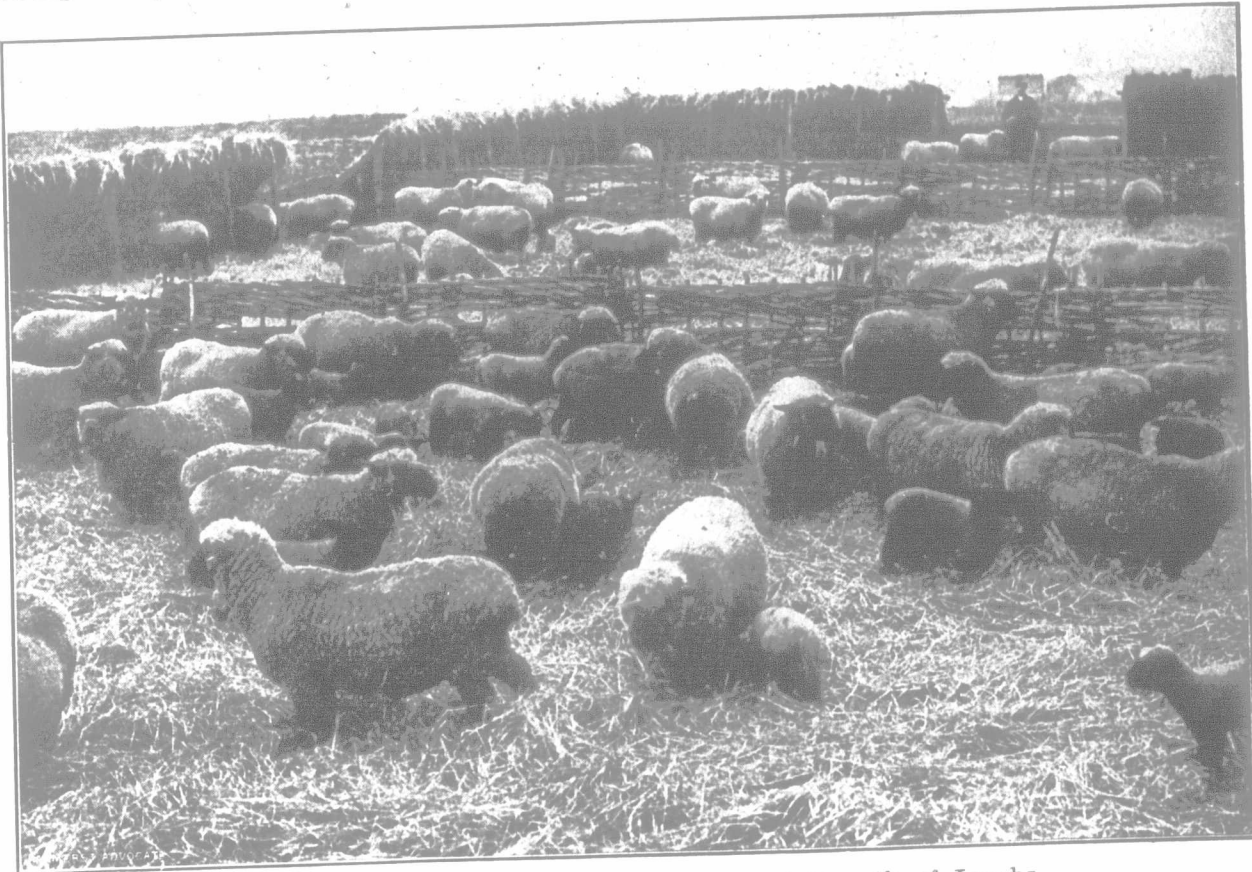
On this farm (Milton) we keep only a "flying stock" of sheep—that is to say, the sheep (which are bought in) are kept on the farm for one and sometimes two years only. All together, we run a flock of 140. Five-year-old ewes, pure-bred Cheviots, which are regularly drawn from the hill farms, are sold off annually at our local auctions in the months of September and October. Before being sold, these are examined, and guaranteed correct of their mouths and udders. We purchase 90 to 100 of these each year to renew our stock, at prices usually ranging from 24s. to 28s. (nearly \$6 to \$7), from a stock that is known to be sound and good liver. For my part, I prefer North Country ewes, from Sutherlandshire, to the Lockerbie or South Country type of Cheviot, as they are much bigger, roomier, and, as a rule, more prolific, besides being better milkers.

On the arrival of the ewes at the farm, they are put on the older grass fields, as the seeds and younger grass will already have been stocked with lambs, or been reserved for them. These old pastures have usually been well eaten down with cattle in the earlier part of the season. If not, the long, wet grass has a tendency to bring on a form of foot-rot, by accumulating between the hoofs of the ewes, which may be already suffering from a tenderness and sweating we call "scald," which is brought on by their long walk on hard roads to and from the market. This foot ailment has to be attended to by dressing with a strong antiseptic, or foot-rot may get a hold.

We aim at having the ewe in good condition at lambing time, and another object is to get as big a crop of lambs as possible. To insure a good crop—i. e., as many twins as possible—we believe in having the ewes in an improving condition when the rams are with them. With this end in view, shortly before the ram is put out, we put the ewes on clean and fresh pasture, at the same time giving them a few cut yellow turnips. If grass is scarce, they also get one-half a pound to three-quarters of a pound of good oats per day during the whole of the tugging season.

The tups (rams) we use are pure-bred Border-Leicesters, costing from £8 to £10 (\$40 to \$50) each. Of course, we could get them at half these prices, or less, but a pound or two spent on a good sire is not lost. I have known a good tup to get lambs 5 shillings each better than a bad one getting an equal chance. Our rams are selected with good strong heads (not coarse, or we may expect trouble at lambing time), good necks, well-sprung ribs, as lengthy in body as possible, and they must be able to walk well, on fine-quality bones. When purchasing a sheep, we do not stick for the last £ if we see an extra good one. They are used two seasons, and an extra good breeder is kept a year longer. Three tups are sufficient for 140 ewes, which are divided among them and run in separate fields. The rams are "keeled" on the breast, so that each ewe is keeled as tugged, different colors being used for each ram, so that the produce may be known. At the end of the first week the ewes are all brought in, and those marked are given a distinctive red mark on the shoulder. This is also done at the end of the second, third and fourth weeks, but giving a different color each time. This is for the purpose of drawing the first lambing ewes out at lambing time, so that they can have special attention at that critical period. This also prevents overstocking of the lambing field. The rams are put to the ewes about 1st November, and taken out at 1st January. Turnips or swedes are cut with the cutter cart on the grass all winter, and, if plentiful, it is profitable and safe to give from 10 to 15 pounds per head daily. As the ewes get heavier in lamb, say about 15th February, we begin giving oats,  $\frac{1}{2}$  a pound each, and work up to  $\frac{3}{4}$  of a pound as they approach lambing. This liberal treatment is continued right on till the lambs are a fortnight old, when they do well enough on the fresh young pasture that has been saved all winter for them. Should we happen to have a cover of snow, which, by the way, seldom lies longer than five or six days at a time, we give the ewes a handful of hay, if they will eat it. As lambing time approaches, say about 25th March, the ewes that are marked to lamb first are brought into the lambing field, a well-sheltered enclosure of about fifteen acres near the homestead. Each lot has to be brought in at intervals of a week or so, so that they all in turn may get special attention. When the lambs are from 24 to 36 hours old, they may be walked quietly to the young pasture fields reserved for them near at hand, the ewes with pairs getting the best and most sheltered field. In ordinary seasons they usually require comparatively little attention from now on. If we are fortunate in procuring a fairly prolific strain of ewes, we may count, with good management, on weaning about an average of  $1\frac{1}{2}$  lambs per ewe.

Lambs are all docked and the tup ones cas-



English Lambing Pens, Showing Stages of Growth of Lambs.



trated at about three weeks old, care being taken to avoid cold, dry weather for this operation. At this time we also mark all lambs with our special ear-mark. They are all ewes and lambs—dipped about the beginning of July, and again just after weaning, if found necessary, for the prevention of maggots. Weaning-time with us is about the first of August, and, after the lambs settle, they are folded on clover aftermath. A month later they are taught to eat a little grain from troughs, this being increased up to about one-third of a pound per day as the clover fails. By first of October, a few—perhaps 40—of the best lambs are ready for the fat market, and should realize from 34 to 36 shillings each. A few cabbages or yellow turnips should now be ready, and these are given on the grass, the quantity being increased as they are better cleaned up. About first of November the lambs are folded on turnip land from which the crop has been lifted and stored in rows of three to five-ton pits. These turnips are now put through a root-cutting machine, cut into finger pieces, and fed to the sheep in troughs, feeding four or five times a day, and only leaving as many in the troughs at night as they will have cleaned up by next morning. Another set of troughs are kept in a row for grain-feeding. We usually make up a mixture of grains: equal parts of oats, maize, distiller's dried grains, mixed with treacle and soya or cotton cake, and with a little salt, equal parts, giving two-thirds of a pound twice per day. One-half of the lambs should be prime fat by the 1st December, and the remainder about Christmas, when they are all disposed of at one or more of the big centers. They ought, by this time, to be worth 42 to 44 shillings each, or, an average year, about 15½ or 16 cents per pound of carcass weight.

About a month after weaning the ewes are brought in, and 40 or 50 of the best are drawn out to be kept for another year, to put along with the 90 or 100 we again buy. The "cast" ewes are treated much the same as lambs, but are, of course, kept separate from these latter, as they would overeat them. Ewes should be ready to go by November, and are usually by that time worth 36 shillings (\$9) each. It will be seen from the above that the lambs are never allowed to lose their lamb flesh. That is, in my opinion, the great secret in sheep-rearing for profit.

## BALANCE SHEET.

Expenditure (Annual).	
95 ewes, at \$6.50	\$ 617.50
(Say) 1½ rams, at \$45	67.50
Grazing 140 ewes, 52 weeks, at 8c.	582.40
Grazing 2 rams, 52 weeks, at 8c.	12.48
Oats consumed by rams and ewes, 8,440 pounds	100.50
Turnips consumed by rams and ewes, 106 tons, at \$1.80	190.80
Mixed grains consumed by lambs, 4.25 tons, at \$28	119.00
Aftermath consumed by lambs and ewes (feeders)	172.50
Turnips consumed by lambs and ewes (feeders)	210.00
Sheep dip	8.75
Depreciation of netting, cutter and troughs	21.00
Labor	87.00
Interest on capital, and allowance for overseeing	66.00
	\$2,255.43
Receipts (Annual).	
40 lambs, sold at \$9.00 each	\$ 360.00
160 lambs, sold at \$10.50 each	1,680.00
5 lambs, sold at \$8.50 each	42.50
90 lambs, sold at \$8.00 each	720.00
Wool, 735 lbs, at 20 cents per lb.	147.00
Manurial residue of grain consumed (25 per cent. of cost)	54.85
	\$3,004.35
Expenditure	\$2,255.43
Net profit	\$ 748.92

The foregoing is reckoned on the results of a good turnip year. Turnips are valued at \$1.80 per ton of 2,240 pounds, whereas in some years \$2.50 would have to be allowed, which would make a considerable difference in the net profit. A death-rate of five ewes and five lambs (the latter after weaning time) is allowed for; seldom is it greater than this, and usually less.

—SCOTTIE.

A mistake too commonly made by farmers is that of letting the cattle and other stock out upon the pasture fields before the grass gets a fair start, thus crippling its growth, more or less, for the whole summer, while the early grass is washy and lacking in nutrition, and the animals lose, instead of gaining, weight or condition. Besides, when they have had a taste of young grass, they refuse, if taken into the stables for the night, dry feed which otherwise they would have consumed with a relish.

## Raising and Marketing Winter Lambs.

Baby-lamb mutton between Christmas and Easter is in the same class of luxuries with strawberries and fresh tomatoes at the same season, and commands the price of luxuries in all the large cities.

The editors of "The Farmer's Advocate" have asked me to give its readers an article from my experience. It is about fifteen years since my attention was first called to this phase of sheep-farming by some articles in a New York paper. The prices reported seemed to me so fabulous that I thought the demand only a fad which would soon pass, else so many would go into the business that prices would come down. The articles also mentioned Merino ewes of the Delaine type as employed in their production. I was then breeding that class of sheep, but had never known them to year in the fall. However, I decided to try a few, and the first year succeeded in getting ten lambs born in November. They were pure Merinos, so did not grow very rapidly; and, as I did not know how to dress them for the New York market, I sold them to a local shipper to go to Cleveland, Ohio, at Easter, at only one cent above price for year-old lambs.

But I had demonstrated the possibility of growing winter lambs, and decided to develop the business and qualify myself for dressing and preparing them for market. I secured a small flock of Dorsets, including a ram. I had prepared some Merino ewes for breeding in June, by permitting them to run over a year without breeding, and secured very satisfactory results in mating. I will say here, however, that a flock never breeds as uniformly in the spring as in the fall. But that is an advantage, rather than otherwise, as we want to ship only a few each week throughout the winter, beginning December 20th.

The lambs at this time should weigh not less than 42 pounds, alive, and not much more, and should not be over 10 weeks old—better eight. Later in the season the live weight should increase to 50 pounds, and an age of twelve weeks is permissible, but a lamb older than that always sells at a discount.

But, to take up the thread of my story, I prepared to feed the ewes by growing some roots (the winter before I had fed cooked potatoes and bran, as roots are not generally grown in Ohio), and, as soon as I was assured of some lambs, I got into communication with a New York commission firm that handled the so-called hot-house lambs, and got instructions as to dressing and shipping.

My early attempts at dressing were not very satisfactory to myself, and less so to the commission firm, as I learned by the returns and the tone of their letters. But I was determined to learn, and I have, as I have many times gotten the top quotations.

Now as to what I have learned from the experiences of intervening years. Only Dorsets, Merinos and Tunis can be relied upon to produce lambs at the proper time of the year. Any of the Down breeds will produce them in time for Easter, but only a limited number can be used that week, and the market always drops abruptly thereafter. The only secret within man's control connected with securing the mating of the other breeds at the proper time is to feed so as to have them gaining. Another factor in the situation is the temperature. I have noticed that whenever we have a cool June they breed more freely. If I could transport the flock to a mountain at that time, without excessive expense, I should do so. Yes, there is one other little trick in the trade. Two rams turned together with the flock serve as a stimulus to each other. As this is dangerous when both are horned, I have practiced putting one horned and one polled together, using two to each hundred ewes, and alternating with two others each ten days.

The short-wooled rams are preferable, as the less wool on the lamb at slaughter time, the younger it looks, and that is advantageous.

The flesh of a first-class lamb must be light-colored. To secure this, the lambs must be kept from exercise; this means they must be confined to stables, and closely confined. No springboards are provided for their amusement. On the contrary, the flock is crowded, so there is no chance for them to play, and that they will be forced into their own apartment, where feed in variety tempts them to eat several times a day as soon as they are old enough. They begin eating the third week. It may strike a Canadian with consternation to learn that corn is the principal grain fed, even from the start, only enough oats, wheat, bran and oil cake being given to afford variety, which is necessary to induce them to eat sufficient. Another stimulus resorted to is that of giving fresh feed several times a day. I have gotten better results in this way than by using the self-feeder, which keeps feed before them all the time. Cabbage is greatly relished by them, and a valuable adjunct. Alfalfa is the hay par excellence. When that is not available, good clover is indispensable. Possibly, with roots, bran and oats, lambs would do well

without hay, but I cannot say from experience. So much for the lamb's feeding.

The ewes should be fat when the lambs are born. For the first week there should be continuation in feeding. As soon as the lamb is eating all the milk, gradually increase the feed. The feeding of the ewe from this on should be exactly the same as feeding of a cow for a record in milk production; and I use the same feeds, silage, cottonseed meal and clover hay, supplemented by soy beans. The Canadian feeds that would correspond are turnips, oats and bran and clover hay, with unthreshed peas. A supply of salt and fresh water completes the provision for the ewes.

I hardly need say the stables should be well ventilated and have an abundance of sunlight. After the lambs are two weeks old, they do not need to be warm, but dry, and closed against storms.

The night before we are going to butcher, we pick out the lambs and confine them near the ewe flock. In the morning, their mothers will be answering their calls, and a trained shepherd can locate them. We separate, and confine them convenient to the main flock, putting them at once upon lighter rations, and catching them twice a day to relieve their udders. Usually there are lambs that will do this if the ewes are held for them. Within about two weeks they will be dried off sufficiently to remove to some other stable, that their place may be taken by a fresh lot.

We usually butcher in the forenoon, letting them hang to cool until next morning, when they are shipped by express. I will not give details of dressing, as each market has its own method, but will say we suspend by cord about the hind pasterns, at a suitable height, and bleed by severing the artery in the neck. The lamb is held so it cannot struggle, and, as soon as fairly well bled out, the spinal cord is severed by a thrust of the knife between the vertebrae in the neck. The pelt is not removed, nor the head or legs, in the early part of the season. The dressing, shipping and commission cost about one dollar per head. We still ship to a commission firm. All of the large cities use them. H. P. MILLER.

Ohio.

## Sheep Beats the Cow.

Editor "The Farmer's Advocate":

I am a breeder of registered Cotswold sheep. I winter a flock of between twenty and thirty, usually on pea and oat straw and clover hay, generally giving what hay they will eat up quite clean once a day. During the first three months of pregnancy I feed an ordinary-sized turnip to each ewe once a day, whole. If the six-month-old lambs will not "hook" them, as the Scotchman says, I pulp them a few times, then slice, then cut in chunks with spade. I also keep two or three loads of unthreshed peas, and give a couple of small forkfuls once a day. Two months before parturition I discontinue feeding the breeding ewes turnips, as they produce big, washy, weak lambs if fed up to lambing time. I lost dozens of lambs from this cause, and paid dearly for this information. After quitting the turnips, I substitute, usually, about a half a pint of oats once a day to each ewe. The ewe lambs are not bred the first season, and get roots all winter. My sheep lamb in March. About the middle of February I add about a pint of bran to each ewe's ration, with the oats, to make them bag up, and to act as a laxative. Since I have adopted this method and cut out the roots, mortality has decreased to the minimum. Have scarcely any losses from weak lambs. We provide a nipple and bottle in case twins and triplets do not have enough milk, and, as ewe's milk contains twice the butter-fat of the average cow, we usually add a little fresh, separated cream to the strictly fresh milk for the lamb. If the young lamb's bowels do not act in a few hours after birth, we syringe in some fresh cow's milk in the rectum, which usually produces the desired effect, and does not irritate like soap and water. The system also absorbs what is not ejected, which nourishes and stimulates the little one. After lambing, we feed the ewes a balanced ration similar to what our cows receive, excepting the corn silage, viz.: Clover hay and pulped or sliced turnips, with a mixture of two pounds cracked oats, two of bran, preferably one pound pea meal. If peas are too high or scarce, we substitute one pound corn meal, to keep up flesh; sometimes we add half pound oil cake. We find the ewes milk well on a quart of this mixture twice a day, or two quarts pulped turnips, with salt, with a little sulphur mixed in, and applied to feed once a day. When the lambs are about three weeks old, a partition is made in the pen, so the lambs can feed at their pleasure on the above ration. They all have plenty of fresh water, and are permitted to run out, except at nights and in cold and stormy weather. We do not let them get wet in the late fall and cold weather, as their wool is so long it takes them some time to dry, and they are liable to catch cold and get the shuffles, for which we use tar, if this ever does occur.

During May and June they run on the highway and rough pastures. The first of July the



lambs are weaned (at four months old), and they are put in the best pasture I have, with a couple of acres of rape near-by, to which they have free access after two or three feedings during the dry part of the day, when the dew is off, to avoid bloating, which is apt to cause death. Be careful of new green clover for the same reasons. Later they have access to a patch of turnips for an hour each day.

After weaning, we keep our ewes on our poorest pastures until they are dry. We milk them out several times to avoid injury to udders. After dry, we put them on good pastures, rape, turnips, etc., to flush up for the mating season. We consider good condition of both sire and dam at time of mating season is the secret of getting a large proportion of twins, or a good crop of lambs. If you have many ewes, better results will be obtained if sire is shut up in day time, and given a pint or two of oats morning and evening. Oats is the very best grain we have for all stock-getting animals.

I usually shear in April (very close), and try to get all ticks off. About a week after, I dip the lambs.

I have outlined my method of breeding, feeding and care. Regarding the cost, I am not prepared to say, definitely, as I am too busy a man to bother with weights and measures, although it is businesslike and a great satisfaction to the man who has time, to know where the profit and loss occurs; but, as I feed largely on roughage and cheaply-produced foods, I never lose any sleep over the cost, as I can keep five sheep on what one good dairy cow will consume which produces me about 6,000 pounds of milk per year, at about 86 cents per 100 pounds, or \$51.60 net, manufactured into cheese, all expenses for same deducted, putting the whey against the milking, extra care, etc., which the lamb does in case of the sheep. My ewes average me a lamb and a half each, one year with another, which I realize an average price of \$10 apiece on, double the price of grades. They have also averaged 8½ pounds washed wool for years, at, say, 20 cents (trade). I usually realize 25 cents by turning the finished goods from the factory over to our merchants. The total profits from five ewes would be \$83.50; profits from cow, \$51.60, leaving a balance in favor of sheep of \$31.90, saying nothing of their value as weed eradicators, ease of care, etc. Put grade sheep at half the price of registered stock against the 3,000-pound dairy cow, and profits from them will be about equal to the above example.

Hastings Co., Ont. F. A. COMERFORD.

## THE FARM.

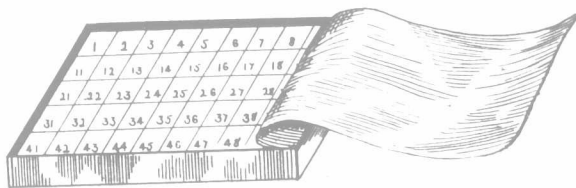
### Selecting and Testing Seed Corn.

There is little use, at this date, in lecturing farmers on the importance of making careful selection of corn ears for seed. That work, however, is very important, and it is hoped that many "Farmer's Advocate" readers looked after it at the proper time. With many who husk some corn, selection is made while husking, the finest ears only being chosen. This is good practice, but a better is to go through the corn just before it is cut and choose good ears on good stalks, from hills that have the full number of plants. Such an ear is likely to be more valuable for seed than a much larger one which grew on the only stalk in a hill. The ears should not then be broken off, but the stalk should be cut, and, with others, selected, shocked separately, and husked a little later. A considerable percentage of ears will have to be discarded when husked, no matter how careful the selection has been made, so that it is well to choose at least twice as many as will be needed. For one's own seed, it is a small matter, at best, as so few ears are required to plant an acre. Never, never, put off seed-ear selection until severe frosts have occurred. The outside ears of a shock are easily injured.

Seed should be thoroughly dried before cold weather, if vitality is to be maintained throughout the winter. This can be done by hanging behind or above the kitchen stove, or under the roof of a shed or corner. For winter, it is much better, where practicable, to store in an attic or some room where temperatures are never low, than in the woodshed or barn, where the frost is almost as severe as it is outside.

Seed corn treated in this way will not only grow, but make a strong start. But even though one may feel perfectly sure about the vitality of his seed, it is very easy, by testing, to make "assurance doubly sure." And, as the great majority of Canadian corn-growers buy their seed, knowing little of how it has been cared for, this matter of testing ought to become to them imperative. If possible, seed corn should be prepared in the ear, not only because some estimate may be formed of the value of the variety by the appearance of the ears, but also because tests of individual ears for vitality may be made. Let no one imagine that the making of such tests is beyond the capacity of any ordinary farmer, or that it is not worth while. With dent corn, it

is said that only fifteen ears are required to plant an acre, four grains to the hill. More, of course, would be needed where flint corn was used, but even though twice as many were required, it would still be but a small number. And when we remember that not only will lifeless ears be discovered by means of the test, but also those of feeble germination; and when we remember, further, what it means to the prospects of a crop to have a full stand of vigorous plants, such as will be the case when these others are eliminated, we realize that a difference of many dollars' worth may result from a few cents' worth of trouble. It is probably within the mark to say that less than half a day's work would suffice to test the seed ears necessary for planting a ten-acre field. The style of tester commonly recommended is a shallow box, across which, near the upper edge, wires or threads are stretched in both directions, forming a number of squares.



Seed-corn Tester.

The box is filled with moist sand up to the level of these wires or threads, and on this sand the seed grains are laid, and covered, to keep from drying out. The cut which we publish shows a shallow box, partly filled with moist sand or sawdust, which is covered with muslin, drawn tightly and tacked, on which two-inch squares, each one numbered, are marked with an indelible pencil. A box 20 x 40 inches would have 200 squares. A plain, moistened cloth is placed over the kernels, and a sack made for the purpose and partially filled with sawdust, about two inches thick, is placed on top of the cloth, and pressed down firmly (see cut). When sawdust, which is an excellent material for the purpose, is used, it should first be boiled in water to kill bacteria and molds. The tester should be placed where it will be held at ordinary room temperature, or warmer, for five or six days. The ears from which the samples—four, five or six grains—have been taken should be arranged in sections of tens to correspond with sections of tester, and where they will be undisturbed until after test is finished. It is well to place grains with the point towards observer, and the germ side uppermost. Those only which show strong upward, as well as root sprout, should be reckoned good.

### Value and Culture of Rape.

Editor "The Farmer's Advocate":

The question has been quite frequently asked through your valuable columns, "How is the best way to prepare land for rape, how to sow, and amount of seed per acre?" I have had some experience in the growing of this most valuable crop, and find it excels anything else in the way of fall pasturage for putting cattle in condition, and also in gains in weight.

The preparation of the soil, if stubble land, should be the same as the old-fashioned summer-fallow, getting the soil as friable and as full of moisture as possible. If old sod, it should be plowed about the 15th of May, and thoroughly disked and harrowed through the month of June. During the first days of July is a good time to shallow-plow the field, or, if sod, to give it another disking, and afterwards roll it down well, after the surface soil is thoroughly dry. I use an ordinary grain drill, and find it a wonderful improvement over the old way of putting land in drills and using the turnip seeder. Take the rubber hose off from the grain tubes, and use every third one or every fourth, as you wish, on the clover seeder, with the lower end back into the hoe spout. If every third is used, the drills will be 21 inches apart; and if every fourth one, the drills would be 28 inches apart. I use every third spout, and find it about the right width. Then shorten the chains of the idle spouts, so as not to loosen the rolled bed. With a 13-hoe drill, five rows at a time can be sown, as the wheels measure the same distance apart as the spouts. If more holes are in the seeder than necessary for the number of tubes, close these up. With the seeder set for ordinary seeding of clover or timothy—that is, from 9 to 11 pounds per acre—it will sow in 21-inch drills about 1½ pounds per acre, which is about as near the required amount as you can expect to get, and which is abundant if the soil is well prepared.

Rolling the land before preserves the moisture, and the spout cuts to a good depth in the fine, moist soil, depositing the seed in such a way as to make a most excellent seed-bed, and bound to insure a choice stand. The land can then be regularly cultivated, which is very necessary to insure a good strong plant, and also to keep the land free of growing weeds, for it must be borne in mind, in this cultivation, that the real feeding value is in the stem and rib, and not in the leaf.

Waterloo Co., Ont.

J. H. WOODS.

### A Plea for the Birds.

Editor "The Farmer's Advocate":

Although the fact that birds are among the farmer's best aids has been frequently stated, and is well known, their work is so well done, and in such an unassuming and quiet way, that we are apt to overlook and disregard them. And, though a cessation of their efforts, even temporarily, would result in certain disaster to many lines of effort on the farm, still there is not seen, on the part of most of the tillers of the soil, any intelligent interest in their protection and multiplication. It may sound odd to hear the multiplication of birds spoken of as though it were a part of man's sphere of control, but such is surely the case. When we consider that the number of birds which die each year is equal to the number of young that is fledged, it can easily be appreciated that a little protection may have a considerable result in the way of increased numbers.

Especially is this the case with birds that are resident with us during the whole year, such as chickadees and nuthatches, whose insectivorous proclivities are of the highest order. With the aid of these birds, and others, the most astonishing results may sometimes be attained, one example of which may be quoted.

The most eminent exponent of bird protection in the world is Baron Von Berlepsch, of Eisenach, Germany. This gentleman has devoted much time and thought to the encouragement of wild birds in his domain, and has accomplished results that are little short of marvellous. Such results would be more strikingly seen and appreciated if a small portion of a neighborhood were deprived entirely of the services of birds. There was recently in the neighborhood of Eisenach a plague of tiny moths, whose caterpillars fairly denuded the trees of orchard and forest alike; but when this plague extended itself towards the property of Von Berlepsch, it was found to be checked by his insect-hunting friends, so that, on his place, no damage whatever was done, although the near-by trees were stripped!

Who can doubt that this striking occurrence is repeating itself in a modified way each year, and that it is possible for each individual farmer to produce a repetition of these favorable conditions on his own farm?

Now for the methods: Two main features stand out in the work of Von Berlepsch—nesting boxes, and suitable shrubbery. He has found that the birds that nest in cavities come regularly and easily to holes resembling those made by the woodpeckers, and he has such holes reproduced in solid wood, and fastened up all over his grounds. His results show that it is desirable to procure these specially-made nesting holes; but it is likely that similar results, only less effective, could be obtained by the use of homemade boxes. If there is any considerable desire to procure the most effective style, I am sure the editor of "The Farmer's Advocate" would arrange for a co-operative purchase of them, the cost being about 50 cents each. The second part of the Von Berlepsch method is shrubbery. Every farmer should devote a small piece of ground, say half an acre, or more, to the purpose of a bird sanctuary. Such a plot should be planted with many wild, berry-bearing shrubs, comprising mainly thorn, viburnum, and cornus, with climbers like climbing bitter-sweet and wild grape, making a tangle in which the birds would have a safe retreat. The whole should be surrounded with a fence of wire netting, to exclude cats and dogs, as well as man. Such a plot would return a splendid interest on the investment, in the way of insect-eating allies, and it is safe to say that the farmer who avails himself of the assistance—ready to hand—of the birds will have no reason to regret the efforts he may put forth in their behalf.

London, Ont.

W. F. SAUNDERS.

Spraying demonstrations at ten centers, reported by the University College of N. Wales, Bangor, Agricultural Department, showed that the application of a solution of 25 pounds copper sulphate in 50 gallons of water, a five-per-cent. solution, practically destroyed all wild mustard. This is a stronger solution than has been recommended in Canada, where 10 to 12 pounds per 40-gallon barrel is usually advised.

In March 16th issue, "R. A. P." asks regards tools for joining laterals into main drains. The connections can be neatly made with a cross-cut handsaw and a coarse rasp.

Simcoe Co., Ont.

GEO. CRAWFORD.



### What Crop Shall We Grow?

It does not follow, because a certain crop or variety produces more bushels per acre that it is the most desirable one to grow. In the case of oats, for example, a given sort may have such an undue thickness of hull as to cause it to yield less in real nutritive material per acre than a sort yielding fewer bushels per acre. In a trial by Prof. Chas. A. Zavitz, at the Ontario Agricultural College, covering nine years, the hull percentage in four varieties was as follows: Joannette, 23.8; Daubeney, 25.1; Early Dawson, 34.6, and Pioneer, 38.6. One hundred pounds of Joannette would, therefore, produce an average increase of meal over that produced from 100 pounds of the Pioneer variety, of 14.8 pounds. In average yields per acre for five years, these varieties ranged as follows: Daubeney, 87.44 bushels; Early Dawson, 66.73; Pioneer, 71.55; and Joannette, 79.63. Some of the largest-yielding varieties are also some of the thinnest-hulled sorts. Why not grow oats combining these two good qualities? As Prof. Zavitz remarks, it will surely pay us to look into the subject and see what manner of oats we are growing. Some very extensively-grown new oats, like Early Dawson, Storm King, Dodds' White, and Tartar King, are comparatively of poor quality, because of the thickness of hull. Pioneer is another very thick-hulled oat. Then, there is another strong point to be considered. In a wise system of farming, as a rule, a great proportion of the field crops are used for feeding on the farm, so as to retain fertility and sell more refined products. We should ask what crop will give us the greatest food value? A table is given, showing that, while the average yield of oats in Ontario for 28 years past has been 35.6 bushels, in comparison with 27.7 for barley, yet the barley actually produced 120 pounds of grain per acre more than the oats. Compared with oats, winter wheat, spring wheat, peas, buckwheat and rye, barley topped the list in productiveness. In digestible constituents per acre, field peas surpassed all others in protein content. Barley and oats did not vary greatly in that respect; but, in the amount of digestible carbohydrates, barley headed the list, with 920 pounds per acre, on the average, more than oats. When one considers the value of barley in the feeding ration for hogs and cattle, and the superior value of barley as a nurse-crop for clover, we do well not to put all our acres into oats because the threshing tally shows a big yield of bushels.

### Sowing Mixed Grains.

Experiments conducted over a series of years at the Ontario Agricultural College show that suitable varieties of barley and oats, mixed in the right proportions, produced over 200 pounds of grain per acre more than either of the grains when grown separately. Whenever flax, emmer, spring wheat or hullless barley were added to the standard mixture of oats and barley, it decreased the yield per acre, even though a greater amount of seed was used in each case. The average results of ten years' trials go to show that the greatest number of pounds of grain per acre were produced from the mixture of one bushel oats (34 pounds) and one bushel barley (48 pounds), or a total amount of 82 pounds mixed seed per acre. Sixteen other different combinations were used in the trial. Another point of interest brought out in two distinct experiments was that the largest amount of seed gave comparatively low results in grain production. A mixture of five pecks of oats and five pecks of barley was surpassed by a mixture of three pecks each by an average annual yield of over 87 pounds per acre of grain. The mixture of one bushel oats and one bushel barley surpassed the mixture of five pecks of each by an annual yield of practically 200 pounds per acre. For this purpose, a very early variety of oats with a six-rowed barley should be used, or a very late barley with an ordinary-maturing variety of oats, so as to secure even ripening.

The tabulated results of a four-years' trial shows that, prior to 1910, the combination of Mandscheuri barley and Daubeney oats gave a greater grain yield per acre than any other mixture. With the results of 1910 included, Mandscheuri barley and Alaska oats, one bushel each, headed the list, with an average yield of 2,551 pounds of grain per acre, by 25 pounds over the other mixture. Of nineteen different combinations, the two referred to are the only ones that gave an average total yield of over 2,500 pounds of grain per acre per year. The mixture of Mandscheuri barley and Banner oats was surpassed by the mixture of Mandscheuri and Daubeney oats by 107 pounds of grain per acre per year. While there appears to be a decided advantage in growing different cereals together, there seems to be no marked advantage from growing different varieties of the same class in combination.

A point of importance to be considered in this connection is the possible effect of this extra five bushels per acre of grain taken from the land and sown as clover seeding. Will the latter be as good? The clover catch is an essential. Are

the results as favorable when seeded with the mixed grains as with oats or barley separately? What say the experimenters?

### A Well-known Cement-block Silo.

Interest in the silo question quickens apace. Cement-block ones are becoming rather numerous. Strength and economy are the two main points concerning which assurance is sought. One of the earlier cement-block silos in Canada was built by R. A. Penhale, of Elgin County, Ont., who, in 1907, built one 16 feet in diameter inside, by 40 feet in height, the estimated capacity being 200 tons of silage. The owner thus described it in "The Farmer's Advocate" in 1908:

"The material used was sixty barrels of cement, fifteen cords of gravel and sand, one thousand feet of reinforcement, and ten bushels of white lime. Three men spent 12½ days making blocks with a concrete-block machine. The masons charged 40 cents per hour, and the helpers 20 cents per hour. The size of the blocks from foundation up to about one-half the height was 8x10x16 inches; balance to the top, 8x8x16 inches. The blocks were made on the ground by the block machine, and were laid up by city masons the same as any cement-block structure, with an iron rod laid in a groove formed in the block to secure same, every third course, the rod making a complete circle or hoop; a three-eighths-inch rod will answer the purpose well. Regarding cost of hollow concrete-block silo, as compared with solid concrete, I am of the opinion that the hollow-block silo will cost a little more. I think it will be just as durable, amply strong, and rather more desirable."

In reply to a recent inquiry as to how this silo was standing the test, Mr. Penhale writes us as follows:

"Our cement silo is standing the test of time satisfactorily. There is not a crack or a check in it as yet. It is certainly all we expected or could desire, and I would, without any hesitancy, recommend the building of a cement-block silo. The cost I would estimate to be in the neighborhood of ten to twenty per cent. more than the slop silo, but for me I think it is more than worth it. Since our silo was built, there have been several built in this section, and they all are built with cement blocks, and are giving good satisfaction. You will note below the detailed cost of material and labor of our silo when built a few years ago. It being an experiment, at that time, it cost more than it should cost to build it to-day. You will also notice that the price of cement was higher than it is at the present time. I would not use so much ½-inch iron, but would use mostly ¾-inch iron, which would reduce cost of iron, and also some labor. I would also reduce cost by not using so many ten-inch blocks. Two feet above the ground would be ample for a 16 x 40-foot silo; for a less size, I would use only eight-inch blocks. Cost of silo 16 x 40 feet:

60 barrels cement, at \$2.10 .....	\$126.00
10 bushels white lime, at 25c.....	2.50
15 cords sand and gravel, at \$3.....	45.00
500 feet ½-inch iron (round).....	7.72
250 feet 7-16-inch iron (round).....	3.35
250 feet ¾-inch iron (round).....	2.55
12½ days' work, 3 men, at \$7.....	85.75
5 days' work, 2 men, scaffolding and plastering, at \$5.00 .....	25.00
2,400 blocks, laying up, at 5c.....	120.00
Total .....	\$417.87

"We estimate the capacity to be about two hundred tons. I may say that it takes fifteen acres of good corn to fill it. To my mind, it is very important to have a good foundation, and five or ten dollars extra spent in a good foundation is good economy.

"We have a cement floor, and it has proven to be all right. I might add that, before we built cement silo we had wood-stave silos standing on the same place, and, in excavating to the depth of four feet for the foundation, we found that the clay was permeated with very disagreeable stench from the leaching of the old silo, down the full depth we went. How much further it went, we do not know, but it thoroughly convinced me of the advantage of a cement bottom."

Experiments as to the effect of weeding and hoeing on mangels, by University College, Reading, for three years, gave the following results: Singled only, 21 tons per acre; once hoed, 32 tons; twice hoed, 36½ tons; kept clean by hoeing, 36½ tons; kept clean by hand weeding, 37½ tons. In addition to the extra crop, weeds were also prevented from going to seed that would have greatly prejudiced succeeding crops.

Flax growing has fallen off in Ireland because it is not an essential crop in a rotation, and the farmer is influenced by one consideration only, viz., the net return to be secured. When prices fall, he simply stopped growing it.

### Traction Engines Upon the Highway.

Editor "The Farmer's Advocate":

In reading your journal, some time ago, I noticed a question to this effect: Why do threshermen not have a dust-collector attached to their machines, thus making the work of threshing more agreeable? The writer also stated that he would be willing to pay an extra fee for operating it.

To the thresherman with enterprise enough to invest his money in an outfit to do custom work, this is a fair proposition, and one likely to be taken advantage of if he desires to keep busy during the season, by securing the greatest number of jobs possible.

Your paper commendably champions the cause of the farmer in getting his work done with dispatch and the least possible labor, providing it does not interfere with the quality of the work done. The demand for labor-saving machinery has brought out in recent years a threshing machine with a self-feeder, straw-cutting attachment, wind-stacker, chaff-blower, dust-collector, high weigher and bagger, or a grain-blower. While this machine weighs nearly as much again, or more, as the old-style carrier machine, it does away with more than half the men formerly employed at the threshing. The objection that a machine up-to-date in all respects costs more, is met with the answer that cast iron and steel is cheaper than elbow-grease. The majority of farmers patronize the new-style machines.

Since steam power is the best for threshing purposes, and, as from twelve to fourteen horse-power engines were used to operate the old-style separators, I think an engine of twenty-four horse-power not too much to do the work as fast or faster than before these machines were used, and have a little reserve power for unfavorable circumstances. A twenty-four horse-power engine, properly proportioned, will weigh about twelve tons, and, on account of its weight, it must propel itself and be able to draw the separator from place to place, using the roads and bridges the same as the travelling public.

But, look here, Mr. Thresherman, if you cross a highway bridge, you are a law-breaker, and liable to be prosecuted. The law requires that no greater weight than eight tons be put upon a bridge at one time. Oh, well, you say, I'll get a twenty-horse-power engine—one that weighs below the limit required. In other words, you will use a horse weighing thirteen hundred pounds to do the work that requires one fifteen or sixteen hundredweight. The engine will have a short life to live, but it will not cost as much. The sooner it is dumped on the scrap-heap, the better for the manufacturer, who will replace it with a new one, and relieve you of your money. Has this anything to do with bringing the threshing business into disrepute, and is it the reason there are as few of millionaire threshermen as of the proverbial hen's teeth?

But the trouble does not end here. The law requires that planks a certain width and thickness be laid the full length of the bridge in the path of the rear wheels. This applies whether the engine weighs eight tons or one. The law does not specify whether the thresherman may carry the plank on his engine or on his back, nor does it forbid him to take it all apart and carry it over piece by piece. I suppose this is left to his option.

Now, what I would like to know is this: If such machinery is required by the farmer, why should the thresherman be treated like a beast of burden by having such laws on the statute books? The only reason that such a lopsided law exists, I suppose, is because it is rarely enforced. If it was, its unreasonableness and impracticability would become apparent. The threshermen of Ontario would do well to take a hint from the Western farmers, who probably think that the way to get legislation in their favor, and get it soon, is to agitate a little. Now, while I do not defend the thresherman's right to make himself noxious by wantonly breaking bridges, yet he should be allowed the same freedom upon the highway as any other traffic. I know that the use of plank does protect the floor of a wooden bridge, but let them be put in place permanently by the pathmasters or overseers, instead of asking traction-engine owners to carry them.

Waterloo Co., Ont. ANGUS BOWMAN,  
Thresherman and Farmer.

[Note.—The Ontario law regarding traction engines provides that no traction engine exceeding 20 tons in weight shall be used on the public highways. Where a traction engine not exceeding 8 tons in weight is used for threshing or road construction, the municipality is responsible for the strength of bridges over which it may pass, but the owner of the traction engine is required to protect the floor of bridges and culverts from injury, using suitable plank for this purpose. Where the traction engine exceeds 8 tons in weight, the owner of it must cross the bridge at his own risk, and is responsible for any injury he may do to the bridge. He is not, however, a law-breaker until the traction engine exceeds 20 tons in weight.—W. A. McLean, Provincial Engineer of Highways.]



**Nitro-culture for Legumes.**

(Press Bulletin.)

During every season since 1905 the Bacteriological Laboratory of the Ontario Agricultural College has sent out to farmers and others cultures of bacteria for inoculating seed of alfalfa and other clovers, in order to aid in insuring a better catch of the seedling. The bacteria sent are of the kind which live in the small nodules or "knots" which are naturally formed on the roots of clovers, and which may usually be readily seen when a clover or alfalfa plant is dug up and the earth carefully broken away from the roots, so as not to break off the nodules. It is the business of these bacteria to draw upon the great supply of nitrogen in the air (about four-fifths of the air is nitrogen gas), and transfer it to the growing plant. Thus, by the aid of these nitrogen-gathering bacteria, the clover plant is able to get its supply of this most valuable fertilizing element, nitrogen, from the air, instead of having to depend upon what is in the soil. This explains the fact which every farmer knows, that clovers and other closely-related crops are such good soil enrichers. When these crops are plowed under, the extra amount of nitrogen which has been stored up in them becomes available for succeeding crops.

It is absolutely essential that the nitrogen-accumulating bacteria be present, in order that the storing of nitrogen in the clover plant be accomplished. If a clover or alfalfa crop has been successfully grown, as shown by thrifty, vigorous growth and the presence of plenty of nodules on the roots, it indicates that the necessary bacteria are already present in the soil, and ready to penetrate the roots as soon as germination of the seed occurs. In the case of a new or unsuccessful seeding, however, it is probable that the bacteria are not present, and they should be supplied by some method of inoculation. Experience has shown that the most satisfactory method of inoculation is to apply the bacteria directly to the seed before sowing. This is the method to be followed with the cultures sent out by the College at Guelph.

Last year there were 3,375 of these bacteria cultures sent to 1,881 farmers, and, of 771 who returned reports, two-thirds stated that the inoculation of the seed had aided in securing a better crop.

During the present season the College will send cultures for the inoculation of the following kinds of seeds: Alfalfa, red or mammoth clover, alsike clover, white clover, crimson clover, vetches, peas, beans, sweet peas. Each kind of seed requires a different culture. The cultures are sent by mail, with full instructions for their use. There is only one size package prepared, that being sufficient to treat sixty pounds of seed. There is a nominal charge of 25 cents for each package of culture, to cover cost of material and postage. Applications should state the kind and amount of seed to be treated, and should be addressed with enclosed postal note, stamps, or money order, to S. F. Edwards, Ontario Agricultural College, Guelph, Canada.

**Use of the Saccharometer.**

The saccharometer may be used to determine the density of the syrup, either while it is boiling or while it is cold. There is required a tin test tube or cup two inches in diameter, and nine and one-half inches deep, into which the syrup, hot or cold, is poured for the purpose of testing. The test tube is filled with the hot syrup, and the saccharometer is promptly plunged into it. If the syrup is of the standard consistency or thickness, it should settle at 30½ degrees. If the syrup is not yet thick enough, the instrument will dip deeper and register less than the 30½ degrees. If it is too thick, the instrument will dip less and register more.

If the syrup is tested while cold, before being poured into the test tube, it must be first brought to the ordinary temperature of a comfortable room; that is to say, 70 degrees F. This temperature is ascertained by means of an ordinary thermometer plunged into the syrup and left there, while the syrup cools down to 70 degrees F. Then this thermometer should be removed, and replaced by the saccharometer, which at that temperature should register 35½, if the syrup has reached the standard thickness.

Testing with the saccharometer is a delicate operation, and care must be taken that the tube and the saccharometer are not excessively hot or cold; otherwise that might unduly influence the temperature of the liquid with which they come into contact. Care must also be taken, in hot testing, to pour the syrup in while it is at the boiling point, and lose no time in introducing the saccharometer, as the density changes during the process of cooling.

When the saccharometer is not in use, it is well to place the instrument in a dish of lukewarm water, so as to dissolve the syrup which adheres to it, and leave it in proper condition for immediate subsequent use. J. H. GRIMM.

**Salt and Land Plaster.**

Editor "The Farmer's Advocate":

Your article on "Salt and Land Plaster for Barley," in March 16th issue, giving the results of Dr. Saunders' experiments with these fertilizers, prompts me to send you the results of some of our experiments. Some years ago we tried an experiment of spring wheat; the field contained ten acres. On one acre we sowed 200 pounds before cultivation of seed-bed; on another acre we sowed a like quantity after drilling; another acre we sowed after the plants were up; the rest of the field received none. There was no apparent effect until heading-out time. The first acre was out in head a full week before the rest of the field; the second acre, a little later; the third acre showed little or no difference from the rest of the field. At harvest the crop was all equally good, but the first two acres had much the brightest straw, and was the most evenly matured. Furthermore, the threshed grain weighed more.

We have on other occasions repeated the experiment, with the same results, viz., earlier maturity, brighter straw, heavier grain. I might say that our soil is heavy clay. We believe that it would always pay to sow it for barley, though we do not, for the reason that we seed clover with the crop. We are convinced of the good effect of land plaster for barley and clover seeds; but in this case, as with the salt, the effects are much more marked when sown and worked into the seed-bed before drilling. The reason probably is that, when sown on the surface after the crop is up, there is not sufficient moisture to make it effective. On one occasion we dressed a field of clover in the spring, all but about two acres, when we ran out of plaster. The season was dry and the crop fair, but not heavy. There was no noticeable difference in the field. The following season the field was sown to oats. The part that received the plaster showed a very marked superiority over the part that received none, proving either that the plaster was not in an available form for the clover crop, or that it had promoted a more vigorous root-growth, the decay of which had enriched the soil.

Land plaster is not used to the extent its merits deserve. One reason probably is that it is unpleasant to sow. We need badly a machine to sow it. When sown on clover or pasture, it should be done, if possible, before spring seeding, for the best results. FOYSTON BROS. Simcoe Co., Ont.

**Sow Extra Mangel and Beet Seed this Year.**

Permit me to intimate to your readers that, in order to abridge the danger of the partial failure of their mangel and beet crops, they will this year need to be particularly careful to ascertain the per cent. of seed balls capable of producing sprouts, and to adjust their seeders accordingly.

Because of the climatic conditions in 1909 and 1910 in those European countries from which we obtain our mangel and beet seeds, practically all the available supply this year is low in percentage of vitality. Our Canadian seed merchants have been doing what they could to procure seed that would conform with the provisions of the Seed Control Act, which fixes a standard of vitality for good mangel and beet seed of 90 per cent. of the seed balls, and 160 sprouts from 100 seed balls (what is commonly known as mangel seed is really a fruit containing from three to six small seeds), and the law is that when the percentage vitality falls below two-thirds of this standard for good mangel seed, then the seed must be labelled, showing the actual percentage of balls and of sprouts capable of being produced from the seed. All the seed inspectors now in the field have been notified to pay particular attention to the quality of the mangel seed exposed for sale; but the information and punishments to seed merchants resulting therefrom will not protect users of mangel seed this year.

There is no need for any farmer to reduce the area intended for planting to mangels, and he will suffer no danger from crop failure, providing that he will take the trouble to determine the percentage of seed balls capable of germinating, and increase the amount of seed per acre accordingly. In most cases it will be found that at least one-half more mangel seed than usual will have to be sown this year to secure a reasonably good stand of plants. Farmers should give the preference to mangel seeds put up by reliable firms, and not hesitate to procure seed of their favorite varieties from bags or packages on which the percentage of vitality is branded, even though that percentage would seem to be rather low.

GEO. H. CLARK, Seed Commissioner.

**THE DAIRY.**

**Excited a Wholesome Discontent.**

Editor "The Farmer's Advocate":

We commenced the work of keeping cow-testing records four years ago. Our association was one that was organized in order to make use of Government aid along this line. Personally, we have never regretted our entering this work. Instead of being an irksome task, as many would have us imagine, it has proved interesting and profitable.

The time taken in weighing and sampling the milk of each cow three days of each month, as we do it, is never missed, but rather looked upon as time well spent at the end of each year. Had we a smaller herd, we would make a daily record of each cow. At the end of each month it takes but a short while in one evening to total up each cow's production, set it down opposite her number on the sheets furnished by the Dairy Division, of Ottawa, and place the sheets in the box of bottles containing a sample of each cow's milk. This is taken to our cheese factory, where the maker tests the samples, places the tests opposite each cow's number, and forwards the sheets, having the cows' production of milk for the past month, also her test, to the Department of Agriculture, at Ottawa.

The methods of keeping the records are well known to any who have studied this matter. A spring-balance scale, a box for bottles, a sheet for tabulating weights of milk, and a small spoon for dipping milk out of pails into bottles, are all the equipment necessary. The cost of these articles for a twenty-cow dairy will scarcely exceed \$3.00.

Someone may say, Why all this bother? Why not feed the cows, and dispose of your milk for all that you can get for it? Well, for one thing, I will answer: Why keep cows to milk at all, which means a lot of work that is unavoidable, unless you get the most from each one that you can, and how are you to be able to do this unless you know each cow individually as regards milk and butter production? And, further, how are you going to raise heifers which we all want to be better producers than their dams, unless, besides breeding to a pure-bred sire descended from a good milking family, we know which of our breeding cows is the best for milk and butter-fat?

At the end of our first year's work of testing we found we had some good cows, and some not so good. Our final returns from the Department that year showed us an average, for twenty cows and heifers, of 7,500 pounds milk and 250 pounds butter-fat. Next spring we kept our heifer calves from the cows that tested best the previous year, and this past season we had two- and three-year-old heifers giving us as much as what our supposed best cows gave us the first year we entered cow-testing work. In three seasons we raised our herd average from that just mentioned to 9,100 pounds milk and 300 pounds butter-fat. This was an increase of 1,600 pounds milk and 50 pounds butter-fat, which I am sure we would never have had if we had not tested, as we were well satisfied with our cows' performance previous to starting to test. Turning to the financial end, which is the important part to us all, we had an increase of \$14.50 per cow—i. e., 58 pounds butter, at 25 cents.

We read a lot to-day of the value of weeding, feeding and breeding to increase milk production all over this Province, but never did we realize personally the value of the first injunction in this oft-repeated text of our professors, dairy instructors, etc., to its full extent until we commenced individual testing of our own cows. We have also been stimulated towards the better feeding of our cows, the growing of crops necessary to the cheap production of large quantities of milk, as alfalfa, clover, and corn for ensilage. This whole business of milk production has been made more interesting by these instructive monthly returns from Ottawa.

Another important point: Buyers of dairy stock to-day are looking for these records; and if you have them to show, you can secure quite an increase in price over that obtained by your neighbor who does not test. Anything in the dairy line, from a three-year-old calf to a twelve-year-old cow, or older, has an enhanced value where these returns are down in black and white.

**STATEMENT.**

Cost of each cow's feed (average) ..... \$40.00  
Return from factory and creamery (av.) ..... 75.00

Profit ..... \$35.00

These returns are only the averages from the checks of a cheese and butter factory. They do not include value of skim milk, whey, and calf, which last item is considerable in a high-grade or pure-bred herd of Holsteins. C. E. MOORE, Peterborough Co., Ont.



### Centenary of Jersey Cattle in England.

Although small consignments of Channel Island cattle had from time to time been previously shipped to England, it was not until the year 1811 that any systematic efforts were made to introduce the breed into that country. According to C. P. Le Cornu, says the *Live-stock Journal*, the earliest arrivals in England came from the Island of Alderney, a fact which doubtless accounts for the frequent substitution of the term Alderney for the breed now so generally known as the Jersey. George Culley, the eminent agriculturist and authority on cattle, writing in 1807, mentioned the Jersey as a breed only to be met with on the estates of the wealthy, and one which was too delicate and tender ever to be of use to the British farmer. How very sparsely distributed was the breed at the beginning of the nineteenth century, may be inferred from the fact that Michael Fowler, who bought cattle in all parts of the country, had never met with a Jersey until just before he commenced his importations from the Islands, exactly a century ago. Yet to this Mr. Fowler may well be ascribed the honor of introducing and popularizing the breed which at the present time holds so high a position amongst dairy cattle.

On one of his journeys in search of cattle for the dairy, Mr. Fowler passed a man driving a little cow, unlike anything he had seen before, to Barnet Fair. On inquiry, the drover told him that the cow had been sent as a present to his master, who did not like her, and that he was to sell her for £9. Mr. Fowler offered £7 for it, intending to give it as a little present to his wife, whom he had recently married. This offer was declined, and the drover took the cow to the fair, where it became an object of ridicule among the dealers and drovers—so much so that the man, far from getting the £9 demanded, was glad enough to leave the fair and take the cow home again. Oddly enough, Mr. Fowler overtook him returning, and repeated his offer, which the man at once accepted. Mr. Fowler was so surprised by the quantity and quality of the butter produced that he determined to find out whence she came, and to get more of the breed. He discovered that she came from one of the Channel Islands, and he soon went direct to the Islands and established a regular business with this country, and which his sons extended to Belgium, United States, Canada, and various parts of the world. He urged the Jersey farmers to improve their breeding, established a scale of points, and recommended the adoption of agricultural societies and shows like those held in England.

Mr. Fowler often acted as judge, and took prizes, obtaining silver medal at the Highland Society's Show at Glasgow, in 1850, and a gold medal and 900 francs at the Paris Exhibition, 1856, the Emperor of the French purchasing his prize bull and four cows. He sent them in droves of forty or fifty to the principal towns of England, selling the remainder privately and by auction. He left his business to his sons, L. P. and P. H. Fowler. As illustrating the continuity of the business in one family, it may be mentioned that the work of Michael Fowler, after being carried on at Watford by his sons, still flourishes under the direction of P. T. Fowler, his grandson. The well-known firm of Messrs. Fowler and De la Perrelle, at Southampton, represents another branch of the same family, G. H. De la Perrelle being a grandson of Edward Parsons Fowler, who, after helping his father, Michael Fowler, started business on his own account.

### Feeding a Record Maker.

The sensational performance of the Canadian-bred Holstein-Friesian cow, Evergreen March, whose photograph was reproduced in "The Farmer's Advocate" of March 30th, together with notes of her recent phenomenal daily, seven-day and thirty-day records, renders timely and interesting these notes, solicited by "The Farmer's Advocate" from her feeder, Percy Clemons, about how she was cared for prior to and during her official test:

"Evergreen March freshened October 28th, 1909, and gave, from October 28th, 1909, to August 28th, 1910, inclusive, 18,040 pounds milk. Although giving over 40 pounds daily September 15th, 1910, I commenced to dry her then, as she was due to calve December 12th, and I wished to officially test her. I did not succeed in drying her completely until October 1st, so she was dry about ten weeks. From October 1st to November 1st, 1910, she was on good pasture, and had about 10 pounds bran per day, as well as a few mangels. From November 1st to within a few days of calving, she had about 45 pounds silage, 26 pounds mangels, what alfalfa hay she would eat, 10 pounds bran, and 3 pounds oat chop, daily. She was very dull both before and after calving, which occurred December 13th, when she gave birth to a deformed heifer calf. The evening of December 15th she was attacked with milk fever, but recovered rapidly under the "oxygen" treatment, and was on her feet next morning. As her appetite was very capricious

after the attack, she got very little grain for some time, but gradually improved in milk, from 16 pounds on December 16th, to 90 pounds on December 31st, and was able to take more feed as production increased. Her test was below normal from calving, never running above 3.4, whereas in former years it ran from 3.7 to 3.95 per cent. This I attributed to the attack of milk fever. I was doubtful about starting a test for some weeks on account of the low fat content, but, as she continued to increase in milk production, I applied for a tester, who arrived on January 23rd, she being milked out that evening. She was milked at 5.30 and 11.30 a. m., and 5.30 and 11 p. m. Her first day's milk in test was 100.1 pounds; her last day's milk, on February 22nd, was 98 pounds. Her highest milking during 24 hours was on Feb. 12th, 110.8 pounds, and her lowest on January 28th, 94.9 pounds.

"She was fed silage and grain three times daily, at 6 a. m., 12 noon, and 6 p. m., immediately after milking. Her morning and evening feeds each consisted of about 20 pounds silage, 4 pounds bran, 4 pounds oat chop, and from 3 to 3½ pounds oil cake; the noon feed, of about 6 or 7 pounds silage, 2 pounds bran, and 3 pounds oat chop—the grain ration varying from 25 to 28 pounds daily. She had all the mangels she would eat, fed whole, at 1 p. m. and 11 p. m.—about 40 pounds at each feed. Also had alfalfa hay (second crop) before her all the time (she was running in box stall), and water before her all the time; she drank from 220 to 240 pounds water daily. We were handicapped through having a succession of foggy, rainy days, it being a hard task to keep her cool enough. Doors and windows were open, except in the very coldest weather, and temperature kept as low as possible; in fact, on some of the colder days ice would form on the water in her stall. She needed a lower temperature than any other cow I ever tested."

### Another Record-breaking Holstein

The seven and thirty-day world's record for amount of butter produced in official test has recently been broken by Pontiac Clothilde De Kol 2nd, a Holstein-Friesian cow owned by Stevens Brothers Co., of Liverpool, N. Y. In seven days she produced 634.1 pounds milk, 37.21 pounds butter (80 per cent. fat), and in thirty days, 2,588.4 pounds milk, 145.29 pounds butter—a showing that has never been equalled by any cow of any breed. Pontiac Clothilde De Kol 2nd is a regular breeder and a persistent producer. Calving for the first time a few days after she was two years old, she produced 16.85 pounds butter in seven days, and a year later increased this to 22.09 pounds. As a four-year-old she made a great record, 28.72 pounds butter in seven days, and as a five-year-old made 30.27 pounds; while her sensational record of 37.21 pounds was made in her six-year-old form. No special feeding or training before freshening was used to prepare Pontiac Clothilde De Kol 2nd for her record-breaking performance. She was dry between two and three months, ran out to pasture late, and when brought in had a thick coat, almost like fur. After she completed her thirty-day test, she was clipped, in order that the photo would show her milk-vein development, and immediately increased her milk flow. Her best days during the A. R. O. test was 94.7 pounds milk, but she twice since has given over 100 pounds milk in a day. In 95 days, to March 1st, she has produced, in semi-official test, 8,584.3 pounds milk, 435.45 pounds butter—the highest amount ever credited to any cow in the same period of time.

During her test she was kept in a roomy box stall, and fed clean, bright hay, an average of a bushel per day of cut roots (beets and mangels), and from 18 to 23 pounds per day of a grain ration composed of bran, hominy meal, oil meal, distiller's grains, gluten and cottonseed meal.

G. H. TRUCKELL.

### Dairy Record Centres.

A further advance has been made in the cow-testing movement by the organization of "Dairy Record Centres" in several localities. The Recorder, as the man in charge of each center will be designated, will devote his whole time to a limited territory covering something like a radius of six or eight miles. He will be expected to secure a complete census of every herd, and to encourage as many as possible of the farmers in his district to keep accurate records of the individual cows. It is the intention to follow up this line of work for several years in each locality. Dairy Record Centres have already been established in Oxford County, Ontario; St. Hyacinthe County, Quebec; and at Kensington, in Prince Edward Island. Others are likely to be started in the Eastern Townships and in Central and Eastern Ontario.—J. A. Riddick, in *Census and Statistics Monthly*.

### O. A. C. Dairy School Results.

The O. A. C. Dairy School term closed on Friday, March 24th. Thirty-two students wrote on the final examinations—twenty-six in the Factory Class, and six in the Farm Dairy Class. The students comprised representatives from Nova Scotia, in the East, to British Columbia, in the West.

So far as we know, all the students have positions awaiting them, and we have applications for a dozen or more, which we cannot fill. There appears to be a great demand, especially for buttermakers. There is room for a number of bright young men who can qualify as buttermakers and creamery managers. These positions are worth \$60 to \$75 per month, or more.

Quite a number of the class left at once to take charge of official cow-testing until their factories open. There is a large demand for competent men to test cows, though the work is more or less irregular.

Well-trained, practical and scientific dairymen are in demand, and will continue to be in demand, as we are on the eve of marked changes and phenomenal growth in the dairy business of Canada.

The following is the proficiency list for the class of 1911, the maximum mark being 1,200:

1, R. J. Skelton, 1,022; 2, James Reid, 1,012; 3, Robt. M. Halliday, 1,000; 4, W. Jno. Bird, 914; 5, G. B. Burton, 892; 6, Arthman N. Capron, 889; 7, Wm. F. Shepherd, 843; 8, Leslie Silver, 818; 9, Chas. Goggin, 814; 10, Samuel Hill, 807; 11, F. R. McCrae, 796; \*12, Jno. P. Limare, 766; 13, Norval Bell, 762; 14, Jno. Wilson, 744; 15, Jno. Jos. Kennv, 742; 16, Orville Hakkirk, 735; 17, Wilfrid James Arscot, 733; \*18, Albert James Elliott and Samuel E. Hunter, 726; 20, J. M. Gordon, 716; 21, Harry Barnett, 694; \*22, Martin Millard, 678; 23, J. Vance Canling, 673; \*24, Thos. Ed. Scott, 661; \*25, Wm. Floyd Parker, 644; \*\* \*26, Alfred C. Lister, 542.

\*Failed in Bacteriology; will require to take supplemental examination.

\*\*Failed in Practical Cheese; will require to take supplemental examination.

\*\*\*Failed in Written Cheese; will require to take supplemental examination.

Farm Dairy Class; maximum mark, 940:

1, Miss Grace Robertson, 1,015 (two optional subjects written, making maximum mark 1,140); 2, Ernest A. McCook, 746; 3, Charles Woods, 721; 4, Leslie Leckie, 711; 5, Jas. Lammiman, 679; 6, S. Inaba, 583. H. H. DEAN.

## APIARY.

### Beekeeping.

By Morley Pettit, Provincial Apiarist, O. A. C., Guelph.

I suppose no useful animal or insect is so little understood as the honeybee. Aside from the fact that bees sting, make honey and swarm, popular knowledge is vague and mythical. At the same time, everyone is interested in a general sort of way in bees.

There is something very fascinating about the inhabitants of a hive. They are so active and alert, as they come and go. Then, there is the spice of danger, which gives zest to a desire for closer acquaintance. Being initiated to the wonders of the interior of the hive does not lessen the interest. Indeed, the mysteries increase with experience, and the usual result of studying bees is a case of what the fraternity calls "bee-fever." The duties of the apiary are generally pleasant, always in the "great out-of-doors," except when the weather is bad. The work is mostly clean, and seldom heavy. The product is nature's purest sweet.

Bees are of value as fertilizers of fruit and seed blossoms, as well as for the production of honey. As to the income one may expect from honey direct, we may say, in a general way, that from 50 to 75 per cent. on the capital investment is the usual return for careful beekeeping. It is a common occurrence for a beekeeper's income to be \$800 to \$1,000 per annum. Numbers of men who have the elements of success in their make-up are doing better than that. Hundreds of others who are careless or otherwise occupied, or not adapted to beekeeping, are making little or nothing.

The market for honey is only in its infancy. This daintiest of foods is practically unknown in most Canadian homes. It is almost never advertised. At present it does not need to be. It is picked up so rapidly at good paying prices that the market is bare before new honey comes. But if Ontario farmers were keeping enough bees to save the honey that now goes to waste, a bit of judicious advertising would so increase the consumption that the price would not need to be lowered, and the market would be even more uniformly healthy than at present.

Many people are prevented from keeping bees simply because they think they have not time to fuss with them, or else they do not understand their management. It is principally for the bene-



fit of such that this series of articles is being prepared for "The Farmer's Advocate." There is, of course, a never-ending mystery about the deeper things of bee-nature, but the fundamentals are easily mastered.

**POULTRY.**

**O. A. C. Outdoor Hopper.**

Keen interest has been aroused by the illustrated description of Prof. W. R. Graham's model poultry house, published in "The Farmer's Advocate" of March 16th. It has brought forth a request for a similar diagram of his outdoor feed hopper. This has been supplied by our O. A. C. correspondent, whose drawings of the side and end views are reproduced herewith. Following are specifications:

It is made of 3/4-inch lumber, and the slats over the front are 3/8-inch by 1 1/2-inch. Material required to build:

- 2 pieces 3/4 in. x 12 in. x 1 ft. 8 in.—ends.
- 1 piece 3/4 in. x 12 in. x 2 ft. 10 1/2 in.—bottom.
- 2 pieces 3/4 in. x 3 1/2 in. x 3 ft.—bottom sides.
- 2 pieces 3/4 in. x 2 1/2 in. x 3 ft.—top sides.
- 18 pieces 3/4 in. x 1 1/2 in. x 10 in.—side strips.
- 1 piece 1/2 in. x 16 in. x 2 ft. 10 1/2 in.—center div.
- 2 pieces 1/2 in. x 10 in. x 2 ft. 10 1/2 in.—side divs.
- 2 pieces 1/2 in. x 12 in. x 3 ft. 2 1/2 in.—cover.
- 2 pieces 3/4 in. x 6 1/2 in. x 1 ft. 8 in.—cover ends.

**Sulphur for Feather-pulling.**

Editor "The Farmer's Advocate":

In reading "The Farmer's Advocate" this spring, I have noticed several communications from correspondents complaining of hens feather eating. I have had this trouble for several winters, and have tried different remedies. In February and March the hens would start picking the feathers off one another in the region of the oil-bottle and the cushion. When the feathers were off, they would sometimes sample the hen herself. On several occasions I have found the mangled remains of hens killed in this manner. I tried feeding meat, but it seemed to only aggravate the trouble.

This spring my hens started in to eat feathers again, so I saw plainly that something had to be done, and, by experimenting, I found that milk, given as a drink, went a long way towards preventing the trouble; but, where the habit had obtained a hold, it would not cure it. The only sure and effective cure that I have found for feather-eating is sulphur. Feed it in mash or shake a handful on the drinking trough. Feed the sulphur regularly, and you will have no further trouble with feather-eating fowls. The sulphur, if fed in very heavy doses, is liable to cause a looseness in the bowels, but it will not be serious; in fact, I have found the feeding of sulphur to act as a stimulant to egg production.

My hens have always before them a box filled with ashes, but there are always a few in the flock that will not dust themselves; consequently, these few are liable to have lice. Now, since feeding sulphur regularly, I have been unable to find any trace of vermin in the flock. This result only comes after feeding for some considerable time, but I strongly suspect that it is due to the feeding of sulphur. Hen feathers contain considerable sulphur, or material very similar to it. Hence, it seems to me the sulphur satisfies the craving of the appetite, and causes the trouble to cease.

In very bad cases of feather-eating, where the skin has been broken, a very small amount of pine tar applied to the wounds will keep the other hens from picking the wounds and perhaps killing the victim. Having tried these remedies myself, I can vouch for their value.

Middlesex Co., Ont. W. E. WILLIAMS.

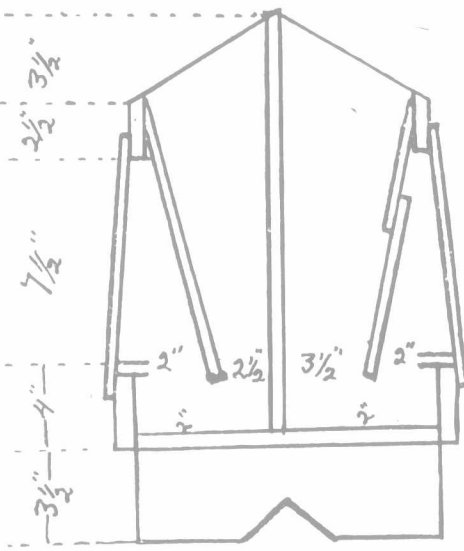
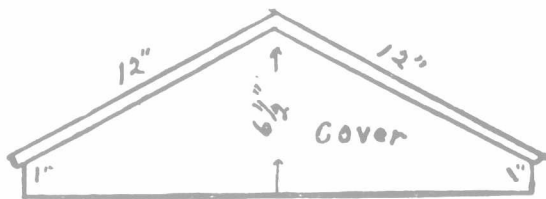
**Convenient Hatching Arrangement.**

Editor "The Farmer's Advocate":

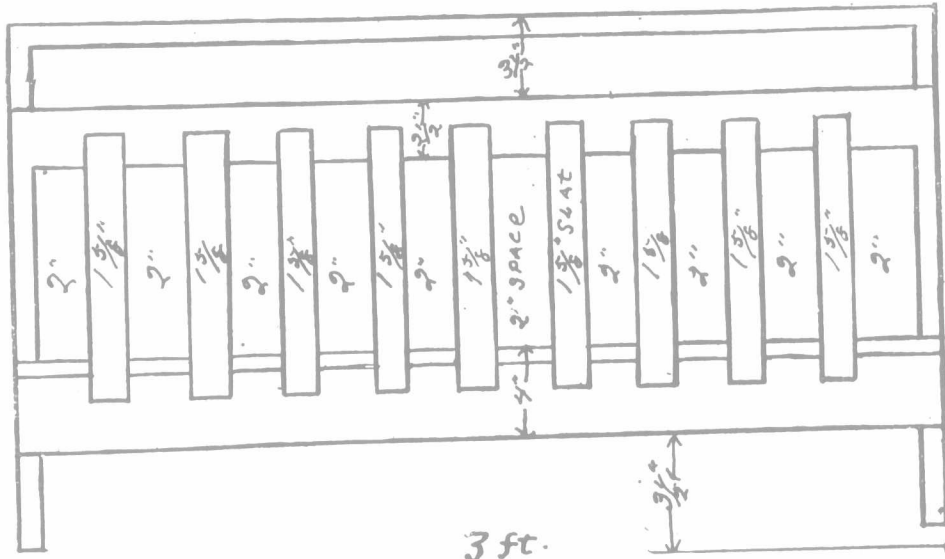
I have had splendid success during the past winter with my flock of Buff Orpingtons. Egg production has been good. I have found rolled oats a very valuable and cheap food. Feed in a hopper, and keep always before the fowl. I have a system of incubation with hens that has given me splendid success, with a minimum of labor. I have constructed a box fourteen feet long, two feet high, and four feet from front to back. It is covered with chicken netting, except over the nest, where a door shuts down. Another door lifts up in front to allow of the admission of food and water. The box is divided by partitions into ten cells. Each partition has a hole cut in it at the floor large enough to admit a five-cent butter crock. These crocks contain feed and water, alternately, and each crock supplies two cells. The floor is covered with sand or gravel. The nests are situated at the rear of the cell. When a hen becomes broody, she is taken from the henhouse and placed in a cell, one or two eggs being placed

in the nest. After a day or so, if she sits quietly, the full clutch may be given. This "incubator" may be placed in the loft of the implement house, in the barn, or any quiet place. The hens require very little attention, as they will get off the nest and eat and drink when they require it, and much bother and annoyance is prevented. I have been using this hatching scheme for several years, and have raised as many as 300 chickens in a season.

W. E. W.  
Middlesex Co., Ont.



End View Outdoor Feed Hopper.



Side View Outdoor Feed Hopper.

**GARDEN & ORCHARD.**

**Irrigation of Strawberries.**

Owing to the dry spells which we often have during the strawberry season, our strawberries have, this last two years, suffered greatly from drouth. At present, I have a rock-well in the center of my patch, the rows extending about twenty rods in two directions. Do you think this water would be too cold to apply to the plants? And, if not, what do you consider the most economical way to apply it?

I might say that I have on other occasions made inquiries through your Question and Answer columns, and would like to express my most hearty thanks for the courtesy and promptness of your replies.

Ans.—There is no question, I think, concerning the advisability of irrigating strawberries in dry seasons. We have practiced artificial irrigation in a small way for the past few seasons, with excellent results. We have, of course, a good water supply under pressure, and consequently have made use of the overhead sprinkling system, although the usual method is by means of furrows. It is not likely that the water from your correspondent's well would be too cold, though, as a safeguard, it would be well to apply

it only in the forenoon of bright, sunny days. Your correspondent does not state the nature of his soil, and this, of course, is an important point in irrigation. In heavy soils, furrows can be three hundred or four hundred feet long, or even longer. In light soils, two hundred feet is probably the limit in length. Furrows could also be placed closer together in sandy soils, because water tends to go down, rather than spread out. If the well is so situated as to give a flow in each direction, it will be easily possible to conduct the water to any desired part of the plantation by means of a heavy cotton or canvas cut to three or four inches in diameter. This should be dipped in linseed oil to make it waterproof.

Ontario Agr. College. J. W. CROW.

**The Onion Maggot Defeated.**

The New Jersey Agricultural Experiment Station issued a bulletin four years ago in which the result of numerous experiments against cabbage and onion maggots are given. The injury caused by these pests is at times very serious, sometimes one-third to one-half the crop being destroyed. The experiments were conducted under field conditions, and in different sections.

As a preventive measure against the cabbage maggot, nothing better than disks or cards of tarred paper has yet been tried. These are about 2 1/2 to 3 inches in diameter, having in the center a star-shaped cut, with a slit from it to the edge of disk. The paper used is one-ply tarred felt.

The method of applying the card is to separate the two edges of the slit running to the center, slip the card around the plant when it is set, and see that it fits snugly about the stem and lies flat on the ground, so that the fly cannot get under it. She will then be forced to lay her eggs, if at all, on the card or on the dirt beyond it. If laid beyond the card, the maggots, when they hatch, will be unable to reach the plant; and, if laid on the card, they will almost inevitably dry out before the larvae develop.

The late Dr. Fletcher, of Ottawa, recommended for onion maggots the application of carbolic-acid emulsion, and this is given favorable notice in the bulletin. It is made as follows: Dissolve one pound of soap in one gallon of boiling water; to this add one pint of crude carbolic acid, and

churn thoroughly with a pump until a good creamy emulsion is obtained. This emulsion, properly made, will remain stable for several days. For use, dilute one part of the emulsion with thirty parts of water, and apply thoroughly around the plants. The work, to be effective, must be begun early, and thoroughly done. The first two applications should be but four or five days apart, and later once a week for a month. But the material which is recommended as the most effective of any tested was a mixture

of carbolic acid and lime. To make this, slake the lime to a thin cream, use three pints to a gallon of water, and to this add one tablespoonful of crude carbolic acid. This can be applied with a sprinkling can or a spray nozzle, and an application should be made every week. In the experiment, the patch of onions was situated near a previously infested plot. The application was very thorough, so that the material formed a crust on the ground, and the odor of the acid was perceptible for several days. The material seemed to act as a repellent, because even the untreated check rows showed a very slight infestation, while the treated plants suffered scarcely at all. The plants of surrounding neighbors suffered to a considerable extent.

The young plants seem to have no difficulty in growing through the lime coating.

The growth of teaching agriculture in the schools of Ohio has been remarkable. In a leaflet from G. S. Bricker, Assistant in Agricultural Education, Ohio University, it appears that in the school year, 1908-9, 73 High Schools offered agriculture as a special subject, but now two hundred and sixty-seven are offering such a course. While in some cases the teaching is elementary in character, much of it is quite as well done as in any other subject, and there is steady improvement. In the new centralized school, at Boardman, Mahoning Co., the site covers five acres, one acre being for demonstration gardening, and a greenhouse.



## Spray Calendar.

BY L. CAESAR, O. A. C., GUELPH. REVISED TO DATE FOR "THE FARMER'S ADVOCATE."

PLANT.	1ST APPLICATION.	2ND APPLICATION.	3RD APPLICATION.	REMARKS.
<b>APPLE.</b> Scab or black spot, canker, leaf spot, codling moth and other biting insects, scale insects, blister mite and aphids.	Shortly before the buds burst. Use A or B1.	Just before the blossoms open. Use B2 or D with a poison.	Immediately after the blossoms have all or nearly all fallen, and before the calyxes close. Use B2 or D with a poison. This is the application for codling moth.	Cut out, disinfect and paint cankered areas on trunks and large branches. In moist climates, or if the weather is wet or foggy, or if codling moth is very troublesome, give a 4th application with B2 or D, and a poison about two weeks after 3rd. For aphids, see if they are present just before leaf buds burst; if so, spray at once with kerosene emulsion or whale-oil soap.
<b>PEAR.</b> Scab or cracking, blight, codling moth, other biting insects, scale insects, blister mite, psylla and slug.	Shortly before the buds burst. Use A or B1.	Just before the blossoms open. Use B2 or D with a poison.	Just after blossoms have all fallen. Use B2 or D with a poison.	Cut out and burn blight as soon as seen, cutting always one foot or more below ripens. Destroy mummied fruit in autumn. Remove at once and burn any tree attacked by yellows or little peach, and also all suspected trees. Dig out borers at base of tree with knife in May and again in October. For shot-hole borer cut down and burn before April all dead or dying trees or branches, and leave no brush near orchard.
<b>PLUM AND CHERRY.</b> Black-knot, brown rot, leaf blight or shot-hole fungus, curculio, slug and aphids.	Just before buds burst. Use A or B1.	Just after fruit is set. Use B2 or D with a poison.	About 2 weeks later. Use B2 or D with a poison.	Watch for black-knot and whenever seen cut out well below diseased area and burn. If leaf blight is troublesome, give a 4th application with B2 or D about two weeks after the 3rd, and repeat as soon as fruit of cherry is picked. Destroy mummied plums in autumn. Look for aphids just before buds burst, and if present spray at once with kerosene emulsion or whale-oil soap. Treat slug as on pear. B2 or D should be used at about $\frac{1}{2}$ ordinary strength, as foliage is more tender than that of apple and pear.
<b>PEACH.</b> Leaf-curl, scab or black spot, yellows, little peach, curculio, borer, San Jose scale, shot-hole borer.	Before buds begin to swell. (All must be done before any sign of bursting of buds.) Use A or B1. This is the application for leaf-curl and scale.	Just after fruit is set. Use arsenate of lead alone with water for curculio if this insect is troublesome.	About 1 month after fruit is set. Use C. May omit if there is no trouble from brown rot.	If brown rot is likely to be troublesome use C again about one month before fruit ripens. Destroy mummied fruit in autumn. Remove at once and burn any tree attacked by yellows or little peach, and also all suspected trees. Dig out borers at base of tree with knife in May and again in October. For shot-hole borer cut down and burn before April all dead or dying trees or branches, and leave no brush near orchard.
<b>GRAPES.</b> Black rot, powdery mildew, downy mildew, anthracnose, flea beetle, thrip or leaf-hopper.	When 3rd leaf is appearing. Use D.	Just before the blossoms open. Use D.	Just after fruit sets. Use D.	Spray again whenever wet weather threatens. It should always be done BEFORE, not after rain. At first sign of powdery mildew dust with sulphur. For flea beetles use poison whenever they appear. For leaf-hoppers or "thrips" use kerosene emulsion or whale-oil soap early in July to destroy nymphs. (Clean cultivation is very important, and destruction of all old mummied grapes and prunings.)
<b>CURRENT AND GOOSEBERRY.</b> Mildew, leaf-spot, currant worm, aphids.	Shortly before buds burst. Use A or B1.	Just before blossoms appear. Use B2 with poison.	Just after fruit is formed. Use B2 with poison.	For worms when fruit is ripening, use hellebore. Look for aphids just before buds burst; if present, spray with kerosene emulsion or whale-oil soap. Of little use to spray for these after leaves curl.
<b>RASPBERRY AND BLACKBERRY.</b> Anthracnose, red rust, crown gall.	Before growth begins. Use D.	When shoots are 6 or 8 inches high. Use D and add poison if caterpillars are present.		If anthracnose is very severe, set out new plantation of healthy shoots. If disease begins cut out old canes as soon as fruit is picked, also badly attacked new ones, and burn. For red rust remove and burn plants at once. No other remedy. For crown gall set out plants in fresh soil, rejecting any plant with a gall on root or crown.
<b>STRAWBERRY.</b> Leaf spot, white grub.	For leaf spot set out only healthy plants with no sign of disease. First season spray with D before blossoms open, and keep plants covered with mixture throughout the season. Second year spray before blossoming with D, and again soon after picking; or mow and burn over after picking. For white grubs dig out as soon as injury is noticed. Do not plant on land broken up from old meadow or pasture for at least three years after breaking.			
<b>BEAN.</b> Anthracnose and bacterial-osis.	Get seed from pods showing no signs of disease. Do not work among the plants if they are wet with rain or dew. Spraying scarcely pays as a rule.			
<b>CABBAGE, TURNIP.</b> Flea beetles, caterpillars, root maggots, aphids.	For flea beetle on turnip, sow after June 21st, or dust plants as soon as they appear above ground with Paris green, or spray with Bordeaux and a poison. Repeat in three days. For caterpillars dust with Paris green until heads begin to form on cabbage and cauliflower, then spray with pyrethrum, 1 ounce to 2 gallons water. For root maggots use medium thick tarred felt-paper discs, putting on as soon as plants are set out, or use hellebore once a week up to July 1st, or set out plants after July 1st. For aphids use kerosene emulsion as soon as they appear.			
<b>POTATO.</b> Tip burn, early blight, late blight, scab, Colorado beetle, flea beetle.	Keep foliage covered with D from time plants are about 5 inches high. Take special precautions to see this is well done if weather is at all damp after about 15th July, as late blight begins about this time. Add a poison to each application when necessary. For scab, soak tubers before cutting 2 hours in formaldehyde solution, 1 pint of formaldehyde to 30 gallons of water. Spread out on grass to dry. Wash all boxes, bags or other vessels to be used in same liquid. Plant none but perfectly healthy tubers.			
<b>TOMATO.</b> Leaf blight, black rot, flea beetle.	Spray plants in seed-bed with D. Keep foliage in field covered with D until danger of staining fruit. Add a poison if necessary for flea beetles.			
<b>ASPARAGUS.</b> Rust, beetles.	For rust, let no plants, not even wild ones, mature during cutting season. Late in fall, when growth is about over, cut and burn old plants. For beetles, let poultry run in the plantation. After cutting season is over spray with arsenate of lead; repeat in two weeks. May add sticker and a little lime.			

NOTE.—A=Home-boiled Lime-sulphur.—20 lbs. lime, 15 lbs. sulphur, 40 gallons water.  
B1=Commercial Lime-sulphur.—Spring strength, about 1 gallon to 9 of water.  
B2=Commercial Lime-sulphur.—Summer strength, for foliage about 1 gallon to 35 or 40 of water.  
C=Self-boiled Lime-sulphur.—8 lbs. lime, 8 lbs. sulphur, 40 gallons water.  
D=Bordeaux Mixture.—4, 4, 40, formula.

NOTE 2.—Homemade concentrated lime-sulphur may be substituted for commercial. For strength see formula below.

## Formulæ for Insecticides.

## I. POISONS (for biting insects only):

1. ARSENATE OF LEAD.—2 lbs. to 40 gals. liquid spray; 3 lbs. for potato beetles.
2. PARIS GREEN.—(a)  $\frac{1}{2}$  to 1 lb. to 40 gals.; 1 lb. for potato beetles. If used with water alone, add 1 or 2 lbs. fresh lime.  
(b) 1 lb. mixed with 50 lbs. land plaster, air-slaked lime or some similar substance, for dusting on plants.  
(c) Poisoned Bran.—Mix 1 lb. Paris green with 50 lbs. bran moistened with sweetened water. Scatter in evening on soil by plants for cutworms.
3. ARSENITE OF LIME.—Boil 1 lb. white arsenic and 1 lb. sal soda (crystals), with stirring, for about 15 minutes in 1 gallon water till all the arsenic is dissolved, then add 2 lbs. stone lime dissolved in boiling liquid. Add water to make up for what has evaporated. One quart of this when well stirred is sufficient for 40 gals. spray liquid. Arsenite of lime can be made in large quantities and stored. Label barrel "Poison," and be careful to keep white arsenic itself labelled "Poison." Keep barrel covered to prevent evaporation. Stir well before using.  
N.B.—With Bordeaux, 1, 2 or 3 may be used; with commercial lime-sulphur, 1; the others cause burning.
4. WHITE HELLEBORE.—1 oz. to 2 gals. water, or dust undiluted over the plants. For root maggot, dust close to plants, or pour around roots.

## II. CONTACT POISONS (chiefly for sucking insects):

1. KEROSENE EMULSION.—  
Kerosene (coal oil).....2 gals.  
Water.....1 gal.  
Whale-oil soap..... $\frac{1}{2}$  lb.

2. WHALE-OIL SOAP.—For brown or black aphids, 1 lb. in 4 gals. For green aphids, thrip and leaf-hopper, 1 lb. in 6 gals.
3. TOBACCO WATER.—Boil 1 lb. refuse tobacco in 2 gals. water for 1 hour; make up for water that evaporates.
4. PYRETHRUM (or Insect Powder):  
Pyrethrum powder.....1 oz.  
Water.....2 to 3 gals.  
Dry Mixture.—Mix thoroughly 1 part by weight of pyrethrum with 4 of cheap flour, and keep in air-tight vessel for 24 hours before dusting over plants.  
Note.—Pyrethrum is useless if left exposed to the air.
5. LIME-SULPHUR WASH. (See under fungicides.)

## Formulæ for Fungicides.

## I. BORDEAUX MIXTURE:

1. BORDEAUX MIXTURE:  
Copper sulphate (bluestone)..... 4 lbs.  
Unslaked lime..... 4 lbs.  
Water..... 40 gals.  
Dissolve the copper sulphate in a wooden or brass vessel with hot water, pour into a barrel and add cold water to make 20 gals; slake the lime, preferably with hot water, add cold water to make 20 gallons. Stir both barrels well, and pour lime into the copper sulphate barrel. (Never mix concentrated milk of lime and copper sulphate solutions.)  
A stock solution of each may be made and kept indefinitely if not mixed: Dissolve 40 lbs. copper sulphate in 40 gals. water by suspending just below the surface of the

water in a coarse sack. Each gallon of the liquid will now contain 1 lb. copper sulphate. Slake any desired quantity of lime and put into a box or barrel in shaded place, or sunk in the ground. Keep covered with small amount of water to exclude the air. Calculate how much is required for 4 lbs. lime if well stirred.  
To test Bordeaux mixture, let a drop of ferrocyanide of potassium solution fall into a little of the mixture when ready. If this causes it to turn reddish brown, add more lime until no change takes place.

## II. LIME-SULPHUR WASH:

1. HOME-BOILED (for use on dormant wood only):  
Fresh stone lime.....20 lbs.  
Sulphur (Rour or flowers).....15 lbs.  
Water.....40 gals.  
Slake 20 lbs. of lime in about 15 gals. boiling water in a kettle or other boiling outfit. While slaking add the 15 lbs. sulphur made into a paste by the addition of a little water. Boil vigorously, with stirring, for 1 hour. Dilute to 40 gals. with cold or hot water. Strain and apply at once.
2. COMMERCIAL.—This is for use either on dormant wood or on foliage. For the former use at the strength of about 1 gal. to 9 gals. of water; for the latter 1 gal. to 35 or 40 gals. of water. Dilute to 40 or 50 gals. for cherry.
3. HOMEMADE CONCENTRATED LIME-SULPHUR.—This may be used as a substitute for commercial lime-sulphur, but is only about 2 as strong as a rule. For preparation, see issue of March 9th, 1911.
4. SELF-BOILED (chiefly for use on peach foliage):  
Fresh stone lime..... 8 lbs.  
Sulphur (Rour or flowers)..... 8 lbs.  
Water..... 40 gals.

Best prepared in quantities of 24 lbs. at a time to get sufficient heat. Place 24 lbs. lime in a half barrel, add enough cold water to start it slaking well and to keep the sulphur off the bottom. Dust the 24 lbs. sulphur over the lime, having a screen to break lumps; then add whatever further amount of water is necessary to complete the slaking. Stir well with a hoe to prevent the lime caking on the bottom. As soon as the slaking is over, add enough cold water to cool the whole mass and prevent further combination. Strain into spray tank. Keep well agitated while spraying.

## III.—DISINFECTANTS (for pruning tools and for wounds on trees):

One pt. formaldehyde diluted to 2 gals. with water; or corrosive sublimate, 1 part to 1,000 by weight = 1 tablet to 1 pt. of water. Apply with a swab on end of a stick.

**CAUTION.**—Corrosive sublimate is a deadly poison to man or beast if taken internally. It will also corrode iron or metal, so use in glass or wooden vessel. Formaldehyde is not poisonous.

## STICKER.

Resin..... 2 lbs.  
Sal soda (crystals)..... 1 lb.  
Water..... 1 gal.

Boil together till a clear brown color, which takes from 1 to 1½ hours. Cook in iron kettle in an open place. Add the above to 40 gals. Bordeaux for use on smooth foliage like onions, cabbage or asparagus. If used with arsenate of lead, Paris green, or arsenite of lime, add 1 or 2 lbs. of fresh lime to every 40 gallons of spray.



APRIL 6, 1911

Asparagus-growing.

The principal reason why so little asparagus is grown is that a period of three years must elapse before a crop is harvested. During this period, good cultivation, to prevent the growth of weeds and develop strong plants, is necessary.

The very best strain of plants available should be used. The variety French Argenteuil is one of the best. If you grow your own plants, put the seed in rows three feet apart, about two inches apart in the rows, on a very rich piece of ground, forcing the plants as rapidly as possible.

The best soil for asparagus is a good rich, deep loam, with not too compact a subsoil. The drainage should be such as to remove surplus water to a depth of 2 1/2 feet. Asparagus can be grown on light, sandy soil, or on any soil running from light to heavy loam.

The plants are set in these furrows as early in the spring as possible, about 18 inches apart. It may be necessary to remove some of the loose soil with the shovel to get the plants set even depth and spread out in natural position.

The application of manure should be made annually. The best time to apply it is in the spring, or directly after the cutting is finished. The ground is usually manured heavily after the last cut, and plowed under.

It is advisable to plow lightly over the plants toward the row in the fall, and in the spring this is worked down with the disk harrow, cutting all the weeds up fine to a depth of 3 or 4 inches all over the surface, regardless of rows, and levelled

off with the smoothing harrow, after which frequent cultivation should be given.

Cutting is commenced the third year, and may be continued for one month, and after the third year may continue until the middle of July. During the first two years, plants that seed should be carefully gathered to prevent seeding, and any plants that do start up from this source should be promptly hoed out.

The plants from an old bed cannot be taken up and reset to advantage. Always start with strong, well-grown young plants. During July and August the weather is usually dry, and this is the time the plants should have abundant moisture; therefore, see that the ground is well cultivated, and no weeds allowed to grow, to prevent the plants from doing their best.

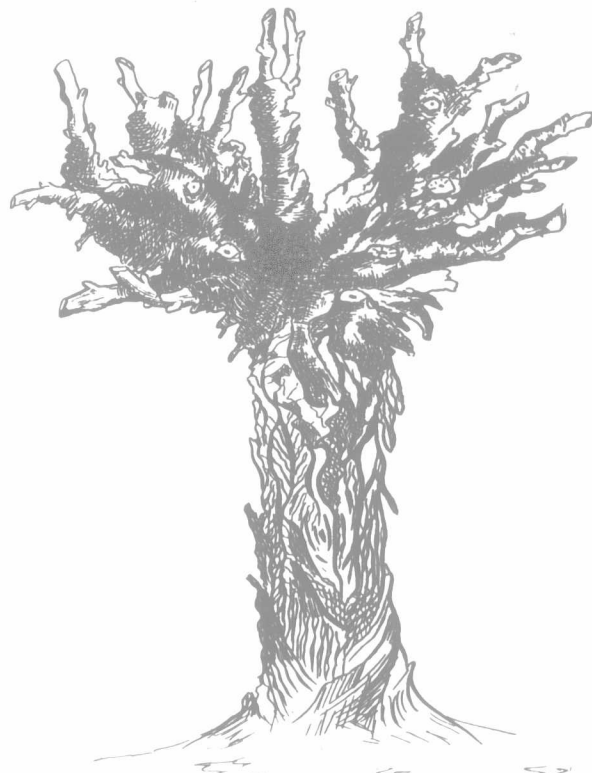
Asparagus is put up in bunches of about two pounds in a bunching machine made for the purpose, which can be got from almost any seedsmen. The bunches are tied with raffia.

After the asparagus is bunched, it should be put with the butts in water in an ice-cold store-room for 10 or 12 hours, after which it is shipped in tight crates to the market.

One-year-old plants can be secured at about \$5 per 1,000. It requires about 5,000 plants per acre if they are spaced 18 inches by 6 feet apart. It costs approximately \$100 per acre per year to grow and harvest asparagus, made up as follows: Fertilizing material, \$40; labor of cultivating and hoeing, \$20; cutting and bunching, \$40.

Pruning the Vinifera Vine.

The kind of grapes that are grown in Ontario and throughout most of the United States are known as American grapes, and are a distinct species from the grape of the Old World, which is called the European grape (Vitis vinifera) or the Vinifera grape.



Mature Vine of Proper Shape.

with the Vinifera grapevine. In this species, the portion of the cane between buds is but a shell filled with soft pith, and cuts have to be made at the nodes (slight swellings where buds are produced), which are solid throughout, or the pith will shrink away and leave a hollow, in which the rain will collect and spoil the cane.

The California grape-grower does not bother with posts and wires, or trellises of any kind. With him, the vine must be self-supporting. What is called short pruning is practiced in 90 per cent. of the vineyards of California, and is the simplest and least expensive manner of pruning the vine. It is, however, suited only to vines of small growth, which produce fruitful shoots from the lowest buds, and of which the bunches are

large enough to admit of a full crop from the small number of buds which are left by this method. Our readers will be interested in the cut, showing, better than words can do, the style of pruning adopted.

THE FARM BULLETIN.

Farming Better Than Railroading.

Editor "The Farmer's Advocate":

In looking over "The Farmer's Advocate" of March 16th, I noticed an article headed, "The Boy on the Farm; Farm vs. Railroad Life," written by "Farmer's Son." Now, I have never written anything for the press before, but I have too much love for the farm to listen quietly while someone places farm life on such a low level as that.

As I don't know much about railroad life, I will not try to argue the matter, but will just give a little of my experience as a farmer. My father was a struggling farmer, with a large family, and, as I was the oldest of six boys, I had a good chance to learn how to work. In the fall of 1902, just before I was twenty-one year of age, there happened to be a farm of 150 acres to rent, about 100 acres of which was tillable land. With my father's consent, I rented it, and began farming for myself.

On January 1st, 1911, after eight years of farming, I took stock of our possessions. In doing this, I put the farm at about what it has cost us, while the live stock, machinery, etc., were placed at what they would be likely to bring at an auction sale. I found that the value of our property amounted to \$6,481.50, and our liabilities were \$769.00, leaving a balance of \$5,712.50.

Now, at the age of twenty-nine, I find myself with a good comfortable home; also a wife and two sturdy boys, and a small debt, over which we don't lose any sleep. During this time we have had a splendid living, and, although we have worked hard, we have also had our times of recreation. Quite often my wife and I get away for a day or two, and occasionally for a week. We have paid our hired help the highest wages going, and haven't been niggardly in any way.

A schoolmate of mine started working for the C. P. R. as office boy when quite young. He was smart and industrious, and earned promotion quickly. Last summer, when he took sick, he was drawing \$125 per month, and yet he hadn't saved any money. He was a sober fellow, but the railroad man has plenty of ready money, and many ways of spending it. The young farmer has his mortgage to pay off and his farm to improve; and, I fancy, when old age comes on, will be more able to retire from active life than his railroad cousin.

The Farm Closet, Again.

Editor "The Farmer's Advocate":

It is always a source of pleasure to me to get "The Farmer's Advocate" each week, but I must congratulate you on the number issued the 16th inst. It is full of instructive and interesting articles, particularly those by Prof. L. S. Clinck and J. H. Grisdale, which ought to be read by every farmer in the Dominion.

"Onlooker's" letter appeals to me as extremely well timed and very necessary (notwithstanding the subject has to be dealt with delicately), as the conditions that prevail on the majority of farms can only be characterized as "disgusting," when a very little labor and small financial outlay would completely alter this state of things. It may be of interest to some to know how we overcame the difficulty. I covered the outside of closet with tar paper and laths, procured a double-hinged seat, with lid, enlarged the opening of seat board so that a large enamelled pail could be lowered through (bought at a bargain sale four years ago for 39 cents) a piece of galvanized sheet iron nailed on front of seat, and bent out to carry the urine into the pail.

"SANITAS."

Joliette Co., Que.



## The Sayings and Doings of "Donald Ban."

By Peter McArthur.

"That's all good, John," said Donald Ban, vigorously. "Every word you have been saying is good. I am glad that the things they taught you in college are things you can make use of on the farm."

John had just been explaining his plan of campaign for the year's work. He had it all mapped out, from getting the land ready for the crops, to putting away the fodder for next winter.

"Of course, you will have to use your judgment about a lot of things as the work goes on, for things never happen in Nature according to rules. A spell of wet weather or a spell of dry weather may upset your plans; but when you know what you want to do, you can do it somehow."

"The weather has nothing to do with having good clean seed."

"That's true. They didn't teach you a better thing than that in college. There are too many weeds in the country, and I guess they came mostly through dirty seed."

"Oh, I didn't learn that in college, though they did insist on its importance."

"No?"

"I learned that the year you bought your seed oats from Jim McKeracher. For three years afterwards I had to pull the wild mustard out of that field, and I made up my mind then that if I ever got started farming I would have clean seed."

"Very good, very good! Learn from my mistakes, as well as from your books, and there will be only a few things that you won't know before you are done," said Donald Ban, testily.

"I didn't mean any disrespect," said his son, hastily, "but you tease me so much about college ways and book-farming that I can't help having a fling once in a while."

"I know, but if I didn't think it was best for you to go to college I would never have sent you. I made plenty of mistakes in my time, but, you know, a college professor once said, 'We can't always be right, not even the youngest of us.'"

After this shot, Donald Ban paused for a while to regain his good-humor, and then went on.

"After all, the spring is the time for making good resolutions. It is the real first of the year, when everything begins on the farm. You can make up your mind what you should do, and start right in to do it. I am glad that in your plans for the work you didn't count on my help, though I'll be glad to do what I can when there is a rush on. I have made my plans for the year, too, but they need not interfere with yours. The work that you have laid out is work that you can take care of yourself, with change-work now and then with the neighbors. I can see now that it is waste of time to put the crops in unless they are put in right, with plenty of manure and plenty of work. I guess the man was right who said, 'You should never borrow money unless to buy manure.' And there is a lot of sense in the saying, 'Feed your land if you want it to feed you.' It didn't matter so much when I was young, for the new land was rich, anyway. But we always knew that drainage counted, though we didn't always live up to what we knew. I remember they used to say of some farmers that 'they put in their seed and trusted to Providence, but if they drained their land they would have had crops.' The time has passed when a man could 'tickle the land and it would laugh with the harvest.' Farming means well-planned work now, and a man must go at it like a general going into battle. I thought at first that testing the milk and keeping a record of the cows was just a lot of college foolishness, but now I see that it is right. It is just as wasteful to feed a cow that will not give plenty of the richest milk as it is to have your grain threshed with a machine that will put half of it in the straw stack. You are doing all right, John; and, with your manuring and draining and rotations of crops, you will soon have the farm better than it was when we cleared off the woods and started to rob it of its richness."

"I have laid my plans for the year, too, but they are not altogether for farming. I have done my share of farming, such as it was, and now I am going to try my hand at living. You go on and make the farm pay. I am going to try to make it better worth living on. I am going to make a garden, plant trees and vines, and try to get a little of the growth and gladness that is in the world into my own heart. I am going to have a professor to teach me, too, and whenever you have time to spare you may come and learn something worth while in my college."

"Your college? A professor?" asked his son, in bewilderment.

"I mean just what I have said. I have asked Dan to let little Dugald come and spend the summer with us, and he is going to be my teacher."

John looked at him wonderingly.

"That is not so foolish as it sounds. I am growing old, and I find it hard to be interested in things as I used to be. I am all the time

passing by things that I might enjoy. With a child it is different. Everything is interesting to him. He wants to know the 'how' and 'why' of everything. I remember when you were little how you used to question me about things, and it was because I could not always answer you that I made up my mind that you should go where they could teach you all they knew. But I did what I could for you, and if you are now proud and fond of farming, and will be a better farmer than any of my other boys, it is because I was beginning to slacken on the work and could take time to tell you things and help you to do things. The older boys were made to work, just because I wanted it done; and, as I think of it, I wonder that any of them stuck to farming at all. I taught them to work, and perhaps to work too hard, but I did nothing to make them enjoy the work. But answering your questions as best I could made me see things in a different light. While you were asking questions as a boy, you were not all the time figuring on profits, and wondering if this or that would pay. If I have any grudge against the college you went to, it is that they made you so practical. You see the dollar in things before you do the pleasure and beauty."

"I am sure I enjoy the beauty of things. A good cow is prettier than a poor one, and a good crop than a half a crop."

"Yes, but that isn't exactly what I mean. I don't know as I can make it clear, for it is not yet clear to me, but perhaps with a child to lead me it may become clear. I feel that this world we live in was meant to be enjoyed more than it was to make money in. Our minds and our souls were meant to grow, just as much as the grass and the flowers, but we starve and stunt them. Do you know, John, I feel every spring now that the world is a great temple, and that these splendid spring days are the entrance to it. Every year the work of the world is taken up afresh, and wisdom is whispered to us by every breath of air that stirs, but we are so busy that we do not hear it. I sometimes feel that in this great temple of Nature we are simply money-changers, and should be scourged out of it. But this year a little child shall lead me, and I shall try to make my old eyes see with his young eyes, and my heart to beat like his."

"Have you ever noticed, John, that in Nature everything is perfect as far as it goes. The first bud is a perfect bud, just as much as the leaf is a perfect leaf. Its growth is from within, and, as it grows, it grows to a higher beauty. Now, it seems to me that the mind of a child is the same. When the children come to us they come direct from the hand of Nature, and if we helped them to grow we would keep them from getting out of touch with Nature and all that is beautiful. The first questions they ask are the questions of growing minds, and if we do not put them off or try to make them learn something else, they will grow naturally. That is where I think our system of education is all wrong. The children ask for bread, and we give them a stone. It is quite true that no man can answer all the questions of a child, but his questions point the way along which we should strive. We will never have a good school system until we have one that will follow the leading of the child. Someone has said, and it is a wise saying, that 'A child learns because of the necessity he feels.' The children ask questions because of the need they feel. The country child asks different questions from the city child because he sees different things to interest him. Yet we have the same system of education for the city and the country."

"Why don't you write to the papers or to our Member of Parliament, telling him what kind of a school system we should have?"

"Who? Me? That's nonsense."

"It is not nonsense. You are like everyone else. You are willing to leave the school question to the college professors, and then you complain because it is wrong. It is a question the farmers must get interested in themselves, and work out for themselves."

"Oh, well, after I have been with a child for a whole summer and learning some things myself in the simple, growing way that Nature intended, I may talk it over with the Member. Just now I want to learn things myself, and, above all things, I want to learn to enjoy. And somehow I have a feeling that what is worth enjoying is worth knowing, even in a practical way. And now that spring is here again, and the world is waking, I am hungering for the little boy to come and teach me what is interesting in this world we are living in."

\* \* \*

Dear little boy with wondering eyes  
That for the light of knowledge yearn,  
Who have such faith that I am wise,

And know the things that you would learn,  
Though oft I shake my head and smile

To hear your childish questions flow,  
I must not meet your faith with guile;

I cannot tell, I do not know.

Dear little boy with eager heart,  
Forever on the quest of truth,  
Your riddles oft are past my art  
To answer to your tender youth.  
But some day you will understand  
The things that now I cannot say,  
When life shall take you by the hand  
And lead you on its wondrous way.

Dear little boy, with hand in mine,  
Together through the world we fare,  
Where much that I would fain divine,  
I have not yet the strength to bear.  
Like you with riddling words I ask,  
Like you I hold another hand,  
And haply when I do my task,  
I, too, shall understand.

### P. E. Island Seed Fairs.

The agricultural affairs prominently to the front here lately were the seed fairs, three of which were held during the month of March. First came the King's County show, held in Georgetown; then the "Provincial," held in Summerside, Prince County; and last, the "Central Seed Fair," also open to the whole Province, held at the capital, Charlottetown. Each and all of the three were unequalled successes. At Georgetown, which was only a county show, the entries were large and the competition close, as the quality was nearly all A-1, a distinct advance being made over the show of the previous year. The educational feature was strong, and packed houses listened to the addresses delivered by the experts who did the judging. A poultry show was held in connection which brought out a fine show of birds of the different breeds.

The Provincial, at Summerside, was a grand exhibition. In all, at this show, which includes a domestic science department, there were 1,800 entries. The attendance was the largest yet, and the quality of the seeds all that could be desired. As we walked back and forth through the building, examining the different samples, we were quite prepared to believe the judges when they stated it was difficult to decide on which to place the prize tickets; and, also, when they stated that the tenth-prize samples were about good enough for anybody. One of the expert judges, who is also a grower of hand-selected seed, said that if he had to go over his work again, he was not at all sure that he would place the awards the same, so good were all the samples. The potatoes at this show occupied a big space, and were of grand quality; and it was evident to any observer that the exhibitors in this section were experts in selecting the best type of tubers in the many varieties shown.

The educational meetings were held in the largest hall in town, and were packed on every occasion by interested, eager listeners who were there to learn all that was latest and best along the lines of improvement in the different branches of farming. The principal speakers on agricultural topics were Governor Rogers, who delivered an address at the official opening; Professor Ross, who gave an address on "The Advancement of Agriculture"; Harvey Mitchell, of the Dominion Dairy Department, who gave an excellent address, illustrated by charts, which was an education along the line of profitable dairying; C. F. Alward, who spoke on "Seed Selection," by the use of charts showed how well cleaned and selected seed had given great gains in yield over inferior seed. J. A. Clark, Superintendent of the Experimental Farm, gave an account of the methods of culture, and seed selection, that gave such results in his experimental plots last season, and, on being questioned, gave the audience many facts about the science of agriculture and the best practice along lines of cultivation, fertilization and seeding.

At all the meetings the speakers were plied continually with questions by farmers who were intensely interested to know the why of these things. The managers of this show, headed by the Rev. Dr. Gauthier, the president, deserve great credit for working it up to its present status. It is now perhaps the best seed show held in Canada.

Then, the "Central" Seed Fair, in the capital city, Charlottetown, was a grand wind-up for the whole affair. This is a new show, being in its first year only; but it was also a grand success. The exhibits came from all over the Island, and some that won firsts at the other shows had to be content with seconds. It was not so large a show as the Provincial, but in quality was not much behind. The attendance was as large as at any, and the big market hall was filled to its full capacity at many of the meetings.

The speakers were much the same as in the other Counties, and the subjects discussed the same. This show owes much of its success to its energetic president, Rev. P. O. McGuigan, who was untiring in his efforts to make it a grand success. At this show, as well as at the Provincial, there was a large and excellent domestic science department, and also a show of poultry, which contained specimens of the very best from some of our foremost poultry fanciers. Seth Jones, of



the New Brunswick Department of Agriculture, was in attendance, and delivered an excellent, practical address on "Poultry-raising for Profit." A feature of the meetings was the giving of much of the time on one evening of the show to Members of the Legislature, who spoke along agricultural lines, and showed their strong, active sympathy with everything pertaining to improved agriculture. American Consul Deedmeyer gave excellent addresses at the two larger shows, and gave some interesting facts and figures with respect to the great increase in the agricultural productions of Canada in general, and Prince Edward Island, in particular.

These seed shows have done and are doing a great deal in the interests of advanced agriculture, and are a special means of waking up our farmers to the fact that good seeds are one of the greatest factors in successful farming.

W. S.

### Railroading as It Really Is.

Editor "The Farmer's Advocate":

I notice in your last issue a letter from "Farmer's Son," on "Farm vs. Railroad Life," and I think he would tell a different story if he had a little railroad experience. I have had a little experience the past two years, which I am not likely to forget. To begin with, I started in to work as "hostler's helper"; that is, a man who is expected to do anything that comes along, such as wiping, coaling-up, firing-up, turning turntable, throwing switches, dumping fires, etc.—all for 16 cents an hour. From that I got to be "hostler," at night work, at 18½ cents an hour. I worked at the first for three months, at the second for ten months—all night work, remember, and thirteen hours every night on duty. In the winter, I was going to work in the dark, and coming home in the dark.

Well, when I had put in over a year at the roundhouse, they let me out on the road. The first thing was a trial trip all over the road, on which I did most of the work and got nothing but abuse for. Next came a physical examination, eye test, and ear test; then the writing out of some three hundred rules for two different companies, and the purchase of a \$40 or \$50 watch. This was all completed satisfactorily, and then my name was put on the "spare list." This is a list of firemen who are called upon to work when some of the regular men lay off, or when the road is extra busy. If I had stayed on the road, I would have had to work on this list for at least two years, sometimes working night and day, when the road was busy, and sometimes not working at all, when business was slack. At the end of two years I might get a steady engine; and even then, in order to make \$80 a month, I would need to work almost night and day when business was rushing, and about one-quarter of the time when business was slack.

Just to give an idea of the hours on the road, we left home at 6.30 p. m., went 118 miles, arriving at 5 a. m.; were ordered back for 8 a. m., arriving home at 4 p. m.; were ordered again for 11 p. m., went 132 miles, arrived at 8 a. m., and were ordered back for 11 a. m., arriving home at 10 p. m., and was asked to go out again at 1 a. m., but refused to go. Talk about long hours are. And, remember, one has to pay big prices for meals and sleeping accommodation at the other end of the road, or else live on cold meals and sleep with bedbugs for companions. Well, the average fireman will work on the "spare board" for two years, fire a steady engine for six or eight more, then perhaps get a chance running when the road is busy, and fire when they are slack, from two to four years more. Then, after running on the "spare board" for eight or ten years longer, if he still has good health and eyesight, he will get a steady engine, and a chance to earn from \$100 to \$150 a month.

The statement that railroad men are more saving than farmers is not true. With the majority of them, the wages are spent before they become due, and I think that \$500 for board, clothes and other expenses, would be nearer the mark than \$310. Now, I hope this letter may be the means of making some farmer's son more contented with his occupation.

Middlesex Co., Ont.

EX-FIREMAN.

### Taxed for Improvements.

Editor "The Farmer's Advocate":

I have just been reading the little article in your valuable paper, signed "Paddy," "Why the Government Assesses the Farmers for Improvements." Now, I for one, think it a shame. For instance, a farmer gets burnt out, either house or barn, and cuts the timber off his own farm to build it up again. Then the Government will turn around and increase the assessment on building; then on the land one takes the timber off, as improved land. Now, I for one, like to make improvements, but do not like to pay two or three times for doing so. Hoping someone else will address the subject.

Waterloo Co., Ont.

### Facts Favor Reciprocity.

Editor "The Farmer's Advocate":

I read with much interest the article written by C. E. Parker, of Sherbrooke Co., Que. Mr. Parker is trying to prove, by comparison, that the Canadian farmer is going to be stuck by reciprocity. Let us go over his comparisons and see if they are correct. In the first place, he refers to the prices of pork. He says that pork prices have been higher in Canada than in the United States for a number of years past. To prove whether that is correct, let us refer to the market prices of the same number of "The Farmer's Advocate," in which his article appears. We find the highest price paid for hogs in Toronto was \$7.05, while the highest price paid in Chicago for the same date was \$7.30, and the highest price paid in Buffalo was \$7.70.

Eggs, he says, are only 8 cents a dozen in Chicago, and have been bought by a Montreal firm at that price, although there is at present only 3 cents duty per dozen on eggs, yet our eggs are selling on the local Canadian markets at from 23 to 25 cents per dozen.

He also says there are butter and cheese enough in cold storage in the United States to last for one year, without making another pound. Not long ago I read the report of the Eastern and Western Dairymen's Associations, in which it said that they had shipped thousands of pounds of butter and cheese across the border in the year 1910, in the face of the tariff of 6 cents per pound. Why should the United States import so much butter and cheese from Canada, with so much in cold storage?

He also says that the Canadian farmer will be in the hands of the American beef trust. How can that be, with the duty off Canadian cattle and on American beef?

age. The correspondent whose views he is combating made an even less defensible statement on the same subject, however, in his reference to the large stocks of these commodities in cold storage this season, as if that was the normal condition in regard to these articles there, instead of being, as it is, very unusual and exceptional, and not likely to occur again for years. This error on both sides shows how easy it is, when feeling runs high on any question, for anyone who wants to strengthen his side of the case to err in regard to facts—to argue from false premises.—Editor.]

### Let Well Enough Alone.

Editor "The Farmer's Advocate":

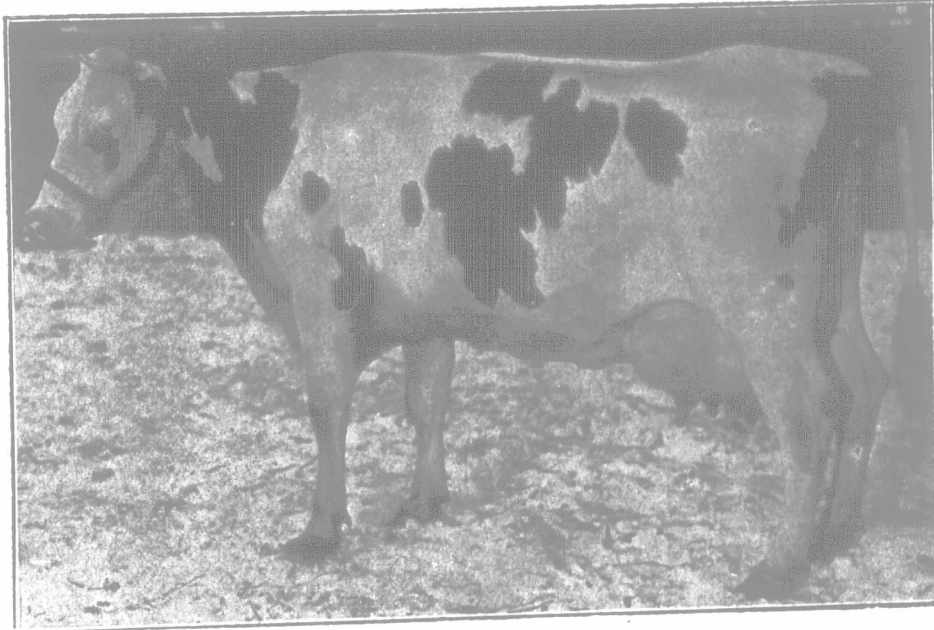
Is it not strange, Mr. Editor, that we do not all think alike on such little questions as the proposed reciprocity agreement? I read the remarks of Mr. Scratch, referred to by your correspondent, Thomas McMillan, and was impressed with the fact that Mr. Scratch is a serious-minded, logical analyzer of the situation, and not affected with the well-known weakness which seems to dominate his critic, Thomas McMillan, namely, to make oneself believe whatever we require it is right for us to have; or, in other words, Thomas McMillan seems to be a good example of the individual who loves to be kind to himself and his own opinions.

It seems quite natural for your readers to have diverse views on this reciprocity question. Although, Mr. Editor, I have always enjoyed reading your editorial items, your stand on this issue is such that I could not endorse. In your issue of February 16th, your article, "Mutual Advantage in Reciprocal Trade," states: "Hasten the day of world-wide reciprocity." This would guide me in guessing the evident direction of your desire—free trade. On the other hand, Thomas McMillan does not altogether reveal to your readers, in your issue of March 23rd, his dominant desire; but, in turning up another letter written by this gentleman, I note that he has a habit, instead of speaking for himself, to assume to hold a brief from farmers—a broad constituency, and proclaims that there is a fight on between those engaged in manufacturing and those who follow the pursuit of agriculture. Rather quixotic; certainly much more amusing than Mr. Scratch's serious and modest reflections.

However, we do not all possess a McMillan vision, by which we can see the ultimate results—good or bad—from the adoption of this big national legislative trade enactment, especially one which is not directed by necessity, which many farmers fear will prove detrimental to the national welfare of our country. Therefore, is it not reasonable to say that, because this proposed agreement was not directed by necessity, it should be regarded as speculative and unwise? At all events, it is at a time when we are enjoying a full measure of prosperity.

Mr. Scratch pointed out, from the viewpoint of the horse market, that the horse-breeders of this country have a better home market than the American breeder possesses. He claimed that it was unwise to open said market to the invasion of the American breeders. Mr. McMillan, in criticising, says: "It simply means that our Western farmers will be able then to get better value for their money in buying horses across the border," or, in other words, the price of horses to the Westerner will be lowered. He then reverses his reasoning by claiming that if he had had the American market for beef during the last year, he would have netted an additional \$1,000 on what he sold. Note: When it strikes home, the American consumer's price would not be lowered on beef like our Western home market on horses—a very accommodating reasoner. It seems to me there is a great deal of wild speculation as to what would and would not be should such and such happen.

Theory cannot be successfully substituted for practical experience." The American nation did not follow the free-trade example set by Britain early in the nineteenth century, but started out to build up their country in their own way, according to their own requirements; protected their industries from the invasion of others, and, as a result, they possess to-day a home market which is the envy of our friend McMillan and many



Pontiac Clothilde De Kol 2nd.

Holstein-Friesian cow which has just completed a remarkable performance. (See article on page 594.)

He also states that Canadian wheat will be milled in the States, instead of Canada, and exported from the States, and the Canadian farmer will lose the wheat by-products. What I would like to know is how he can lose them any more than at present. The present duty on Canadian wheat is 15 cents per bushel, and Canadian wheat can be ground in the United States mills in bond under the present tariff law, and when the flour is exported they get a rebate of 99 per cent., which leaves an actual duty of considerably less than one cent per bushel. Why will the Canadian farmer lose the by-product any more under the new tariff than under the present tariff. He further states that the vegetable and fruit growers will certainly be hurt. The growers of hot-house vegetables may be hurt to some extent, but that is no shame; while the fruit-growers are already ashamed of the noise they made at Ottawa a few weeks ago, and many are now awaiting reciprocity.

And now, what about the favored nations. Of all our imports last year from the favored nations, there was not included any of the natural products mentioned in the agreement, except tropical fruits. In conclusion, I would like to say that, if Canada should get stuck, it is only an agreement, and not a treaty, and, therefore, can be abandoned at any time.

JOHN SCHNAERINGER.

Waterloo Co., Ont.

[In the above letter, the argument is put up that, because the United States imported cheese and butter from Canada last season, therefore there cannot be a glut of these products there at present, nor a large surplus stock in cold stor-



others. Canada wavered and experimented, and finally decided to partially adopt similar methods, with very gratifying results, possessing now a home market which consumes 80 per cent. of our production. Now, at a time when we are travelling successfully in the direction of possessing a better home market than our Southern neighbors, saying nothing of our Old Country market, we are again at the old game of wavering and dickerings. I would advise Thomas McMillan and the rest of his ilk, if not satisfied with our present measure of prosperity, to trek across the border, and properly and honestly enjoy the home market they now seem to covet.

York Co., Ont. WM. G. ELLIS.

### Some Conditions of the Seed Trade this Spring.

The trade in bulk seeds has now well opened, and farmers are securing their stocks of red clover, alsike, alfalfa and timothy. It is satisfactory to note that, so far as weed seeds are concerned, there is a decided improvement in their purity, especially in the lower grades, over previous years. The general appearance of the seed is not so good as in former years, owing to their having been so much brown, dead-looking seed in nearly all samples marketed this season. From 50 to 60 per cent. of the discolored seed is all that is found to grow under the most favorable conditions.

Here and there a few dealers are found who have been careless in the selection of their seed for the local retail trade, or who have complained that in their section it seemed impossible to get any seed that was really first-class. All the seed merchants complain that there has been a great deal of very dirty seed offered this year. The chief complaint has been against ribgrass or buckhorn and ragweed. In most cases bladder campion seed has been overlooked, of which there is an increasing amount, especially in the mammoth clover seed. It is to be regretted that that weed is widening its constituency so fast. Only the other day I met a farmer who said he had discovered two plants on his place last season, and that he had dug them into the ground, and then put some salt on the roots, which seems to be the only effectual method of dealing with them. He also spoke of the efficacy of salt on the seedling perennial sow thistles, which had from time to time appeared on his farm. It is a pity that more farmers are not as vigilant as this one, who lived near Wellesley, Waterloo Co. In this section the farmers are alive, as they are in most parts, to that well-known weed, wild mustard. One of the dealers there said that a Toronto firm had lost an order from him this year of \$1,000 or more of seed, because in some of his best grades last year some yellow blossoms had been found as a result of sowing it on several farms. Farmers should be thankful that the wild mustard has a yellow blossom, and it is so easily seen that it can be pulled. They overlook the fact that in the same seed may be very much worse weed seeds than those of wild mustard. Just the other day I went to examine a quantity of red clover seed about which some complaint had been made, based on a farmer's examination of it. He thought it was very impure with buckhorn. It turned out that it was seed about as free from weed seeds of all kinds as you could find anywhere. The farmer had evidently taken some brown, shrunken seeds of clover for buckhorn. Contrast with that another lot I was called to examine, where a farmer was handling some seed for a friend, for which the dealers wouldn't pay the price asked. This seed the farmers were ordering at \$8 per bushel. The seed contained, besides considerable quantities of ribgrass or buckhorn and ragweed, about 15 per cent., perhaps, of foxtail, or, as many farmers know it, summer grass. They were turning down very clean seed at \$9.50 per bushel, for this seed. The excuse was, "We have these weeds already on our farms." They didn't stop to consider that the dearer seed was the cheaper seed in the long run, as it was much better selected, and quite pure. There is still the dangerous factor that many men will buy seed because it is, as they suppose, cheap.

Not only is it possible for a farmer to sow his seed free from ribgrass or buckhorn, by using cheesecloth over sieves, screen doors, etc., by wetting the cloth and sprinkling the infected seed over it, when the separation is made by the buckhorn sticking tight to the cloth, when the clover seed has all shaken off; but I believe he can also destroy, at least the vitality of, any ragweed in his seed. Most of the machines hull the ragweed now pretty well. If this seed were passed between rubber rollers, it would flatten the soft ragweed without injuring the clover seed. An ordinary clothes wringer might be made to do the trick. It is worth trying by those farmers who have a lot of ragweed in their seed.

T. G. RAYNOR.

### J. H. Grisdale Appointed Director of the Dominion Experimental Farms.

The retirement of Dr. Wm. Saunders from the Directorship of the Dominion Experimental Farms Branch of the Federal Department of Agriculture has opened a way for the well-earned promotion of J. H. Grisdale, Dominion Agriculturist.

Mr. Grisdale, son of Albert B. Grisdale, was born on a farm at St. Marthe, Que., near the border of Russell Co., Ont., Feb. 18th, 1870;



J. H. Grisdale, B. Agr.,

Who succeeds Dr. Saunders as Director Dominion Experimental Farms.

educated at Vankleek Hill School; Albert College, Belleville; Toronto University; Ontario Agricultural College, where he won a gold medal and first-class honors; and at the Iowa Agricultural College, where he was also an honor man. In various ways he earned his own education. At the Trans-Mississippi Exhibition, in 1898, he won a \$125 prize in stock-judging, and early in 1899 he was appointed Agriculturist and Live-stock Husbandry man at the Central Experimental Farm, Ottawa. Last year he was given well-deserved status as Dominion Agriculturist. His twelve years' service has demonstrated his ca-



H. Barton, B. S. A.

Professor of Animal Husbandry, Macdonald College, Que. capacity for larger service and greater responsibility. He embodies a rare combination of agricultural scholarship, and ability to translate his knowledge into results. With the work of the Central and Provincial branch farms he is thoroughly acquainted, and no man in the Canadian agricultural public service is more closely in touch with actual farm conditions, nor with a clearer

discernment of the needs of Canadian farming. Well versed in the French, as well as the English language, he is peculiarly fitted to greet people of either, ad arbitrium. Just coming to the prime of life, he brings courage and the invigorated mental fibre of rigid experience to the accomplishment of his tasks. His incisive letter on the farm work of the season in "The Farmer's Advocate" for March 16th expresses the gospel he teaches and the gospel he lives as a working farmer. Canadian agriculture is now in the dawning of a new day, in the making of which Prof. Grisdale will assuredly play a most influential part. He is an enthusiastic optimist, who will aim to serve, as well as direct. His work has been commended before in these columns, and the Minister of Agriculture is to be congratulated upon the choice of one who can so ably assume the duties laid down by Dr. Saunders. Promotion is a sound principle in the public service, and the farmers and stockmen of the Dominion will heartily approve this appointment.

### Unfair Taxation.

Editor "The Farmer's Advocate":

In your columns I wish to agitate the question re taxation on improved and unimproved lands. In the first place, I think it is not proper to assess our improvements on the farm, unless the object is to keep our good old farms behind the times, or to favor those who own large tracts of lands from which they have sold the buildings to escape assessment.

The section in which I live is, without a doubt, second to none in this grand old Dominion, and right here in this same belt are hundreds of acres that are in the same state as the Creator left it, but minus the very best of timber which it formerly possessed. However, much of this land contains a lot of valuable timber, the owners of which would not take the price of improved land for it; yet it increases in value year by year, but the assessment does not grow.

Then, again, in regard to large pasture lands, termed as not cleared land, thus escaping assessment, those same land-owners are making plenty of money, yet they have no risk of loss of buildings, and no insurance to keep up nor taxes to pay on improvements.

I have twenty-five acres of slash land, and I think it is worth as much to me as if it were cleared. Therefore, I say, with all sincerity, that all land, whether bush, slash, or cleared, with equal "fertility," should be assessed equally, and improvements on the farm should not by any means be taxed.

T. J. B.

### Reforestation by Counties.

In the Ontario Legislature, Hon. Mr. Duff, Minister of Agriculture, has introduced a bill called "The Counties Reforestation Act," authorizing the municipal councils to pass by-laws (a) for acquiring by purchase, lease, or otherwise, such land suitable for reforestation purposes; (b) for planting such land, and preserving and protecting the timber thereon; (c) the management and sale, or other disposal of the timber, (d) for the issuing of debentures providing for the purchase of such lands to an amount not exceeding \$25,000 in any one year. No by-law shall be finally passed under this Act until the same shall have been approved in writing by the Minister of Agriculture.

### Professor Barton.

Advices from Macdonald College state that it has been decided to recommend to the Board of Governors at McGill University the promotion of H. Barton from the rank of Associate Professor to that of Professor of Animal Husbandry in the faculty of Agriculture in that institution, to succeed Professor H. S. Arkell, who resigned in 1910 to join the staff of the Dominion Live-stock Branch, at Ottawa. Professor Barton is a native of Vankleek Hill, Prescott County, Ontario, and is a graduate of the Ontario Agricultural College, which he entered in the year 1900, receiving his Associate diploma in 1902, and his degree of B. S. A. in 1907. After graduation, he accepted a lectureship under Prof. Arkell, and since the latter's resignation has had efficient charge of the live-stock department.

Two Granges were organized in Dufferin County last week, one at Riverview, with 15 members, and the other at Corbetton, with 17 members. Preliminary steps were also taken towards the organization of a Grange at Melancthon. A further meeting will be held on Friday night for the purpose of completing organization at that point.

The Ontario Plowmen's Association, Simpsonton, Rennie, President, and C. L. Wallace, Sec.-Treas., are asking a Federal appropriation of \$3,000 to each of the nine Provinces for the encouragement of plowing matches, to be distributed through the Dominion Seed Commissioner.



### The Canadian Bank of Commerce

affords to farmers and others every facility for the transaction of their banking business.

Accounts may be opened by mail and moneys deposited or withdrawn in this way with equal facility.

SALES NOTES will be cashed or taken for collection.

Branches throughout Canada, including Toronto, Hamilton, Montreal, Charlottetown, New Glasgow and Truro.

### MARKETS.

#### Toronto.

##### LIVE STOCK.

At West Toronto, on Monday, April 3, receipts numbered 122 cars, comprising 2,669 cattle, 227 sheep, 89 calves, 27 horses; quality of cattle good. Export cattle were dull, at \$5.70 to \$6; butchers' cattle steady; picked lots, \$5.85 to \$6; good loads, \$5.60 to \$5.80; medium, \$5.25 to \$5.50; common, \$4.90 to \$5.15; milkers, \$4.0 to \$60; calves, \$3.50 to \$8. Sheep—Ewes, \$4.75 to \$5.25; yearling lambs, \$6.75 to \$7.50; spring lambs, \$5 to \$10 each. Hogs, \$6.70, fed and watered, and \$6.43 f. o. b. cars, country points.

##### REVIEW OF LAST WEEK'S MARKETS

The total receipts of live stock at the City and Union Stock-yards for last week were as follows:

	City.	Union.	Total.
Cars	212	165	377
Cattle	2,795	2,643	5,438
Hogs	5,248	787	6,035
Sheep	1,014	2,068	3,082
Calves	415	48	463
Horses	8	123	131

The total receipts of live stock at the City and Union Stock-yards for the corresponding week of 1910 were:

	City.	Union.	Total.
Cars	172	165	337
Cattle	2,414	2,776	5,190
Hogs	4,522	1,590	6,112
Sheep	418	238	656
Calves	316	99	415
Horses		249	249

The combined receipts at the City and Union Stock-yards show an increase of 40 cars, 248 cattle, 2,426 sheep and lambs, and 48 calves; but a decrease of 77 hogs and 118 horses, compared with corresponding week of 1910.

It will be seen that live-stock receipts, especially cattle, continue to be light, with prices barely steady for exporters, while butchers' cattle are steady to firm.

Exporters.—The top price for exporters, with the exception of one load, was \$6. Prices ranged from \$5.65 to \$6, and one load of 18 cattle sold on Tuesday at \$6.10. There were 623 cattle bought for export on Monday by the American buyers, at an average of \$5.80. Cattle bought for the London market averaged \$5.90; Liverpool cattle averaged \$5.80, and those for Manchester \$5.72. Export bulls ranged from \$4.85 to \$5.5.

Butchers.—Prime picked butchers' sold at \$5.85 to \$6; loads of good, \$5.60 to \$5.80; medium, \$5.30 to \$5.55; common, \$5 to \$5.25; cows, \$3 to \$5.35; bulls, \$4 to \$5.

Feeders.—A few lots of feeders, 800 to 900 lbs. sold at \$4.85 to \$5.15.

Milkers and Springers.—Receipts were moderate. Few choice quality cows are being sold, the bulk being common to medium. Prices ranged from \$40 to \$60 each.

Various calves.—Receipts were moderately large with prices averaging lower. As usual, there was a wide range, at \$4 to \$8.

Sheep and Lambs.—Sheep and lambs were firmer, as follows: Ewes, \$4.50 to \$5.25; rams, \$4 to \$4.50; yearling lambs, \$6.50 to \$7.60; spring lambs, of which a few are being offered, sold at \$5 to \$8 each.

Hogs.—Selects, fed and watered at the market, sold at \$6.90 to \$7, and \$6.60 to \$6.65 to drovers for hogs f. o. b. cars at country points. Thick, fat hogs, over 220 lbs., at 50c. per cwt. less than the above quotations.

Horses.—Trade at the Union Horse Exchange for the past two weeks has broadened out, and a fair supply of horses have changed hands at about steady prices. Several lots have been sold and consigned to the West, as well as many shipments to different points in Ontario and the Eastern Provinces. Prices are quoted by Mr. Smith as follows: Drafters, \$200 to \$225; general-purpose, \$175 to \$200; express and wagon horses, \$160 to \$210; drivers, \$100 to \$150; serviceably sound, \$30 to \$80.

##### BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 81c. to 82c., outside points. Manitoba—No. 1 northern, 97c.; No. 2 northern, 95c.; No. 3 northern, 93c., outside points. Peas—No. 2, 80c. to 81c., outside. Rye—No. 2, 66c. to 67c., outside. Buckwheat—48c. to 49c., outside. Barley—For malting, 60c. to 65c., outside. Oats—Canadian Western oats, No. 2, 37c.; No. 3, 36c., lake ports; Ontario, No. 2, 31c. to 32c.; No. 3, 30c. to 31c., outside. Corn—No. 3 yellow, new, 53c., at Toronto. Flour—Ontario 90-per-cent. white winter-wheat flour, \$3.20 to \$3.25, at seaboard. Manitoba flour—Prices at Toronto: First patents, \$5.40; second patents, \$4.90; strong bakers', \$4.70.

##### HAY AND MILLFEED.

Hay.—Baled, in car lots, on track, Toronto, No. 1, \$12; No. 2, \$8.50 to \$10.50.

Straw.—Baled, in car lots, track, Toronto, \$6.50 to \$7.

Bran.—Manitoba bran, \$21 per ton; shorts, \$23 per ton; Ontario bran, \$22, in bags; shorts, \$24, car lots, track, Toronto.

##### COUNTRY PRODUCE.

Butter.—The market continues steady to firm. Creamery pound rolls, 26c. to 28c.; creamery solids, 23c. to 24c.; separator dairy, 22c. to 24c.; store lots, 17c. to 19c.

Eggs.—Receipts have been and are heavy, and prices lower, at 18c. to 19c., by the case.

Cheese.—Market steady to firm, at 13c. for large, and 13c. for twins.

Honey.—Prices unchanged, at 10c. to 11c. for extracted, and \$2.50 per dozen sections, for combs.

Beans.—Market easy. Hand-picked, in car lots, in country, are worth \$1.50 to \$1.60 per bushel, and \$1.85 in broken lots here.

Potatoes.—Market easier. Car lots, on track, Toronto, of Ontario potatoes, 80c. to 87c.; New Brunswick Delawares, 90c. to 95c.

Poultry.—Receipts light; prices firm. Turkeys, 24c. to 27c.; chickens, 18c. to 20c.; hens, 15c. to 17c.

##### HIDES AND WOOL.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 9c.; No. 2 inspected steers and cows, 8c.; No. 3 inspected steers, cows and bulls, 7c.; country hides, cured, 8c. to 8c.; green, 7c. to 8c.; calf skins, 11c. to 13c.; sheep skins, \$1 to \$1.30; horse hides, No. 1, \$3.00; horse hair, per lb., 30c. to 32c.; tallow, No. 1, per lb., 6c. to 6c.

##### TORONTO SEED MARKET.

The William Rennie Seed Company report the following prices, at which trade-cleaned seeds are being sold to the trade: Alsike No. 1, per bushel, \$11; alsike No. 2, \$9.60; alsike No. 3, \$8.75; red clover No. 1, per bushel, \$10.50; red clover No. 2, \$9.30; red clover No. 3, \$8.40; timothy No. 1, per bushel, \$7.20; timothy No. 2, \$6.75; alfalfa, No. 1, per bushel, \$13.75; alfalfa No. 2, per bushel, \$12.25.

##### FRUITS AND VEGETABLES.

Apples, prices firmer. No. 1 Spies, \$6 to \$6.50; Baldwins, \$5, by the barrel; No. 1 Spies, in boxes, \$2.25; No. 1 Baldwins, in boxes, \$2; celery, per case, \$2.75; cabbage, \$18 per ton, or \$1 per 100 lbs.;

carrots, 45c. per bag; parsnips, 50c. per bag; onions, \$1.50 per bag; strawberries, Florida, quarts, 40c. to 50c.; tomatoes, Florida, six-basket crates, \$2.75.

#### Montreal.

Live Stock.—Shipments of live stock from the ports of St. John, N. B., and Portland, Me., for the month of March were 2,465 cattle and 3,492 sheep. In the local cattle market last week the tone was stronger, and, in some cases, buyers were prepared to pay slightly higher prices. The demand from butchers was fairly active. A few carloads of choice steers were taken at 6c. to 6c. per lb., while in a smaller way butchers paid as much as 6c. for choice; 6c. for fine; 5c. to 6c. for choice; 5c. to 5c. for medium, and 4c. to 5c. for common, per lb. Choice bulls sold at 5c., while the lower grades brought as low as 4c. The market for sheep and lambs was firm, and the demand was good, at 5c. to 5c. for sheep, and 6c. for yearlings. Spring lambs are coming forward, and are selling readily, at \$5 to \$8 each. Quite a few calves were offered, and prices ranged from \$2 to \$8 each. The supply of hogs was more liberal, and there was a good demand from packers. Prices ranged from 7c. to 7c. per lb. for selects, weighed off cars, the higher being very hard to obtain.

Horses.—The demand has been light for some weeks past, but the market is very strong, and, from all that can be seen, there is little or no likelihood of prices getting lower.

Dressed Hogs.—Fresh-killed, abattoir-dressed stock sold at 9c. to 10c. per lb., country-dressed being 8c. to 9c. per lb.

Potatoes.—A carload of Green Mountains were received here last week, the cost on track being 80c. per 90 lbs. The dealers were asking an advance of 5c., carted away from car. Grocers' prices were from \$1 to \$1.10 per bag of 90 lbs.

Maple Products.—Practically no maple syrup so far. Dealers are commenting on it. It was thought that gallon tins would sell at about \$1 to start with, and some dealers are cutting this down to 7c. per lb. on gallon tins.

Eggs.—Prices continue to decline, and dealers declared they were able to purchase at from 16c. to 16c. per dozen, in the country, and that this week would see the price down to 15c., 19c. and 20c. seemed to be fair prices for straight-gathered eggs last week.

Butter.—The make of new butter is very small as yet, but prices are lower. Purchases of new-made creamery were made in the townships last week at 25c. The quality was very fair, and sales were made here at 27c. to 28c. Choice fall-made butter was selling all the way from 25c. to 27c., according to quality. Dairy butter was quoted from 18c. to 20c., according to quality.

Grain.—The market was about 1/2c. lower all round on oats. No. 2 Canadian Western oats were quoted at 38c. per bushel, car lots, store; No. 1 extra feed at 38c.; No. 2 Canadian Western at 37c.; No. 2 local white at 36c.; No. 3 a cent under, and No. 4 yet a cent under. Manitoba barley No. 4 was 49c. to 50c. per bushel, and No. 3 American yellow corn 56c. to 56c. per bushel.

Flour.—Manitoba flour steady, at \$5.60 per barrel, in bags, for first patents; \$5.10 for seconds, and \$4.90 for strong bakers'. Ontario patents were unchanged, at \$4.50 per barrel, straight rollers being \$4 to \$4.25.

Millfeed.—The market continues unchanged, at recent prices, being \$21 to \$23 per ton for Manitoba bran, in bags, and \$23 to \$25 for shorts. Ontario bran, \$22 to \$23; middlings, \$24 to \$25; pure grain mouille, \$30; mixed mouille, \$25 to \$28.

Hay.—Choiceest qualities were again 50c. lower. Dealers quoted No. 1 baled hay \$10 to \$10.50, carloads, track, Montreal; No. 2 extra being \$9 to \$9.50 per ton; No. 2, \$8 to \$8.50. Clover mixed was quoted at \$7 to \$7.50; pure clover, \$6 to \$6.50 per ton.

Seeds.—Demand improving. Prices per 100 lbs., in bag lots, Montreal, are as follows: Timothy seed, \$15 to \$16.50; medium red clover, \$18 to \$20; Mammoth red clover, \$18.50 to \$20.50; alsike, \$18 to \$22.

Hides.—Calf skins, 11c. per lb. for No. 2, and 13c. for No. 1. Hides were unchanged, at 8c., 9c. and 10c. per lb., ac-

### To Open a Savings Account

At The Bank of Toronto it is only necessary to take a small sum to the Teller at one of our Branches, and sign your name on the card handed you. Our officers will do all the rest of the work, and hand you a passbook showing the amount at your credit.

Your account is invited. Interest is added to balances half-yearly.

## Bank of Toronto

Assets, \$50,000,000

According to quality. Lamb skins, 90c. each. Horse hides sold at \$1.75 and \$2.50 each. Tallow steady, being 6c. to 7c. per lb. for rendered, and 1c. to 4c. for rough.

#### Chicago.

Hogs.—Mixed and butchers', \$6.30 to \$6.80; good, heavy, \$6.10 to \$6.65; rough, heavy, \$6.10 to \$6.80; light, \$6.65 to \$6.95; pigs, \$6.45 to \$6.90.

Cattle.—Beeves, \$5.25 to \$6.90; cows and heifers, \$2.75 to \$6; stockers and feeders, \$4 to \$5.85; Texans, \$4.50 to \$5.80; calves, \$5 to \$6.75.

Sheep and Lambs.—Native, \$3 to \$5.80; Western, \$3.25 to \$5.85; lambs, \$5 to \$6.25; Western, \$5.20 to \$6.45.

#### Buffalo.

Cattle.—Prime steers, \$6.40 to \$6.80; butcher grades, \$3.50 to \$6.25.

Calves.—Cull to choice, \$5.25 to \$8.25.

Sheep and Lambs.—Choice lambs, \$6.80 to \$7; cull to fair, \$5 to \$6.75; yearlings, \$5.50 to \$6; sheep, \$2.75 to \$5.40.

Hogs.—Yorkers, \$7.25 to \$7.35; stags, \$4.75 to \$5; pigs, \$7.40 to \$7.45; mixed, \$7 to \$7.20; heavy, \$6.70 to \$6.75; roughs, \$5.50 to \$6.

#### British Cattle Markets.

John Rogers & Co., of Liverpool, cable 13c. to 13c. per lb. for States steers, and 13c. to 13c. per lb. for Canadians. States lambs, 17c.; whethers, 15c. per lb.

#### TRADE TOPICS.

Seed corn, also strawberry, raspberry and blackberry plants, are advertised by N. E. Mallory, Blenheim, Ont. Write him for circulars and guarantee.

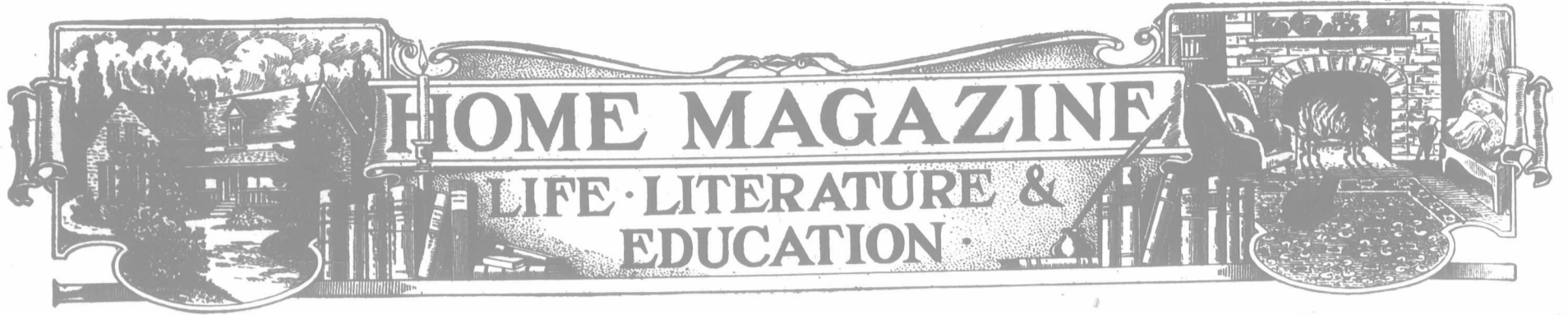
Brown's nurseries need no introduction to Canadian fruit-growers. Elsewhere in this issue will be found their advertisement. Address, simply, Brown's Nurseries, Welland Co., Ont. Post office is at the plant.

LOW RATES FOR EASTER.—Via Grand Trunk Railway system. Return tickets at single fare (with minimum charge of 25 cents) between all stations in Canada; also to Niagara Falls and Buffalo, N. Y., Detroit and Port Huron, Mich. Good going April 13, 14, 15, 16, 17th. Return limit Wednesday, April 19th, 1911. Full particulars and tickets from any Grand Trunk Agent, or address A. E. Duff, District Passenger Agent, Toronto, Ont.

#### GOSSIP.

D. C. Flatt & Son, Millgrove, Ont., near Hamilton, offer for sale the four-year-old Clydesdale stallion, Brogie's Stamp [8865], sire Prince Cairnbrogie (Imp.) [4785], by Prince Thomas, dam Grace Anderson (Imp.), by Up-to-Time, by Baron's Pride, dam by Macgregor, by Darnley. Brogie's Stamp is described as absolutely sound and without fault, a show horse, and will be priced right to a quick buyer, as the owners do not wish to keep an entire horse.





### Gardens.

The attraction that gardens have always had for poets and thinkers is significant. The first recorded history of the earth, clothed in the imagery of the primitive Orient, concerns itself chiefly with events in a garden. "God Almighty first planted a garden," noted Bacon in his quaint essay, "Of Gardens." "God the first garden made, and the first city Cain," sang Cowley, suggestively; while Milton, grim old Puritan though he was, revelled in the languorous beauties of Eden as conjured before him by his marvelous fancy: Satan leaps the wall of Eden, flies up into the tree of life, the "middle tree and highest there that grew," and perching there "like a cormorant," surveys the scene below:

"Thus was this place  
A happy rural seat of various view;  
Grove whose rich trees wept odorous  
gums and balm,  
Others whose fruit burnished with  
golden rind,  
Hung amiable (Hesperian fables true  
If true, here only), and of delicious  
taste.  
Betwixt them lawns, or level downs,  
and flocks  
Grazing the tender herb, were inter-  
posed,  
Or palmy hillock; or the flowery lap  
Of some irriguous valley spread her  
store,  
Flowers of all hue, and without  
thorn the rose.  
Another side, umbrageous grots and  
caves  
Of cool recess, o'er which the man-  
tling vine  
Lays forth her purple grape, and  
gently creeps  
Luxuriant; meanwhile murmuring  
waters fall  
Down the slope hills, dispersed, or in  
a lake,  
That to the fringed bank with myrtle  
crowned  
Her crystal mirror holds, unite their  
streams.  
The birds their choir apply; airs,  
vernal airs,  
Breathing the smell of field and  
grove, attune  
The trembling leaves, while universal  
Pan,  
Knit with the Graces and the Hours  
in dance,  
Led on the eternal Spring."

Coming to the later poets, one thinks first, perhaps, of Tennyson, who found opportunity for some of the most exquisite word-picturing in our literature in "Recollections of Arabian Nights," and again in his more powerful "Maud":

"Maud has a garden of roses  
And lilies fair on a lawn;  
There she walks in her state  
And tends upon bed and bower,  
And thither I climb'd at dawn  
And stood by her garden-gate;  
A lion ramps at the top,  
He is claspt by a passion-flower."

And so on. What poetical emotions, too, even a "forsaken" garden inspired in the poet Swinburne:

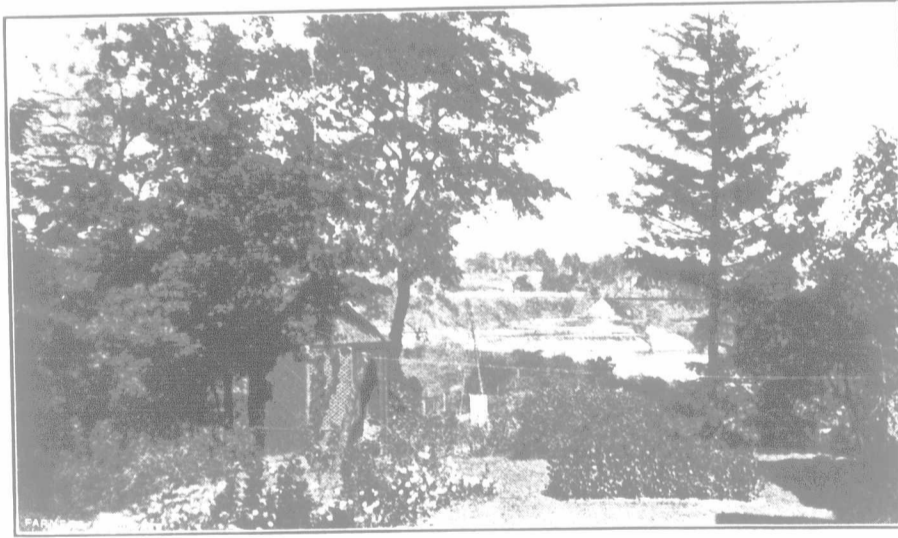
"In a coign of the cliff between low-  
land and highland,  
At the sea-down's edge between  
windward and lee,  
Walled round with rocks as an inland  
island,  
The ghost of a garden fronts the  
sea,  
A guild of brushwood and thorn en-  
clothes."

The steep square slope of the blos-  
somsless bed  
Where the weeds that grew green  
from the graves of its roses  
Now lie dead."

So one may pass through the  
realms of poet, dramatist, novelist,  
and find them all besprinkled, as with  
emeralds, with gardens.

Nor has this interest in gardens on  
the part of men of letters been wholly  
aesthetic. When Coleridge went with  
his young wife and baby to live in  
his little cottage at Nether Stowey,  
he was delighted to possess, in con-  
nection with it, a little plot of  
ground, upon which "his imagination  
had already planted corn, cabbages  
and potatoes," enough, he hoped, to  
supply the needs of his house, and  
also those of a "couple of snouted  
and grunting cousins," as he gaily  
declared; and so enamored was he of  
tending it that before long he wrote:  
"Literature, though I shall never  
abandon it, will always be a sec-  
ondary object with me. My poetic  
vanity and my political favor have  
been exhaled, and I would rather be  
an expert, self-maintaining gardener  
than a Milton, if I could not unite  
them both." Vain boast—yet, with-  
out doubt, the writer thereof found  
much pleasure and some little profit  
among his corn and cabbages, as has  
many another of his songful breath-  
ers.

Kings and magnates, too, have  
they not been, one and all, almost  
without exception, identified at one  
time or another with the creating or  
enjoying of gardens? The hanging  
gardens of Babylon are even yet  
world-famous, although they have  
long since been lost in chaos of  
ruin. Every palace in Europe has  
had its gardens, and among the trees  
and bowers of some of them, such as  
those of Versailles, many of the most  
brilliant functions of the now gay,  
now sorrowful, old world have taken  
place.



A Very Attractive Back Yard.

Trees were cut away here to give a view of the river and dam in the background; the remaining trees serve as a frame to the picture.

Nor can one think of gardens at all  
without seeing that little plot, the  
sacred plot of all, with its gnarled  
old trees and quiet recesses, sancti-  
fied as never before nor since has  
garden been sanctified—Gethsemane—  
whose holy calm was deemed neces-  
sary by the Saviour of the world in  
his final His supreme agony.

The joy of gardens is inherent. He  
or she who has not known the joy  
of owning, or frequenting, or, still  
better, working in, he it never so  
small a plot, with his or her hands,

breathing the pure air, smelling the  
fresh, damp exhalations of the earth,  
seeing the little brown seeds spring  
up in tender green, each little plant  
keeping, like a dutiful child, its place,  
has missed something of the things  
that make life worth living.

Then, the joy of watching the con-  
tinuous development during the long  
summer—leaves sprouting, stems  
shooting upward, buds forming,  
leaves unfolding—until, at last, work  
ended, the garden nestles in its full  
beauty, a place for "Retired leisure  
That in trim gardens takes his pleas-  
ure"; a place for Sabbath calm,  
for drinking in the joys of the morn-  
ing, for quiet rest at the close of  
the day. Truly, while gardens re-  
main, Eden has not altogether van-  
ished.

"A garden is a lovesome spot.  
God wot!  
Rose plot,  
Fringed pool,  
Fern'd grot—  
The veriest school  
Of peace; and yet the fool  
Contented that God is not—  
Not God! in gardens! when the  
eve is cool?  
Nay, but I have a sign;  
'Tis very sure God walks in mine."

### Margaret's Garden.

For ten unbroken years Margaret  
and John had lived in the old house  
at the bend of the river. "What a  
snug place," people had said, driving  
past in their working clothes on high  
loads of white bags to the mill, or  
in their "Sunday best" to church,  
in "top" buggies built all to a pat-  
tern; for the old house was quite  
surrounded by trees, and only the  
red chimneys showed here and there.  
Margaret and John had quietly en-  
joyed the distinction of living in so  
cozy a nook—indeed, they had heard  
such remarks so often that they had  
come to acquiescing without giving

in the house; and if there were a  
spare moment, there was always  
weeding to be done in the little vege-  
table garden down the lane.

True, when company came of a  
Sunday, there was usually a general  
excursion around the house and under  
the trees, but no one seemed to care  
to stay there long. The trees were  
close together, so close that the  
ground beneath was usually damp,  
and much of it moss-grown. There  
was no grass, partly because the sun  
never filtered through there, and  
partly because the fallen needles—for  
most of the trees were pine—did not  
create the sort of mould which sun-  
loving grass loves to creep over.

It was worthy of remark, too, al-  
though nobody ever seemed to re-  
mark it, that people fled in as short  
a time from the front rooms of the  
house—with polite excuses about  
wanting to see the cows, or the gar-  
den; so that visitors and all usual-  
ly finished the evening on the kitchen  
step in warm weather, or in the  
kitchen itself on cold or rainy days.  
Many enjoyable evenings were spent  
thus, too, although Margaret often  
found people somewhat in the way  
when the time came to get tea or to  
prepare for milking. Sometimes she  
wondered a little, perhaps, if people  
did not like her pretty little parlors,  
yet it did not dawn upon her that  
folk are, after all, sun-loving ani-  
mals, and so she would look in at  
the pretty rooms on hot summer  
days, blessing the thick evergreen  
shade-trees pressing close to the win-  
dows—so close that not a vestige of  
sunshine could steal in to fade the  
carpet.

The first jar to this accepted order  
of things came when baby Ethel, lit-  
tle three-year-old Ethel, fell ill and  
had to be brought into the front  
bedroom, so that mother could at-  
tend to her easily.

"Humph!" sniffed the doctor,  
"this is damp, too damp. Bless  
your soul, woman, this is no place  
for a sick baby, and you are not  
strong enough to run up and down  
stairs—enough to do, without any  
extras, I should say."

"Well, what can be done?" said  
distressed Margaret. "I'll have to  
do it."

"No you'll not, either," said the  
doctor, with murderous eyes on the  
pine-tree at the window. "Tell John  
to cut that tree down right away."  
"Cut down our tree!" gasped  
Margaret.

"Is the tree of more value than  
Ethel?" queried the doctor, curtly.

"But I—"  
"Or you?" he interrupted. "Take  
it out of that. It should have been  
away long ago," and he stuffed his  
stethoscope into his little black bag,  
and strode off as though he were  
angry; but Margaret had sense  
enough to know that his haste was  
only due to the fact that he wished  
to escape further discussion.

That night John cut down, not one  
tree, but two, that stood in the way  
of the afternoon sun; and somehow  
when, next day, a yellow gleam shot  
in, lighting up the gold of the big  
bowl of daffodils on the table by  
Ethel's bed, a ray of hope seemed to  
shoot with it right into Margaret's  
heart. "How cheerful it is," she  
thought to herself. "It must be  
better for Ethel, and I really believe  
the room looks better, too." And  
so next morning she felt quite in the  
mood to agree with the doctor when  
he said heartily:

"There, that's more like the  
thing! Nothing like sunshine to  
root! damp and bacteria. Every



house should be flooded with it—flooded with it, I say."

Now, the doctor was far-seeing in his way. He had perceived Margaret's little pang of regret at the sacrifice of the supposed coziness of her home, although he knew that anything would be sacrificed for baby Ethel's welfare, and he chuckled to himself as he began sorting out a pile of "Farmer's Advocates" that were neatly piled on a kitchen table.

"Um—m—m!" he thought to himself. "Queer how often some people can read a thing or hear a thing that's true as gospel, without any of it soaking in! Um—m—m! Here it is, February 9th issue. Lucky I happened to see that article." And he glanced over it.

"Ever read this article by Professor Hutt, on Home Grounds, Mrs.

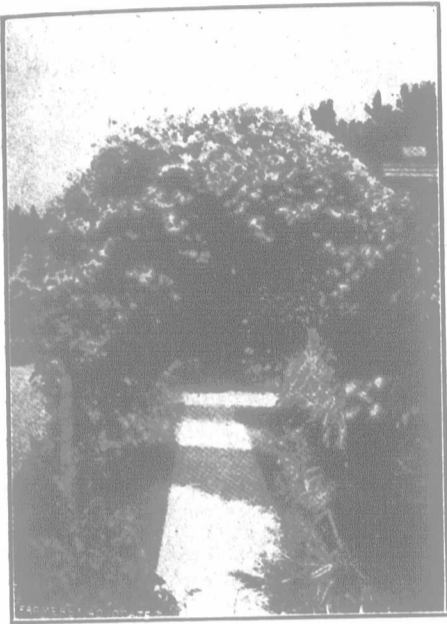
space in front of the house"—reading again. "Ah, now I see! The rascal! . . . The view out from the building should be upon a more or less spacious, open lawn, with the planting so arranged as to hide from view any unsightly objects, and to afford the most pleasing outlook in every direction possible."

Margaret dropped the journal and looked out at the solid phalanx of sombre pines that walled the house in from view and sunshine alike. Perhaps the little ray still quivering on the daffodils from the one open space so recently accomplished pleaded a bit in behalf of the open spaces, for all of a sudden she picked the paper up again, and read the article throughout, with a new light, as it were, upon it.

"Why," she thought, "our place really and truly is all wrong—and we have been priding ourselves that it was the coziest place around! That red barn is ugly, and we haven't even a tree on that side to hide its ugliness! . . . And if those pines were cut out just a little towards the river, there would be the most charming view imaginable! Why didn't we think of that ourselves? . . . And, really, a little plot of open grass before the front would be lovely, with plenty of trees left all about for a border! And—oh, I must tell John all about it right away! How stupid we are sometimes, just because we get used to things, and don't even dream that any improvement can be made! And to think that even the house was getting mouldy and bacteria-y!" she concluded, inventing an awful mouthful of syllables, and forgetting even to smile at it as she looked at baby Ethel, sleeping with a little flush on her cheek that did not look exactly like a rose of childhood.

To make a long story short, before many days the smothering trees close to the house were removed, and, although Margaret said to John, when surveying the bleeding stumps, "How one hates to cut down a tree!" she was willing for further sacrifice in the interests of health and beauty; and when baby Ethel was well and strong again, she and John set to planning in good earnest.

This autumn the plans will materialize, and you may judge whether people passing will admire the less. Enough trees will be left so that a broad green wall will still remain by the roadside, with twinkling and alluring views of the old-fashioned windows and red chimney-stacks. An arbor covered with wild clematis will encircle the gate and permit just a glimpse of the rather irregular little green lawn. On the side where the view is only of flat, uninteresting fields, the driveway, bordered with maples, will run; but towards the river and the hills openings will be cut, so that from the living-room (into which the parlors will be metamorphosed) a splendid picture, framed



An Arch Over a Gate.

Clematis paniculata, and other flowering vines.

Daly?" he called out, carrying the yellow-backed journal into the bedroom.

"Why, yes, I did," replied Margaret, "but really I've forgotten—" "Better read it over again while Ethel is sleeping," interrupted the doctor, thrusting the paper into her hand; then off he went again, as though in high dudgeon.

Margaret watched him through the window with a smile. "Eccentric old fellow, Dr. Smith," she said to herself. "Wonder why he wishes me to re-read this article. Something about that pine-tree, I'll wager." And, as there was nothing pressing to do just then, she opened the journal.

"Shrubs should not be scattered promiscuously over the lawn," she read, amusingly. "What about trees?—why we—really haven't any lawn!"—as though a revelation had come to her. . . . "Open



Asters are Very Satisfactory, both for Garden and Cut Flowers. Aster bed, residence of Mr. John Marr, London, Ont.

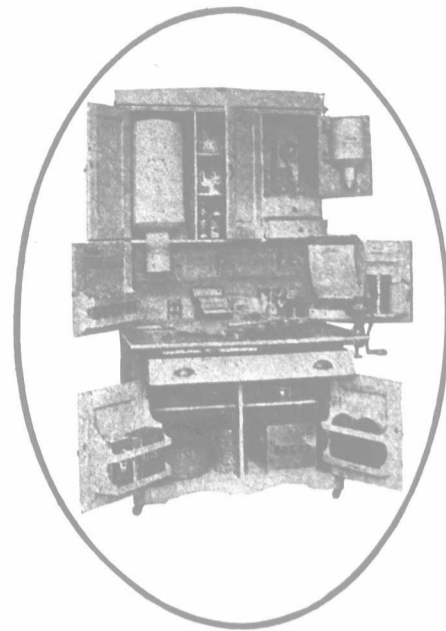
## THIS HELPS THE COOK AS MUCH AS THE SEWING MACHINE HELPS THE SEAMSTRESS

Prepare meals sitting down.

Take no more needless steps.

Have everything in easy reach.

Gain hours for rest and recreation.



Economize your foodstuffs.

Keep the kitchen tidy easy.

Know just where everything is.

Have a kitchen helper worth while.

If you attend to your own cooking, you need a Knechtel Kitchen Cabinet. You need one even more if you hire a cook. For this Cabinet does much indeed to solve the "servant problem." It keeps help contented, because it makes the work so much easier.

The Knechtel is the only really up-to-date, practical Kitchen Cabinet. Its shining, tarnish-proof extension top, of seamless aluminum; its cylinder flour-bin (50 lbs. capacity); its ingenious sugar-bin—



these are only three of the thirty points in which none of the other vies with it. See it.

why it must save its cost in a few months' use.

Be sure to have your furniture dealer show you the several styles of the Knechtel Kitchen Cabinet. One among them is just what you have been wanting. The price will suit you too. Booklet D mailed on request.

**INSIST ON SEEING THE KNECHTEL.**  
Knechtel Kitchen Cabinet Co., Limited, Hanover, Ont.

Preserving Time Means

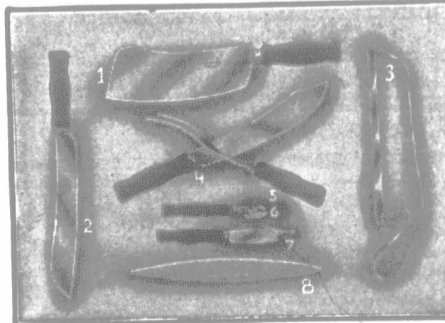
# St. Lawrence Sugar

Every good housewife knows that poor sugar means poor Preserves.

The anxiety as to whether Jams, Marmalades, Preserves and Pickles are going to keep, can be entirely dispelled by using **ST. LAWRENCE GRANULATED.**

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**The St. Lawrence Sugar Refining Co. Limited**  
MONTREAL. 34



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**May Mfg. Co., Elora, Ont.**





## I'm the Cream of the West Miller, and I'll tell you what I'll do—I'll guarantee your next batch of bread

**I** WILL guarantee it to rise away up out of the pans, and make as delicious bread as you ever tasted. The loaves will be the biggest and most wholesome you ever baked with the same amount of flour. I'll guarantee it or you get back the money you paid for the flour! Now see:

Just go to your grocer and buy a bag of Cream of the West Flour. Take it home and bake it up.

Give it a trial.

Give it a couple of trials. Your oven or yeast might not be just right the first time.

Now when you give it a fair trial, if you honestly feel that you have not

had splendid satisfaction with Cream of the West Flour, return the unused portion of the bag and get your money back.

Just tell the store man your bread didn't come out right and you want your money back as guaranteed.

It's not the grocery man who loses. It doesn't come out of his pocket. It is the Campbell Milling Company, Limited, of Toronto, who pay, and they are satisfied to pay if you'll be satisfied to try Cream of the West Flour.

Ask your store-keeper about this guarantee. He knows. He will tell you. Try a bag next baking day.

# Cream of the West Flour

*The hard wheat flour that is guaranteed for bread*

### Guarantee

**W**E hereby affirm and declare that Cream of the West Flour is a superior bread flour, and as such is subject to our absolute guarantee of money back if not satisfactory after a fair trial. Any dealer is hereby authorized to return price paid by customer on return of unused portion of bag if the flour is not as represented.

The Campbell Milling Company, Limited, Toronto.  
ARCHIBALD CAMPBELL, PRESIDENT



100

by green trees, may be seen all day long.

The veranda across the front, which is old and mouldy, will be taken away, too, and a broad new one built just along the north end—when the sunshine can't come in,

anyway," as Margaret explains, for she has become a sunshine devotee. "And then, you know, we can sit out there in the evenings, and we'll have vines running up the posts, and a little flower-garden in the back yard, and, oh, won't it be lovely?"

"What about the red barn?" queries John. "Will that be a background for the flower-garden? We could sit on the veranda and admire both at once, you know."

But Margaret is ready. "You must plant a screen of trees along

there right away, John," she says, "and in the meantime, why, we'll just grow—why," with sudden inspiration, "a corn-patch, John! If you were rich, I should say put up a pergola; but the corn would grow so tall, you know, in that rich earth, and would make the loveliest background for the flowers. Corn really is beautiful, if folk only thought so."

"Going to have all the flowers there where—where the chips were?" queries John.

"Most of them," she replies, positively, "and some celery. You see, they'll be close to the well there, when watering is needed, and then I can see them all day from the kitchen, and in the evenings from the veranda; and, besides, you know, to cut up the front lawn with flower beds would be such execrable taste!" Clearly, her education has been progressing.

"Of course," she continues, "we'll have to have shrubbery close to the house, and maybe just a few clumps of flowers in the border, but, you know, John, farmers can't have many flowers."

"How many on your list now?" he asks, with a twinkle.

"Why—why—now don't be inquisitive, John," she replies, and then they both laugh. "At all events, I see an end of the chips."

"Going to invite Professor Hutt up to dinner when it's all done?" he smiles.

"Well, I should if I knew him," she replies, quite seriously. "Dear knows, we ought to make a chance to thank him. And just to think that I had read that article, without taking one bit of it to ourselves!"

The confusion of pronouns passes unnoticed in John's remark that people have an awkward habit of that, either of not taking things to themselves that they should, or of taking things that were never thus intended—"done the things we ought not to have done, and left undone the things we ought to have done," and so forth, "world without end," he hums, until Margaret's hand over his mouth stops him.

And then she wanders over to the window and looks through a cleared space towards the river and the wooded hills beyond. At one point a curl of blue smoke is mounting into the clear spring air from a chimney half hidden behind a rounded hill.

"I was just wishing, John," she says, that we could have sent all those trees that we cut down over to the Burns home. Of all the bare places—not a tree, not a shrub, not a vine! Really, if it weren't for the hills and the bush beyond, the whole place would be as bare as a desert."

"Perhaps, when they see yours, they will follow suit," remarks John.

"Yes," responds Margaret, quoting:

"Go make thy garden as fair as thou canst.  
Thou workest never alone;  
Perchance he, whose plot is next to thine,  
Will see it, and mend his own."

John looks at her in his amused way for a moment. "I must tell doctor what a convert he has made," he says. "Not only a convert, but a propagandist."

"And to think," rejoins Margaret, "that he was thinking only of—bacteria!" And then she remembers baby Ethel, and smiles to herself, and blesses the doctor in her heart.

### The Garden in Early Spring.

Sow in a seed-bed provided with glass covers, over which sacking may be thrown in very cold weather, cabbage, cauliflower, celery, lettuce, onion, tomato, beets, and a few flowers for early bloom, such as morning glory, nasturtiums, verbenas, nasturtiums, asters. If you have not a proper seed-bed, start a few of each kind in boxes in the house. You can gain a month yet. Carrots, parsnips, parsley, radish, mizanonette, poppy, may be sown in the open when the garden is made.



# FOUR SEASONABLE OFFERINGS

## MOST TEMPTINGLY PRICED

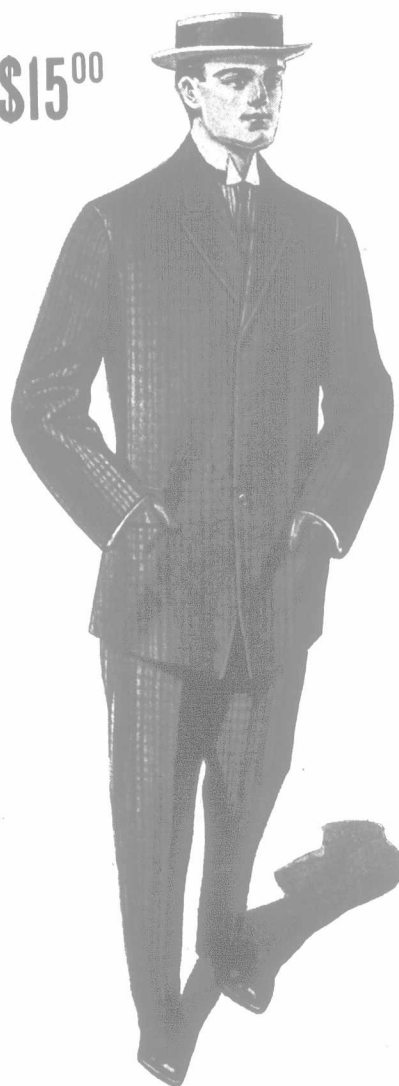
"Money saved is money gained." Here is a chance for YOU to save. No doubt you are needing a Spring and Summer suit. You want something which is new—something that is stylish and up-to-date. We are offering you four distinct styles to choose between, and you cannot possibly make a mistake in selecting any one of them. They are genuine values through and through. The material used is exceptionally good—the linings and trimmings are equally so—while the tailoring, and, in fact, every detail, has been thoroughly inspected and pronounced first-class by competent critics before we ever thought of offering the finished garment for sale. Send us your order under the protection of our guarantee. It is printed below—READ IT.

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We never sacrifice quality to enable us to quote a low price; in fact, quality is always our first consideration. When you buy from us you can rest assured that you are getting good value, and, furthermore, that you are to be the judge and not us. Order one of these suits, and you will remember the quality long after you have forgotten the price.

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\$15<sup>00</sup>



**3E-2000. Handsome Stylish Suits** for Spring and Summer wear, made from two of England's worsted cloths; one shade is a dark brown Celtic stripe cloth with green thread stripe, the other is a nice grey, fine basket weave effect with very faint green pin stripe, 1½ inches apart. These are extra well tailored into 3-buttoned single-breasted sack shape. Body linings are of a fine quality twilled Italian, haircloth and shrunk duck interlinings which do not allow them to lose their good shape. Longest leg measure is 34 in. **\$15<sup>00</sup>**

### TWO UNUSUAL VALUES

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ORDER EARLY

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**3E-2002. Men's Suits** of nice appearance and nicely made into 3-buttoned, single-breasted sack shape. The material is a medium dark pepper-and-salt effect, worsted finished fabric. The linings are of a good strong Italian cloth with good strong trimmings. Sizes 36 to 44 inch chest taken over vest, under coat. Longest leg measure 33½ inches. State height and weight. **\$6<sup>99</sup>**

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### OUR GUARANTEE

Send us your order for one of these suits and we will ship it immediately. If it doesn't fit, if you don't like the style, the material, or the workmanship, send it back at once and we will refund your money in full and pay all transportation charges. Could any proposition be fairer? You can't lose—you run no risk—TRY US.

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We will send you a copy of our Clothing Booklet upon receipt of your request. It illustrates our complete stock of Men's and Boys' Clothing, with samples of the goods attached. It contains correct measurement charts and gives you all the information required to satisfactorily buy your Clothing from us by mail.

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We can safely guarantee Pen-Angle Hosiery for several reasons. In our gigantic

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seamful, foot-wearying kind. Don't forget the name, or how the trademark looks.

### FOR LADIES

No. 1760—"Lady Fair" Black Cashmere hose. Medium weight. Made of fine, soft cashmere yarns, 2-ply leg, 5-ply foot, heel, toe and high splice, giving strength where needed. Box of 3 pairs, \$1.50; 6 pairs, \$3.00.

No. 1020—Same quality as 1760, but heavier. Black only. Box of 3 pairs \$1.50; 6 pairs, \$3.00.

No. 1150—Very fine Cashmere hose. Medium weight. 2-ply leg, 4-ply foot, heel and toe. Black, light and dark tan, leather, champagne, myrtle, pearl gray, oxblood, helio, cardinal. Box of 3 pairs, \$1.50; 6 pairs, \$3.00.

No. 1720—Fine quality Cotton Hose. Made of 2-ply Egyptian yarn, with 3-ply heels and toes. Black, light and dark tan, champagne, myrtle, pearl gray, oxblood, helio, sky, pink, bisque. Box of 4 pairs, \$1.00; 6 pairs, \$1.50.

No. 1175—Mercerized. Same colors as 1720. Box of 3 pairs, \$1.00; 6 pairs, \$2.00.

### READ THIS REMARKABLE GUARANTEE

We guarantee the following lines of Pen-Angle Hosiery to fit you perfectly, not to shrink or stretch and the dyes to be absolutely fast. We guarantee them to wear longer than any other cashmere or cotton hosiery sold at the same prices. If, after wearing Pen-Angle Guaranteed Hosiery any length of time, you should ever find a pair that fails to fulfill this guarantee in any particular, return the same to us and we will replace them with TWO new pairs free of charge. 53

### ORDER THIS WAY

Ask at the store first. If they cannot supply you, give the number, size of shoe or stocking, color of hosiery desired and enclose postage, and we will fill your order postpaid. Remember we will fill no order for less than one box and only one size in a box. BE SURE TO MENTION SIZE.

ADDRESS AS BELOW:

### FOR MEN

No. 2404—Medium weight Cashmere, 2-ply Botany yarn with special "Everlast" heels and toes. Black, light and dark tan, leather, champagne, navy, myrtle, pearl gray, slate, oxblood, helio, cadet blue and bisque. Box of 3 pairs, \$1.50; 6 pairs, \$3.00.

No. 500—"Black Knight" winter weight black Cashmere half-hose. 5-ply body, spun from pure Australian wool. 9-ply silk splice heels and toes. Box of 3 pairs, \$1.50; 6 pairs, \$3.00.

No. 1090—Cashmere half-hose. Same quality as 500, but lighter weight. Black only. Box of 3 pairs, \$1.00; 6 pairs, \$2.00.

No. 330—"Everlast" Cotton socks. Medium weight. Made from four-ply long staple combed Egyptian cotton yarn, with six-ply heels and toes. Black, light and dark tan. Put up in boxes. Box of 3 pairs, \$1.00; 6 pairs, \$2.00.

**Penmans, Limited, Dept. 45 Paris, Canada**

Fill up holes in the lawn and sprinkle with grass seed.

Clear up all old stems, etc., and burn them out of the way. You may also chance to burn with them innumerable small cocoons of injurious insects.

If you are arranging your lawn and garden this spring, put sufficient thought on it. Do not place any shrub or perennial in the wrong place. By exercising care, you will save your temper and much time and trouble at a later date.

If you have very little time to spend on the flower garden, plant flowering shrubs, and, of course, perennials, which by next year should make a fine showing. For immediate results, you will have to depend upon annuals—poppies, annual phlox, mignonette, nasturtiums, morning glories, alyssum, candytuft, coreopsis, stocks, sweet peas, verbenas, etc.

Mass your flowers in clumps of one kind, as far as possible. This helps to prevent clashes of color. White is a peacemaker, so use quantities of white flowers everywhere—white lilies, white candytuft, alyssum, white aquilegia, baby's breath, white asters, etc. You will find these white flowers particularly attractive at dusk, and even at night.

If you value artistic effects, do not plan for rockeries and lawns cut into beds of wondrous shape and form. Do not plant flowers in tiles, old teakettles, old boats, iron vases (cemetery urns?). Eschew everything that savors of the bizarre, and do not place conch-shells or whitewashed stones around beds or along borders. Low bedding plants, such as feverfew or sweet alyssum, supply the only artistic border.

In planning your garden, arrange to have the tallest flowers at the back, graduating them towards the outer edge. Provide this year for a "backyard beautiful."

Encourage the children to make a garden this year, both vegetables and flowers.

Provide for succession of bloom in all parts of the garden. Use annuals to follow the bulbs, later-sown seed to keep up the bloom, long-flowering and late-flowering plants, such as fall anemone and verbenas, to keep a dash of color until snow-fall.

Be sure to sow very small seeds by simply pressing them into the ground with a smooth board, then water with a very fine spray, or by absorption. Cover other seeds according to size. Do not use raw manure anywhere where seeds or roots are to be planted. Only manure or compost which is reduced to the consistency of muck is safe.

If you have not already done so, plant your sweet peas at once. Choose heavy soil, or, if the soil is light, either add stiff clay, or take great pains to make the ground below and above the peas very firm. If the soil is rich, you need not respade it in spring, says an authority, but if you must respade it for the purpose of mixing, tread it down very firmly. Now hollow out to about two inches in depth, and two feet wide. In this scratch two little furrows, about eight or ten inches apart (the rows should run north and south), and one inch deep for the seed. After sowing, roll or tread down firmly. After the plants come up, do not fill in any soil about the vines for six weeks. Keep the weeds down by pulling them out or by very shallow use of the hoe, but do not disturb the soil more than necessary. Give plenty of water, and, if necessary to use fertilizer, do not use anything that is new or hot; old, well-rotted manure, put in the bottom of the trench (dug deeper for the purpose), and covered with soil, is good, or rich compost. When the vines are ready to bloom, use plenty of wash-day suds for watering.

"He only is advancing in life whose heart is getting softer, whose blood warmer, whose brain quicker, whose spirit is entering into Living peace. And the men who have this life in them are the true lords or kings of the earth—they, and they only."—Ruskin.

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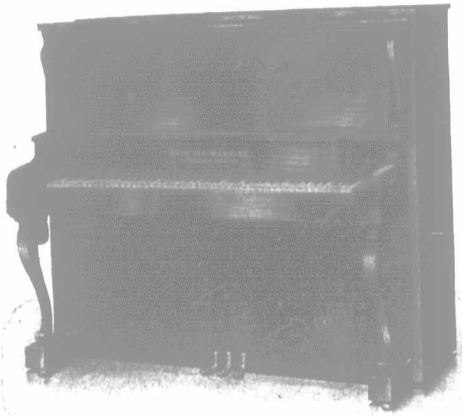
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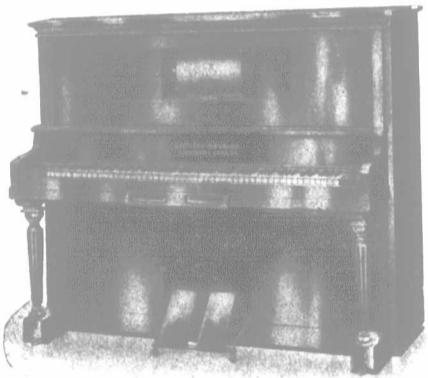


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## Hope's Quiet Hour.

### The Joy of the Lord.

These things have I spoken unto you, that my joy might remain in you, and that your joy might be full.—St. John xv.: 11.

"O Joy that seekest me through pain, I cannot close my heart to Thee; I trace the rainbow through the rain, And feel the promise is not vain That morn shall tearless be."

I am not thinking of the Easter victory to-day. Before we come out with our victorious Master into the glorious sunshine of Easter, we must watch with Him in the shadow of the Cross. Was there no joy there?

In "The Dawn at Shanty Bay"—a beautiful little Christmas story, by Robert E. Knowles—two men had been playing Santa Claus, and delighted the heart of a poor little girl. As they walked home under the stars, one of them said: "There must a' been a curious joy about dyin' on the cross."

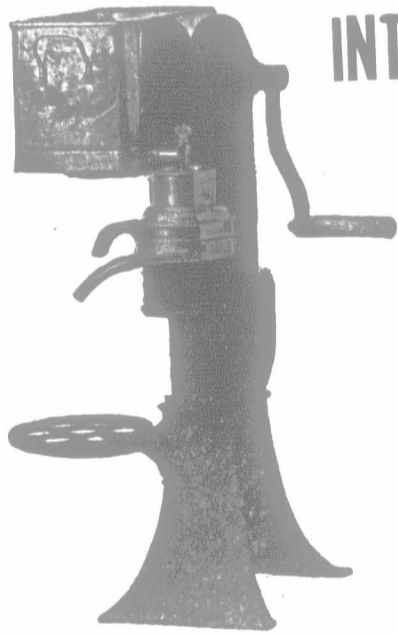
"Joy!" echoed the other, "what dae ye mean?"

"Oh, nothin'." Only it's so much fun to give something—an' that other was the high-water mark."

Don't you think that is true? It is a joy to be able to give something, for love's sake; so the greater the love and the greater the gift, the deeper and fuller must be the joy. When Infinite Love gave Himself for the redemption of mankind, the Gift was not spoiled by any want of gladness. "God loveth a cheerful giver," and His own gifts are always cheerfully and joyously given to His children.

When did our Lord talk most about His joy? If you study the Gospel record, you will find that it was the night before the Great Sacrifice was offered. It was then that He poured out a tender benediction of peace on the troubled hearts of those who loved Him, such a wonderful benediction that for two thousand years

# Standard



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WRITE US NOW and you will be sent one of these books postpaid, free of charge; also the facts of a recent contest at Port Rowan, Ont., in which the "STANDARD" demonstrated its skimming supremacy.

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it has rested like the touch of His own hand on anxious hearts. The very words are sweet: "Peace I leave with you, my peace I give unto you. Let not your heart be troubled, neither let it be afraid." The Cross had no power to disturb that royal peace—peace enjoyed and bestowed so tranquilly and confidently. But peace leads up to the still more perfect gift—the gift of Joy. And joy was offered to the disciples as a radiant jewel in a setting of love. The threefold love of the Father to Christ, of Christ to His disciples, and of the disciples to Christ, was first discovered, then—out of that love—comes the assurance of joy mentioned in our text, leading up to the command to "love one another" as the Master loves us all, the Good Shepherd Who proved His love by laying down His life for the sheep.

Who knows best the meaning of joy? Is it a man who shirks every hardship and discomfort that can be avoided, or the man who shoulders heavy burdens because he loves greatly? Selfishness and joy can never live together in any heart, though pain and joy often walk hand-in-hand. Think of the joy of men like Father Damien, who laid down his life in the leper colony of Molokai. He went there of his own free will—constrained by the love of Christ—there he cleansed terrible sores, comforted the dying, and ministered to sick souls and bodies. He made hundreds of coffins with his own hands during the 16 years of marvellous self-sacrifice, digging the graves and burying the dead. When preaching, he absolutely identified himself with his stricken people, not saying only "my brethren," but "we lepers." He was head-mason and carpenter, encouraging the people to work, not only bravely, but cheerfully: When he reached the height of his self-sacrifice by catching the awful disease which he had faced so fearlessly, and dying a leper among the lepers, the world showed its admiration of his heroism by sending, not only money, but volunteers to continue his splendid work. What joy must have filled the soul of Father Damien, and other heroic lovers of men, as they followed in the footsteps of the



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## Suffragette vs. Aunt Salina

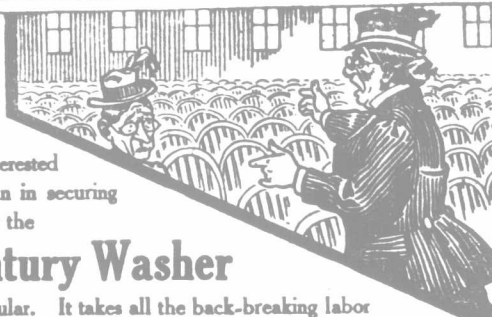
The Canadian housewife is much more interested in lightening household drudgery than in securing the right to vote. That is why the

### New Century Washer

is so popular. It takes all the back-breaking labor out of wash day and sweetens the housewife's temper. It also thoroughly cleanses the clothes by forcing the water through them.

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## The Future Looks Bright

risk. \$2,000,000 Assets

Agricultural Savings & Loan Co., 109 Dundas Street, London, Ontario. 3% or 4 per cent.

King of Love. If they had not rejoiced in the opportunity and privilege of spending their lives in noble service, their sacrifice would have been cold and uninspiring.

Think of the joy of Him who by His offering of Himself for the sins of the whole world, claimed at once the right to forgive His murderers and admit the penitent by His side to the royal park of Paradise. Think of the joy of knowing that the mighty work of the redemption of men's souls was finished. Think of the joy of the Good Shepherd as He stood between the sheep He loved and their terrible foe.

And what of ourselves? Are we adding to His joy by accepting gladly the burdens He offers, or are we hurting Him by doubting His love every time we are given the chance of patient and cheerful endurance? Do we consider—as someone once wrote to a friend who was passing through a time of trouble—that "with all its sadness, we are having a rare experience, and must feel that God has shown us special favor in asking us to carry a heavy burden?"

Perhaps we are dwelling on our grief and pain, making the home a gloomy place, talking continually about our troubles. Perhaps we have forgotten that we are children of God, and that He is always watching to give us the very best gift we are able to make use of.

What right have we to behave like the heathen, when pain or trouble is given to us to endure cheerfully? They do not know that their Father has all power in heaven and earth, and that He loves them enough to give them all necessary training, and will not send one trouble that is not needed. We do know this. Are we showing by the gladness of our faces that our hearts are not troubled nor afraid? Can we truthfully say—

"We take with solemn thankfulness Our burden up, nor ask it less, And count it joy that even we May suffer, serve, or wait for Thee, Whose will is done."

We gaze up into the face of our Master, knowing well that He was fastened to the Cross by the compelling power of His mighty love for us. No nails could have held Him there if He had not been willing to offer up His life as a ransom for many. Are we complaining, instead of rejoicing, because we also—each of us—are given the privilege of enduring some small amount of pain or trouble? With shame at our cowardly faithlessness and weak fretfulness, let us accept His offered forgiveness for the past and joy for the future. Let us refuse to lament over our troubles, and try to grow daily more like Him who forgot His own agony in caring for friends and foes. Don't let us be satisfied with the poor success of submitting because we can't help ourselves. God has called each of us to rejoice with the joy of the martyr—the martyr who gladly lays down his life at his Master's feet. Our Lord may not call us to die for His sake, but He certainly accepts each life that is freely offered, and disposes of it as He wills. Your gift of a life is just as precious in His sight, if you are ready and willing to suffer and die for Him, as the victorious death of any of the noble army of martyrs. The faithful servants who had made diligent use of the talents placed in their charge, were called to enter into their Lord's joy. If there is no joy in our serving, no joy in our enduring of pain or trouble, then it is certain that our love is of very poor quality. We are called—even now—to enter into the joy of our victorious Leader.

"Thy will be done." Not with bowed head alone In meek submission would we say the words; Not only in the garden's agony May this our prayer be as it was our Lord's; But through the smoke and conflict of our life We catch a glimpse of glory to be won. Our Captain calls, we plunge into the fight, And shout our battle-cry: "Thy will be done!"

DORA FARNCOMB.

## Children's Dresses

STYLISH little suits and dresses can be made for the children out of father's or mother's, or the older children's discarded garments by Dyeing them with



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ONE DYE FOR ALL KINDS OF GOODS

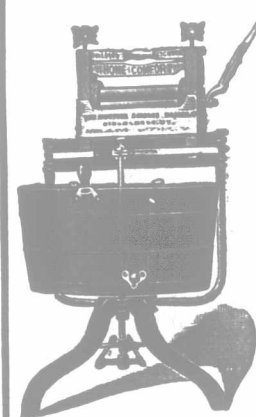
and making them over.

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The Johnson-Richardson Co., Limited, Montreal, Can.

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The 1900 GRAVITY WASHER cuts out labor and saves money. Does a big family washing—and wringing too—in short order. The Gravity washes a tubful spotlessly clean in six minutes. Prove it at our expense.



Any Woman Can Have a 1900 GRAVITY WASHER On 30 Days' Free Trial

Don't send one cent. Try it first at our expense—if you are responsible. We'll pay the freight. See the wonders it performs. Thousands are in use and every user

delighted. We are constantly receiving letters from hosts of satisfied customers. The 1900 Gravity is sold on small payments. Send for our fascinating FREE Book to-day. Write me personally. F. A. C. BACH, Manager, The 1900 Washer Co., 357 Yonge Street, Toronto, Ontario.

The above offer is not good in Toronto, Winnipeg or Montreal and suburbs—special arrangements made for these districts. 2173a

## A Thick Neck

This is the name usually given to Goitre, a most uncomfortable, unsightly and dangerous condition. A few years ago we were asked to prepare our home treatment for Goitre, a trial having been so satisfactory in one case. Since that time our

## GOITRE SURE CURE

has been a winner. Letters of gratitude from those who have used it received frequently. A young man recently said: "My collar is a size smaller in three weeks, and my health is better." Internal and external treatment. Price \$2, express paid.

**SUPERFLUOUS HAIR, Moles, Etc.,** permanently removed by our reliable treatment—Electrolysis—which is given only at our offices here. Satisfaction assured. Booklet "F" mailed free.

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## Cowan's Maple Buds

(NAME AND DESIGN REGISTERED)

are different from and better than any other chocolate confection you ever tasted. Maple Buds are not made by any other concern, as the name and design is fully patented. Look for the name on every Bud.

The Cowan Co. Limited, Toronto.

37



**Holy Week and Easter.**  
 Dark and still the shades are falling,  
 As the season draweth near  
 When repentance boweth lowly  
 Hearts that hold the Master dear.

Closer, closer draws the shade;  
 Nearer, nearer comes the Cross;  
 As we kneel in sorrow there  
 All beside seems worthless dross.

Lighter, lighter grows the shade;  
 Softly on the sense doth fall  
 Strong, unseen, a Presence here,  
 Breathing comfort over all!

Splendid glows the Easter dawn,  
 Songs triumphant swell the air;  
 All creation wakes in joy,  
 Earth and heaven the gladness share.

Oh, the glory of the Morn!  
 Oh, the promise of the Day!  
 Death no more in darkness stands,  
 Christ hath cast its gloom away.

He who in that shadow passed  
 For us, lifted all the gloom!  
 We who rest our souls on Him  
 Need no longer fear the tomb.

"Alleluia!" Sing the song  
 That doth herald in the day:  
 "Christ is risen! Christ is risen!  
 He hath rolled the stone away!"  
 —Anna B. Bensel.

### The Roundabout Club

The prizes in Study V., "Reciprocity," have been awarded as follows: (1) T. J. Rutherford, Grey Co., Ont. (2) A. M. Freeborn, Perth Co., Ont. (3) "A Friend," Prince Edward Co., Ont. Today we have space for the first-prize essay only. It is rather noteworthy that all the essays received argued in favor of reciprocity.

#### "Reciprocity"—Study V.

Would it be to the advantage—material and otherwise—of Canada, standing as she is on the very threshold of nationhood, and holding fast to British institutions and British connection, the land of a million fertile farms, of vast and verdant forests, of enormous mineral wealth, of teeming fisheries and of prosperous and growing towns and cities, to have a reciprocity treaty providing for the free exchange of natural products—a direct influence upon trade, a decided step towards free trade, and something that will tend towards closer social union with the United States, a nation of our own blood and of our own language and customs, a land of comparatively exhausted natural resources and of predominating urban population, which will shortly be dependent for its sustenance upon imported food? Such is the question, vastly important as it is complicated, to which politicians and laymen alike all over this wide Dominion, are at the present moment giving their best thought, and upon which I will here venture my humble, though sincere, opinion.

Firstly, with regard to the effect such a treaty would have upon industrial conditions here: Canada, as we know, is a large producer of natural products, so that, after supplying home consumption, she has been enabled to build up a large export trade in them. This trade in the past has been largely with far-off Europe, as the high tariff wall between her and her neighbor to the south has for long held her back from enjoying the higher prices there prevailing. But should this wall be removed to the extent of allowing free exchange of natural products, Canadian producers of natural products, which class constitutes a very large proportion of the population, would find a much more convenient, as well as a better-paying market, in the large cities across the border. This could have no other effect than that of affording the greatest good to the greatest number. Such is the result we wish to see from our legislation; and, although a few unproductive individuals here may suffer by having to pay more for what they have to buy, it will perhaps stimulate them into some effort toward production, and thus help in the development of our resources.

# Now is the time to start building your telephone line

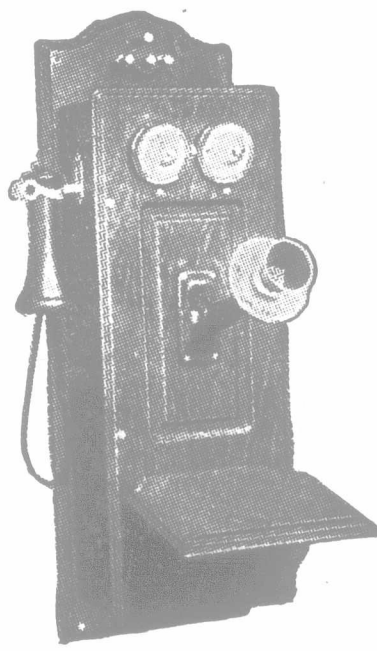
The conditions are all in your favor now for the construction of your telephone line. The sooner the work is completed the earlier you will be enjoying the benefits of an efficient telephone service.

At our factory here in Toronto we always carry a large stock of construction supplies. You can secure the best goods from a Canadian Company, and save time as well as duty.

Everything we make is fully guaranteed. Our telephones are guaranteed for ten years against defective material or workmanship.

The success of this company has been almost phenomenal, our business doubling in volume last year. This is going to be another record-breaking year.

Independent Telephone Systems everywhere are fast recognizing the superiority of



our materials and apparatus, and are adopting them as their standard equipment.

They also tell us they like our methods of doing business, and appreciate the suggestions and co-operation given by our staff of expert engineers.

If you intend to establish a telephone service in your locality, we believe you will find it profitable to get into communication with us at once.

We will place our expert engineers at your disposal, and do all in our power to facilitate rapid and thorough construction.

When writing, be sure and ask for our latest publication, called "Canada and the Telephone"—the most artistic and interesting telephone book yet published.

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Some pianos have many good features  
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**Goulay Pianos have all**  
 the good features known to modern musical science.



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 Toronto

To object to such a treaty on the principle of conserving our natural resources—in this case principally our forests—by keeping them out of the hands of American speculators, is quite reasonable. But it seems to me, that, as far as the average citizen of this country is concerned,

he is just going to be as much the loser by allowing the remaining forests of this once forest-clad Dominion to pass into the hands of Canadian speculators, as he they are doing at the present time, as he

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 84 Front St. E., TORONTO, CANADA.

**EVERY** office needs "SNAP", because all book-keepers and stenographers need it to keep their hands free of ink stains. "SNAP" is antiseptic. It kills germs. 15c. a can.



**Ayrshires**—Two bulls rising two, two rising one year; also calves and high-grade heifers in calf. All stock good dairy breeding.  
**JOHN A. MORRISON, Mt. Egin, Ontario.**  
**WESTERN FARMS FOR SALE**—For reliable information about snaps in good farm lands, write H. H. Suddaby, Secretary-Treasurer Herbert Board of Trade, Herbert, Sask.



# BOVRIL

IS A SIMPLE, NATURAL FOOD.

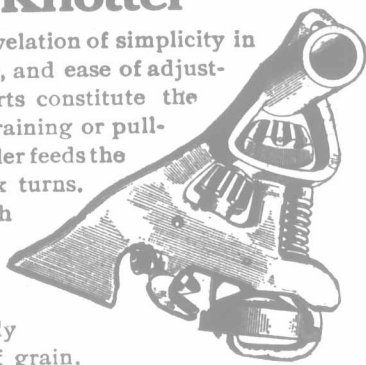
BOVRIL is the simplest of foods, for it is just the concentrated goodness of prime beef.

## McCORMICK

### A Simple Knotter

THE McCormick knotter is a revelation of simplicity in construction, accuracy in tying, and ease of adjustment. Only two moving parts constitute the working mechanism. There is no straining or pulling of the twine because the twine holder feeds the twine in the direction the knotter hook turns.

The cutter bar has guards in such a position that the machine can be tilted to cut close to the ground without pushing trash and stones ahead of the knife. It cuts smoothly and perfectly in all conditions of grain.



The McCormick reel has a wide range of adjustment. It successfully meets the conditions encountered in any field, whether the grain is tall or short, standing, down, or tangled. Grain filled with green undergrowth is forced upon the platform.

The McCormick floating elevator handles grain of any length or weight without clogging, even when the grain is filled with vines or green undergrowth.

There are many other features and advantages of McCormick binders. The McCormick agent will tell you about them. He will tell you about the wonderful strength of each individual part and of the strength of the binder as a whole—of the skilled workmanship backed by many years of experience that enters into the construction of every McCormick binder. Why not see him today? Ask him about McCormick haying machines and tools.

If you prefer, write to the nearest branch house for catalogue and any special information you desire.

EASTERN CANADIAN BRANCH HOUSES:—International Harvester Company of America at Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; or St. John, N. B.

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### I H C Service Bureau

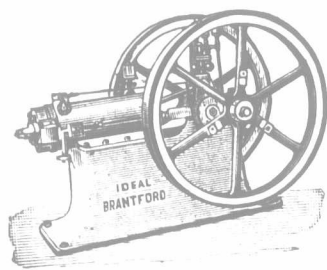
The purpose of this Bureau is to furnish farmers with information on better farming. If you have any worthy questions concerning soils, crops, pests, fertilizer, etc., write to the I H C Service Bureau and learn what our experts and others have found out concerning those subjects.



## IDEAL GASOLINE ENGINES

1/2 TO 40 HORSE-POWER

Windmills  
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BRANTFORD, CANADA.

would be if they were going into the hands of Americans. What we want is to have our forests, and any other apparently exhaustible resource, preserved as a Government utility, and operated under Government supervision, and then, with or without an export duty, our forest-conserving enthusiasts need have no fear.

Secondly, let us consider such a treaty in its capacity as a step towards complete free trade, for such it is, and a very decided one at that. Would not complete free trade be an advantage to us? Surely, for are there not many industries which can be carried on to much better advantage here than in the United States, and vice versa? And would it not be to the advantage of both countries to be supplying each other's needs out of their several fullness instead of trying separately, and against great odds, to produce for themselves? This, of course, would entail a very large falling off in the customs revenue of our country; but this could be made up in what, I think, would be a very proper way, by taxing the unearned land profits which, in this rapidly-developing country, are at present building up large fortunes for what is in the most part a non-productive section of the population.

And, lastly, we must look at such a treaty from other than a commercial standpoint, for closer industrial connection will assuredly tend toward closer social intercourse, and will inevitably bring about mutual assimilation, socially and morally. And why not? Are we not of the same blood, the same language, and almost the same social and moral standards? Would we not have been today, save for the ignorant tyranny of one of the past sovereigns of Britain, supplemented perhaps with some impatience and insubordination on the part of the colonies, one nation within the British Empire? And why now, on the eve of celebrating the advent of the completion of a century of peace with this nation, which for 4,000 miles forms our frontier, a frontier over which no cannons frown or fortresses stand guard, should we not join with them in closer industrial and social relationship? For, in doing so, it seems to me that Canada, as our gallant Premier has already said, would render to old England, the mother of nations, and, in fact, to the whole British Empire, a service unequalled in its present effect, and still more in its far-reaching consequences.

T. J. RUTHERFORD.

### April.

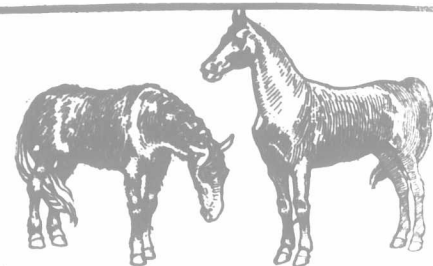
Month of wind and month of showers,  
Month of buds and month of flowers,  
Month of birds that bill and coo,  
Making old nests into new;  
Month of pussy-willows gay,  
Month of merry lambs at play.

Month of leaves all peeping out,  
Month of merry lads that shout,  
Month of maids with wind-tossed hair,  
Month of blossom-scented air.  
New life has to nature come,  
There's no time for feeling glum.

Month of crows as black as night,  
Cawing loud with all their might;  
Month of farmers sowing grain,  
Caring for their fields again;  
Month of work and month of play,  
Sweet forerunner of the May.  
Quebec. JUANITA.

### A Curse on Them.

An empty life is worse than a failure. Rather attempt something worthy of your manhood and fail, than to live a life of empty thoughts and vain occupations and be swept with the chaff into oblivion. A good many people think that because they do no harm they are doing fairly well. The curse of the Creator is upon the unproductive. Christ points to the fig tree that bore leaf but no fruit, and pronounced the anathema, "Henceforth, let no man eat fruit of thee." The blight left it a dried and unsightly lesson to all generations. If you are doing nothing for others, you are a curse to yourself and them. There is nothing so deadly as spiritual stagnancy. Get out of this condition of do-nothing-ness if it is only to do something with color enough to distinguish it as right or wrong. To do nothing, either good or bad, is to be a moral cesspool.—Selected



## CLIP YOUR HORSES IN THE SPRING

Clipped horses have the best of it in every way. They not only look better, but they are fresh and full of life and vigor. Their feed does them more good, they rest better and do better work. They are not subject to coughs, colds, pneumonia, etc., which ruin many good horses. Clip before you put the horses at the spring work. You can clip a horse in 30 minutes with this

### Stewart Ball Bearing Clipping Machine

It turns easiest, clips fastest and lasts longest of all clipping machines.

Anyone can operate it and do good work.

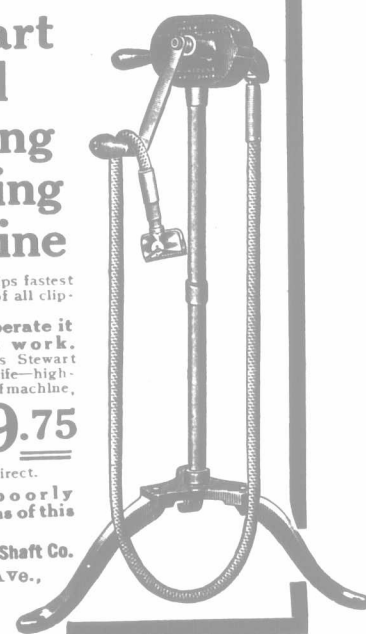
It has the famous Stewart one-cut tension knife—highest grade. Price of machine, all complete, as shown, at your dealer's, is only \$9.75

If your dealer hasn't it write us direct.

Beware of poorly made imitations of this machine.

Chicago Flexible Shaft Co.

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## SEED CORN

That we can and do GUARANTEE

Price, \$1.15 per 70 lbs. in the ear. Whether you plant one bushel or fifty, plant corn that will grow. Also Strawberry Plants—25 each of five varieties, \$1.00; 50 each of six, \$2.00; purchaser's selection and postpaid; 200 each of five varieties at 1,000 rates. Gibraltar and other Raspberry and Blackberry plants. Send now for circulars and guarantee.

N. E. MALLORY, Blenheim, Ont.

They soon grow old who grope for gold  
In marts where all is bought and sold;  
Who live for self, and on some shelf  
In darkened vaults hoard up their pelf,  
Cankered and crusted o'er with mould,  
For them their youth itself is old.

## CURED THE WIFE AND HUSBAND TOO

Great Work done by Dodd's  
Kidney Pills in one  
Quebec Family.

Thomas Lauriault had Kidney Disease and his wife Bright's Disease, and Dodd's Kidney Pills made them both well.

Lac Cayamont, Que., April 3.—(Special.)—There is a world interest in the simple story of Madame Thomas Lauriault of this place. In her own words, it is as follows:

"Dodd's Kidney Pills cured my husband of Kidney Disease, and myself of Bright's Disease. We recommend Dodd's Kidney Pills to all who suffer from Kidney or Bright's Disease."

This is a splendid example of the grand work Dodd's Kidney Pills are doing among the plain people of Canada. Kidney Disease is the commonest of all ailments among those who have to work hard, because the kidneys are the first part of the body to feel the wear and tear of heavy work.

When the kidneys go wrong, the blood goes wrong, and the whole body goes wrong. Rheumatism, Dropsy, Diabetes and Bright's Disease are the usual results. Dodd's Kidney Pills cure these by simply curing the kidneys.



### The Garden of a Com-muter's Wife.

(By Mabel Osgood Wright.)

#### CHAPTER XII.—Continued.

A few days ago a flagman on the branch railway that runs north-west from town was hurt to death by the derailing of a train. Father saw at once that he could live but a few hours, and that freedom from pain was all that he could give him. He asked the man if there was anyone he wished to see, any little matter that he would like adjusted.

At first the man seemed stunned, and did not answer. Then he said: "I'd like to see The Orphan, sir. There's nobody else that'll care. He's my dog. I guess you'll find him in my flag-house behind the coal-box. That's where he lies of nights, if you care to bother. I don't suppose you will, though," this with a wistful glance, while a big tear rolled down his cheek.

In half an hour or so the dog was brought, a sombre creature, big and woolly, looking like a huge Skye terrier. He gave a little whine of joy, licked the poor man's hand, and crouched close to him.

"He's almost four years old. He was a freight car 'left over' when I got him as a pup. He'd be good company to you if you happen to need a dog, and he don't eat much. Else perhaps you'd give him something—a drug, you know. He's too retiring to make out foragin' for himself, and he ain't got any friends but me. His looks was always up against him."

"I have five dogs already," said father, "but I will take him. No faithful dog is ill-looking to me."

So he arrived, sitting solemnly by father in the gig, and Evan pronounced him an old-time English sheep-dog, and well bred.

Strange to say, he has attached himself to Tim, after fretting for a time and seeming ill at ease with so much space to walk about in, and a whole horse stall for a bed. And Tim, who only tolerates dogs in a grudging sort of way, evidently returns the feeling. To-day, hearing conversation in the stable, I thought Bertle was there with Tim, but found only The Orphan leaning against Tim's knees and licking his fingers that were feeding him scraps of meat, while Tim looked positively pleasant.

It doesn't so much matter what one loves. To love is the transfiguring thing.

March 26. To-day I found hepaticas on the wood-edge, and the tiny white violets that bloom almost before the leaves uncurl are perfuming a dozen sun spots in the garden. It is not often that wild and garden flowers may be combined and keep their attributes, but these two harmonize perfectly, and carry indoors the elusive spirit of early spring.

April 1. All Fools' Day. I have planted my sweet peas, a pound's weight, in a long double row in the new ground beyond the sun garden. The tall nasturtiums will match them on the other side, making a narrow alley of the walk where it meets the cow-path to the wood-lot.

The garden will have a trick played on its trustfulness, I fear. A sharp, cold wind already rebuffs the violets and makes me tremble lest we have laid bare the hardy beds and uncapped the roses bushes too soon.

In the hardy garden the Scylla and Charybdis of spring lies between the keeping of things too warm and uncovering prematurely.

April 10. A sullen week of hope deferred. Evan has been on a little journey. How changed the house is when the personality that pervades its every corner is withdrawn! Each one feels it, the maids and dogs alike. Father even is restless, having come from years of lacking it to lean on his companionship; and I—I fully understand why in old times, when the night went forth, his lady, feeling a cross for general society, betook herself to a tower. There she



The first pound you use will win your lasting favor

"More bread and better bread"



# PURITY FLOUR

## ROYAL BRAND FARM FENCING

SOLD DIRECT TO THE FARMER

### THE SARNIA FENCE COMPANY, SARNIA, ONT.

ROYAL BRAND FENCE, made by the SARNIA FENCE CO., is the most talked-of fence on the Canadian market to-day. Why? Because it is the best fence made in the Dominion, and we are selling it direct to the farmer just as cheap as we will sell to agent or dealer. We have but one price and one policy to all. Naturally the agent objects to us publishing our prices to the farmer, as it deprives him of commissions and profits, and he resorts to statements regarding quality which are unjustified and absolutely untrue. His object is to get you to purchase from him a fence on which he can make a commission. Agents say our wire is not number 9. Every coil of wire we use is inspected by the Canadian Customs, and it must gauge No. 9 by the Government gauge or they will not admit it to Canada. Another claim of inferior galvanizing is made. Our answer is, our galvanizing is superior to any wire used in Canada. One of the largest railroads, "whose specifications call for wire which will stand four on one-minute dips in acid," asked for bids for 500 miles of fence. Every fence manufacturer who bid had to figure on a special quality of galvanizing to meet this test, as the wire he furnishes the farmer will not stand a four-dip test. We sent a sample of ROYAL BRAND WIRE, the same as we send to the farmer in his fence. This sample was tested both as to strength and quality of galvanizing by the railroad chemist, who pronounced our regular wire equal in quality to the special wire which the other fence manufacturers had to pay \$6.00 per ton extra to conform with the four-dip acid test. We would be glad to have you take a sample of wire from our fence and one from any other make and test both in acid, and prove the superiority of our galvanizing. This is a fight between the Canadian fence combine and the Sarnia Fence Company. We are receiving the support of every farmers' organization, as well as the individual farmer all over the Dominion. The demand for ROYAL BRAND FENCE is increasing so rapidly that we have been obliged to build a new plant, and now have the largest capacity of any plant in Canada. The Sarnia Fence Co. are the only knot-fence manufacturers in Canada who refused to join the fence combine, which was formed for the purpose of increasing the price of fence to the farmer. Don't pay more than our printed price for all No. 9 fence. If you do, you are being taken advantage of. Our guarantee will protect you. YOUR MONEY BACK IF YOU ARE NOT SATISFIED. DON'T BUY COMBINE FENCE AT COMBINE PRICES. If you have any doubt about our reliability, write to the editor of this paper, and ask him if we make good our statements or not.

We furnish a combination hoist and stretcher, complete with one ratchet, made of malleable iron, 8½ feet of chain, patent hardwood clamp, for \$4.50, or with two ratchets for \$7.50. Freight prepaid with fence orders only. The following styles of fence we have in stock, and can ship a 20-rod bale or a carload.

6-40-0—has 6 line wires, 40 in. high, 22 in. apart. All No. 9 hard steel wire. Spacing 7, 7, 8, 9, 9. Price per rod.....	21½c.	8-48-8 line wires, 48 in. high, stays 16½ in. apart. All No. 9 hard steel wire. Spacing 4, 5, 6, 7, 8, 9, 9. Price per rod .....	30c.
7-40-0-7 line wires, 40 in. high, stays 22 in. apart. All No. 9 hard steel wire. Spacing 5, 6, 6, 7, 7½, 8, 8½. Price per rod .....	24c.	9-48-0-9 line wires, 48 in. high, stays 22 in. apart. All No. 9 steel wire. Spacing 3, 4, 5, 5, 6, 8, 8, 9. Price per rod....	30c.
8-40-8 line wires, 40 in. high, stays 16½ in. apart. All No. 9 hard steel wire. Spacing 3, 4, 5, 6, 7, 8. Price per rod.....	29c.	9-48—Same as 9-48-0, with stays 16½ in. apart. Price per rod .....	32½c.
7-48-0-7 line wires, 48 in. high, stays 22 in. apart. All No. 9 hard steel wire. Spacing 5, 6, 7, 9, 10, 11. Price per rod....	25c.	10-50-10 line wires, 50 in. high, stays 16½ in. apart. All No. 9 hard steel wire. Spacing 3, 3½, 3½, 4½, 5½, 6, 8, 8, 8.....	35c.

The above prices include freight prepaid to railroad points west of Toronto, in Old Ontario. East of Toronto, add 1c. per rod to the price. To points in New Ontario, Quebec, Maritime and Western Provinces, deduct 2c. per rod from the printed price; customer to pay his own freight from Sarnia. All fence put up in 20, 30 and 40 rod rolls. Remit cash with your order, by registered letter, post-office or express order, to

## THE SARNIA FENCE COMPANY

MAKE ALL DRAFTS OR CHECKS PAYABLE AT PAR, SARNIA.

Sarnia, Ontario

NO DISCOUNT TO ANYONE FOR ANY QUANTITY FROM THESE PRICES.

alternately gazed at and polished his second-best shield until trumpets sounding and the drawbridge falling announced his return, when, rushing down, she fell into his embrace, unclasped his armor, and kneeling, relieved him of his sword.

Of course, now there is no draw-

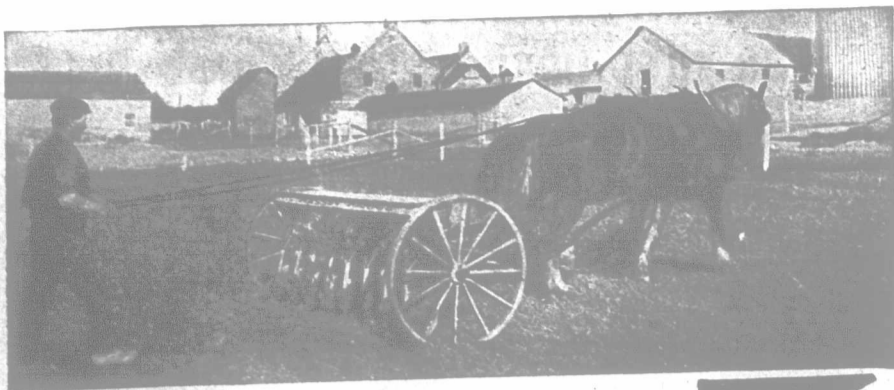
bridge, the door opens easily, the dogs replace the trumpets, and very well do Bugle and Tally-ho imitate them. Evan sets down his suit case unassisted, but the embrace remains, and all the gladness.

April 15. The first hyacinths, daffodils at their height, and the Rus-

sian violets by the Mother Tree a bed of glorious velvet bloom.

To-day we filled an alcove between two snowball bushes in the bed of the long walk, thick with budded pansy plants and tufts of English daisies. What a delicate birch odor the pansies have! (To be continued.)





## Massey-Harris Drills

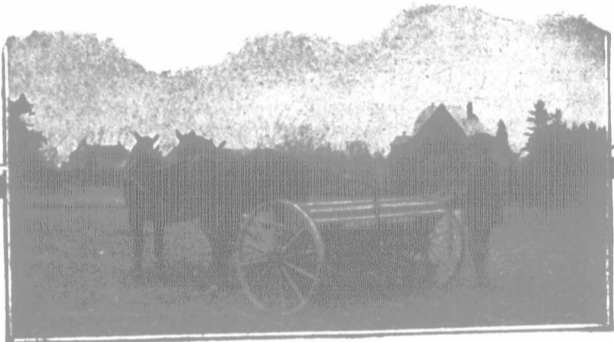
WILL SOW YOUR GRAIN RIGHT.

- MASSEY-HARRIS DRILLS have strong Steel Frames which hold all parts in proper relation.
- MASSEY-HARRIS DRILLS have reliable Force Feed Runs which sow uniformly and without injury to seed.
- MASSEY-HARRIS DRILLS have Positive Gear Drive.
- MASSEY-HARRIS DRILLS have simple and easy control—one motion of a lever lowers the Furrow Openers, applies pressure and starts the Feed—the opposite motion raises the Furrow Openers and stops the Feed.
- MASSEY-HARRIS DRILLS are made in a wide range of sizes, and with Hoes, Discs or Shoes.

GRASS SEED BOXES WHEN ORDERED.

**MASSEY-HARRIS CO., Limited,**

Toronto, Montreal, Moncton, Winnipeg, Regina, Saskatoon, Calgary, Edmonton.



ESTABLISHED 1856

Now is the time to plan for the coming season's work, and in order that your plans may be well founded, you must have

## SIMMERS'

### SEED CATALOGUE FOR 1911

It contains a fully-illustrated and descriptive list of up-to-date varieties of **Field Seeds, Garden and Flower Seeds, Plants, Bulbs, Garden Tools, Etc.** Also a great deal of valuable information that will assist you in making up your requirements in these lines.

We give you the benefit of our long experience in the seed business, extending over more than half a century, and you can rely on getting just what you order, and everything of the very best quality obtainable.

Write for our 1911 Catalogue to-day.

**J. A. SIMMERS, Ltd.**  
Seeds, Bulbs, Plants. TORONTO, ONT.

**Easiest, Quickest Way to Shear Your Sheep**

is with a Stewart machine, and especially the one shown here. This wonderful machine has a good size balance wheel housed in with the cut steel and the hard gears in a dirt proof gear case. The shearing shaft has ball bearings in every joint and the shearing head is ball bearing throughout. This machine turns easier and is faster than any other machine. It is also equipped with 4 sets of knives. The price at your dealers, all complete, is only **\$15.75**.

Get one this year

Chicago Flexible Shaft Co., 119 LaSalle Ave., Chicago

GOSSIP.

G. R. Gies, Heidelberg, Waterloo Co., Ont., writes: "My advertisement in 'The Farmer's Advocate' has brought me excellent results, and I am well satisfied. Through it I have sold all the Holsteins I could spare (except the coming crop of bull calves), as well as my seed grain."

The death is announced, at the age of 84 years, of Robert Wallace, Auchinbrain, Scotland, a noted breeder and judge of Ayrshire cattle, who was one of the first to go in for the deep-milking variety, and for keeping milk records, and his herd had a world-wide reputation. He was almost equally eminent as a breeder of high-class Leicester sheep.

The International Horse Show at Olympia, London, which is slated to open June 12th, is to be a record one in many respects. The sum of £50,000, nearly \$250,000, has been provided for carrying out an elaborate scheme of decoration by means of which Olympia will be transformed into an Elizabethan village. It is hoped that the King and Queen will be able to arrange a visit during the Coronation festivities.

Percherons brought good prices at the auction sale on March 16th, of the offering of C. W. Lamer, at Salina, Kansas. Twenty-two stallions, eight of which were yearlings and two-year-olds, averaged \$648, the highest price, \$2,175, being paid for the yearling, Judas, imported. Twenty-three mares averaged \$419, four being yearlings, one of which latter sold for \$1,000. Forty-five head sold for an average of \$535.

The black imported Percheron stallion, James, having travelled six years on one route in Middlesex County, is advertised for sale in this issue, by W. H. Guest, Ballynote P. O., nine miles from London, by stage, and three miles from Thorndale, G.T.R., on London to Stratford branch. This horse has proven a sure getter of high-selling stock, and is satisfactory in every respect. If not sold before May 1st, he will continue on same route.

The latest importation of Clydesdales to Canada reported is a half-dozen shipped the last week in March by John Kerr, Wigton, and consigned to T. J. Berry, of Hensall, Ont. This is the third importation made by Mr. Berry within the last twelve months, and consists of two stallions and four young mares in foal. One of the stallions is Sir Ronald, a son of the big, good-getting sire, Sir Ronald, dam by Cassabianca. The other horse is the three-year-old, Milleraig MacKinley, by the famous breeding horse, Ascot, by Macgregor, by Darnley, dam by Prince of Wales.

Official records of 232 Holstein-Friesian cows were accepted by the American Holstein Association from February 5th to February 15th, 1911. This herd of 232 animals, of which three-sevenths were heifers with first or second calves, produced in seven consecutive days, 94,945.8 lbs. of milk, containing 3,327.663 lbs. of butter-fat; thus showing an average of 3.50 per cent. fat. The average production for each animal was 409.2 lbs. of milk, containing 14.343 lbs. of butter-fat; equivalent to 58½ lbs. or 23 quarts of milk per day, and 16½ lbs. of the best commercial butter per week.

TRADE TOPIC.

The name of John Deere, inventor of the steel plow, and founder of the Steel Plow Manufacturing Corporation of Moline, Ill., is to be perpetuated in a mammoth consolidation of twenty-two industrial concerns and branch houses, having a capitalization of \$50,000,000. This merger is to be known as Deere & Co., with headquarters at Moline. Of special interest to Canadians is the fact that the Dain Manufacturing Co., of Welland, Ont., forms part of the amalgamation. Deere & Co. will widen their list of implements manufactured, and, having perfected a grain harvester, will begin manufacturing these for the Canadian trade at Welland, Ont. A large tract of land has been purchased adjoining the plant of the Dain Company there, and the harvesters will probably be manufactured in buildings to be erected in the near future.

## This Free Book Will Save You \$20.00 a Year



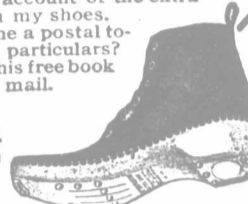
I want to tell you all about my **Celebrated Steel Shoes**—why one pair will outwear six pairs of leather shoes—how a pair will give you more foot-comfort than you ever had in your life. How they will keep your feet powder-dry all the time. How light and comfortable they are the year around. I have told half a million other these facts. They have bought steel shoes of me and saved millions of dollars among them. More than that—they can be on their feet all day—at any work, without foot fatigue. And they have gained health protection.



R. M. RUTHSTEIN  
The Steel Shoe Man.

## Steel Shoes

prevent rheumatism, sciatica, lumbago, lame back and other troubles caused by wet feet. I want to show you the way to avoid these dangers and all such troubles as tender feet, corns, bunions, chilblains, and at the same time show you a saving of \$20 a year in actual money on account of the extra wear you get from my shoes. Will you write me a postal to-day and get full particulars? Let me send you this free book of mine by return mail.



**Ruthstein**  
The Steel Shoe Man  
Dept. 13  
Toronto, Ont.

## BROWN'S

WRITE FOR CATALOGUE      WRITE FOR AGENCY

**BROWN'S NURSERIES,**  
WELLAND COUNTY, ONT.

## GRAND TRUNK RAILWAY SYSTEM

### Easter Rates

#### SINGLE FARE FOR ROUND TRIP

(with minimum charge of twenty-five cents) between all stations in Canada, also to Niagara Falls and Buffalo, N. Y., Detroit and Port Huron, Mich.

#### Good Going

April 13, 14, 15, 16, 17

Return Limit, April 19, 1911

#### LOW RATES TO THE WEST

Ask nearest Grand Trunk Agent about "Home-seekers," "Colonist" and "Settlers" excursions, or address:

A. E. Duff, D. P. A., Toronto, Ont.

## FARM, \$4,200

### For Immediate Sale

93 acres. About 4 miles to Inwood or Oil Springs, M. C. R., Lambton County. House. Barn, stone foundation. Pig house. Hen house. Milk house. Rock well. Windmill. Orchard. Excellent soil. 80 acres hay. Field of fall wheat.

## FARM, \$5,000

### For Immediate Sale

130 acres. ½ mile from school; 1½ miles to Man- damin on G. T. R., Lambton County, near Sarnia. Brick house; barn; stable; rock well. Excellent soil, drainage and road. 14 acres wheat. 80 acres plowed. G. G. MONCRIEFF, PETROLIA, ONT.



POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

BUFF ORPINGTONS. EXCLUSIVELY FOR 10 YEARS. Eggs That Will Hatch.

9 chicks guaranteed. One selected pen, \$3 per 15—all large birds. Utility pens, \$1 per 15—extra heavy layers.

Hugh A. Scott, Caledonia, Ont.

A. & D. McTAVISH, Chesley, Ontario, have eggs for hatching from choice pens of Rose-comb Rhode Island Reds and White Wyandottes. Eggs: \$1.50 per fifteen. Hatch guaranteed.

ANONAS, White Leghorns, Fertile Eggs. New circular free. Use my germ killer. Twenty-five cents, postpaid. Saves little chicks. Edmund C. Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

BARRED ROCK COCKERELS—Eggs for hatching from pure-bred birds. Write me. Leslie Kerns, Freeman, Ontario.

B. P. ROCK EGGS—One of the best laying strains in Canada. One dollar per setting. Mrs. J. R. Henry, Waterdown, Ont.

BARRED ROCKS and Single-comb White Leghorns. Eggs: \$1.00 and \$1.50 per fifteen. Maple Leaf Poultry-yards, Brighton, Ontario.

BARRED ROCKS—Bred to lay; housed in fresh-air houses. A premium on vitality and production. \$1.00 per 15. J. M. McIlquham, Lanark, Ontario.

BRONZE TURKEY EGGS FOR HATCHING—From my Winter Fair winners of thirty-two first prizes since this show started (eleven years). \$5 for nine. W. J. Bell, Angus, Ont.

BUFF ORPINGTONS—Pure-bred cockerels, pullets and eggs for sale; reasonable prices. James McGregor, Caledonia, Ontario.

BARRED ROCK EGGS—Won 8th cockerel, 2nd pullet, Ontario, Guelph, 1910. First and 2nd cockerels, best 3 cockerels, silver cup for best cockerel, Ottawa, 1911. Birds I show I breed. Write for prices. John Gormley, Pickering, Ontario.

BARRED AND WHITE ROCK EGGS—\$1.00 per 15; \$4 per 100. S. L. Jayne, Grafton, Ontario.

BRED FROM CANADA'S BEST—Rose and Single Comb Rhode I. Reds, Barred Rocks and Single-comb White Leghorns. Eggs, \$1.00 per 15. Send 4 cents in stamps for new Standard of Perfection on Rhode Island Reds. W. J. Mihm, 225 Waterloo Ave., Guelph, Ont.

BABY CHICKS—Single-comb Black Minorcas Rose-comb Brown Leghorns, and Barr Rocks, \$6.00 for 25; \$11.00 for 50; \$20.00 for 100. These chicks will be from pure-bred stock. J. H. Rutherford, Box 62, Caledonia East, Ont.

BARRED ROCK EGGS—Choice utility stock. Heavy winter layers. One dollar per fifteen. Satisfaction guaranteed. Arthur Hayward, Eastwood, Ontario.

BARRED ROCK EGGS—Choice stock, one dollar for thirteen. Satisfaction guaranteed. Nelson Smith, Jerseyville, Ontario.

CLARK'S BUFF ORPINGTONS—25 beautiful cockerels, bred from New York and Ontario winners, at \$2.00 and \$3.00. Good laying strain, good color and type. A few females, \$1.50, \$2.00. Eggs for hatching from National winning stock. Free illustrated mating list. J. W. Clark, Cainsville, Ontario.

EGGS FOR HATCHING, of several varieties, \$1.00 per 15. Send for mating list. Robert Houser, Canboro, Ontario.

EGGS FROM PRIZE DUCKS—Aylesbury and Rouens (limited number); Pekins, any quantity. Two dollars, eleven eggs. Barred Rock eggs from prize stock (Pringle strain), two dollars for fifteen. Alton Stevens, Lambeth, Ontario.

EGGS FOR HATCHING—Rhode Island Reds, Wyandottes, Dark Brahmas, Rocks, Leghorns, 15 eggs, \$1.00; 100 eggs, \$4.00. Rouen and Mammoth Pekin duck eggs, 13, \$1.00. Satisfaction guaranteed. Wade & Son, Sarnia, Ontario.

EGGS FOR SALE—Buff Orpingtons a specialty. Large, golden-buff birds; bred for good table qualities and winter laying of large, brown eggs. Eggs \$2.00 and \$1.00 per 15. Turkeys guaranteed. Baby chicks, 25c. each. Percy Maxwell, Sharpton, Ontario.

EGGS FOR HATCHING—From prizewinning Buff Orpingtons, S.-C. Black Minorcas; heavy layers: 13 for \$1.00; 30 for \$2.00. James Fiddler, Norval, Ontario.

EGGS—Single-comb Rhode Island Reds; heavy layers: \$1.00 per 15. Grand laying Rouen Runner ducks, 10c. each. Frank Ryan, Glanworth, Ontario.

"ELWEISS" White Rock eggs for hatching, at \$2.00 the 15. Only trap-layers with records as pullets used as parents. Their mating with a grand cockerel gives results. J. A. Butler, M. D., Sarnia, Ontario.

EGGS FOR HATCHING—From Al heavy-laying strain of S. C. Black Minorcas, one dollar for thirteen. Special prices on incubator lots. Ed. Haacker, Beachville.

EGGS FOR SALE—From prizewinning Rouen and Pekin ducks, \$2.00 per setting. S. J. Cox, Colborne, Ontario.

EGGS FOR SETTING—From choice White Wyandottes. None better. Dollar per fifteen. Emerson Tufts, Welland.

EGGS FOR HATCHING—From good laying strain R.-C. Rhode Island Reds, one dollar per fifteen. L. Parkinson, Guelph, R. R. No. 1.

EGGS, guaranteed for hatching, from No. 1 pen, \$1.50 per fifteen; No. 2 pen, \$1.00 per fifteen, of the following breeds: S.-C. W. Leghorns, R.-C. Brown Leghorns, White Wyandottes, Silver-laced Wyandottes, Rhode Island Reds, Buff Orpingtons, Barred Plymouth Rocks, W. H. Furber, Dunganon Poultry-yards, Cobourg, Ontario.

EGGS FOR HATCHING—Rose-comb Brown Leghorns, \$1.50 per 15; \$2.75 per 30. Rouen Duck eggs, \$2.00 per 15. Mammoth Bronze Turkey eggs, \$3.50 per 9. Guaranteed fertile. J. H. Rutherford, Box 62, Caledonia East, Ontario.

EGGS FOR SALE from birds that have won over five hundred first prizes at nine shows; Barred and White Rocks, White Columbian and Silver-laced Wyandottes, Rose and Single Comb R. I. Reds, Buff Orpingtons, Blue Andalusians, Black Javas, Houdans, Anconas, Black and Spangled Hamburgs, Silver Gray Dorkings, Light Brahmas, Buff Cochins, White and Brown Leghorns, Golden Sebright, Buff and Black Cochin Bantams. Only one pen of each breed; \$2.00 per 15. Eggs half price after June 1st. F. W. Krouse, Guelph, Ontario.

FOR SALE—A few nice Rose-comb Brown Leghorns. Four Golden-laced Wyandotte cockerels from prizewinning stock. Prices right. Eggs in season. Peter Daley & Son, Box 26, Seaforth, Ontario.

GOLDEN WYANDOTTES—World's most beautiful fowl. Large, hardy and great layers. Choice cockerels, \$1.50 up. Glenora Stock Farm, Rodney, Ontario.

GREATEST LAYERS ON EARTH—Indian Runner ducks; 297-egg strain. Howse, Niagara-on-the-Lake.

HOUDANS, Barred Rocks and Black Minorcas. Large, utility stock, and great laying strain. Send for free circular. C. Day, Highgate, Ontario.

HAMBURGS—Black and Golden Spangled. Stock and eggs, at \$2.00 and \$3.00 per setting. Samuel Spies, St. Thomas.

HATCHING EGGS—White, Brown and Buff Leghorns, single-comb; White and Buff Wyandottes; Black Minorcas; Black Orpingtons; all bred for winter laying. \$1.50 per 30; \$2.50 per 60; \$3.50 per 108 eggs. W. R. Kaiser, Mitchellville, Ontario.

INDIAN RUNNERS AND WHITE WYANDOTTES—Eggs, dollar per setting. W. D. Monkman, Bond Head, Ontario.

IF YOU WANT CHEAP EGGS from pure-bred fowl, write to H. Lacey, Kirkfield, Ontario, after April the first. Six different kinds to choose from.

PRIZE BARRED ROCKS, with egg record. Eggs, one to three dollars for fifteen; six dollars hundred. Pekin duck eggs, one and two dollars for twelve. Jas. Coker, Jerseyville, Ontario.

PHEASANTS—Golden, Silver, Amherst, and others. Richard Hill, Ross Pheasantry, London, Ontario.

RHODE ISLAND REDS (Rose-comb)—Bred twelve years from carefully-selected, heavy winter layers of large brown eggs. Fifteen eggs, dollar-half. Good hatch guaranteed. John Luscombe, Merton, Ontario.

RHODE ISLAND REDS—Eggs, one and two dollars per setting; direct from Charlton's strain. Write for price on incubator lots. H. Talbot, 25 Askin St., London.

ROSE-COMB BROWN LEGHORN EGGS, \$1.25 per 15. W. M. Sproule, Westbrooke, Ontario.

ROSE-COMB RHODE ISLAND REDS—Heavy laying imported stock. Eggs for setting, one dollar for fifteen. Fred Colwell, Cooksville, Ontario.

SINGLE-COMBED WHITE LEGHORNS a specialty. \$1.00 per fifteen. W. J. Young, Mt. Brydges.

SINGLE-COMB REDS—Grand winter layers, headed by an Ontario winner. Eggs: \$1.25 per fifteen. Black Cochin Bants, \$1.50 setting. Wm. J. Kay, Guelph.

S.-C. W. LEGHORNS—I breed according to the American Standard, but to fill the egg basket, not the exhibition coop. During past months of December, January and February, flock laid 398 dozen. Eggs, \$1.00 per setting, from selected matings. Jno. H. Stewart, Elliott, Ontario.

SINGLE-COMB BROWN LEGHORN EGGS—\$1.25 per 15. David A. Ashworth, Maple Grove, Ontario.

SINGLE-COMB WHITE LEGHORNS—Trap-nest records, 278, 248, 227, \$1 setting. W. G. Cowan, Wemyss, Ontario.

SINGLE-COMB BROWN LEGHORNS—Prize-winning and great laying strain. Eggs: \$1.00 per fifteen. Arthur Master, Highgate, Ontario.

S.-C. WHITE LEGHORN EGGS—From high-class stock. Make money for me, also for you if you get into my strain of hardy workers. Pullets lay at 4 months, and keep at it. \$1 per 15; \$5 per 100. Invest and you won't regret. Cockerels cheap. B. W. Linscott, "Seven Acres," Brantford.

THE GREATEST LAYING STRAIN of Barred Rocks in Ontario. Eggs: \$1.00 per fifteen; \$5.00 per hundred. Al. Donaghy, Colborne, Ontario.

UTILITY WHITE WYANDOTTES—Eggs for hatching. For further particulars write Chas. F. Hooper, Box 157, Exeter, Ontario.

WHITE ORPINGTON EGGS—From prizewinning birds. Heavy winter layers. \$3.00 per setting of 15. H. Ferns, 715 William St., London, Ontario.

WHITE WYANDOTTES EXCLUSIVELY—Bred for heavy egg production and standard points. Eggs: \$1.00 per 15. Good hatch guaranteed. Thos. F. Pirie, Banner, Ont.

50 BUFF LEGHORN EGGS, \$3.50. Circular free. J. E. Griffin, Dunville, Ontario.

Pleasant Valley Farms EGGS FOR HATCHING.

White Wyandottes, \$1.25 per 15; \$5.00 per 100. Special mating, \$3.00 per 15. Also S.-C. W. Leghorns, pen headed by first-prize C. N. E. cockerels, \$1.50 per 15.

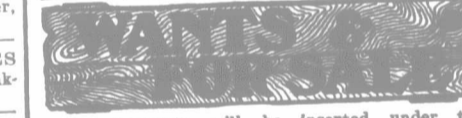
Geo. Amos & Sons, Moffat, Ont. S. G. HANSON'S STANDARD WHITE LEGHORNS

The breeding hens for the season 1911 are part of the flock of 402 pullets which in January, February and March established a record for flocks of that size, by laying 28,532 eggs. The cockerels heading the breeding pens are bred from trap-nested hens, with individual records in their pullet year of 200 eggs and over. Birds from these matings must give exceptionally good results. Book your orders for hatching eggs well in advance, if you want early-laying pullets.

EGGS FOR HATCHING

March and April—\$3.00 per 15; \$15.00 per 100. May—\$2.50 per 15; \$12.50 per 100. June—\$2.00 per 15; \$10.00 per 100. Prices of day-old chicks on application.

S. G. Hanson, Hillcrest Poultry Farm, Box 147, Duncan, B. C.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

ALABAMA NEEDS 50,000 FARMERS, dairy-men and stock-raisers to supply her local markets with butter, poultry, vegetables, hogs and cattle. The best lands in the world can be had at \$5.00 to \$50.00 per acre. Let us help you to get a farm in Alabama, where the climate is delightful, where you can raise several crops each year on the same land, and find a ready market for same. We are supported by the State and sell no lands. Write for information and literature. State Board of Immigration, Montgomery, Alabama.

EXPERIENCED married man by the year, to take charge of seventy-five-acre farm near Toronto. Give references and wages expected in first letter. One with no encumbrances preferred. Apply: Box W, "The Farmer's Advocate," London, Ontario.

FOR SALE—Iron, Pipe, Pulleys, Belting, Rails, Chain, Wire Fencing, Iron Posts, etc.; all sizes very cheap. Send for list, stating what you need. Agents wanted; good commission. The Imperial Waste & Metal Co., Queen St., Montreal.

FARMS FOR SALE—Three-quarter section virgin land within three miles of Engelfeld, Sask., and near Watson, on Canadian Northern. Soil well adapted for mixed farming. Will sell for cash or exchange for Toronto or Ontario property. R. L. Robertson, Box 444, Toronto.

FARM TO RENT—Township of St. Vincent, near Meaford, 200 acres under cultivation. 300 acres range for cattle. Farmhouse, good outbuildings. Well watered. Rent, \$400 per annum. J. W. G. Whitney & Son, 25 Toronto Street, Toronto.

GOVERNMENT STANDARD SEEDS FOR SALE—O. A. C. No. 21 Barley, 90c.; Golden Vine Peas, \$1.00; Banner, White Siberian, Silver Mine, Scottish Chief Oats, 50c.; Red Clover, \$5.50; Alfalfa, \$13.00; bags extra. Ask for samples. Caledonia Milling Co., Ltd., Caledonia.

IT IS OUR BUSINESS to introduce you to parties looking for farms. We have on our list some of the best farms in Ontario. If you want to buy or sell, it would pay you to consult us. Woolley & Farewell, 177 King St. E., Hamilton, Ontario.

O. A. C. NO. 21 BARLEY—Our supply is going fast, but we still have some left at old price. Best cotton bags 30c. Jno. Elder, Hensall, Ontario.

MEN WANTED—Age eighteen—thirty-five, for firemen, hundred dollars monthly, and brakemen, eighty dollars, on all Canadian railroads. Experience unnecessary; no strike. Positions guaranteed competent men. Promotion. Railroad Employing Headquarters—over five hundred men sent to positions monthly. State age; send stamp. Railway Association, Dept. K, 227 Monroe Street, Brooklyn, N.Y.

O. A. C. NO. 21 BARLEY—Our large supply was exhausted, but we have purchased 350 bushels more, grown from our seed. Sample is excellent and true to name. Price, \$1 per bushel. Best bags, 30c. Jno. Elder, Hensall, Ontario.

POTATOES—Empire State; heaviest yielder, best quality. Registered seed, 3 years' selection, \$1.50 bag. A. Hutchinson, Mount Forest, Ontario.

STRAWBERRY PLANTS—Stocky and well-rooted. All tested varieties. Catalogue and price-list free. S. H. Rittenhouse, Jordan Harbor, Ontario.

T. O. CATHOLICS ONLY—If you have \$20 or more to invest in a safe and profitable enterprise, which has banking endorsements, send for my free book. Philip Harding, Dept. C316, Box 96, Spokane, Wash.

WANTED—By April 15th, working house-keeper for farmhouse work. Small family of adults. Good wages. Apply: M. C., "Farmer's Advocate," London, Ontario.

WANTED—100-acre farm in County of York; clay loam, good buildings and good supply of water. Write: Alex. Kerr, Port Sydney, Ontario, Muskoka.

WANTED—Several good hardwood bush lots. State what you have to offer for spot cash. Box O. S., "Farmer's Advocate," London, Ontario.

WANTED—Single man, for herd of Holstein cows. Good wages to experienced man. Give references. W. Chessor, Eglinton, Ont.

WANTED—Man to work on farm. State wages expected and experience. A. A. O'Leary, Pt. Lambton.

CEMENT SACKS, \$25.00 1,000,000 per 1,000.—Cement sacks made from all rope paper. Will replace the expensive Jute or Cotton Bag. Jos. Werner, 1842 North Park Avenue, Chicago, Ill.

\$6.41 A YEAR PER HEN—Our catalogue tells all about it. Write for one. It's free. L. R. Guild, Rockwood, Ontario.

THE DELHI TANNERY WANTED—2,000 horse and cattle hides to tan for robes, coats, etc. All kinds of hides, skins and furs dressed soft and pliable. Deer skin for buck, or with the hair on. Send them to me and have them dressed right. B. F. Bell, Delhi, Ont.

THE ENERGY FOOD

The Vim and Vitality One Gets From Oats

There is something in oats which creates spirit and energy. No other grain can bring results like them. Everyone knows what oats do for horses. They have the same effect on man.

An extract of oats is employed as a tonic. A diet of oats multiplies one's vitality. That's why energetic men—men of vim and spirit—are said to "feel their oats."

In Quaker Oats, the finest oats—Canadian grown—are subjected to 62 siftings. Just the rich, plump grains are used. There is only ten pounds of Quaker Oats in a bushel.

These grains have the maximum of richness and energy. They are also the most delicious. To eat Quaker Oats once a day for a month will show to the limit what tonic effects, what bubbling vitality one can get from oatmeal. One never knows how good oat food is, or what it can do, until he tries Quaker Oats.

Made in Canada.

Advance Notice of Sales OF ENGLISH PEDIGREE LINCOLN RED SHORTHORNS AND Longwool Sheep, 1911

April 27th.—Annual Amalgamation Sale of Registered Lincoln Red Shorthorn Choice Bulls, on the Fair Grounds, Lincoln.

July 6th.—Annual Sale of Mr. Hy. Dudding's world-famous RIBBY LONGWOOL RAMS AND EWES, at Ribby, near Grimsby, Lincolnshire.

Full particulars of above, and commissions executed by

Dickinson, Riggall & Davy, Live-stock Auctioneers and Agents, Louth, Grimsby & Brigg, England

Imported Percheron Stallion

FOR SALE: Imported James, black, weight about 1,800 lbs. Has travelled six years on same route; has proved to be an extra sure foal-getter, and his colts have sold for high prices. Unless sold before May 1st will continue on the same route. For price and particulars, apply to:

W. H. GUEST, Ballymote, Ont.



# CLYDESDALE and HACKNEY ADMIRERS

## Come to Cairnbrogie

and see the greatest bunch of big young stallions and mares, from three to six years of age, ever collected in one barn.

At the three great shows of Canada and the United States, Toronto, Chicago, and Winnipeg, we won, in Clydesdale Stallions, every first prize but one, that being taken by a horse previously imported by us.

"THE BRUCE," imported by us, and shown at the last Winnipeg Industrial, where he won the Grand Championship, over all draft breds, was again made Champion at the recent Brandon Stallion Show, where he met and defeated past Western Champions, as well as the last New York, Guelph and Ottawa Champions.

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Come and buy where you get a square deal.

The name of GRAHAM BROS. is evidence the animal is the best, as there are so many in the business who do not know the difference between the good and the inferior animal.

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## GRAHAM BROS., Claremont, Ontario





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IF YOU WANT THE SEEDS  
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DEALERS EVERYWHERE SELL RENNIE'S SEEDS  
THE FINEST IN THE LAND.  
WRITE NEAREST ADDRESS FOR CATALOG.  
W.M. RENNIE CO. LIMITED, TORONTO, MONTREAL, WINNIPEG, VANCOUVER.

**The Marlin Model 20 REPEATING RIFLE**

You can buy no better gun for target work and all small game up to 200 yards.

Without change of mechanism it handles .22 short, long or long-rifle cartridges perfectly. The deep Ballard rifling develops maximum power and accuracy and adds years to the life of rifles.

The solid top is protection from defective cartridges—prevents powder and gases from being blown back. The side ejection never lets ejected shells spoil your head and allows quick, accurate repeat shots. With simple take-down construction, removable action parts,—least parts of any .22—it is the quickest and easiest to clean. A great vacation rifle. Ask any gun dealer.

The 136 page Marlin catalog will help you decide what rifle best suits your individual desires. Send 3 stamps for it today.

**The Marlin Firearms Co.**  
113 Willow Street New Haven, Conn.

**These Wheels Will Carry as Much as a Team Can Draw.**

Say good-bye to the worries, trials and troubles due to ordinary, unreliable wooden wheels. Use T.-K. Wide-tire Steel Wheels on your farm wagons, and you can go through the deepest mud or over the rockiest road, and the horses will draw a 2-ton load, and do it easier than any team will pull an even ton without them.



This is the most popular wagon made for farm work, and is in appearance, finish and workmanship equal to any made in Canada. A T.-K. Handy Farm Wagon will accomplish with one man the work which requires two men with any ordinary wagon. No other wagon can compare with it, even those selling at nearly twice the price.

Write for literature that tells how to make farm work easier and more profitable.  
**Tudhope - Knox Co., Limited, Orillia, Ontario**

**Anything from a BERRY PLANT to a SHADE TREE is waiting your order**

No better stock or value offered than at the old reliable CENTRAL NURSERIES. We ship direct to customer with satisfaction. Send for priced catalogue before placing your orders. It will pay. If you have not had good results from others, TRY OURS—31st YEAR.

The new hardy Hydrangea HILL of SNOW, a Beauty; the New Snow Queen Rose; Baby Rambler, in bloom all summer, by mail, 35c. each.

Apple, Pear, Plum, Cherry, Peach and Ornamental Trees, Roses, Shrubs, Seed Potatoes, etc.

**A. G. HULL & SON, St. Catharines, Ont.**

**QUESTIONS AND ANSWERS.**  
Veterinary.

**BRONCHOCELE, ETC.**

1. Calf was born with enlargements in the throat. Should I get rid of it?
2. How long after a cow calves until the milk is fit to use? I. J. C.

Ans.—1. This is enlargement of the thyroid glands, called bronchocele, or goitre. It is not uncommon in young calves, and usually yields to treatment. Get an ointment made of two drams each of iodine and iodide of potassium, mixed with two ounces vaseline, and rub a little well into the lumps once daily.

2. In five or six days. V.

**Miscellaneous.**

**OVERRUN—CHURNING TEMPERATURE.**

1. How much butter is equivalent to 1 lb. of butter-fat?
2. At what temperature should cream be churned? A SUBSCRIBER.

Ans.—1. The overrun varies with conditions and methods, but, on the average, one pound of butter-fat may be reckoned equivalent to seven-sixths pounds of butter.

2. There is no given temperature at which cream should be churned. If cream is rich, and the cows have but lately freshened, the temperature may be as low as 54 degrees in summer, and sometimes in the fall and early winter when cows are first put on dry feed and are drying up in their milk, and cream perhaps is thin, and churning is continued all day without bringing butter, temperature of cream should be raised to 64 or even 70 degrees. If the cream takes 40 minutes or longer, the temperature has been too low. If the butter comes in 10 minutes, the temperature has been too high.

**CHEESE FACTORY IN TOWN.**

What can be done in a case like this? We have formed a joint stock company, procured a charter, and purchased a lot in town upon which to build a cheese factory. At this stage of the proceeding, we are informed that it is necessary to get a permit from the local Board of Health before we can operate the factory. We then call for a meeting of the Board of Health, and ask if they will give the permit, providing we build a perfectly sanitary factory. They all refuse to give the permit except one, on the ground that it is impossible to make a cheese factory sanitary. We have reason to believe that this Board of Health would still refuse to give a permit, even though we were able to prove that we had a perfectly sanitary factory. L. H. W.

Ontario.  
Ans.—We doubt very much your being in a position legally to insist upon proceeding with your proposed factory. It would be well for you to consult a local solicitor. Possibly the Provincial Board of Health might be persuaded to intervene.

**SPRING PASTURE—ALFALFA FOR SEED.**

1. Is there any kind of grain or seeds that can be sown in the spring that will make an economical pasture for hogs the same summer?
2. Would it be advisable to cut alfalfa for seed which had been sown in April, 1910, and which made a good growth the following summer?

Ans.—1. Rape, though usually sown in June or July, will grow right along if sown in early spring, and makes abundant and nutritious pasture for hogs. It sometimes produces skin troubles in hogs, usually believed to be caused by pasturing while stiff with dew. It might be wise to sow along with it a half-seeding of oats, which of themselves make excellent cattle pasture, and are sometimes recommended as part of a mixture for hog pasture. We notice, however, that Prof. G. E. Day has rather advised against sowing anything with the rape for this purpose.

2. As it is a question whether it pays to try to grow much alfalfa seed in Canada, it would be better, probably, not to attempt it the second year after seeding. The crop would not likely suffer seriously if such were done, but we should suppose there would be less likelihood of harm if the alfalfa were a year older.

**"EASTLAKE"**

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**FIRE, LIGHTNING, RUST AND STORM PROOF**

SIMCOE, ONT., April 9th, 1908  
"We have handled your 'Eastlake' Shingles for nearly a quarter of a century. They have been on the Court House, Free Library, and other public buildings of this town for 18 years. We have used very large quantities during the past 25 years, and they have always given first-class satisfaction, and have never required any repairs."  
(Signed) MADDEN BROS.  
Tinmiths and Hardware Merchants.

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**The Metallic Roofing Co.**  
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that live to grow up mean big profits. Pratts Poultry Regulator will make money for you this year if you give it to your chicks right from the start—you will have a flock of plump productive fowls that will begin to lay early.



**Poultry Regulator**

is a wonderful tonic for the blood and keeps their digestion in perfect order. Bowel trouble, which alone is responsible for the loss of thousands of little chicks every year, will be prevented by giving the little fellows Pratts Poultry Regulator every day. The chicks grow faster because they get more nourishment from their food.

You cannot make money with lousy poultry. Start early to dust all the birds with Pratts Powdered Lice Killer, then spray the walls and hen houses with Pratts Liquid Lice Killer. Remember Pratts Remedies are all

**Guaranteed or Money Back**

Get some of Pratts Poultry Regulator today and try it on the little chicks and all fowls. Your dealer sells 25 lb. pails for \$2.50 also smaller sizes and 100 lb. bags.

Write for your free copy of POULTRY WRINKLES. It is waiting for you—a postal will bring it.  
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**Collette Mfg. Co., Dept. K, Collingwood, Ont.**

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Safeguard your home. The **DODD SYSTEM** of protection is the standard. Only system endorsed by 2000 insurance companies. Lower insurance rates. Agents wanted. Fine, large Lightning Book with vivid lightning scenes, free. Address  
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# KEITH'S SEEDS

IN NINETY-NINE CASES OUT OF ONE HUNDRED WE CAN SAVE YOU MONEY ON  
**CLOVERS, TIMOTHY SEED AND SEED GRAINS**

Prices as quoted in last week's issue of this paper, on page 559, are still good. Our "**Sun**" Brand Red Clover is that beautiful pure blue berried seed that sells on sight; it is cleaned, re-cleaned, and then cleaned again. We still have some **O. A. C. No. 21 Barley** on hand. Send in your order before it all goes.

**Geo. Keith & Sons, Toronto, Ontario**  
Seed Merchants Since 1866. 124 King Street, East.

## Dr. Williams' Fly and Insect Destroyer

IS MANUFACTURED SOLELY BY

**BAKER & BOUCK, MORRISBURG, ONT.**

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DR. WILLIAMS' FLY AND INSECT DESTROYER.

1. The farmers' friend.
  2. Protects horses and cattle.
  3. A veritable vermicide.
  4. A perfect disinfectant.
  5. Perfectly harmless.
  6. Easy of application.
  7. Increases supply of milk.
  8. Kills all the bad germs in your stable, henhouses, etc., prevents roup and hen cholera, and arrests abortion in cattle. Has cured distemper in two days.
- N. B.—Finest vermin destroyer and disinfectant known.

### Notice.

The general satisfaction cows will manifest when freed from the annoyance of flies.

The increase in the amount of milk they will give.

The comfort and ease in milking. The hen get busy at her nest to lay the golden winter egg.

The absence of hair-lick on the cows' sides.

The healthy condition of your porkers' epidermis.

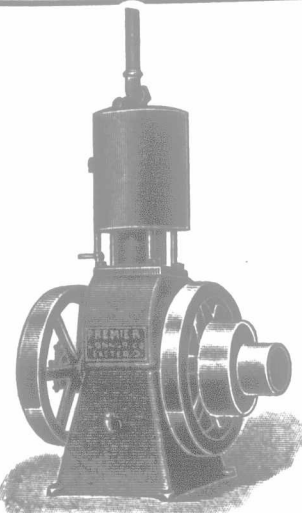
Be progressive and use DR. WILLIAMS' FLY AND INSECT DESTROYER. We guarantee it to do all that we claim for it. If not satisfied, we want to hear from you.

**The Three Grandest Disinfectants: 1. Sunshine; 2. Air; 3. Dr. Williams' Fly and Insect Destroyer.**

None genuine without the facsimile signature of W. Williams on a yellow label printed in black.

**J. A. Brownlee, 385-7 Talbot St., London, Ont.,**  
SOLE AGENT FOR LONDON DISTRICT.

**J. A. Johnston & Co., 171 King St., East, Toronto, Ont.**  
**John Fowell, Travelling Representative Woodstock, Ont.**



## THE AIR-COOLED PREMIER

A GASOLINE ENGINE

designed specially for the farmer. Two sizes: Two and four H.-P. Write for circulars and prices.

**The Connor Machine Co.**

Limited

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## RELIANCE FENCING 2000 MILES

Think of it! Over 2,000 miles of this fencing is already in use on the farms and along the highways of Canada and in Foreign Countries, and every foot of it is giving good service. All the good points in every kind of Fence are incorporated in the manufacture of

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Write for your copy of our catalog of Fence, Gates, Lawn Fences. Agents wanted in unoccupied Territory.

**The Empire Fence Export Co., Ltd., Walkerville, Can.**  
EVERY ROLL OF RELIANCE FENCE IS BUILT TO SELL ANOTHER!

### GOSSIP.

Robert Miller, Stouffville, Ont., under date March 29th, writes: I to-day shipped to P. M. Brett & Sons, Edmond, Saskatchewan, a really grand lot of Clydesdale mares and one Shetland Pony. In the lot are five imported from Scotland, one of which came from Smith & Richardson, a beautiful filly rising three, and in foal. Another from Graham & Renfrew, one of their best show mares. A grand big and good mare from John A. Boag, sired by Everlasting, dam by Sir Thomas, grandam by Darnley, a great mare, with great breeding, both for quality and size. Another good big mare from G. A. Brodie, and still another from myself. All above are imported. There were also four bred from imported stock on both sides, and seven registered mares besides, with grand quality and breeding, many of them in foal to the best horses in the district, all but one old enough to work, and quite able for it. I have never put a nicer and more valuable lot of mares in a year, and they should be good, for neither time, trouble nor expense was spared in securing them.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### CALLING A MEETING.

A petition is filed out according to the form in the regulations of the Educational Department for calling a special meeting of the ratepayers, and signed by ten, and given to the Secretary of the School Board. The petition states the objects for calling the meeting. The Secretary sends the petition to the Chairman of the Board. They notify him it is not of sufficient importance to call for a meeting.

1. Have the Trustees that power?
  2. Should the Secretary have called the meeting on receipt of the petition?
  3. What recourse have the ratepayers?
- Ontario. J. I. G.
- Ans.—1. Such action on their part does not relieve the Secretary of his duty in the matter.
2. Yes; assuming, of course, that the proposed meeting was for a lawful school purpose.
3. It is possible that the Secretary has rendered himself liable to a penalty of \$5, under Sec. 130 of The Public Schools Act, 9 Edw. VII. (1909), Chap. 89.

#### ROUP.

What is the matter with chickens when their heads and eyes swell up so that they cannot see? Is the disease contagious? If so, how can chickens that get it be cured? R. T. K.

Ans.—The chickens have roup. Some call the disease swelled head, or swelled eyes. It comes, in all probability, from a cold in the beginning, but will spread among the flock, if not checked. There are several roup cures on the market, most of them, doubtless, good, but there is nothing better than permanganate of potash dissolved in the drinking water. Prof. Graham recommends as much as will lie on a 5-cent piece to a gallon of water. Get five cents' worth from a drug store. Mild forms of roup may run through a flock without causing any deaths, but if there are any cases in the advanced stage, and death is certain, they should be killed, and the bodies burned. This should be done with all affected birds in the case of the more virulent forms.

It may be well to disinfect the house. If so, use air-slaked lime under the dropping boards, to a bushel of which has been added one pint of crude carbolic acid, and spray the interior of the house with a whitewash containing 5-per-cent. solution of carbolic acid.

## "KODAK"

Is our Registered and common-law Trade-Mark, and cannot be rightfully applied except to goods of our manufacture.

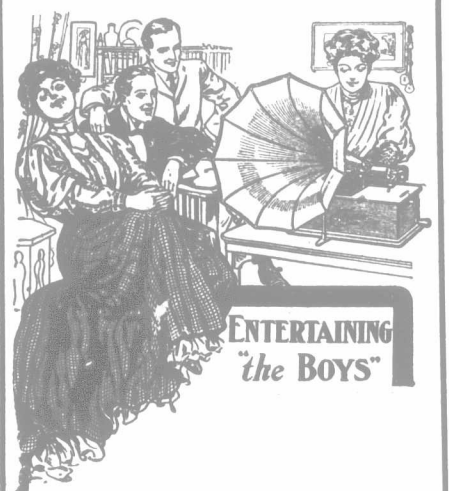
If a dealer tries to sell you a camera or films, or other goods not of our manufacture, under the Kodak name, you can be sure that he has an inferior article that he is trying to market on the Kodak reputation.

If it isn't an Eastman,  
It isn't a Kodak.

CANADIAN KODAK CO., LTD.  
TORONTO, CAN.

Write for Kodak Catalogue—or ask a Kodak dealer.

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"the Boys"

EDISON, VICTOR, COLUMBIA.  
\$19.60 to \$240.00

Cash or monthly payments. Send for catalogue.

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## E. ISLAND SEED OATS

The best in the world. Farmers sowing our selected, separated seed oats will make more by extra yield than will pay for seed twice over. All seed prepared by special Power Brush Clipper Separator. Only the large, plump, vital grain, put up in new three-bushel bags, sufficient for one acre, offered. White—Banner, Ligowo, Sensation, Big Four, Jewel, Waverly, Swedish Select, Danish, Gothland and Black Beauty (Black). Refer by permission, Agricultural Department, Charlottetown, and (or) Maritime Dominion Seed Inspectors.

Joseph Read & Co. Ltd. Summerside, P.E.I.

Some of your hurts you have cured. And the sharpest you still have survived. But what torments of grief you endured From evils which never arrived.

—Ralph Waldo Emerson.

## Make YOUR OWN Will

No lawyer necessary. With Bax's Correct Will Form you can make your own will as perfectly legal and binding as any lawyer. Insures privacy and saves the usual \$5 or \$10 fee. Send 35c., stamps or coin, for complete Will Form, also specimen Will, with full instructions, postpaid.

Save  
Costly  
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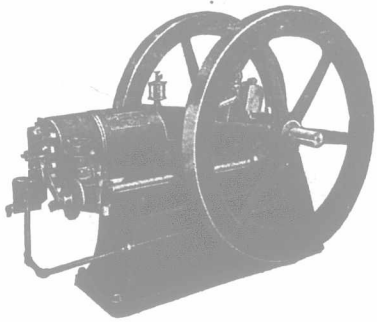
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The advantages of a gasoline engine are recognized by every progressive farmer. The question is, which make to buy.



### Barrie Engines Run Right

You can rely on a Barrie Engine. It will do its work quickly and well. Just start it. A Barrie Engine is built to go without constant attention or regulation. Mounted on skid, with battery box and all connections made ready to run. Catalogue free. Ask for best agency proposition ever offered.

#### SPECIAL FEATURES

Gasoline reservoir in sub-base. Gasoline is drawn from reservoir by suction of engine, without any moving parts to get out of order. Has circuit breaker, prolonging life of contact points and batteries 400 per cent. Heavy and rigid construction. Solid steel billet crankshaft, counterbalanced. Perfect controlling governor. Small number of moving parts. Only Hooper Cooled Engine in which there is a perfect circulation of water. All parts guaranteed interchangeable.

Gas Engine Dept., A. R. Williams Machinery Co., Limited,  
95 FRONT STREET, WEST, TORONTO.

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The Canada Producer & Gas Engine Co., Limited, Barrie, Ont.  
RELIABLE AGENTS WANTED.

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long and leaks not



the cheapest good roof  
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is so thoroughly locked together, unit by unit, that the hardest windstorm cannot budge; the heaviest rainstorm cannot penetrate; the severest lightning cannot harm. And that means Preston Shingles. Possibly you may think wood shingles are cheap. They are—in the worst sense. Only metal shingles should roof any building of yours. And any metal shingle is better than any other roofing. But Preston Shingles excel—in every practical way—all other metal shingles. Shouldn't you know about that? The book that proves is waiting for your request. 17

Write Now To

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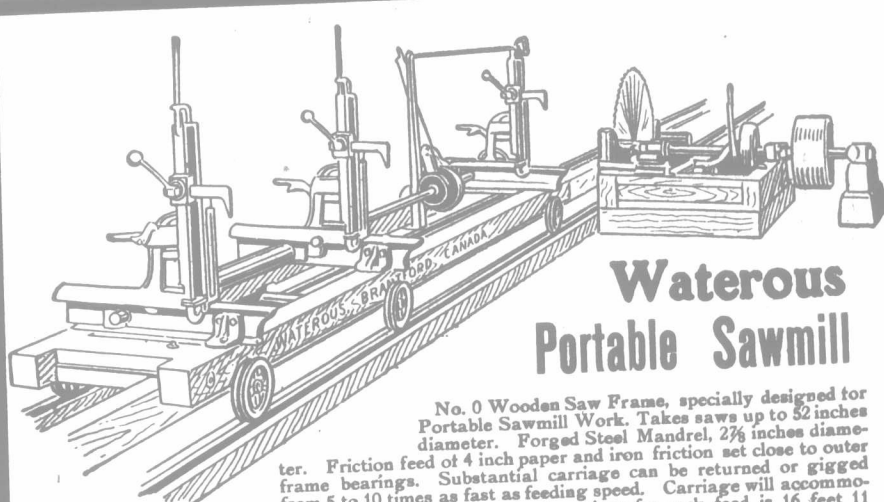
# PRESTON

SAFE-LOCK  
SHINGLES

Branch Office and Factory: Montreal, Que.

#### TRADE TOPICS.

CANADIAN MANUFACTURERS TO THE FRONT.—That Canadians manufacture goods which equal anything produced elsewhere, is now a fact generally admitted. Some years ago, the Canadian manufacturer was inclined to concede superiority to foreign goods, and was quite willing to let buyers have the impression that his goods were imported. This has changed. Our manufacturers have jumped to the front. "Made in Canada," stands for quality; and the Canadian people, as a whole, have found, by careful comparison, that in many cases goods made in our own country are quite as good in every way as anything bearing a foreign trade-mark. To-day, the Canadian manufacturer considers it an honor, as well as a mark of merit, to label his goods—"Made in Canada." More than this, in some products, Canada has the proud distinction of producing something superior to anything else in the world. One of these articles is Granulated Sugar, refined from Cane Raws; and in a recent comparison it was shown that samples taken from the St. Lawrence Sugar Refinery in Montreal were pronounced by experts as being as near perfection as possible, and of better color and higher test than any other sugar produced. The St. Lawrence Sugar Refinery, although established for over thirty years, has one of the most modern plants in existence, a large amount of money having been spent during the past few years in putting in the most up-to-date machinery for sugar refining, the result being that this progressive firm now enjoys the reputation of producing the choicest sugar in the world. The name, "St. Lawrence Sugar," is well-known all over Canada. In these days, when the cost of living is so high, owing to much higher prices obtaining for almost all food products, it is a very noticeable fact that this is one article which has been considerably reduced in price, although such a high standard of perfection has been maintained.



### Waterous Portable Sawmill

No. 0 Wooden Saw Frame, specially designed for Portable Sawmill Work. Takes saws up to 32 inches diameter. Forged Steel Mandrel, 2 3/8 inches diameter. Friction feed of 4 inch paper and iron friction set close to outer frame bearings. Substantial carriage can be returned or giggered from 5 to 10 times as fast as feeding speed. Carriage will accommodate good size logs. Standard carriage for rack feed is 16 feet 11 inches long; rope feed 17 feet 6 inches long. Frame extra wide, of heavy red pine stringers, edges bound with heavy iron. Log seats heavy web. Six-inch eye-beams. Knees and rack cast in one piece. Knees have 3-inch independent taper movement, and are fitted with our patent upper and lower steel hook. Peel Dogs, operated by overhead, single-acting ratchet networks, having large ratchet wheel. Split steel setting and holding Pawls, designed to eliminate lost motion and permit a set of 1-16 inch. Steel-set shaft 1 15-16 inches diameter and 16 feet long. Carries pinions which operate knees, and is fitted with heavy cast iron hand-wheel for hand setting; Track 54 feet long. This is one of the finest portable sawmills made. It will pay you to send for our free catalogue, which describes it, as well as many others, in detail. Drop us a card to-day.

THE WATEROUS ENGINE WORKS CO., LTD.,  
BRANTFORD, ONT.

## NORTHWEST FARM LANDS

Half a million acres of wild and improved lands near railway. All specially selected in the most fertile districts.

Special excursion in the spring to see these lands.

Write now for particulars as to prices and location.

STEWART & MATHEWS CO., LIMITED  
Galt, Ontario.

A few good agents wanted.

FREE AMATITE SAMPLE.—Farmers are reluctant to experiment with novelties until they have thoroughly investigated them. Some do not realize how easy it is to find out all about the new kind of roofing that needs no painting. All that is necessary to do is to write to the manufacturers of Amatite Roofing, asking for a free sample. It will be sent by return mail, and involves no obligation whatever on the part of the inquirer. Amatite has a mineral surface consisting of stone particles embedded in a tough, plastic matrix of pitch. Address a postal request for a free sample of Amatite to the nearest office of the manufacturers. The Paterson Manufacturing Company, Limited, Montreal, Toronto, Winnipeg, Vancouver, St. John, N.B., Halifax, N.S.

#### GOSSIP.

A. W. Smith, Maple Lodge, Ont., writes: The young Shorthorn bulls I am offering for sale are both rich roan in color, and large, smooth-fleshed, thick-bodied fellows, and bred from good milkers, one a son of a Mysie bull, and the other of a Miss Ramsden. The next sire, Imp. Knuckle Duster. One of the young bulls is a Cruickshank Lovely, the other of the old Isabella family.

James Douglas, of Willow Bank Stock Farm, Caledonia, Ont., in his advertisement of Shorthorns, calls attention to his offer of his imported bull, Joy of Morning, and writes: "While he is getting up in years, he is just as fresh and active as ever; sure, and very quiet. He is right every way as far as I know, and his calves, like himself, are so very smooth-fleshed and good feeders—consequently good sellers. They are growthy, yet smooth, and always look good, and can be seen at various ages, along with the bull, at my farm. My stock are looking excellent, and sales have been good, thanks to 'The Farmer's Advocate' for bringing me a good share of my trade."



## Was Troubled With Liver Complaint For Three Years.

Milburn's Laxa-Liver Pills will regulate the flow of bile to act properly upon the bowels, and will tone, renovate and purify the liver, removing every result of liver trouble from the temporary but disagreeable headache to the severest forms of liver complaint.

Mr. S. Nelson, North Sydney, N.S., writes:—"I have used your Laxa-Liver Pills. I was troubled with liver complaint for three years, and could get no relief. I was persuaded by a friend to try your remedy, and after taking one vial I got relief. After I had taken three more I was cured completely, and I have not been troubled since, thanks to your valuable medicine."

Milburn's Laxa-Liver Pills are 25 cents per vial, or 5 vials for \$1.00, at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

### FOR OUT DOOR WORK IN WET WEATHER

NOTHING EQUALS



**TOWER'S  
FISH BRAND**

**WATERPROOF  
CLOTHING**

TO KEEP YOU DRY.

Made for hard service and guaranteed waterproof.

Best Dealers Everywhere.

**TOWER CANADIAN OILED  
CLOTHING CO., LTD.**  
Toronto, Canada. 211

### Dr. Stewart's Pure Condition Powders

For horses, cattle, hogs and poultry—not a stock food, but a scientific blending of roots, herbs and barks; makes good solid flesh naturally, not artificially. Makes pure blood and cleanses the system. Try it for coughs, scratches, distemper and worms. Two cans guaranteed to put your horse in first-class condition. One large can, 50c., prepaid, at most dealers, or  
**Palmer Medical Co., Windsor, Ont.**  
Veterinary booklet sent free on application.

**A FLOOD OF LIGHT  
FROM KEROSENE COAL OIL  
THE ALADDIN MANTLE LAMP** gives more light than gas or electricity. It is simple, durable, portable, odorless and safe. Satisfaction guaranteed. **AGENTS MAKE BIG MONEY** by showing the lamp, the light makes the sale. It revolutionizes rural life; needed in every home. The **SUNBEAM** burners fit all ordinary lamps. Ask for Agency proposition or how you can obtain a lamp FREE to introduce it.

The **MANTLE LAMP CO. of America, Chicago**  
Wholesale and Retail. **MONTREAL**

**COLD IN HEAD  
CATARRH  
INSTANTLY RELIEVED BY THE OLD  
DR. MARSHALL'S  
CATARRH SNUFF**  
25¢ AT ALL DRUG STORES OR SENT PRE-PAID BY C. M. KEITH, CLEVELAND, OHIO

### DON JERSEYS!

Contains more of the blood of Golden Fern's Lad than any other Jersey herd in Canada. For sale are heifer calves from 4 to 9 months of age, and young bulls from calves to 1 year.

**D. DUNCAN & SON, DON, ONT.**  
Duncan Station, C. N. R. Phone connection.

For Sale: Reg. Clydesdale Stallion rising three years; a good one; will sell cheap. Apply: **G. Treleven, Cambray P. O., Ont.** Ten miles from Lindsay.

### GOSSIP.

The trotting stallion Unco, 2.11½, winning race record, owned by Wm. Pierce, Falconbridge, Middlesex Co., Ont., is advertised to stand for service at \$25 to insure.

Thos. B. Carlaw, of Warkworth, Northumberland County, Ont., near Hastings Station, on the Peterboro and Belleville branch of G. T. R., offers for sale two yearling Holstein bulls, fit for service, bred from best milking strains, at moderate prices, to make room.

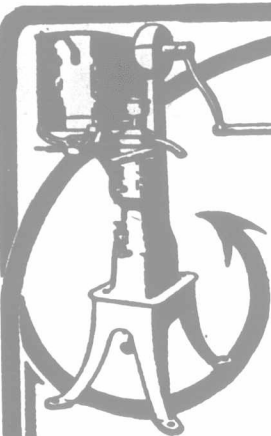
### CHANGE OF SALE DATE.

Dr. D. McEachran, Ormstown, Que., writes from off the Azores, on board the steamer Celtic: I have received a telegram informing me that the Spring Show at Ormstown will be held on May 23rd to 25th. Please make my sale date of imported Clydesdale fillies to read Tuesday, May 24th, at 2 p. m., instead of May 18th, as previously published.

Wm. Thorn, Lyndoch, Ont., writes: My Ayrshires have come through the winter in fine condition; cows are milking heavily. I have a number of very choice cows and heifers for sale, some milking and some to freshen this spring. I have young cows milking nearly 50 lbs. per day, and testing 5.7 butter-fat; two-year-old heifers testing as high as 5.5. I am making a specialty of Record-of-Performance work. I still have one choice, large young bull for sale, which should make a lucky purchase for some breeder. Also for sale, several large pure White Wyandotte cockerels, at \$2 each.

S. M. Pearce, of Iona, Ont., as a result of his advertisement of Shorthorns in these columns, report the following sales: To Duncan Brown & Sons, Iona, the good breeding cow, Martha 11th, out of Martha 9th (imp.), and got by Scottish Beau (imp.); to H. V. Sutherland, Fingal, Ont., Woodburn Mina and Maggie Earl 4th, both having heifer calves at foot; to A. Hamilton, of Fingal, the promising bull calf, Mina Prince. I still have a roan bull calf of the Beauty tribe, fit for service, and will sell him reasonably, right away. Mr. Gardhouse used this calf at the Special Judging Course at Dutton, February 28th, in demonstrating the desirable points of a beef animal, and described him as an individual of the first rank.

E. H. Dollar, Heuvelton, N. Y., whose advertisement of his great herd of Holstein cattle runs in this paper, reports the following recent sales: To A. C. Hardy, of Brockville, Ont., the splendid heifer Fairview Mable Korndyke, one of the best daughters of Pontiac Korndyke, with a three-year-old record of 25.51 lbs. in seven days. This heifer is one of the best candidates in the herd for a 30-pound record, and only the long price offered by Mr. Hardy caused us to part with her. Another sale that deserves mention, was that of a young bull, to A. C. Hallman, Breslau, Ont., whose ability as a judge of dairy cattle is well known. He came to Fairview and selected an in-bred son of Pontiac Korndyke, out of Fairview Korndyke Boon, a two-year-old heifer, with 19 pounds to her credit with first calf. As will readily be seen, Mr. Hallman's judgment was not wrong, when this heifer has just completed a record of 26.70 lbs., at three years and 1 month, dropping her second calf just 11 months after her first one, and was not dry a minute between calves. Another mighty good young bull went to J. W. Richardson, Caledonia, Ont. He was a son of the young Colantha bull, Sir Johanna Colantha Gladi, whose two nearest dams average over 33.61 lbs. each for seven days, which is higher than can be claimed for any other sire of the breed. The dam of the calf sold to Mr. Richardson, was Lady Korndyke Pauline De Kol, a daughter of Pontiac Korndyke, with a four-year-old record of 29.14 lbs. in seven days, and 11½ lbs. in thirty days. She will surely make over 30 pounds the first time she freshens right, and we believe would have done it this year had she not dropped a pair of twin bulls that weighed over 85 pounds each. I have a lot of other sales that I will report in the near future, as they go to show that Canadian breeders realize that the best are none too good to breed from.



## OWNERS KNOW THE REASONS WHY IHC CREAM HARVESTERS PAY BEST

LET IHC owners tell you about IHC Cream Harvesters. They know IHC superiority by actual experience. The local dealer will give you the names of some owners near you. Learn from them why IHC Cream Harvesters skim closest, are most durable, easiest to clean, and easiest running.

Let them tell you about the many profit-advantages of

## IHC Cream Harvesters

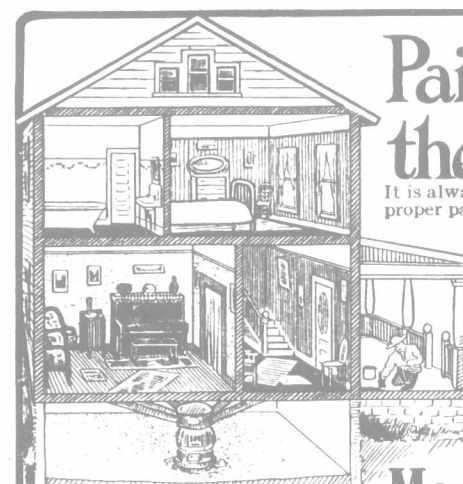
Look over the IHC separators they are using every day. Then consider these facts:

The wearing out of parts and many other cream separator troubles are largely due to dust and milk getting into the gears. IHC Cream Harvesters are the only separators with dust and milk proof gears which are easily accessible. A glance at an IHC will show you this great feature. IHC Cream Harvesters are protected against wear at all points by phosphor bronze bushings—not cast iron or brass bushings. IHC Cream Harvesters are constructed with larger spindles, shafts and bearings than any other separator. The IHC bowl is free from slots or minute crevices, which make it remarkably easy to clean. There are many other advantages which any IHC owner or the local dealer will point out and prove to you. IHC Cream Harvesters are made in two styles—Dairymaid—a chain drive machine, and Bluebell—a gear drive separator—each in four sizes. In justice to yourself, see an IHC owner or the local dealer before you decide on any separator. If you prefer, write for catalogues and all information to nearest branch house.

**CANADIAN BRANCHES—International Harvester Company of America at** Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton.  
**INTERNATIONAL HARVESTER COMPANY OF AMERICA**  
Chicago (Incorporated) U.S.A.

### IHC Service Bureau

The bureau is a center, where the best ways of doing things on the farm, and data relating to its development, are collected and distributed free to everyone interested in agriculture. Every available source of information will be used in answering questions on all farm subjects. If the questions are sent to the IHC Service Bureau, they will receive prompt attention.



## Paints for All Over the House—INSIDE AND OUT

It is always more economical and satisfactory to use the proper paint for any purpose. In the **Martin-Senour** line of **Family paints**, you will find a paint for every purpose—stains for the roof of the house; paints for the porch; outside and inside paints, and finishes; paint for the furnace and stoves; stains for the stairs, furniture and floors, woodwork and doors; enamel paints for the bath-room, and for the bedroom furniture; gold and silver paints for decorative purposes and sanitary wall finishes—all put up in cans of suitable sizes for family use. It is a real pleasure to use

Paint makes the housewife's labors lighter—makes the home more sanitary and easier kept clean—makes old things new again, and adds the artistic touch that makes home the dearest spot on earth.

It is really surprising the improvement a little paint and good judgment can make in any home—and so cheap, the cost need not be counted. Cut out the coupon, present it to our agent and get a half pint can of paint free. If no agency near you, send coupon to us, and we will see that you get the paint, and a copy of our handsomely illustrated book "The Home Beautiful"—both free. Write today.

**The Martin-Senour Co., Limited**  
Montreal

### Martin-Senour Paints

to freshen  
up the home

**A Can of  
Paint FREE**  
This coupon entitles you to a free can. Be sure you get it.

### COUPON

Present this coupon to any Martin-Senour Dealer, and receive free a half pint sample can of RED SCHOOL HOUSE PAINT To Dealer—You are authorized to honor this coupon when presented. **The Martin-Senour Co., Limited**

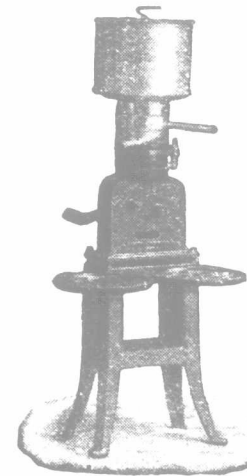
\$15.00 and Upwards

## We Give a Free Trial

of the **DOMO CREAM SEPARATOR**, which excels any other separator in the world. The **DOMO SEPARATORS** are of the highest quality, well built and durable. They are close skimmers, turn easy, handsomely finished, and guaranteed. Prices cut in two.

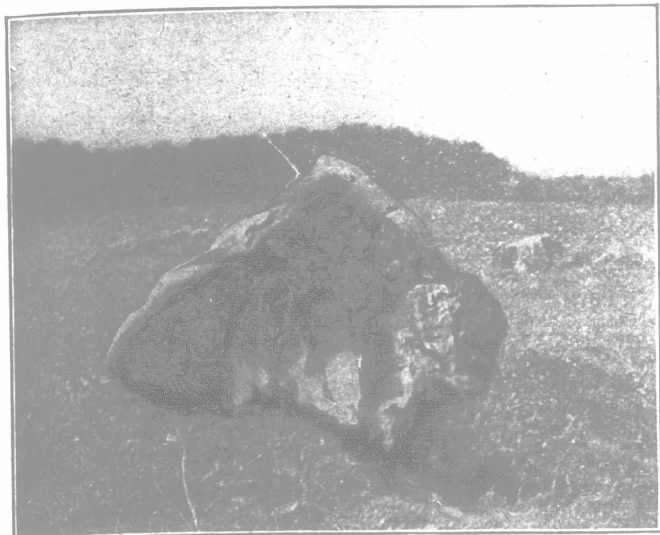
We gladly send a machine to you on free trial, **FREIGHT PREPAID**, and if you are not perfectly satisfied, return it to us at our expense. This liberal offer enables you to prove our statements, and that's what we mean. **TEST IT AT OUR EXPENSE.** We take ALL the risk. Can we offer anything more fair?

Write to-day for Circular "A," which gives full particulars of our machine, trial offer, a few of many testimonials received from users, prices and easy terms of payment. It's FREE.



**DOMO SEPARATOR CO.**  
Brighton, Ont. St. Hyacinthe, Que.





The Boulder.

## Stumping Powder

DO YOU KNOW  
The Value of Stumping Powder  
On the Farm

AND THAT  
MONEY, TIME AND LABOR  
Can be saved by using  
CANADIAN EXPLOSIVES, LIMITED,  
STUMPING POWDER

FOR  
Blowing Out and Breaking Boulders,  
Turning Up and Aerating Subsoil,  
Digging Ditches, Splitting Logs,  
Excavating Cellars and Foundations,  
Digging Post and Pole Holes.

Write for Descriptive Catalogue on Stump and  
Boulder Blasting and Prices.



What happened to the boulder by using Stumping Powder.

**CANADIAN EXPLOSIVES, LIMITED** Montreal, Que., Toronto, Ont., Nearest Office to Where You Reside.  
Successors to Hamilton Powder Co. Cobalt, Ont., Victoria, B. C.



**Roofs  
of Slate  
Never  
Wear  
Out**

Judge the merits of Sea Green or Purple Roofing Slate by any test of service you please—it's the best roofing obtainable. Compare its imperishable qualities, strength, handsome appearance or all 'round satisfaction with any other material you can think of—and you'll agree that it would still be the cheapest roofing you could buy even if the first cost was many times greater than what it is.

### Sea Green or Purple Roofing Slate

will cost a trifle more in the beginning than shingles, iron or felt, it will save you more in money, repairs and anxiety from the day it is laid. Besides this—Sea Green or Purple Slate Roof enhances the value of any building. It cannot crack, warp, blister or leak; is spark proof, water tight; cannot decay, rust, retain snow, ice or impurities that contaminate cistern water; it is unaffected by climatic changes and is as enduring as solid rock.

If you want the best roof that any amount of money can buy—tell your roofer to use Sea Green or Purple Slate.

"Roofs" the Booklet, Mailed Free  
Tell us the name of your nearest Roofer and our 16-page Booklet "ROOFS," giving many valuable and helpful hints on the selection of roofing materials, will be mailed FREE.

**The American Sea Green Slate Co.**  
(Roofs That Never Wear Out)  
103 Clark Street, Granville, N. Y.

## BINDER TWINE

Buy your twine from us or the opposition, just as you like. Look up, however, and see who is shaking the apples down, and say if you want it continued, or will you force us to join hands with our competitors?

**FARMERS' BINDER  
TWINE CO., Limited**  
JOSEPH STRATFORD  
General Manager.

### ENGINEERING.

Do you want to learn how to run ANY KIND OF AN ENGINE, or to prepare for Government examination for ENGINEER'S CERTIFICATE in any Province? Our courses will fit you. Complete instruction by mail in Stationary, Traction, Gas or Gasoline, Marine and Locomotive work. Course in arithmetic included. Write for circular, stating branches in which you are interested. **Canadian Correspondence College, Limited, Dept. E, Toronto, Canada.**

PLEASE MENTION THE ADVOCATE.

### GOSSIP.

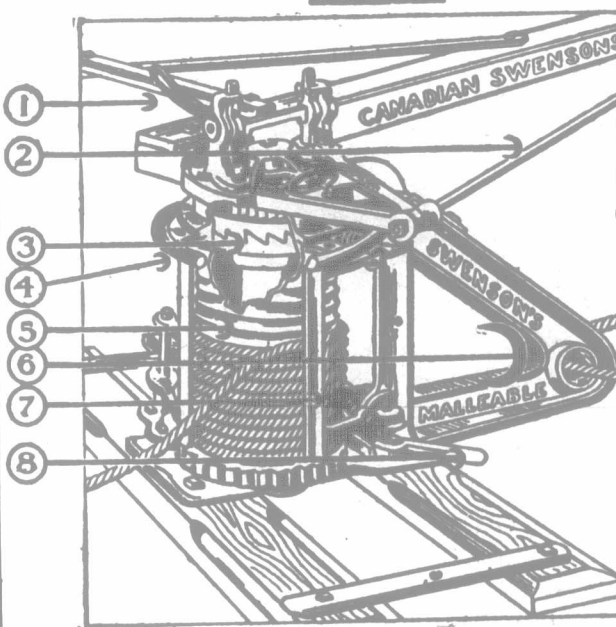
#### HIGH-CLASS CLYDESDALE FILLIES AT AUCTION.

One of the very best lots of Clydesdale fillies ever sold by auction in Canada, will be sold, positively without reserve, at the village of Dundalk, on Thursday, April 13th, 1911, the property and latest importation of T. D. Elliott, of Bolton, Ont., and R. R. Kennell. There are 18 head, from one to four years of age, mares and fillies, and one stallion, rising two years, fully registered, but his pedigree was not at hand at the time of our visit. Among this lot of fillies are some that, when put in fit, have the size, style, quality of underpinning, and action, to qualify them to successfully compete with anything that may come against them. All of them are big, well-balanced Clydesdales, particularly good at the ground, and part of them are essentially high-class, away above the average usually sold by auction in this country. Six of them are rising two years of age, seven are rising three, two are rising four, and three are rising five. Three of them have five registered dams, six of them have four registered dams, the balance have three registered dams. From this, it will be seen that no better-bred lot was ever sold in this country; sired by such renowned Scottish sires as the great Prince Sturdy, the H. & A. S. first-prize horse, Ruby Pride; the Kilmarnock champion, Royal Edward; the H. & A. S. first-prize Warlaby; the ever-popular Up-to-Time, etc. With dams by such notables as the H. & A. S. champion, Prince Thomas; the H. & A. S. first-prize, Pride of Blacon; the H. & A. S. first-prize, Moncrieffe Marquis, and so on. For full particulars of their breeding, write for a catalogue, to T. D. Elliott, Bolton, Ont. Dundalk is on the Owen Sound line of the C. P. R. Trains leaving Toronto at 8.15 on morning of sale, will arrive at Dundalk at 11.28; returning, will leave Dundalk at 5.12 p. m., arriving at Toronto at 8.25 p. m. Parties going the evening before will leave Toronto at 5 p. m. First-class hotel accommodation will be found at Dundalk. The terms are cash, or 7 months' on bankable paper, with 6 per cent. interest. With the present big demand for breeding Clydesdale mares, and the high standard of this offering, this sale will present one of the most desirable opportunities ever offered the farmers of Northern Ontario to get one or more of these mortgage-lifters at their own price.

### TRADE TOPIC.

A farm of 93 acres, with full set of buildings, four miles from railroad station, in Lambton County, Ont., is advertised for sale in this paper, at the moderate price of \$4,200. Also another farm, in the same district, with brick house and good barn and stables, 14 acres wheat and 50 acres plowed; price \$5,000, for immediate sale. Write G. G. Moncrieff, Petrolia, Ont.

## THE ONLY STUMP-PULLER SOLD WITH A REAL GUARANTEE



The only Malleable Stump Machine made, and the only one sold on a positive guarantee that it will do more than any other. Now it does not matter what kind of stump-pulling work you have to do, we make the right Machine for the purpose.

### THE ONE WITH ALL THE GOOD POINTS

- 1—Rocker Shaft puts machine in and out of gear from either end of sweep, without lifting the sweep or sweep casting.
- 2—Truss Rod full length of sweep. Takes the strain off the sweep, puts it on the sweep casting.
- 3—Gear Clutch raises and lowers on hub by a half-turn of the hand lever.
- 4—Hand Wheel takes up the slack cable in a jiffy. Saves team, men and time.

5—Large Diameter Grooved Drum takes absolute care of the cable and makes it last many times longer.

6—Heavy Anchor Frame is so constructed that the strain is equalized on the machine whether the cable is high or low on the drum, and holds the machine in a rigid position.

7—The Rope Guides, adjustable hinged, held by springs, take absolute care of cable, prevent it from over-lapping, crossing, or shearing.

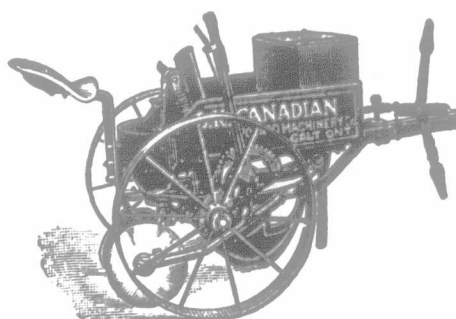
8—Back Ratchet takes strain off of team when pulling big stumps, and makes whole machine safe.

This is the only Machine in which every casting is warranted for one year, FLAW OR NO FLAW. Try this Machine under our Guarantee—that it far EXCELS any other—or you pay nothing. Hundreds of your friends and fellow farmers have tested and approved this Machine. So will you once you try it.

### REMEMBER YOU RISK NOTHING

If you have land to clear of stumps, standing trees or willows, standing or burnt over, or poplars, or scrub of any kind, this is the machine you want, and the only one you will buy after you see it work. For it has every good point a Stump Puller should have, not merely one or two. We ask you just to test it for yourself under our most positive guarantee, that it will do the work better, easier, and quicker, that it will clear your land cheaper than any other machine on this earth. Isn't that plain? 11

Ask for catalogue showing the five different sizes, etc.  
**Canadian Swenson's, Limited, Ridout Street, Lindsay, Ont.**



## Potato Planter.

If you want durability, reliability and simplicity, you get them in the O. K. CANADIAN.

It requires only one team and man to plant your crop. Its automatic cup device does not puncture or bruise the seed in any way; handles it almost as carefully as by hand.

Write for our 1911 Catalogue.

**Canadian Potato Machinery Co., Ltd., 145 Stone Road, Galt, Ont.**



## Consider the Availability of Your Fertilizer

Before you buy Fertilizer, learn what you are going to get out of it. The stuff your crops can't take up is worthless. There is much such nitrogen in most nitrogen fertilizers. There is one form of nitrogen—

# Nitrate of Soda

—that has 100% of its nitrogen available. It is the cheapest form of Nitrogen—also Quickest in effect and Cleanest to handle. Use it as a top dressing or in a complete home-mixed fertilizer. \$3.00 worth on an acre of meadow often increases the yield a full ton.

Would such results pay you? Drop in, or call us up for prices.

CHEMICAL LABORATORIES, LIMITED,  
148 Van Horn Street, Toronto, Canada



## Great Fences

# AMERICAN FENCE

Made of wire that is all life and strength—wire that stretches true and tight and yields just enough under impact to give back every jolt and jam it receives.

Made of materials selected and tested in all the stages from our own mines, through our own blast furnaces and rolling and wire mills, to the finished product. Our employment of specially adapted metals is of great importance in fence wire; a wire that must be hard yet not brittle; stiff and springy yet flexible enough for splicing—best and most durable fence material on earth.

To obtain these and in addition apply a quality of galvanizing that will effectually protect against weather conditions, is a triumph of the wiremaker's art.

These are combined in the American and Ellwood fences—the product of the greatest mines, steel producing plants and wire mills in the world. And with these good facilities and the old and skilled employes back of them, we maintain the highest standard of excellence possible for human skill and ingenuity to produce.

Dealers everywhere, carrying styles adapted to every purpose. See them.

# ELLWOOD FENCE



## Architects, Contractors, School Trustees

Do you want your schools, hotels, factories or public buildings up-to-date? If so, use

### "RED CROSS" CLOSETS

Made especially to fill the requirements where no sewerage is available. Catalogue C upon application, with full particulars.

Red Cross Sanitary Appliance Co., Grimsby, Ont.

## QUESTIONS AND ANSWERS. Miscellaneous.

### HORSE DEAL.

A buys a horse from B. B does not guarantee the animal. A is his own judge. A, having the horse for a short time, finds the animal not as good as he thought. Can A, by right of law, compel B to take the horse back and refund money? A. E.

Ans.—From the statement of case submitted, it does not appear that A has any right to demand money back.

### SEEDING HILLSIDES.

I have five acres of hilly land, and last year I sowed it with clover and oats as a cover crop. The clover came up well, but by the time the oats were harvested it had dried up and disappeared. I am particularly anxious to put this piece into grass of some sort this year, and, not having sufficient manure to cover it, would ask if clover or grass would grow if seeded alone? Thanking you in anticipation. T. G. D.

Ans.—Clover and grass would grow, at least as well, if seeded alone. Beyond keeping down weeds, our so-called nurse crops are usually more of a hindrance than help to clover seeding. The probability is, though, that a light nurse crop of barley, say five pecks per acre, would be profitable, giving some return from the land. By the way, why not try alfalfa? Your field would seem to be well adapted for it. Alfalfa makes gold mines out of hillsides. Seed with a bushel of barley per acre.

### CHERRY CULTURE.

1. We have about three acres of low-lying land, well drained. The soil is gravelly, mixed with clay loam. Would cherry trees do well on this soil?
2. What kind is the best?
3. Is there a kind that the black knot does not attack?
4. How far should they be put apart? M. A. S.

Ans.—1. If well drained, cherries should do well on the soil you describe.  
2. The Morello, or sour varieties, are harder than the sweet cherries, and less susceptible to rot, and the market demand is excellent for both. The Board of Control of the Ontario Fruit Experiment Stations, recommend the following general list of varieties: Orel 25, Orel 24, Richmond, Montmorency and Russian 207.

3. Black knot is easily kept in check by spraying, together with cutting and burning all knots as soon as discovered.  
4. From eighteen to twenty feet for sour cherries, and about 25 for sweet varieties.

### FLOORING FOR HENHOUSE—CEDAR FOR STAVE SILO—HAY RACK.

1. Is cement flooring in the henhouse as good as, or better than earth or lumber?
2. Would cedar lumber, 2 x 6 inches, be stiff enough for making a stave silo, with hoops three feet apart?
3. Give description of cage rack for hauling in hay and sheaves? D. P. L. C.

Ans.—1. There is little to choose among cement, boards or earth for henhouse floor. The main thing is to have floor raised some inches higher than the ground surrounding. Most henhouses have earth floors. A kind of floor much recommended is made of a layer of large stones, six inches in depth, then smaller stones three inches, this covered with gravel, and finished with a layer of coarse sand. Such a floor is dry, and supposed to be rat proof. A cement floor, deeply covered with earth, removed once a year, is also good. Of course, whatever the floor, it should be kept well littered.

2. Cedar lumber such as described, should answer very well for silo.  
3. Probably some reader will describe such a rack that he may have in use.

### TRADE TOPIC.

See the advertisement in this paper of The Connor Machine Company's Air-cooled Gasoline Engine, manufactured at Exeter, Ontario, and which appeals to farmers and mechanics who purpose making use of convenient and satisfactory power for medium-heavy work, at a moderate price.



Natives digging and loading asphalt at Trinidad Lake

All "asphalt roofing" is not Trinidad Lake Asphalt Roofing—there's a great big difference. Look out for that when you buy your roofing.

Ordinary so-called asphalt roofings are made of artificial products masquerading as real asphalt. They are nothing more than the residue from petroleum oil or native bitumens made into a black pitch, which is easily affected by changes in weather.

# Genasco

## the Trinidad-Lake-Asphalt Roofing

is made of genuine natural asphalt—perfectly stable and uniform in quality. Trinidad Lake Asphalt is endowed by Nature with natural oils; and they stay in it. This gives Genasco its wonderful resistance to rain, snow, sun, wind, heat, and cold—and keeps it lastingly waterproof.

The artificial asphalts have oils mixed with them, but they haven't the quality of the oils in the natural product; and they soon evaporate and leave the roofing "dead"—and it cracks, breaks and leaks, although at the first it may look like Genasco, the real Trinidad-Lake-Asphalt roofing.

To make sure of roofing that will permanently protect, ask your dealer for Genasco, the Trinidad-Lake-Asphalt Roofing, with either mineral or smooth surface. Fully guaranteed.

The Kant-leak Kleet waterproofs the seams of Genasco Roofing without cement, does away with nail-leaks, and gives the roof an attractive finish. Ask your dealer for Genasco with Kant-leak Kleets packed in the roll.

Write for samples and the Good Roof Book.



## The Barber Asphalt Paving Company

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

### Philadelphia

New York San Francisco Chicago

Caverhill, Learmont & Company, Montreal, Que. D. H. Howden & Co., Ltd., 200 York St., London, Ont.



## STEEL TANKS



WON'T RUST - CAN'T LEAK All Sorts and All Sizes

Our barn and general storage are made of heavy galvanized steel of the best quality. No farm is complete without them. Send to-day for prices and catalogue. Special sizes made to order.

STEEL TANK CO., TWEED, ONT. Agents Wanted Everywhere

### 84X LEGAL WILL FORM

Costs only 35 cents—you can draw up your own will and we guarantee it as legal and unbreakable as if a lawyer did it and charged you \$5. We send full directions and sample will filled out so you will make no mistakes. Don't delay. Filled in plain envelope. Send 35 cents to Barber's Will Form Co. 1250' Woodland Ave. Toronto

O. A. C. NO. 21 SEED BARLEY and Short-horn Bulls.—Look up our ad. in Want and For Sale column if you want a supply of the best barley ever grown in Ontario. It is as cheap at \$1 per bush, as other varieties at nothing. We have still four Shorthorn bulls left, fit for service; one a grand two-year-old, with both weight and quality, and an extra dark red calf 10 months old. Jno. Elder & Son, Hensall, Ont.





# WHY NOT TRY TO-DAY



It costs you nothing : if not satisfactory, your money is refunded

## Hackney Poultry Tonic

Is not a food, but a medicine, to tone up the system and help the food, whether high-grade or cheap food, do the work, and get every possible good out of same, putting her in condition nature intended. Then she will produce you the eggs. The cost is very little as to the return in eggs. For young turkeys it has no equal.

EVERY ARTICLE GUARANTEED TO GIVE SATISFACTION IF USED ACCORDING TO DIRECTIONS, OR MONEY REFUNDED.

**HACKNEY STOCK FOOD CO.,**

## HACKNEY

Stock Tonic.  
Hog Tonic.  
Calf Tonic.  
Poultry Tonic.  
Louse Powder.  
Worm Powder.  
Heave Powder.  
Distemper Powder.  
Kidney Powder.  
Condition Powder.

Louse Paint.  
Sheep Dip.  
Gall Cure.  
Colic Cure.  
Hoof Ointment.  
Healing Oil.  
Physic Balls.  
Fly Nocker.  
Disinfectant.  
B. W. Liniment.

## Hackney Louse Powder


Is death to all lice or mites. Hens will not lay eggs if pestered with these small vermin. A 25c. can, if used according to directions, will show its value, used on fowls or birds of all kinds, cabbage plants, currant bushes. Keeps moths from the carpets, rugs, or furs. It kills all kinds lice and mites.

## Hackney Stock Tonic

Is for the animal that is run down or not doing what it should on the food it is getting. Try it for the horses that you are going to work this spring; for the cow that is not giving you the return in milk; or those pigs that are not what they should be.

Write to 18 Millstone Lane, Toronto, for our Booklet.

**Toronto and Winnipeg.**



**"ELECTRO BALM"**  
CURES ECZEMA,  
Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. This Balm is handled by the best firms, and is highly recommended by those who have used it.

Write for Free Sample  
ENCLOSE 2c. STAMP FOR POSTAGE  
50c. a Box at all dealers or upon receipt of price from  
**THE ELECTRIC BEAN CHEMICAL CO.,**  
LTD., OTTAWA.

**QUESTIONS AND ANSWERS.**  
Miscellaneous.


**ROOT-HOUSE OF CEDAR BLOCKS.**  
I intend building a root-house this summer, and want one that will keep the frost out. I was thinking of building one with cedar blocks, cut two feet long, laid in a cement foundation, and built up with those blocks in mortar. Have heard of a barn foundation built in this way. I would like to hear, through the columns of "The Farmer's Advocate," whether this would be a good, serviceable root-house, or could you advise something better?  
A NEW SUBSCRIBER.

Ans.—If you have the timber, and can afford it, the plan you suggest of making root-house of cedar blocks, could scarcely be improved upon for efficiency, we should judge.

**LYMPHANGITIS.**  
I have a mare which has been working regularly. About three weeks ago her front legs swelled, from above the knees to the hoof-heads. This swelling has all disappeared, except that the inside of one leg remains swelled and hard. She showed no signs of lameness. What caused this swelling? Will it all disappear? One of our learned men calls this lymphangitis. Is he right?  
A. G. C.

Ans.—Your learned man was in all likelihood right. The symptoms point to lymphangitis as the trouble. An attack of this disease is usually ushered in by a chill, followed by a rise in temperature, and some uneasiness. The swelled limb, or limbs, are tender to the touch. Of these symptoms you say nothing, and, therefore, there is some reason for doubt. Light feeding, regular exercise, hand-rubbing, and bandaging, and the administration of 1 dram iodide of potassium twice daily, are recommended for such a case as we suppose yours to be. It is very seldom that all the swelling leaves the leg. This disease usually attacks well-fed animals, and is sometimes called Monday-morning disease, because very often it develops after a day of rest.

SHOW  
**Clydesdale Fillies**  
BY AUCTION



At the VILLAGE OF DUNDALK on  
**Thursday, April 13th, 1911**

MESSRS. T. D. ELLIOTT & R. R. KENNEL, of Bolton, Ont., will sell without reserve **18 Clyde Fillies**, all imported, from 1 to 4 years of age, strictly high-class in type, size, quality and breeding. Many of them when put in fit are show propositions of a high order. All are big and drafty, and particularly good at the ground. The terms are cash or 7 months' on bankable paper, with 6 per cent. Catalogues on application to

**T. D. ELLIOTT, Bolton, Ont.**

Dundalk is on the Owen Sound line of the C. P. R., and has good hotel accommodation.

Auctioneers { **J. MYLES, Heathcote.**  
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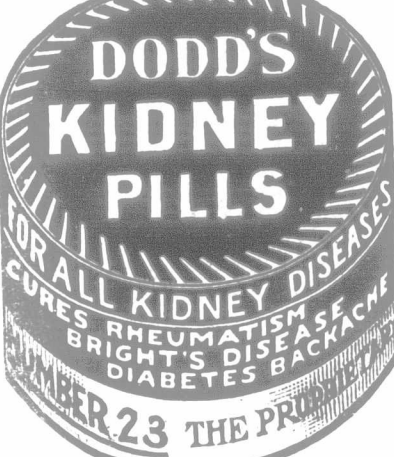
**Make With An American Money SAW MILL**

Lumber is high. A car load or two pays for an American Mill. Supply your needs and your neighbors'. No experience needed. Mill to mill to timber if desired. All Sizes—All Prices. The Variable Friction Feed, Combined Ratchet Set Works and Quick Recorder means most work with least power. Free Catalogue lists all kinds of wood working machinery. Ask for it.

American Saw Mill Machinery Co.  
119 Hope St.  
Hackettstown, N. J.  
1504 Terminal Buildings  
New York



"Mother," remarked the small boy, "isn't it funny that everybody calls little brother a bouncing baby?"  
"Why do you think it's funny, William?" returned his mother.  
"Because, when I dropped him off the porch this morning he didn't bounce a bit. He just hollered."

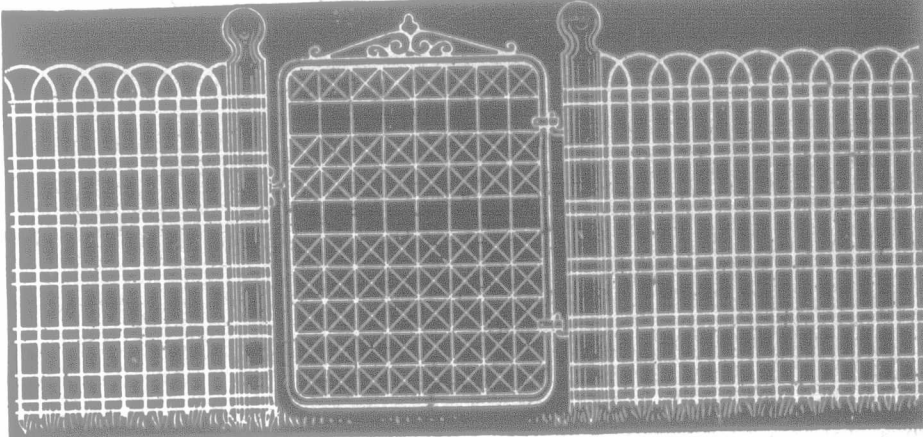


**DODD'S KIDNEY PILLS**  
FOR ALL KIDNEY DISEASES  
CURES RHEUMATISM  
BRIGHT'S DISEASE  
DIABETES BACKACHE

NO. 23 THE PR...

**SKIM-MILK CALF.**  
Can I raise a calf by hand from the time of its birth on skim milk? How much milk should it have at one feed? What could I put in milk, hay tea or anything like oatmeal? If it would be all right, how much of each at one feeding?  
G. M.

Ans.—Some accounts of different calf-feeding methods have appeared in "The Farmer's Advocate" lately. Look them up. A calf should be fed whole milk for at least one week, and, after that, the change to skim milk ought to be made gradually. The most common mistake in feeding skim milk to calves is in giving too much, and causing scours. About three quarts each feed is enough to start with, increasing to four quarts later. Be very careful about having milk at blood heat, and keep feeding pail clean. To supplement milk, there is nothing better than a small handful of ground flaxseed, simmered in warm water until jellied, and added at each feeding. Good calves can be raised without this, however, but at about the age of a month, some whole or rolled oats and clover hay, as the calf shows relish for these, should be given, and the quantity increased according to the appetite of the animal. If there is plenty of skim milk, a calf will be all the better of it for eight months, or longer.



**An Attractive Fence** for your lawn—neat, durable

The Peerless Lawn Fence and Ornamental Gates will add to the attractiveness of any property. They're good enough for any city lawn and strong and durable enough for the farm.

**PEERLESS ORNAMENTAL FENCE AND GATES**

Peerless Ornamental Fence is solidly made of spring steel wire—carefully galvanized and painted, so that it is thoroughly protected from rust.

Peerless Gates are built to last. The frame is made of tube steel, electrically welded into one solid piece. They cannot sag out of shape.

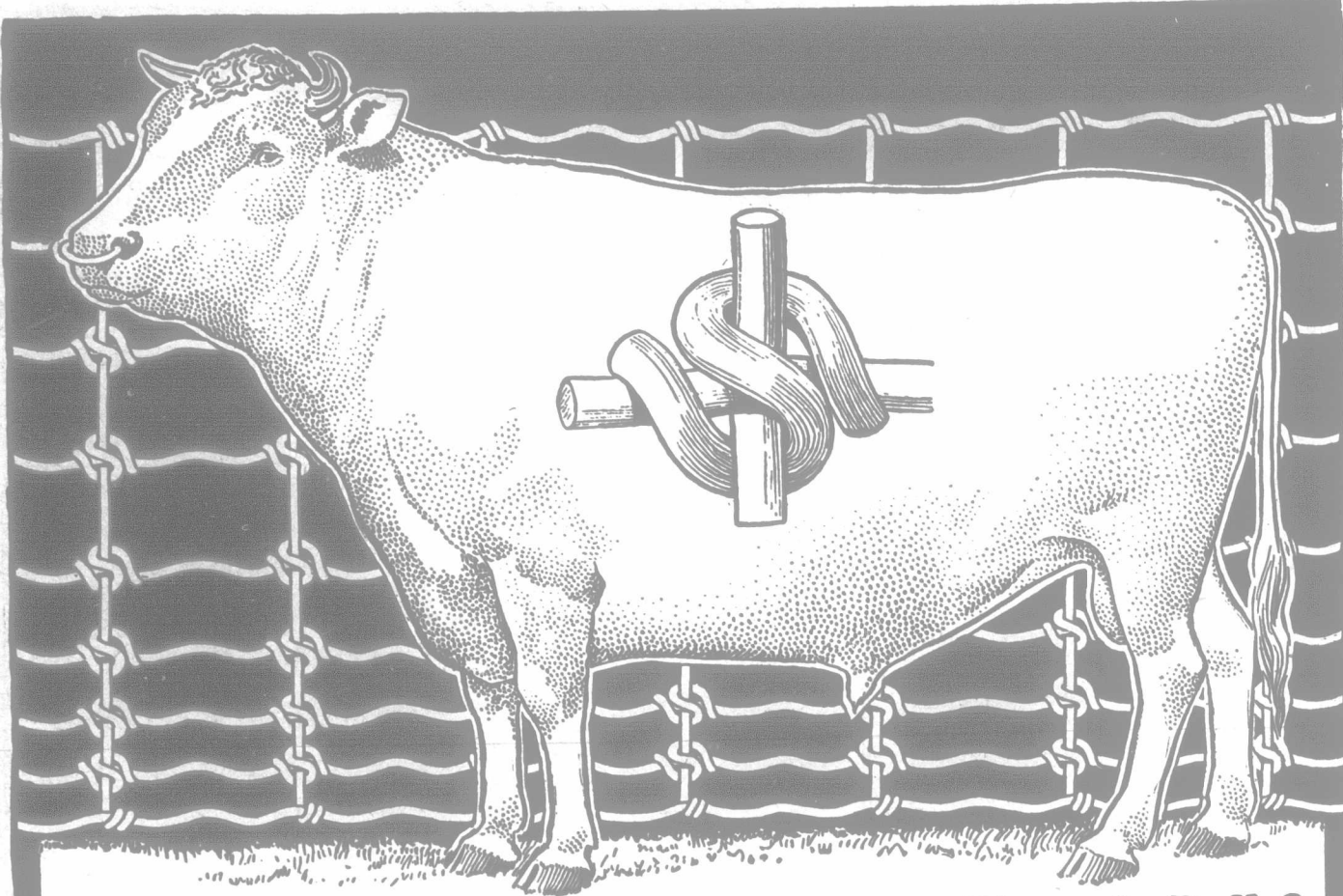
We also make poultry and farm fence that is known throughout the country for its durability and long service. Let us send you our booklet about it.

We want agents wherever we are not now represented. Write for particulars.

**The Banwell Hoxie Wire Fence Co., Ltd.**  
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### Is Anything On Your Farm Stronger Than A Bull ?

**YES!** If your fences are "IDEAL" Woven Wire, made of large gauge No. 9 HARD STEEL wire, heavily galvanized and with the verticals and horizontals clamped together with the Ideal Lock—that CANNOT SLIP. Bull-strong; hog-tight; horse high—a REAL fence.

**NO!** If you have wire fences of the ordinary kind—fairly good for a few years, but with no reserve strength to stand hard usage—because poorer wire makes them, and stretching them taut takes the utmost of their little strength to start with.

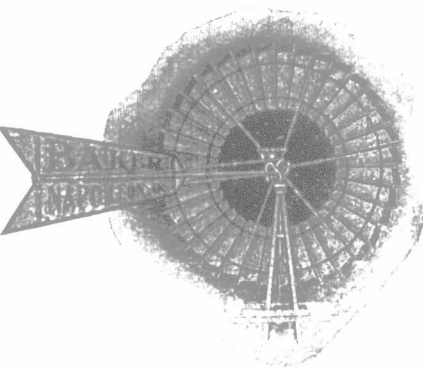
### All Large Gauge Number 9 Hard Steel Galvanized Wire

From top to bottom Ideal Fence is all the same—large gauge No. 9 hard steel wire, heavily galvanized and therefore rust-proof. Note lock and its uniform smooth curve—no sharp turns to weaken the strength of the lock and yet a most positive grip—in FIVE different places. This is the fence that has ample springiness, immense strength, and the ONE LOCK THAT'S GOOD. Drop us a card and get our catalog telling all about the many styles and merits of IDEAL FENCE. Sample lock comes with it. Write us today.

McGREGOR BANWELL FENCE COMPANY, LIMITED, WALKERVILLE, ONTARIO

### "BAKER"

Ball-bearing Wind Engines for Pumping, the most satisfactory and economical power and the easiest-running mill made.



We make a full line of steel towers, galvanized steel tanks, pumps, etc. All goods fully guaranteed. Write for catalogue.

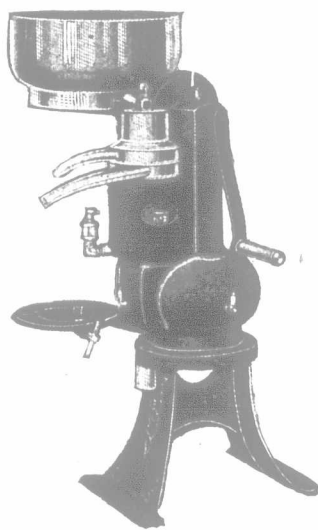
The Heller - Aller Co., WINDSOR, ONTARIO.

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A new invention to take the place of the old-time strap. Fastens instantly with gloves on. Works automatically. Don't freeze your fingers on cold days. Every horse owner wild about them. Fits any hame. No straps or buckles. Snaps in place instantly. Outwears the harness. Money back to any customer not pleased.

Write today for FREE SAMPLE. You will make more money than ever before. Agents say stock sold out before fairly get started. Thomas Mfg. Co., 544 Wayne St., Dayton, Ohio.



1910 MODEL

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WESTERN BRANCH:

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## Simplex Link Blade Separator

For Simplicity, Perfect Skimming,  
Easy Running,  
Large Capacity, Durability,  
Under a wide range of conditions.

We carry a full line of Dairy Supplies at lowest prices. Write for our Catalogue No. 5, and full information about our 1910 machines.



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"How to Raise Calves Cheaply and Successfully Without Milk"

Contains full information and complete feeding directions for using

### Blatchford's Calf Meal—The Perfect Milk Substitute

Three or four calves can be raised on it at the cost of one where milk is fed. No mill feed. The only calf meal manufactured in an exclusive Calf Meal Factory. Established at Leicester, England, in 1892.

STEELE, BRIGGS SEED CO., LTD., TORONTO, ONT.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### NITRO-CULTURE.

I have a hillside which I am going to seed to alfalfa this spring, the hill being clay, with about one acre of sand on top, in fair condition, and free of grass. Do you think it would be necessary to use the nitro-culture on the seed? If it was not necessary, would it do the seed any harm, in any way? What is lacking in the soil that it needs this nitro-culture? What does it do to the seed?

#### CLOVER.

Ans.—See article (Press notice) sent out by authorities of Bacteriological Department, Ontario Agricultural College, Guelph, on the subject of nitro-culture. Treatment of seed with nitro-culture can do no harm, and is a wise precaution, if neither sweet clover nor alfalfa has been grown on your farm to any extent in recent years.

#### CARE OF SHEEP AND LAMBS.

I am going into the sheep industry, and I have about eight acres of old pasture land. It is clear of stumps, and is very badly in need of drainage. After it is well drained, how should I go about it to get better pasture? There is a great deal of water-grass in the low land, and the pasture is poor.

1. How should I crop it to get best results?  
2. What crop should I sow before seeding it?  
3. What is the best pasture for sheep?  
4. Will alfalfa stand to be used as sheep pasture?

5. I have ten ewes, and they are to lamb about April 15th. It is my first year with sheep. What should I feed the ewes after they come in, and what care should I give the lambs until they are about a week old?

#### RECENT SUBSCRIBER.

Ans.—1, 2 and 3. Why not let the grass that comes in naturally grow after land is drained? There is no better pasture for sheep than the native grasses on high, dry land.

4. Alfalfa would be ruined by being pastured by sheep. They nip too close.

5. The ewes should be fed, in addition to good clover hay, at least a quart each of oats daily in two feeds, mixed with the same bulk of bran. If you have turnips or mangels, a liberal feed of these will also be helpful. If the lambs are strong enough to get up and suck, they will need no extra care. If weak, and not able to stand, they should be held up, and some milk drawn into the mouth, when they will probably take to helping themselves.

#### PLUM TREES NOT BEARING.

1. We have about three acres of an orchard which was pruned two years ago. Up to that time the orchard had not been pruned or taken care of for years, and was almost in a wild state, as the farm has been rented for so long. The orchard needs pruning again, and would like to have someone do it who understands the business, as I have not time to look after the orchard this year. Where could we get a man to prune the trees?

2. Have a few plum trees which blossom every year, but never grow any plums. The trees are about six years old, and have grown very high and branched. Why do they not bear fruit?  
3. Will carrots and mangels grow well on lucerne sod which was plowed last fall, or what is considered the best for roots on clay land?

H. W. B.  
Ans.—1. If you cannot secure a good local man to prune your orchard, why not insert a small advertisement in our Wants and For Sale column.

2. A variety of possible causes might be suggested, among which are self-sterility, and the ravages of the plum curculio. The latter insect causes the fruit to drop after it is set. It may be controlled fairly well by cultivation and spraying. See Spray Calendar. Self-sterility may be due to any one of several causes. (a) Defective pistils; (b) insufficient pollen; (c) difference in time of maturity between the stigma and the pollen, and (d) impotency of pollen. Many trees and varieties, especially of native plums, have insufficient pistils.

3. A fall-plowed alfalfa sod, properly worked up this spring, should grow you a first-class crop of roots.



QUESTIONS AND ANSWERS.  
Miscellaneous.

GRASS SEED PER ACRE.

I see by your March 16th issue, that J. H. Grisdale recommends sowing 18 to 30 lbs. of clover and timothy seed per acre. I have 22 acres of heavy blue clay to seed this spring. It has been under pasture and willow brush for over 25 years. It has been plowed twice, 1909 and 1910. At 20 lbs. to the acre, it would cost me about \$75 for seed. Do you think it would pay me to sow that amount of seed? If not, what do you recommend?

A YOUNG FARMER.

Ans.—Mr. Grisdale thinks that it would pay to spend even more than \$75 to thoroughly seed 22 acres. So do we; if anything less than 20 lbs. of seed per acre is not enough for a perfect stand. But most practical farmers think that 13 to 15 lbs. of mixed seed per acre is as good as more. We usually recommend not less than eight pounds red clover, 1½ to 2 pounds alsike, and 4 or 5 pounds of timothy.

BULL VOMITS—THRUSH.

1. I have a two-year-old bull in fair condition, that chews his cud, but every few days he has a vomiting spell. He does not seem to grow as well as I would like.

2. Also, a mare three years old this spring—in foal—appears to have a rank-smelling discharge from two of her feet; is not lame; the hoof is quite spongy around the heel of the frog; have used hydrogen peroxide. It seems to make it all right for a time, but it comes back. Is there any danger of blood-poisoning? If you could give me help and advice I would be greatly obliged. W. T. W.

Ans.—1. Your bull that has vomiting spells is probably troubled with indigestion, and attention to diet will put matters right. Give easily-digested food, and not too much for a while. The trouble may be caused, however, by a tumor in the stomach.

2. The trouble with the mare's feet is what is known as "thrush," a condition of decay of the substance of the frog. A common cause of the trouble is standing in urine, though other filth in the cleft of the frog will produce it. Clean out the cleft of the frog, and syringe or douse daily with a solution of one part formaldehyde (40-per-cent. aqueous solution), in 4 or 5 parts water. Remove the cause of trouble.

PIG PEN QUERIES.

1. I am going to build a pigpen 16x30, leaving 4 feet for a hall, balance for pens, hall running lengthwise of building. Allowing 7 feet in the clear for pen, and 12 feet for pen in length; would that be large enough for each pen?

2. Would it be advisable to put a trench running lengthwise of building in center of pens, and having floor sloping to this trench for slush, and out one end of building, or have the floor sloping to the back of pen, and holes for slush? Would there be slope enough in floor to allow 4 inches in depth and 4 feet in length, for the slush to run out under the sill? I am allowing 2 feet for each pen, but going to put the partition in the center of the 4-ft. hole, and that will only allow two holes in the wall for four pens, and also raise the opposite corner of each pen for sleeping.

3. How many windows should I have in the building to give sufficient light, and what size?

4. Would a small window in each end of building, at the peak, give sufficient ventilation?

A SUBSCRIBER.

Ans.—1. A pen 7 feet by 12 feet, would be large enough for a limited number of pigs, say about five.

2. It would be advisable to have floors of pens slope from front to back, with outlet for each at back. The slush ought not, however, to be allowed to run away. By having a plentiful supply of straw, and cleaning the pens every other day, much valuable manure would be saved.

3. Three windows on each side of building, about 2½ feet square each, would make the building fairly light.

4. Some other means of ventilation than merely having a small window in each peak should be provided. See article in March 23rd issue, page 504.

**FREE** Our latest book on Cream Separators. Send for a copy

Don't settle the separator question finally before you have a copy of our latest book in your hands. It is much more than a separator catalogue. It is, in fact, a separator guide book. And the

**most unbiased**

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This book gives the facts about

the cone and disc types of separators. We make both types. So we know all about each one. Our agents in nearly every town in Canada have everything that's good in cream separators to show you.

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quickly and thoroughly cleaned. Every Empire runs smoothly and easily. Every Empire will save you many hours of work. Every Empire has many desirable features that our patents prevent any other make of separator using. Empire Separators have

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You are paying for an Empire Cream Separator now with the money you are losing by using old-style methods. The Empire way is 30 per cent. more profitable. But

**some day you'll own an Empire**



Whether you choose the Frictionless Empire (cone method) or the Empire Disc, you are bound to be satisfied. Every Empire is sold with a binding guarantee—a guarantee

**as good as a gold bond**

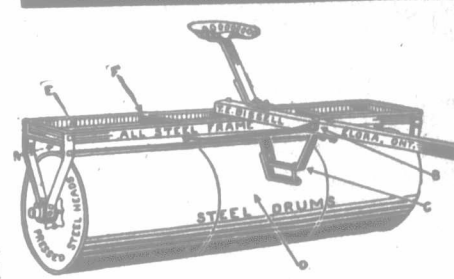
THE Empire Cream Separator Company of Canada, LIMITED

WINNIPEG TORONTO  
MONTREAL and  
SUSSEX, NEW BRUNSWICK



THE KING OF ALL SEEDS  
Steele, Briggs' "LION" RED CLOVER  
SUREST - PUREST - BEST  
ALSO  
Steele, Briggs' "ERMINE" TIMOTHY  
These two brands represent the best values produced in seeds. Ask your merchant for these brands. He'll have them. If he hasn't, send to us direct.  
**STEELE, BRIGGS SEED CO. LIMITED**  
TORONTO, HAMILTON AND WINNIPEG

**Make sure it bears the "Bissell" name**



Like most experienced farmers, you want the "BISSELL" Land Roller, but you'll need to be careful or you may get an imitation. Therefore be sure that the name "BISSELL" is stamped on the roller you buy, for no roller is a genuine "BISSELL" unless it bears the "BISSELL" name. In no other

roller will you get large roller bearings ½ inch in diameter; nor solid malleable cages; nor a steel-plate bottom in the frame; nor drums riveted every two inches. No other roller has the seat projected over the frame and the low draw bracket to balance all the weight off the horses' necks. Our Roller

Booklet describes many other exclusive "BISSELL" features, and shows our 6-, 8-, 9- and 12-ft. styles. Ask Dept. W to send you a copy.

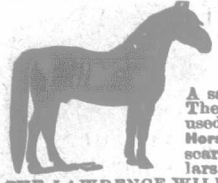
We also supply Grass Seed Attachment for use on "BISSELL" Land Rollers.

**T. E. BISSELL COMPANY, LTD., Elora, Ont.**

**When Writing Please Mention The Advocate.**



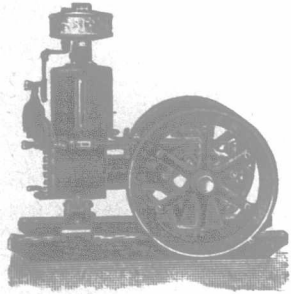
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GOMBAULT'S  
CAUSTIC  
BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from horses. Impossible to produce scab or bluish. Send for circulars. Special advice free.

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## Grind Your Feed at Home



If you would investigate you would find that you could grind all your feed, cut all your straw and pump all your water at home with a

## STICKNEY Gasoline Engine

and save the price of the engine in a very short while by saving the miller's tolls, and the hire of the man who owns a portable engine. Think of it—Without leaving your barn you could do all your work that requires power. And the Stickney never balks. It is ready at all times. No trouble. No tinkering. The cost of the gasoline is very small. We carry all sizes from 3 to 16 horse-power. Write for our catalogue.

The Ontario Wind Engine & Pump Co. (LIMITED),  
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THE  
FENCE  
MAN

TORONTO, CANADA

Sells his Crown Wire and Iron Fences and Gates at factory prices; also barbed, coiled and plain wire, fence tools, etc. Ask for free catalogue.

## Agents are Coining Money

Selling this Combination Tool. Sells at sight. Farmers, farmers sons and others having time at their disposal this winter should write to-day for our Agents' offer.

MAY MFG. CO.,  
ELORA, ONTARIO.

FOR SALE  
IMP. CLYDESDALE STALLION  
Banquet (9644) (13292)

The imported brown five-year-old stallion, Banquet, is a son of the famous Silver Cup, three times first at the Highland and twice first at the Royal. On the maternal side he is bred through the dam of Darnley (222); his second dam, the famous Keir Peggy 4th, being uterine sister of that horse; her dam being Keir Peggy, Darnley's dam.

Banquet is a big, handsome, quality horse, a sire of rare merit, and an exceedingly sure foal-getter; absolutely sound and smooth in every way, and one of the handsomest Clydesdale horses living.

Having no immediate use for him, I offer him for sale at a figure that will appeal to intending purchasers who want a tried sire at a moderate price.

B. Rothwell, Hillsdale Farm, Ottawa P.O., Ont.



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Gerald Powell, Commission Agent and Interpreter, Nogent Le Rotrou, France, will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references; correspondence solicited.

FOR SALE: TWO CHOICE, BIG, SMOOTH

IMP. CLYDESDALE  
STALLIONS

Four and six years old. Both dark brown. Sound and right, with best of breeding.

Wm. Meharey, Russell, Ontario.

## UNKO2.11½

Winning race record.

\$25.00 to insure. Owned by:

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## For Sale: Imported Shire Mare

Eight years old. Pair registered Shire mares rising three years old. M. Sexsmith, Ridgeway, Ont.

QUESTIONS AND ANSWERS.  
Veterinary.

## ELEPHANTIASIS.

Horse had lymphangitis last December. It broke and discharged for a time, and then healed up, leaving a big leg. I have tried everything, but cannot reduce the size of the leg. A. McD.

Ans.—This is called "Elephantiasis," and very little can be done for it. That is, treatment is seldom successful. Treatment consists in giving the patient 1 dram iodide of potassium three times daily. If this causes loss of appetite, reduce the dose to 40 grains, or even less, but it is probable he will be able to stand dram doses. Rub the swollen parts well once daily with a liniment made of 4 drams each of iodine and iodide of potassium, and 4 ounces each of alcohol and glycerine. V.

## DIARRHEA IN CALVES.

My calves become affected with diarrhea shortly after birth, and die at from two to three days. J. G. W.

Ans.—This is due to a germ that exists in the stable, and gains the circulation through the navel opening. Prevention consists in thoroughly disinfecting the stable. Sweep out thoroughly, and then wash thoroughly with a hot five-per-cent. solution of carbolic acid. Clean the stalls out every day, and scatter freshly-slaked lime on the floors before scattering fresh bedding. Dress the navel of the calf as soon as possible after birth, and four or five times daily until it heals, with 1 part formalin to 9 parts water. Curative treatment consists in adding ½ ounce aqueous solution of formaldehyde to 15½ ounces water, or 1 to 31, and adding a teaspoonful of this to every pint of milk fed to the calf. V.

## INAPPETENCE, ETC.

1. Jersey bull, 16 months old now, did well until three months ago, when he began to lose his appetite. I have purged him, but he has not regained his appetite. I have also given him condition powders without results. He looks rough and seems itchy.

2. Berkshire boar, nine months old, breeds well, but is not sure. J. R. S.

Ans.—1. If he is tubercular, nothing can be done. The only means of diagnosing is by the tuberculin test, applied by a veterinarian. If he is not tubercular, tonics and good feed should cause an improvement. Give him a dessertspoonful of the following three times daily, viz.: Equal parts sulphate of iron, gentian, ginger and nuxvomica.

2. All that can be done is to keep in fair condition, allow plenty of exercise, and not breed oftener than once weekly. V.

## LAME HORSE.

Horse went lame in front more than six months ago. A small lump appeared in front of fetlock joint, but it has disappeared. There does not appear to be any extra heat in the leg or foot, and drawing does not appear to hurt him, but he goes very lame on hard roads. I have sent for a bottle of ——. Do you think this is a good remedy? T. H. M.

Ans.—We do not care to discuss the proprietary medicine mentioned, but if it can do all it is claimed to do, of course, it will effect a cure.

The greatest trouble in lameness is to make a correct diagnosis. The long standing in your case, the absence of apparent disease in leg or foot, and the effects of hard roads, indicate trouble in the navicular joint. I would advise repeatedly blistering the coronet. Get a blister made of two drams each of cantharides and biniodide of mercury, mixed with two ounces vaseline. Clip the hair off for two inches high all around the hoof. Tie so that he cannot bite the parts. Rub well with the blister once daily for two days; on the third day apply sweet oil. Let loose in box stall now, and oil every day. As soon as the scale comes off, tie up and blister again, and, after this, blister once every month so long as you think it necessary or wise. Of course, it will be better if he can be given a long rest. V.

Clydesdales and  
Hackneys  
FOR SALE

We have more prizewinning Clydesdale fillies for sale than any other firm. We have them any age or color you want. Also Hackney and Clydesdale stallions.

## Hodgkinson &amp; Tisdale

Simcoe Lodge, Beaverton, Ont.

Long-distance 'phone. G. T. R. C. N. R.

Clydesdale Stallions; Fillies  
Hackney Stallions

We have been importing Clydesdales and Hackneys for 5 years, and in that time have won at the leading shows in Canada and the United States the grand total of 40 championships against all comers on both sides of the line, besides dozens of firsts, seconds and thirds. We never had a better lot on hand than just now. They were winners in

Scotland, winners at New York, and winners at Guelph and Ottawa. They are the best types of the breed, with size, character, quality, action and breeding, and we sell them as reasonably as inferior ones can be bought, and give terms to suit. Clydesdale stallions and fillies and Hackney stallions.

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Our barns are situated at Bedford Park, 3 miles north of Toronto. Take Yonge Street car. Address all correspondence, Bedford Park P. O., Ont. Send telegraph messages to Toronto, Ont. Telephone North 4483, Toronto.

GRAHAM & RENFREW CO.,  
BEDFORD PARK, ONT.JUST 35 MILES EAST OF TORONTO TO  
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There you are always welcome, and can always see first-class CLYDESDALE STALLIONS AND MARES of all ages, and moderate prices.

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## SCOTLAND'S BEST IN CLYDESDALES

I believe I can show intending purchasers of Clydesdale stallions or fillies a bigger selection, better breeding, bigger horses, more character, more quality, more right-down high-class individuality, and will sell them for more reasonable prices, and give better terms, than any other man in Canada. Let me hear from you if you want a topper.

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MR. JOHN SEMPLE, of the firm of Semple Bros., Spring Hill Stud Farm, Milverton, Ont., and Luverne, Rock Co., Minn., U. S. A., importer of high-class Clydesdales, Shires and Percheron Horses, sails for Europe on Jan. 6th for his second shipment since August, 1910. This shipment will never have been equalled for their high-class breeding and individual merit. Intending buyers should see this shipment before purchasing elsewhere. By doing so they will save hundreds of dollars. Please note their arrival.

CLYDESDALES—Imported and Canadian-bred  
Our several importations per year place us in a particularly favorable position to meet all demands for the best and most fashionably bred representatives of the breed. We are never undersold, and give favorable terms. ROBT. NESS & SON, HOWICK, QUE.

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I have one 6-year-old Clydesdale stallion that is hard to beat for size, quality and breeding; 6 others, rising 3 years, that are big, drab, character colts, and bred the best; 3 Percherons rising 3. There is no better selection in Canada, nor no better prices for a buyer.

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Mount Victoria Stock Farm, Clydes and Hackneys.  
We are just now offering exceptional values in Clydesdale and Hackney stallions and fillies, of all ages; prizewinners and champions, highest-class types of the breed, to make room for our new importation.  
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T. B. MACAULAY, Prop.  
Hudson Heights, Que.



QUESTIONS AND ANSWERS. Miscellaneous.

RETURNING RING.

If a young lady gives you the engagement ring back, and other presents, would she have any claim on one? A SUBSCRIBER.

Ontario.

Ans.—She might have. What you mention would be a strong circumstance adverse to a claim on her part, but it would not be conclusive.

TOULOUSE GEESSE.

I see in your valuable paper the picture of a pair of Toulouse geese. I would like to know where I could get a pair of them, and what I would have to pay for same. Could you please let me know the particulars about them. A. S. B.

Ans.—Put an advertisement in our "Wants and For Sale" column. Breeders who have stock of this kind for sale, would find it profitable to do some advertising also.

CRIBBER.

Have a mare five years old which is a cribber. Could you suggest what would prevent it? SUBSCRIBER.

Ans.—Cribbing, or windsucking, is a habit which is very hard to check. The most successful treatment is to buckle a strap tightly around the throat. Of course, it must not be sufficiently tight to interfere with respiration or swallowing, but so tight that the neck cannot expand as it must in order for the vice to be practiced.

EXPRESS CHARGES.

My wife lost her mother last year in Scotland, and her father decided to come to Canada. He brought his two youngest daughters with him, and in their luggage they brought their piano, having had it booked and registered through "—'s Agency," at Edin, and paid £1 8s. Now that office has sent a letter saying they did not charge enough, and asking for seven dollars more. Can they collect it? SUBSCRIBER.

Ontario.

Ans.—They probably can, if their charging you the amount paid only was owing to a mistake merely, and was not in accordance with their tariff for such service, and assuming also that such tariff charge is not unreasonable.

BLACK TEETH IN PIGS.

Is there such a disease as black teeth in pigs, or is it the effects of some other ailment? Had a bunch of eight pigs ten weeks old; four got sick; would hardly eat; would cough, and seem to froth at the mouth. Was advised to look for black teeth and pinch them out. They all had black teeth, even those that seemed well. Took them out of all but one pig. Thought, perhaps, it was indigestion, so commenced to feed sulphur in feed. They have all gotten around all right, except one, which died, but don't think he got any of the sulphur; the rest all did. Was feeding them a mixture of 100 lbs. bran, 200 lbs. middlings, 100 lbs. chop (oats and barley), 100 lbs. corn meal. They were fed three quarts night and morning, with what milk they wanted, and milk at noon, with pulped roots after. Had clean pen, and an occasional run in barnyard. W. W. M.

Ans.—Many pigs are born with black teeth. These are but temporary teeth, but in some cases they are so long and sharp that they irritate the sow when nursing, and, it is believed by many pig-raisers, cause her to refuse to be suckled. Some hog-breeders make a practice of breaking out the black teeth with pincers as soon as possible after the pigs are born. A correspondent, whose letter appeared three years ago, reported that he had a litter of pigs which were allowed to feed quietly for a week or two, after which the sow became cross, would not let them suck, and they were likely to starve. He took out all the black teeth, then let the sow in with her litter, and she lay down quietly, and there was no more trouble. The pigs grew rapidly afterwards. The correspondent had similar cases before, and in every case the pigs improved rapidly after the treatment.

You were right, we think, in believing that your pigs were troubled with indigestion, but no harm could be done by breaking out the black teeth, and there is just a possibility that they might be interfering with mastication.



A Horse is What His Stomach Makes Him

Few horse owners realize it, yet it's a fact that the physical beauty, courage and endurance of the horse depend upon a healthy normal action of one function—digestion. The stomach of the horse is small and his ration less than the great bulk consumed by the milch cow or fattening steer. Evidently, then, this smaller ration of the horse must be thoroughly digested or his physical fitness will suffer. Here is where

DR HESS STOCK FOOD A TONIC

pays for itself many times over. It is a digestive tonic, formulated by Dr. Hess (M.D., D.V.S.) and intended to aid and strengthen animal digestion. A horse getting a trifling dose of it twice a day turns his smaller mess of hay and grain into muscular energy and physical fitness. A milch cow receiving it converts more meal, hay and fodder into milk. A fattening steer, sheep or hog, fed regularly with small doses of Dr. Hess Stock Food, grows faster and lays on sweeter, firmer flesh than would be possible without its use. "A poor ration, well digested, is better than the best ration poorly digested." This is "The Dr. Hess Idea" of live stock feeding and all farm animals are the better for it. Dr. Hess Stock Food relieves minor stock ailments. Sold on a written guarantee. Ask your dealer for it.

100 lbs. \$7.00 25 lb. pail \$2.00

Smaller quantities at a slight advance. Duty paid.

Dr. Hess Stock Food Makes "Blue Ribbon" Winners

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Also manufacturers of Dr. Hess Poultry Pan-a-ce-a and Instant Louse Killer. Free from the 1st to the 15th of each month—Dr. Hess (M.D., D.V.S.) will prescribe for your ailing animals. 96-page Veterinary Book free for the asking. Send 2c stamp and mention this paper.

DR. HESS POULTRY PAN-A-CE-A Laying hens, growing chicks, moulting fowls—poultry of all kinds, ages and sizes—need Dr. Hess Poultry Pan-a-ce-a in daily doses. It stimulates egg production, hastens growth and fattening, shortens the moulting period, cures minor ailments and pays the poultryman several hundred per cent. profit on its purchase price. Ask your dealer for it.

1 1/2 lbs. 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25 lb. pail \$3.50. Duty paid.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

INSTANT LOUSE KILLER KILLS LICE

Guaranteed Satisfaction

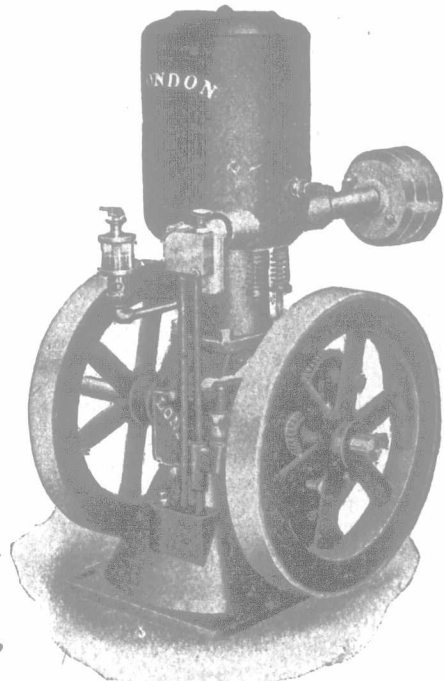
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Simple, reliable, substantial; built for years of continuous work on the farm, with the bother and repairs left out. CANNOT BE DAMAGED BY FROST.

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We still have on hand a few very choice two and three year old Percheron stallions of the big, drafty, heavy-boned type that will make ton horses when finished. Greys and blacks in color, and by the best French sires. All buyers looking for a good Percheron stallion, at a reasonable price, will do well to get our price, as we are in a position to sell below competition. We also have a splendid Hackney stallion, by Garton Duke, that we will sell well worth the money. We invite correspondence of intending purchasers.

R. HAMILTON & SON, SIMCOE, ONTARIO

7 Imported Clydesdale Stallions 7 2, 3, 4 and 5 years of age. selection, with type, quality, breeding and character unexcelled. Our prices are right, and our terms are made to suit. Phone connection. Crawford & McLachlan, Widdler P. O., Ont. THEDFORD STATION.

IMP. CLYDE STALLIONS AND FILLIES

Imported Clyde stallions and fillies always on hand, specially selected for their size, type, character, quality, faultless action and fashionable breeding. Prices right. Terms to suit. GEORGE G. STEWART, Howick, Que.

Imported Clydesdales My new importation of Clydesdale stallions for 1910 have arrived. They were selected to comply with the Canadian standard, combining size, style, quality and faultless underpinning with Scotland's richest blood. They will be priced right, and on terms to suit. BARBER BROS., GATINEAU PT., QUEBEC

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Auction Sale of Fifteen Imported Clydesdale Fillies AT ORMSBY GRANGE STOCK FARM, ORMSTOWN, P. Q., on the 2nd day of Ormstown's Great Spring Show, 24th May, 1911. They are by Baron's Best, Lord Derwent, Pride of the Lothians, Sir Geoffray and Silver Cup. D. Mc EACHRAN. A rare opportunity to buy the best at lowest prices.

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For forty-six years renowned as the best of the breed. Six large importations since February 1, 1910 (the last arrived October 12th), insure fine selection, as each animal was individually selected for size, bone quality and excellence. If you want choice stallions or mares, write for catalogue, illustrated from life.

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MESSRS. HICKMAN & SCRUBY

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As fine a lot as there is in America; 3 to 4 years old; with lots of quality and good individuals; weighing or maturing 1,900 to 2,200 lbs. Prices on imported stallions, \$1,000 to \$1,200; American-bred stallions, \$600 to \$900. Importations to arrive February 18 and March 1.

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as supplied to the Czar of Russia, the King of Denmark, the Duke of Connaught, Prince Christian, patronized by 60 masters of foxhounds, adopted by the War Office. The Burman Power Clippers are the accepted standard wherever horses are clipped.

Points: Ball Bearing; Long Shaft; Hook for Holding Head; Close-Clipping Plates.

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A BOG SPAVIN, PUFF or THOROUGHPIN, but

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will clean them off permanently, and you work the horse same time. Does not blister or remove the hair. \$2.00 per bottle, delivered. Book 4 E free.

Mr. S. Nixon, Kilbride, Ont., writes, Jan. 21, 1910: "I have used ABSORBINE with success on a curb."

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**Clydesdales** FOR SALE—Imp. and Canadian-bred stallions and mares, ranging in age from foals upwards. Seven imp. mares in foal. Keir Democrat (imp.) (12187) (7018) at head of stud. Also a number of work horses. Long-distance phone. **R. B. Pinkerton, Essex, Ont.**

PLEASE MENTION THE ADVOCATE.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### TOMATOES UNDER GLASS.

I have a good greenhouse, fitted with a reliable hot-water heating system, and can carry an even temperature of about sixty or seventy degrees. As I confine myself to the raising of tomato plants and annuals, it is empty a good part of the year. Would it be profitable for me to grow ripe tomatoes for the winter market? If I could successfully grow an average crop, what would be the best way of disposing of the fruit? About what price could I expect to receive for tomatoes from November 25th to January 25th. Where would be the best market?

W. K.

Ans.—The tomato crop is very uncertain under glass. You can sell in almost any city, for they are not plentiful in the winter. The price would be from 20c. up, per lb., if the sample was firm. The most profitable crop for winter, we found to be radishes, and next to them, lettuce. It requires a good deal of experience to make any of these profitable under glass.

C. M. NEWANS.

#### MARE LOSES MILK.

I have an 11-year-old mare which was bred on June 7, 1910, whose milk is running for a couple of days already. Does it hurt her? She is in good condition, fed on hay and some grain, and worked pretty regularly. Does this indicate that she will soon foal? How should I treat her now, and at foaling time?

A. T.

Ans.—A mare from which milk escapes for a considerable time before foaling, often produces a weak foal, but this is not necessarily the case. At foaling time, watch the mare closely, and, if the foal be weak, help it up, and hold up and assist it to nurse. See that it gets sufficient nourishment every hour until it can rise and help itself. As the first milk, which acts as a needful purgative to remove the meconium (the faeces present at birth) has gone, it will be necessary to see that these are brought away. Oil the forefinger, and insert carefully into the rectum, and remove the meconium, and then give an injection of raw linseed oil. Do this four times daily, until the faeces becomes yellow. Do not give purgatives.

The above is wise practice for any colt.

#### TRIMMING BULL'S FEET—QUANTITIES OF PEAS AND OATS TO SOW—PREVENTING PEA WEEVIL.

1. What is the best way to trim a young bull's feet? If you cut the toes off straight, they will turn up.
2. When you sow peas and oats together, what is the best quantity of each to sow per acre on clay loam soil?
3. Is there any way to treat seed peas to prevent bugs?


W. A. M.

Ans.—1. An experienced stock-breeder says that in trimming the feet of a bull, it is well to cut them off square at the proper length, and afterwards trim away the under portion so as to bring the hoof to a natural-shaped point.

2. The quantities of peas and oats to sow for mixed crop, depends on the purpose for which the crop is intended, and upon variety. If for grain production, about 2½ bushels per acre, equal quantities of each, would be enough to sow. If intended to be fed green to stock, more seed would be advisable, from 3 to 3½ bushels per acre being desirable.

3. Pea bugs in the seed may be killed by the use of bisulphide of carbon, but that would have scarcely any effect on the prevalence of bugs in the country. The most of the bugs have escaped from the peas, and are secreted in crevices about the buildings, quietly awaiting the proper time for laying eggs in the pea blossoms. Pea bugs can fly. Even if no bugs had left the grain, and only those in the seed were destroyed, those in the masses peas would soon eat their way out and severely attend to business in the pea field.

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**FOR USE ON ANIMALS.**

Sprains, Rheumatism, Curbs, Splints when formed in Milk, Strung Sinews, Capped Hocks, Overreaches, Bruises, Cuts and Wounds.

Broken Knees, Sore Throat, Sore Shoulder, Sore Udders of Cows, For Sore Mouths in Sheep and Lambs, For Foot Rot in Sheep, Sprains in Hogs, Cramp in Birds.

**FOR HUMAN USE.**

Rheumatism, Sprains, Lumbago, Sore Throat from Bruise, Cold at the Chest, Neuralgia from Soreness of the Cold, Obtrusive Bronchitis, Efficacy after Exercise.

Backache, Slight Cuts, Cuts, Soreness of the Limbs after Exercise.

Elliman's added to the Bath is Beneficial.

Elliman's Royal Embrocation.

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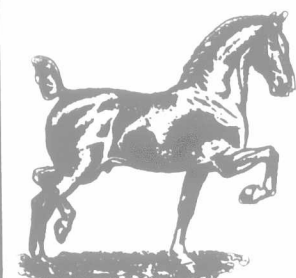
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Contains from 80 to 84 per cent. pure cane molasses (not a particle of sugar-beet by-product enters into its composition). A digestive feeding meal, convenient to handle, economical to use, and gratifying in its results. Nothing to equal it for finishing stock. Ask your dealer, or write:

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The Great Wholesale and Retail Horse Commission Market.

Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Horses and Harness always on hand for private sale. The only horse exchange with railway loading chutes, both G. T. R. and C. P. R., at stable doors. Horses for Northwest trade a specialty.

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Our new importation has just arrived at our stables here. All the animals are in good condition, of big size and quality. Come and inspect them.

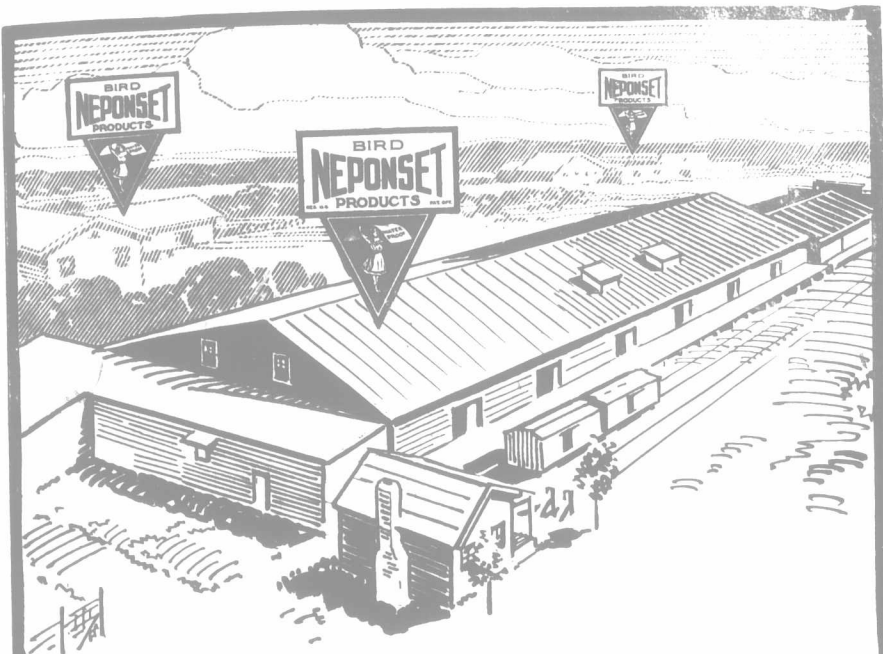
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**NEW IMPORTATION COMING**

We still have on hand a few first-class stallions that we will sell worth the money in order to make room for our new importation early in the summer. Phone connection.

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**A Dollar's Worth of Durability for Every Dollar of Cost**

WHATEVER roofing you choose for your building, don't let the question of first cost have too much influence. The cheapest roofing at first is apt to be the most expensive in the end.

**NEPONSET Paroid Roofing**

costs a little more than some roofings, but every dollar of additional cost will give you a dollar's worth more of service. The idea back of NEPONSET roofings has always been to make them so durable that their years of honest service would be their strongest recommendation. NEPONSET roofings are the most economical roofings you can buy because they wear so long without a single leak.

Write for Book of Plans of Farm and Poultry Buildings We will send you at the same time The NEPONSET Booklet, which describes the different kinds of NEPONSET Roofings for different types of buildings. This book is invaluable to any one about to build or repair.

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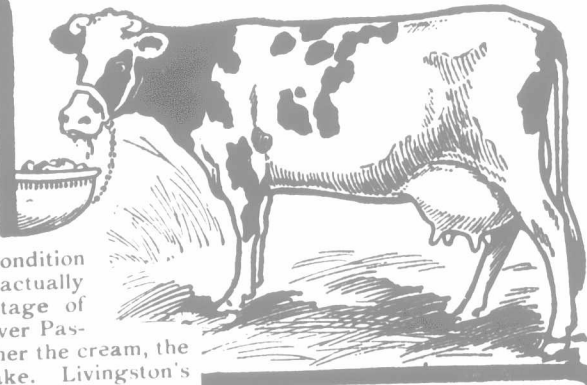
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**This Feed Costs Nothing**

if you count the results it gives. Livingston's Oil Cake is just what cows need.

It tastes good—is easily digested—keeps stock in prime condition all the year round—actually increases the percentage of Butter-fat by 16% over Pasture Grass. The richer the cream, the more money you make. Livingston's is the feed that pays for itself.



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Writing Advertisers, Please Mention "The Farmer's Advocate."

**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**REGISTRATION OF HOLSTEINS—SOWING PASTURE MIXTURE**

1. Can Holstein cattle be graded up so they could be registered in the Canadian Herdbook?

2. What machine would a person use for sowing clover 7 lbs., sugar cane 30 lbs., and oats 51 lbs. per acre, and how should it be set? A. M.

Ans.—1. No.  
2. Use an ordinary grain drill, mixing the sugar-cane seed with oats in proper proportion, and sow the clover from the grass seeder. Regulate your drill by experimenting on the barn floor, or on a smooth surface.

**A MEDICAL BILL.**

A man resides with his son and goes away for a visit; was in poor health when he went and became worse while gone. The people where he was, sent for a doctor, and he came every time it was necessary, and many times when not necessary, so as to make a big bill. The man dies, leaves all to his son, and appoints him Executor. The will included a few farm chattels, household effects, and insurance in C. O. F. The doctor sends the son a good big bill. Now, who should pay this account, the son, or the people that employed the doctor?

Ans.—The son, as Executor, and out of the father's estate, but only to a reasonable amount.

**SPRAIN OF FLEXOR TENDON—MELANOTIC TUMORS—PASTURE IN ORCHARD—TEMPERATURE OF MILK IN PANS.**

1. I have a mare in her teens that has had a swollen leg for several weeks; swollen from hock to fetlock. Hock itself is very much swollen, and it seems to give pain on pressing the point of it. Inside of hock very hot and feverish. I have bathed ever since I noticed it; nothing more. Could you kindly tell me what the trouble is, its cause, and treatment? (I attribute it to having slipped and fallen on ice, which she has done several times this winter.)

2. Have aged horse which has several hard lumps on inside of tail bone, varying in size from a pea to a hickory nut. What are they, and what caused by?

3. I have orchard which I would like to seed down to clover this spring for permanent pasture, without taking a crop off, if that is advisable. It has been in pasture sod for several years, and was only partly plowed last fall. Is such a thing advisable?

4. What temperature should milk be kept at when put in pans for cream to rise? Should it be kept at any certain temperature, and, if cream froze on top of milk, would that tend to prolong the churning operation?

**"HALTONIAN."**

Ans.—1. This is sprain of the back sinew or flexor tendon, caused, no doubt, as you suggest, by mare having slipped and fallen on ice. Treatment consists in shoeing with a high-heeled shoe, so as to throw tendons in a position of partial repose. Give rest and low diet, bathe with hot water several times daily, and, after bathing, apply a liniment composed of 2 ounces laudanum, 1 ounce chloroform, 1 ounce acetate of lead, and water to make a pint. When the acute soreness and inflammation have subsided, change to cold water and a stimulant liniment of 2 ounces oil of turpentine, 2 ounces tincture of arnica, 4 ounces alcohol, and water to make a pint. In an hour after applying the liniment, apply a bandage that has been soaked in cold water, to be left on until time for next bathing.

2. These lumps under tail are melanotic tumors. Unless they give trouble would not meddle with them, as the horse is old. If deep-seated, they can only be removed by the knife. In less malignant cases, they have been cured by touching them repeatedly with tincture of iodine.

3. It is not advisable to have permanent pasture in orchard, if you want any returns from the orchard.

4. When milk is put into shallow milk pans for cream to rise, it should be kept at a temperature of 50 to 60 degrees. If cream froze on top of the milk, the churning operation would probably be prolonged very considerably.

**If I Had Eczema**

I'd wash it away with that mild, soothing liquid, D. D. D. Relieves all kinds of skin trouble, cleansing away the impurities and clearing up the complexion as nothing else can.

Yes. If I had any kind of skin trouble I'D USE D. D. D.

Write the D. D. D. Laboratories, Dept. A, 49 Colborne street, Toronto, and they will send you trial bottle free.

(For sale by all Druggists.)

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WHY ARE YOU IMPORTING PHOSPHATE AND AMMONIA WHICH IS A BY-PRODUCT OFF YOUR FARMS OF WHICH YOU ARE EXPORTING MANY THOUSAND TONS ANNUALLY. BONES AND WHICH CONTAIN LARGE QUANTITIES OF PHOSPHORIC ACID AND AMMONIA

KINDLY ANSWER THE ABOVE

PURE BONE MEAL IS THE CHEAPEST FERTILIZER.

THIS PLANT FOOD IS ALL FROM OUR CANADIAN SOILS AND SHOULD ALL GO BACK SEND FOR PRICES, ETC.

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**Aberdeen-Angus Cattle**—Stock all ages, good strains, at reasonable prices. Apply to ANDREW DINGMORE, Manager, "Grape Grange" Farm, Clarksburg, Ont.

**FOREST VIEW** I have lately purchased the Governlock herd of Herefords, and have for sale sons and daughters of Toronto winners and champions; also Galloways of both sexes. A. E. Caulfield, Mount Forest, Ont., P. O. and Station.

**ABERDEEN - ANGUS CATTLE** 3 choice yearling bulls for sale at reasonable prices. Also females any age. Parties requiring such will get good value. Correspondence invited. GEO. DAVIS & SONS, ALTON, ONT

**Aberdeen-Angus** The "TWEEDHILL" herd has been before the public for 25 years, and means quality and individual excellence. Young bulls, 12 to 15 months, and females all ages for sale. Write James Sharp, Rockside, Ont. Cheltenham Sta., C.P.R. & G.T.R.

**ABERDEEN - ANGUS**

Will sell both sexes; fair prices. Come and see them before buying. WALTER HALL, Drumbo station, Washington, Ont.

**Scotch-bred SHORTHORNS!**

During the present month am offering four very choice young bulls, ready for service, of the best breeding and quality, at very reasonable prices. Also some good young cows and heifers, with calves at foot

H. J. Davis, Woodstock, Ontario Long-distance Bell phone.

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**SHORTHORN HERD** Established 1855. LEICESTER FLOCK 1848. Have decided to offer the famous Duthie-bred bull, Joy of Morning = 32070=. He is very active, sure and quiet. Also bulls and heifers got by him, and young cows bred to him.

JAMES DOUGLAS, CALEDONIA, ONTARIO

**Glenburn Stock Farm**

A few nice Shorthorn calves of both sexes. Shropshire ram lambs, ewes and ewe lambs. Barred Rock cockerels of Hawkins' strain. JOHN RACEY Lennoxville, Quebec.

**Shorthorns and Yorkshires**—A choice lot of young bulls and heifers at reasonable prices, from such noted families as Miss Ramsden, Crimson Flower, Lady Sarah and others. Also a fine litter Improved Yorkshires, prizewinning stock. ISRAEL GROFF, Elmira, Ont



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**THIS OFFER IS NO CATCH.** It is a solid, fair and square proposition to furnish a brand new, well made and well finished cream separator complete, subject to a long trial and fully guaranteed, for \$15.95. Different from this picture which illustrates our large capacity machines. Skims 1 quart of milk a minute, hot or cold; makes thick or thin cream and does it just as well as any higher priced machine. Any boy or girl can run it sitting down. The crank is only 5 inches long. Just think of that! The bowl is a sanitary marvel, easily cleaned, and embodies all our latest improvements. Gears run in anti-friction bearings and thoroughly protected. Before you decide on a cream separator of any capacity whatever, obtain our \$15.95 proposition.



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**EXCELS ANY SEPARATOR IN THE WORLD**

**OUR LIBERAL TRIAL ENABLES YOU TO DEMONSTRATE THIS.** While our prices for all capacities are astonishingly low, the quality is high. Our machines are up to date, well built and handsomely finished; run easier, skim closer, have a simpler bowl with fewer parts than any other cream separator. Thousands of machines in use giving splendid satisfaction. Write for our 1911 catalog. We will send it free, postpaid. It is richly illustrated, shows the machines in detail and tells all about the American Separator. Our surprisingly liberal long time trial proposition, generous terms of purchase and the low prices quoted will astonish you. We are the oldest exclusive manufacturers of hand separators in America and cannot afford to sell an article that is not absolutely first class. You save money by dealing with us and at the same time obtain the finest and highest quality machine on the market. Our own (manufacturer's) guarantee protects you on every American Separator. We ship immediately. Cream Separators are free of duty in Canada. Write us and get our great offer and handsome free catalog.

ADDRESS

### GOSSIP.

Chas. Currie, Morriston, Ont., near Guelph, writes: I sold my young Clydesdale stallion, Morriston's Pride, to O. Sorby, Guelph, at a fancy price. I have on hand a choice lot of Tamworth sows for sale, in farrow to a first-class boar, at prices reasonable; am sold out of boars fit for service. This is the best year I ever had in the business. "The Farmer's Advocate" is the best paper for stockmen to advertise in to make good sales for good stock. It takes the lead of all farm journals.

B. Rothwell, Hillsdale Farm, Ottawa, advertises for sale the imported Clydesdale stallion, Banquet, a brown four-year-old son of Silver Cup, by Baren's Pride. Banquet was winner in his two-year-old form of many prizes in the North British Shows, notably first at the United Counties Show of Durham and Northumberland, and a horse foal by him was first at above show in 1909; also at Cumberland Show. It is hardly necessary to draw attention to the fact that his breeding is of the gilt-edged variety. As Mr. Rothwell has Silver Strand, by the same sire, in his stud, he has no use for both horses, and will show 70 per cent. of his last season's mares carrying foals to him.

### THE DON JERSEYS.

There is probably no herd of dairy cattle in the Dominion, of any breed, that is kept in better condition or receives more care, than the Jersey herd of David Duncan & Son, Don, Ont. The strictly high-class character of this herd is well known by Jersey fanciers all over the continent, and certainly there is none that has received more attention in the matter of herd-heads. This is the only herd in the country that can boast of having at its head a son of the world's greatest sire of the breed, Golden Fern's Lad, a bull, it is claimed, that has sired more prizewinners, that have sold for higher prices, and his heifers have been higher testers and producers, than the get of any other one bull alive or dead, that the breed has produced. This bull is Fontaine's Boyle, by Golden Fern's Lad, dam Nunthorpe Fontaine (imp.), who, at 11 years of age, sold for \$1,035, and with a butter record of three pounds a day. At the same sale, a two-year-old daughter of hers, sired by Flying Fox, sold for \$1,400, her dam, Fontaine 9th, a half-sister to Golden Fern's Lad, has a butter record of 2 lbs. 10 ounces a day. At T. S. Cooper's sale, a half-brother of this bull sold for \$10,000, and another eight-months-old sold for \$10,200. Assistant in service is Brilliant's Golden Fern, by Fontaine's Golden Fern, a son of Golden Fern's Lad, dam Imp. Brilliant Dentonia, who is the dam of that famous bull, Blue Blood of Dentonia. To cross with the daughters of these great bulls, Mr. Duncan has lately purchased the royally-bred young bull, Eminent Royal Fern, got by Sensational Fern, a son of Golden Fern's Lad, dam Eminent Evasion, with a milk record of 54 lbs. a day, and a seven-day butter record of 22 3-5 lbs. The daily milk record of the herd shows: For mature cows, 40 to 49 1/2 lbs.; for three-year-olds, 35 to 42 lbs.; for two-year-olds, 32 to 38 lbs. One hundred and ten, of all ages, make up the sum total of the herd at present, 42 of which are in milk. Last month (February), with 39 milking from three to six months, the check received for cream shipped to Toronto, was \$403. Among the long rows of choice cows, we noticed such particularly good ones as Rosetta of Don, the first-prize three-year-old at Toronto, London and Ottawa; Lady Maid of Don, a most persistent milker, now giving over 40 lbs. a day; Sunshine of Don, whose big, well-balanced udder looks good for over 50 lbs. a day; Lady Primrose of Don, who, when fresh last July, gave 49 lbs. 12 ounces, and is now giving 40 lbs. a day. The intensive breeding of the herd, through the great stock bulls that have been used, has resulted in wonderful persistency of milking, and evenness in quantity of yield, months after freshening. The young things are very uniform in type, and full of quality. For sale are a number of heifer calves, from four to nine months of age, two young bulls, big enough for service, and several bull calves, high-class in quality, with breeding unsurpassed. The farm is only ten miles from Toronto, on the C. N. R. Duncan Station.

### 10 Scotch Shorthorn Bulls 10

FROM 10 TO 14 MONTHS OLD

The Princess Royal, Secret, Bessie, Village Maid families are represented in lot. First-class herd headers and farmers' bulls for getting market-topping steers. Prices very reasonable.

**JOHN MILLER, BROUGHAM, ONT.**  
Claremont Station, C. P. R., three miles.

**Woodholme Shorthorns** are of the richest Scotch breeding, modern in type and quality. For sale: One- and two-year-old heifers, several young bulls, thick-fleshed, low-down and mellow.

**G. M. FORSYTH, Claremont, Ont.**  
100 yards from station. Phone connection.

### MAPLE LODGE STOCK FARM

1854-1911

Two strictly first-class young Shorthorn bulls for sale now. Come and see them, or write.

**A. W. SMITH, Maple Lodge, Ont.**  
Lucan Crossing, G. T. R., one mile.

### HIGH-CLASS SHORTHORNS

I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me.

**GEO. GIER, Grand Valley P. O. and station,**  
also Waldemar station.

### SPRING VALLEY SHORTHORNS

If you want a good Short-horn bull, we have them, Canadian-bred and imported. Females all ages. Also a few good YORKSHIRES—bears and sows. Prices right.

Phone connection. **Kyle Bros., Ayr, Ont.**

### FLETCHER'S SHORTHORNS

Imported Shorthorn bull for sale. Just turned 4 years old. Benachie (imp.) = 69954 =, bred by A. T. Gordon; sire Scottish Farmer, grandson of Scottish Archer; dam Beatrice 22nd, which produced Bandmaster, the first-prize Royal winner.

**GEO. D. FLETCHER, BINKHAM, ONT.**  
Erin Sta., C. P. R.

### SHORTHORN CATTLE!

One twelve-months-old bull, gr.-dam imported. Young cows in calf and yearling heifers, Clippers, Minas, Julias, Wimples, etc., for sale. Inspection solicited. Prices moderate.

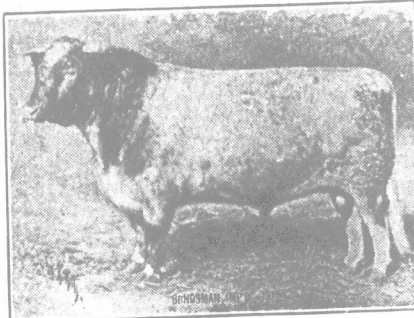
**J. T. GIBSON, DENFIELD, ONT.**

### Shorthorns

Present offering: 12 bulls from 5 to 20 months old; 40 cows and heifers to choose from. Nearly all from imported bulls. At prices to suit everyone. Come and see them, or write: **Robert Nichol & Sons, Hagersville, Ont.**

### Scotch Shorthorns FOR SALE

Three choice young Scotch bulls fit for service; two roans and one red. Bred from imp. stock, also females of all ages. Bell phone. **A. C. Pettit, Freeman P. O., Ontario.**



### SCOTCH SHORTHORNS

100 HEAD IN HERD.

4 Headed by the imported bulls, Bandsman and Village Duke. For sale: 7 choice bulls of serviceable age; 3 are from imported sire and dam; 2 are thick, heavy-boned yearlings, suitable for farmers' use to sire growthy, easy-feeding steers; 1 Non-pareil and 1 Missie, both by Bandsman, are especially suitable for herd headers. 25 young cows and heifers in calf; among these are some good ones for foundation purposes.

**Farm 1/4 Mile from Burlington Jct. Sta.**  
Long-distance phone.

**Mitchell Bros., Burlington, Ont.**

### SHORTHORNS AND CLYDESDALES

THE FOLLOWING CHOICELY-BRED YOUNG BULLS ARE FOR SALE:

Name	Color	Age	Sire	Dam
1 Village Favorite	= 77497 = Red	Sept. 6, 1909	Prince Favorite (imp.)	Village Bride
2 Ramsden Recuit	= 77495 = Red	Nov. 9, 1909	Bullrush (imp.)	Martha 6th
3 Royal Bud	= 81056 = Red roan	Jan. 4, 1910	Royal Winner (imp.)	Silver Rose 2nd
4 Royal Emblem	= 81060 = Red	Jan. 26, 1910	Royal Winner (imp.)	Ury's Star 4th
5 Royalty	= 81059 = Red	Apr. 22, 1910	Royal Winner (imp.)	Claret 34th

Heifers and cows of various ages and choicest breeding. A choicely-bred Clyde stallion, rising two years, from imported sire and dam. **Burlington Jct. Sta., G. T. R. Long-distance phone.** **W. G. Pettit & Sons, Freeman, Ont.**



### H. CARGILL & SON

have to offer at the present moment an exceptionally good lot of young bulls, which combine all the requisites necessary for the making of superior stock sires, viz.: Quality, Size, Conformation and Breeding. If interested, come and make your selection early. Catalogue on application.

**John Clancy, Manager, Cargill, Ontario.**

### Robert Miller, Stouffville, Ont.,

Can supply young bulls and heifers of the very highest breeding, and of a very high class, at prices that you can afford to pay. The young bulls are by one of the greatest sons of Whitehall Sultan. They are good colors, and will make show bulls. I also have two good imported bulls at moderate prices and of choice breeding, and some cows and heifers in calf to Superb Sultan: the calves should be worth all the cows will cost. Some beautiful young imported Welsh Ponies still to spare. It will pay you to write, stating what you want. Glad to answer inquiries or show my stock at any time. Business established 74 years.

### Elmhurst Scotch Shorthorns and Large English Berkshires

FOR SALE: Two young bulls, red and roan, fashionably bred with quality. Young sows bred for April litters. **H. M. VANDERLIP, Cainsville, Ont.** Langford Station. B. H. Radial in sight of farm. B. H. phone.

### Springhurst Shorthorns and Clydesdales

I am now offering a number of heifers from 10 months to 3 years of age. Anyone looking for show material should see this lot. They are strictly high-class, and bred on show lines. Also several Clydesdale fillies, imp. sires and dams, from foals 2 years of age off. **Harry Smith, Hay, Ont., Exeter Sta.**

### Scotch Shorthorn Females for Sale

I am offering, at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scottish Hero (imp.) 55042 (90065), and the older ones have calves at foot by him, or are well gone in calf to him. Their breeding is unexcelled, and there are show animals amongst them. **A. EDWARD MEYER, Box 378, GUELPH, ONT.**

### Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine.

Prices reasonable.

**Porter Bros., Appleby, Ont., Burlington Sta. 'Phone.**

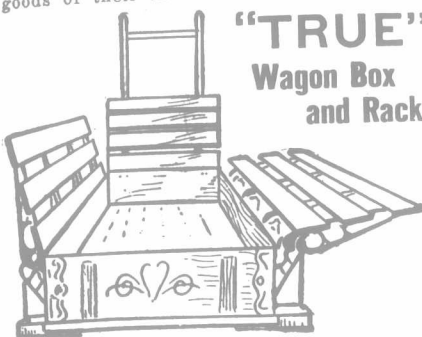
### Maple Hall Shorthorns

We have 15 young bulls for sale between 10 and 15 months old, and they are a choice lot. There is not a weak one amongst them. There are two Cruikshank (Duke) of Glosters, five Crows, and one Bessie. Also Green Flower, one Shipton, and one Red. **DAVID BIRKBECK & SON, GREENWOOD P. O., ONT. CLAREMONT STATION.**



Up-to-Date Specialties For Farmers And Gardeners

Things you need—implements and tools that should be on every truck garden and farm. Our way of making these specialties assures adaptability, strength and service at the minimum price for the best goods of their kind on the market.



"TRUE" Wagon Box and Rack

Without wings and ladder, it is a perfect wagon box. With them, it is the best Hay, Stock, Wood, Poultry, Corn or Fruit Rack ever invented. Adjusted to any position in a minute without wrench, hook or rope.

"Eureka" Sanitary Churn Barrel of finest stoneware—top of clear pressed glass. Churns by hand lever. The only sanitary churn made. 3 sizes—8, 10 and 12 gallons.

"Eureka" Root Cutter will slice or shred from 1 to 2 bushels per minute. Fastest machine made—easiest running. Tapering cylinder—10 best steel knives.

"Eureka" Combination Anvil Best iron anvil, with vice, pipe vice and drill attachment, and saw clamps. Just what you need for repairing tools and machinery. Weighs 60 pounds.

The "Bacon" Seed Drill will handle the most delicate seed without bruising or breaking, and will sow evenly to the last seed.

Write for Catalogue Every farmer, who wants to make money out of his farm, ought to have our new catalogue. It shows our TOOLS, Rakes, Hoes and Machines as they are, and describes their construction in detail. Write for free copy.

The Eureka Planter Co., Ltd, Woodstock, Ont. G1



Rock Salt, \$10.00 ton.

Toronto Salt Works, 128 Adelaide St. E., G. J. CLIFF, MANAGER. Toronto, Ont.

Don Jersey Herd

Now offering young bulls and heifers sired by Fontaine's Boyle (332), also a few choice young cows.

D. DUNCAN, DON, ONT. Duncan station. Phone, long-distance, Agincourt.

MINSTER FARM

Holsteins and Yorkshires R. HONEY, Brickley, Hastings St., Northumberland County, offers bull calves from R. O. P. cows, and from a son of Count Hengerveld Fayne De Kol, also boars and sows ready to mate.

THE MAPLES HOLSTEIN HERD

Everything of milking age in the Record-of-Merit. Nothing for sale at present but a choice lot of bull calves sired by King Posch De Kol. Write for prices, description and pedigree.

Walburn Rivers, Folden's, Ontario

Elmwood Holsteins Offer choice young cows to freshen during March and April, 1911. Spring crop calves. Sired by Ykema Sir Posch and Pontiac Sarcastic—a grandson of Hengerveld DeKol. Prices right. Express prepaid. Safe delivery guaranteed. E. D. George & Sons, Putnam, Ont.

HOMWOOD HOLSTEINS

Home of the champions. Headed by the great milk and butter bred bull, Gray Fayne 2nd's Sir Colantha. Only choice, thirty bull calves for sale at present. M. L. HALEY and M. H. HALEY, SPRINGFORD, ONTARIO

Springbank Two choicely-bred bull calves for sale. One is 10 months, the other 8 months. From high-class milkers. Prices reasonable. For particulars and breeding write to: Wm Barnett & Sons, Living Springs, Ont. Ferguson, C. P. R. and G. T. R.

Holstein Cattle—The most profitable dairy breed. Illustrated descriptions free. Holstein-Friesian Ass'n of America, F. L. HOUGHTON, Secy, Box 127, Brattleboro, Vt.

Lake View Dairy Farm I have several of noted France breeding, also daughters of Sir Admiral Ormsby. Present offering: Bull calves and heifers. W. BELL, BRITANNIA BAY, ONTARIO.

QUESTIONS AND ANSWERS. Miscellaneous.

BEE BOOKS.

- 1. Please let me know the address of a good bee journal. 2. Also the name and price of a good bee book for a beginner.

Ans.—1. The Canadian Bee Journal, Brantford, Ont. Yearly subscription, \$1. 2. A. B. C. and X, Y, Z, of Bee Culture, A. I. Root & Co., Medina, Ohio. Price, from this office, \$1.75, postpaid.

FLAX-SEED MEAL VS. OIL-CAKE MEAL.

Which is better for cattle, flax-seed meal or oil-cake meal? Would the flax meal be too oily for cattle, as I hear some say it is? I grow some flax and grind it for horses. If it is better for cattle than the oil-cake meal, I will grow more flax and grind it for cattle. J.

Ans.—Flax-seed in moderate quantities is more valuable than oil cake, though for most purposes and in most rations the oil cake is more economical at prevailing prices. The oil is valuable in reasonable quantities, but over-laxative in large amounts.

OVERRUN IN BUTTERMILKING.

How much will 100 lbs. of butter-fat increase when made into butter; or how much butter is it possible to make from 100 lbs. of butter-fat? Please give maximum increase. SUBSCRIBER.

Ans.—According to the standard established under the Dominion Adulteration Act, butter must contain 82.5 per cent. fat, and not more than 16 per cent. water. The overrun may vary considerably, but for ordinary purposes of calculation, it is a good rule to add one-sixth to the amount of fat. That is 100 lbs. fat would make 116 2/3 lbs. of butter, allowing for loss in skimming, churning and other mechanical waste.

FIELD PEAS.

Is the Crown pea profitable to grow on heavy clay land; and what is there about them different to the other pea in growing? What do you consider the best pea for clay land? The large pea breaks up so bad in threshing. SUBSCRIBER. Bruce Co., Ont.

Ans.—The Crown pea was grown by some of "The Farmer's Advocate" staff many years ago. It was a large white pea, with short straw, supposed to stand up well, but did not prove a heavy yielder. Other sorts, like the Golden Vine and Mummy, were preferred. Dr. Chas. E. Saunders, the Cerealist at the Ottawa Experimental Farm, reports Prussian Blue, Chancellor, Arthur and Golden Vine as the most productive sorts. The Early Britain is most highly spoken of at the Agricultural College Farm, Guelph, where it has topped the list as a yielder for eleven years. Potter, a white pea of good quality, stands second.

DAMAGES FOR PERSONAL INJURIES.

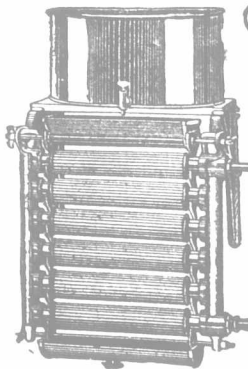
A's horse being tied to a pole one store up street past where he called on business, A came out of store, going to his horse, collided with two old ladies over 70 years of age. The outside lady fell on the street, breaking her hip; "the ladies," C and D, claim that A was running to catch his horse. A claims he was not running, but going to his horse as the street car was passing; this taking place in August, 1910. C and D's lawyer writes A a letter in January, 1911, asking him to come in to let him know what A intended to pay to C and D.

- 1. Would A be liable for expenses and damages, as it has gone so long that witnesses would be hard to get? 2. Is there any particular time set by law when damages have to be claimed? 3. How long has C and D's lawyer a chance to claim damages? ONTARIO.

Ans.—1. We think so. 2. Yes. 3. Within two years from the date of the accident.

Visitor—I envy you that light and skilful hand of yours! Young Sculptor (flattered)—And so you saw my "Amagon"?

Visitor—No, but I hear you shave yourself.



The Secret of Pure Sweet Milk

You dairy-farmers can't afford to ship impure, germ-laden milk into the towns and cities. Our medical authorities are urging the Government to penalize offending dairymen very severely—don't you run any risks. If you pass all your milk through the Root Cooler-Aerator immediately it leaves the cow, you can guarantee it pure and sweet and get a bigger price for it per gallon. The

Root SANITARY MILK Cooler-Aerator

will keep the milk sweet for 48 hours because it kills the animal heat quickly and cools the milk to the same temperature as cold running water. The water is admitted at the bottom, flows through the bottom tube, then from the water column into the second tube and so on until it reaches the top. Thus the cylinder is kept perfectly cold all the time, and as they are deeply corrugated the milk flows down them slowly, reaching the retaining pan thoroughly cooled and aerated. Cylinders are made of heavy copper, heavily coated with pure tin and guaranteed to stand heavy water pressure. Perfectly simple to operate—no complicated parts—a child can easily clean the whole machine in 5 minutes. Made in various sizes—will cool from 40 to 75 gallons an hour. Write us to-day for catalogue and prices—every dairyman should have a Root Cooler—it's a big money-maker. Address: W. A. Drummond & Co., 175 King St. East, Toronto



Brampton Jerseys

cows and some calves for sale. Production and quality.

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good B. H. BULL & SON, BRAMPTON, ONT

Riverside Holsteins

Choice bulls 6 to 9 months old, sired by Sir Pieterje Posch De Boer and Prince De Kol Posch. Latter is the only son of champion cow, dairy test, Guelph, 1908 and 1909, and out of R. of M. dams.

J. W. Richardson, Caledonia, Ont. Haldimand Co. Long-distance phone.

WE NEED THE MILK

For our milk contract, so all the bull calves from fifteen choice cows and heifers, due to freshen by April 1st, must go. This means attractive prices for you. Write us, you'll be surprised how good a calf you can buy for how little money.

MONRO & LAWLESS, Elmdale Farms, Thorold, Ontario

FAIRVIEW FARMS HERD—HOME OF:

Pontiac Korndyke, the only bull living that is the sire of four 30-pound daughters, and the sire of the world's record cow for seven and thirty days. Rag Apple Korndyke, sire of eight A. R. O. daughters that, at an average age of 2 years and 2 months, have records that average 17 1/4 lbs. each, and over 4.2% fat for the eighth. Three of them made over 20 lbs each. Sir Johanna Colantha Gladi, whose dam and sire's dam average 33.61 lbs. each for 7 days, which is higher than can be claimed for any other sire of the breed. We are offering some splendid young bulls for sale from the above sires, and out of daughters of Pontiac Korndyke and Rag Apple Korndyke.

E. H. DOLLAR, (near Prescott) HEUVELTON, NEW YORK

Lakeview Holsteins!

Bull calved June 12th, 1910. Sired by Count Hengerveld Fayne DeKol, and out of Helena Scipjke, a cow that made here since last spring 10,000 pounds milk in seven months. This bull is half black, and is an extra good individual. Several high-grade heifers also for sale.

E. F. Osler, Bronte, Ontario

HOLSTEINS AND YORKSHIRES

More high-record cows in our herd than in any other in Canada, including the champion Canadian-bred three-year-old, and the champion two-year-old of the world for yearly production. The sire of these champions is our main stock bull. We have a large number of heifers bred to him that will be sold right to make room for our natural increase. Also bull calves for sale. We are booking orders for spring pigs, also sows safe in pig. We invite inspection of our herd. Trains met at Hamilton when advised. Long-distance Bell phone 2471 Hamilton.

D. C. FLATT & SON, MILLGROVE, ONT. R. F. D. NO. 2

Centre and Hill View Holsteins We have added to head our herd a young bull from King Segis, world-record sire, and a 26-lb. 4-year-old dam. Have 2 bulls born in January from Bonheur Statesman. Their granlams have over 21 lbs. butter in 7 days. Also younger ones from good A. R. O. dams. These will be P. D. Ede, Oxford Centre, Woodstock Stn. sold right, considering their backing. LONG-DISTANCE TELEPHONE.

Silver Creek Holsteins

officially backed on both sides. King Fayne Segis Clothilde, whose 7 nearest dams have 7-day records that average 27 lbs., is at head of herd. A. H. TEEPLE, CURRIES P. O., Ont. Woodstock Station. Phone Connection.

Holstein Bulls

From high-class, officially-tested cows. Ready for service. Also bull calves.

R. F. Hicks, Newton Brook, Ont., York Co. Toronto Shipping Point.

BUSINESS-BRED AYRSHIRES

My herd of Ayrshires have for generations been bred for milk production. They are nearly all in the R.O.P. My present offering is several young bulls most richly bred. James Begg, R. R. No. 1, St. Thomas, Ont. Bell phone.

PLEASE MENTION THE ADVOCATE.

AYRSHIRES

We are now selecting in Scotland our 1911 importation of Ayrshires. Over 20 already secured as a result of our visit in Oct. Write us about young bulls and females. Deepest milking strains. Reasonable prices. Home offering: A few very choice bull calves. Two fit for service.

ROBT. HUNTER & SONS, Maxville, Ont.

Ayrshires and Yorkshires

Our Ayrshire herd is in fine form. We can fill orders for a number of bulls fit for service, of good dairy breeding, or imported stock for 1911. Females any age. Young calves either sex. Young boars fit for service. Young pigs ready to ship. Write for prices and particulars. Long-distance phone.

ALEX. HUME & CO., Menie P. O., Ont.

HILLCREST AYRSHIRES

Bred for production and large teats. Record of Performance work a specialty. Fifty head to select from. Prices right.

FRANK HARRIS, Mount Elgin, Ont.

STONEHOUSE Ayrshires

The champion Canadian herd for 1910 at the leading shows. 32 head imp., 56 herd to select from. R.O.P. official records, the best and richest bred types of the breed. Anything for sale. Young bulls, females all ages.

HECTOR GORDON, HOWICK, QUE.



## Ring-Bone

There is no case so old or bad that we will not guarantee

### Fleming's Spavin and Ringbone Paste

to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

### Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make a right beginning by sending for this book.

FLEMING BROS., Chemists,  
75 Church St., Toronto, Ontario

## LINCOLN LONG-WOOL SHEEP And Shorthorn Cattle.

The Riby Grove Flock and Herd, owned by  
**MR. HENRY DUDDING,**

is the source to which practically all the leading export buyers have resorted from time to time to obtain stud sires and dams, and rams and ewes of unrivalled merit and quality. The record of its show-yard success is unequalled, and so are its sale averages. Selections of Sheep and Cattle always for sale.

Apply to: **THE OWNER, RIBY GROVE,  
STALLINGBOROUGH, GRIMSBY, ENGLAND.**

## Alloway Lodge Southdowns

The Southdown is the best mutton sheep in America to-day, the championships at the winter fairs prove it. Southdown wool is finer than that of any other mutton breed. I get 4 cents a pound above market price. A Southdown ram makes the greatest improvement on a flock of good ewes; ask anyone who has used one. Write me for prices; they will please you. Phone, Railway Stn., London.

**ROBT. McEVEN, BYRON, ONT.**

## CATTLE and SHEEP LABELS

Metal ear labels with owner's name, address and any numbers required. They are inexpensive, simple and

practical. The greatest thing for stock. Do not neglect to send for free circular and sample. Send your name and address to-day.

**F.G. James, Bowmanville, Ont.**

## The "STAY THERE"

Aluminum Ear Markers

are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Sample tag, catalogue and prices mailed free. Ask for them. Address

**WILCOX & HARVEY MFG. CO.,  
Dept. D, 325 Dearborn St., Chicago, Ill.**

## PERFECTLY SAFE.

Michael Dugan, a journeyman plumber, was sent by his employer to the High-tower mansion to repair a gas-leak in the drawing-room. When the butler admitted him, he said to Dugan:

"You are requested to be careful of the floors. They have just been polished."

"They's no danger iv me slippin' on thim," replied Dugan. "I hov spikes in me shoes."—Lippincott's.

## THERE ARE FEW PEOPLE

Who Have Never Experienced  
**A HEADACHE.**

Headaches effect all ages and both sexes alike, but the female sex is naturally the more effected through the higher nervous development and more delicate organization of the system.

Burdock Blood Bitters has, for years, been curing all kinds of headaches, and if you will only give it a trial we feel sure it will do for you what it has done for thousands of others during the past thirty-five years.

Mrs. C. Meadows, Clarksburg, Ont. writes:—"For years I was troubled with sick headache and dizziness, and was also constipated. I was advised to try Burdock Blood Bitters. I only took three bottles of the medicine; now I feel like a new woman. I find I am completely cured, and I can truthfully testify that it is the best medicine I have ever used.

Burdock Blood Bitters is manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

## QUESTIONS AND ANSWERS. Miscellaneous.

### HOLLOW-WALL SILO.

How many barrels of cement and how many yards of sand would it take to build an eight-inch hollow-wall silo, 10x25 feet? SUBSCRIBER.

Ans.—Such a silo wall would require about 10 cubic yards of sand and 14 barrels of cement, if mixed 1 to 5, and with an air space of two inches.

### REGISTRATION OF CLYDESDALE MARE.

1. What qualifications will a Clydesdale mare need to have so I can have her registered in the Canadian Studbook?

2. What course will I need to take to have her registered? H. H.

Ans.—She will require to have four straight crosses of registered Clydesdale sires. For full particulars, address "The Accountant, National Live-stock Records, Ottawa."

### WASTE OIL FROM CREAM SEPARATOR.

There is some waste oil from our cream separator. Could you suggest some method of taking the dirt out so it could be used again? L. C. W.

Ans.—Oil can be filtered through "cotton batting" or cotton "waste," and thus remove the dirt so it may be used again for "slow-running" machinery, but it would not be advisable to use this filtered oil on the separator again, which is a "fast-running" machine, and needs the best of oil. Sometimes this waste oil contains milk, water, and other impurities, which render it of very little value. If the machine is a small, hand cream separator, I scarcely think it would pay to filter the oil. H. H. DEAN.

### CHESS—FERTILIZER ON POTATOES.

1. Last year I had a lot of chess in my fall wheat. I harrowed it in the spring. Would this be the cause of the chess in my wheat? Will chess grow if sown?

2. How do you put fertilizer into the potato crop, so as not to burn the plant? G. B.

Ans.—1. Harrowing was not the cause, unless, as is unlikely, you injured the wheat, giving the hardy chess opportunity to grow and seed more abundantly than it would otherwise have done. Chess is a distinct plant just as much as wild oats or mustard or sow thistle. Some chess seed must have been in the ground, possibly having been sown with the wheat. Many people have chess in their wheat without knowing it until failure of the wheat gives the weed a chance to develop more plentifully than usual.

2. Broadcast the fertilizer evenly over the ground.

### LANDLORD AND TENANT.

1. A rents farm to B, usual agreement. On farm is maple bush, which A has previously used for syrupmaking. In agreement, A is bound to leave a specified number of sap buckets and sap pans. The brick arch used for boiling purposes when B takes possession is out of repair. A has it relaid (the bricks). Next season B relays it. The third season, when repairs are to be made, the question arises as to which of the parties, A or B, should relay the arch. What is your opinion?

2. On same premises are two barns. One, situated at an inconvenient distance from other buildings, is used for storing implements or other material that cannot be kept in main barn. Should roof on this barn be badly out of repair, can B compel A to repair same? In case of A's refusal, what steps should B take? Ontario. ENQUIRER.

Ans.—1 and 2. If the lease between them is in writing, and in the usual statutory short form, the document will be found to contain covenants governing both matters. If, however, there is no written lease or one that contains no provision respecting the matters in question, then assuming that both brick arch and barn roof have become out of repair on the expiration of reasonable wear and tear, which A might perhaps do to the arch, and B perhaps do not see that B is bound to repair same, to compel him to do so.

# Amatite ROOFING



"THIS IS THE ROOFING THAT NEEDS NO PAINTING"

Frequently the cost of painting a roofing amounts to almost enough to buy a new Amatite Roof.

Amatite can be laid right over shingles, tin or other ready roofings. The directions hold good for laying Amatite anywhere and over anything, and are as simple as A B C.

For further information, booklet, samples etc., address nearest office.

**Creonid Lice Destroyer and Cow Spray**  
Cows give more milk if sprayed with Creonid to keep away the flies which make them restless. The poultry output will be increased if the hen house is made obnoxious to insect pests by disinfection with Creonid.

**AMATITE** means more to the man who needs a roofing than just merely something to put on the top of a building.

It means a thoroughly satisfactory and reliable roof covering, without future expense for painting—because the real mineral surface makes painting unnecessary.

**Everjet Elastic Paint**  
A very tough, durable paint at a low price. One color only—a lustrous black. Use it for machinery, heating apparatus, smokestacks, roofs, fences, water tanks, etc.

**PATERSON MANUFACTURING CO., Limited**  
Montreal Toronto Winnipeg Vancouver

## DUROC - JERSEY SWINE

30 choice young sows, bred and ready to breed. Young boars fit for service. Also a choice Jersey bull calf. Bell phone in house.

**Mac Campbell & Sons, Northwood, Ont.**

**White Hampshire Hogs**—Largest herd in Belted Canada. We bred the hogs that won both championships at Toronto and London for two years. Still have a few choice sows ready for service. Can furnish pairs or more not related. **HASTINGS BROS., Crosshill, Ont.**

## Monkland Yorkshires

7 months of age. An exceptionally choice lot, full of type and quality; also a limited number of young boars.

**MATTHEW WILSON, FERGUS, ONTARIO**

**Newcastle Tamworths and Shorthorns**  
For sale: Choice young sows bred and ready to breed. Boars ready for service; nice things, 2 to 4 months, by imp. boar. Dam by Colwill's Choice. Canada champion boar, 1901-2-3-5. Two splendid young Shorthorn bulls and six heifers—bred. Prices right. Bell phone.

**A. A. COLWILL, NEWCASTLE, ONTARIO**

## Pine Grove Berkshires.

Boars fit for service. Sows three, four and five months old.

Milton, C. P. R. **W. W. Brownridge, Ashgrove, Ontario.**

## TAMWORTH SWINE.

Now offering choice lot of Tamworth sows, in farrow to a first-class boar. Prices reasonable.

Write, or call on: **CHAS. CURRIE, MORRISTON, ONTARIO.**

## MAPLE VILLA YORKSHIRES AND OXFORDS

A grand lot of boars fit for service. Some splendid sows to farrow to first-class boars. 30 ewe lambs, including 50 pen at Winter Fair. Long-distance phone Central Beeton.

**Bradford or Beeton Sta. J. A. CERSWELL, Bond Head, Ont.**

## Elmfield Yorkshires

Present offering for quick sale: Young sows about 2 1/2 months old. Will register and create for \$1,000 each.

**G. B. MUMFORD, Ayl. Ont.**

## Maple Grove Yorkshires

1910 business record. 1911 to be still greater.

Forty sows bred to farrow in February, March and April, and any or all of them for sale. A grand lot, ranging from 7 months to 2 years old. Also younger ones, either sex, or pairs not related.

A choice lot of September boars big enough to use. Prices reasonable, but consistent with quality. Stock shipped C.O.D. and on approval. Correspondence or personal inspection invited. Long-distance phone via St. Thomas.

**H. S. McDIARMID, FINGAL, ONTARIO.**

Shedden station, P. M. and M. C. R.

## Willowdale Berkshires.

I am making a special offering of 50 young bred sows. They will average 200 pounds in weight, and are from 6 to 7 months of age.

**MATTHEW WILSON, FERGUS, ONTARIO**

## Willowdale Berkshires.

For sale: Nice lot of 5 months' sows, one 5 months boar. Eggs from my famous flock of R. C. R. 1 Reds, \$1 per 13. Express prepaid on 5 settings or more. Phone 52, Milton.

**J. J. WILSON, Importer and Breeder, Milton, Ontario, C.P.R. and G.T.R.**

## Hillcrest Tamworths

are second to none in America for type and quality. For sale are both sexes and all ages, from sows bred and boars fit for service down to youngsters. **Herbert German, St. George, Ont.**

## SUNNYSIDE CHESTER WHITE HOGS.

I am now offering some very choice young things of both sexes, of breeding age. A few Shropshire sheep of both sexes. Also Red Cap cockerels and pullets. **W. E. WRIGHT, Glanworth P.O., Ont.**

Please Mention The Advocate



GOSSIP.

Attention is directed to the advertisement in this paper of the Cyclone Woven Wire Fence Co., Toronto, whose specialties are farm and lawn fencing, and gates. The company call special attention to the fact that in the past two years their M style of fence has been on the market, their machines have been taxed to their utmost to keep up with the requirements of their customers, and they have installed more machines, so that now their possible output is 250,000 feet per season in this style alone. See the advertisement, note the terms, and write for further particulars.

COMMUNAL FORESTS.

We speak of the farmer's wood-lot. In Germany, where forestry has become a science, many wood-lots are the property of villages or municipalities. These are managed by expert foresters, and the profits go to the municipality.

Out of 1,564 communities in the State of Baden, 1,530 have their own forests. The city of Baden, with a population of about 16,000, owns a forest of 10,578 acres, which yields an average profit of about \$66,000 per year.

In the "Canadian Forestry Report" the following examples, with more of detail given, are found, and these are not exceptional, but representative:

"The village of Braunlenger has 1,601 inhabitants, and owns 4,507 acres of forest. The amount yearly cut is 2,500,000 board feet of wood, comprising both lumber and firewood; of this all the firewood is given to the citizens as 'Citizens' Gifts' up to 3,500 board feet each (about seven cords each); and a total of about 100,000 board feet of firewood (about 200 cords) is given to schools, town halls, churches, and other public buildings. The lumber, amounting to about 1,500,000 board feet annually, is sold, and brings to the community an average annual net income of \$21,600, so that the community is not only free from all communal taxes, but is also able to establish modern works, electric-light plants, a water system, schoolhouses, churches, and other buildings. Even the smallest villages profit by this common-sense use of the forest.

"The village of Aufen consists of 220 inhabitants, and owns 163 acres of forest. The forester gives to each citizen about four cords of firewood annually, and sells annually 85,000 board feet of timber, which clears for the community more than \$1,440, with which the total expenses of the small village are met. The annual yield of this communal forest is 137,500 board feet."

TRADE TOPIC.

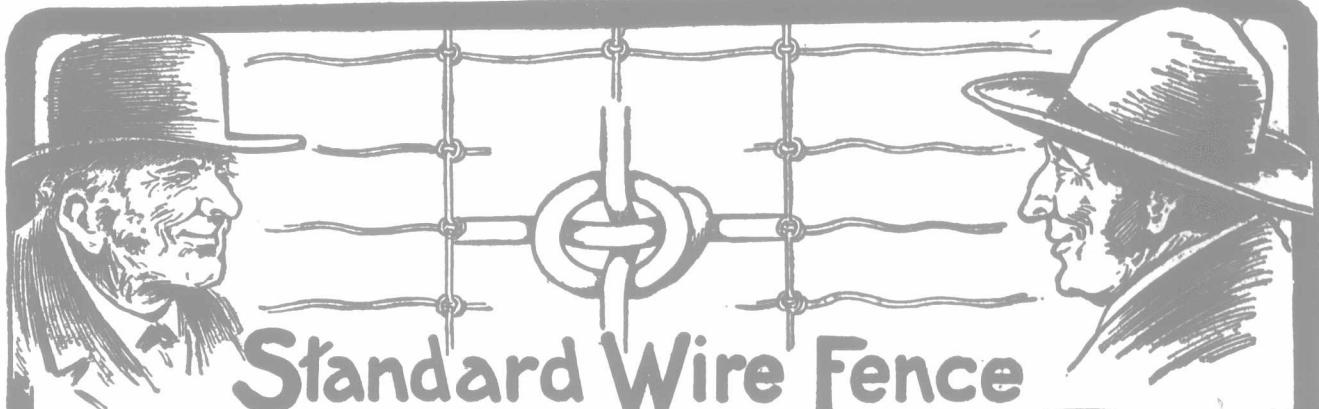
Seed oats grown in Prince Edward Island have gained an excellent reputation when and wherever sown in Ontario and the Western Provinces, and the selected and separated seed sold by Joseph Read & Co., Summerside, P. E. I., advertised in this paper, has given entire satisfaction to growers, the seed having been carefully selected, and separated by a Clipper separator, which eliminates all weed seeds and small, broken, or inferior grain. This firm shipped 102,000 bushels of seed oats to the Western Provinces in 1908, which has done much to enhance the value of the oat crop of those Provinces. Farmers wanting first-class, pure and clean seed, should write this firm for particulars.

A little man in the west of England rushed to the river last summer, swearing that he would drown himself. When he had waded in to the depth of his waist, his wife, who had followed him, seized him by the hair, and then, as a local editor described it, "she led him back till he reached a place where the water was about two feet deep, where she pulled him over backwards, and soused him under and pulled his head up again." "Drown yourself (down he went), leaving me to fetch the brats! (another plunge) get 'em back! (another souse) and start for the mill! (another dip). Better use the millstone instead of the rum! (another dip) make of the head). I'll learn ye to drown a widow!" After sozzling him to her heart's content, she led him to the mill for if not a better man, and she would have him into the house, and closed the door.

ML Floorglaze "the finish that endures"

Use it to make floors bright and smooth as glass, easy to keep clean, (soap and water won't hurt M L Floorglaze). Doesn't get cracky; doesn't show scratches; lasts amazingly and holds its beauty. Surpasses paint or varnish or stain. Renovate your whole house with M L Floorglaze at small cost—a gallon coats 500 square feet. Apply it yourself to-day and it will be dry tomorrow morning. Get M L Floorglaze now.

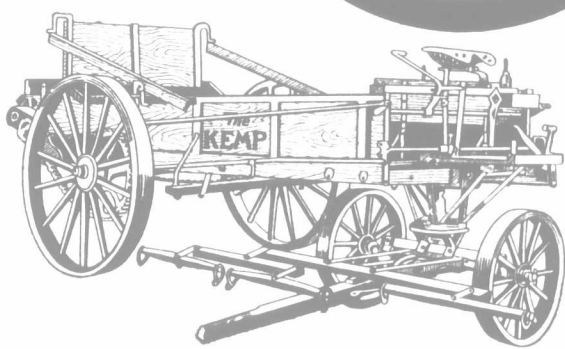
M L FLOORGLAZE comes in tins of handy size, little and big. Choose among 17 enduring colors in solid enamel—seven shades in Lacs that imitate hardwoods exactly—and Transparent for natural finish. M L Floorglaze won't fade and is weather-proof—so use it on outdoor work as well as for indoors. Has a hundred uses about your home—ask your dealer or get new from us direct. Imperial Varnish & Color Co., Ltd., Toronto, Ont.



is all strength. Standard Fence is all No. 9 hard Steel Wire—galvanized to prevent rust—and crimped to allow for contraction and expansion. "The Tie That Binds" is galvanized steel—holds running wires and uprights solid as a wall without injury to either. You've got a fence to be proud of—solid, substantial, attractive, permanent—when you put up a Standard Wire Fence. We make Gates of Galvanized Tubing—rustproof and will last much longer than ordinary painted metal gates.

Get our booklet and sample lock, and learn the facts about Wire Fencing. Sent free on request. What's your address?  
THE STANDARD WIRE FENCE CO. OF WOODSTOCK LIMITED  
Woodstock, Ont. and Brandon, Man.

Here's another "Standard" invention, that saves no end of trouble. Standard Patent Fence Posts are made of 12 gauge steel, bent at right angle to give strength. These posts won't rot or crack—and hold the wires without staples. Cheaper than wood, in the end, and better. 19



At least one-third lighter draft  
Genuine Kemp  
Manure Spreader

You can only buy one manure spreader with the Reversible, Self-Sharpening, Graded Flat-Tooth Cylinder—and that is the Genuine Kemp.

Because of this Graded Flat-Tooth Cylinder the Genuine Kemp is at least one-third lighter draft than any other spreader.

There is less friction on the Flat-Tooth Cylinder, because the teeth are wide and graded. On that account only one-third as many teeth are required, which reduces the friction when the manure is passing through the cylinder.

The square or round teeth on ordinary cylinders are not wide enough apart and the manure backs up, chokes cylinder, causing heavy draft.

The manure cannot back up against the flat teeth, and because the flat teeth are graded they will handle and thoroughly pulverize all kinds of manure from the clear gum to the strawy material.

There are many other exclusive improvements on the Genuine Kemp. Our big catalog describes and illustrates them fully. Send for a copy and learn some new facts about manure spreaders.

There would be twenty times as many manure spreaders in use in Canada today if farmers realized the economy of spreading manure with the Genuine Kemp. The Genuine Kemp will pay for itself faster than any other farm machine.

But send to us for catalog "F" That's your first step. We are sole selling agents. 62

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**I**T may seem hard to believe. Yet that is exactly what you are to expect of an Oshawa-shingled roof. For Oshawa Steel Shingles, made of tough, heavy steel, thoroughly galvanized, make a roof that will need replacing or repair in a century from the time it is first put on. My book tells why you can be sure of this. Also tells about my Guarantee, in proper legal form, to replace at our own cost any Oshawa-shingled roof within twenty-five years from the day it is put on. Do you know of any other roofing which is guaranteed in writing for any period? I don't.

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Now don't say you "Haven't time to bother with it." I'm trying to save you "bother"—and expense. I make it easy for you to get reliable information you ought to have—maybe save you many dollars of roofing expense. Just be curious—critical if you feel like it. But don't fail to send for my book. Do it now, before you forget it.

**I**N the immense Pedlar factories at Oshawa, Ontario, we make various building materials in sheet steel, of great value to anyone who is going to build or repair a house or barn. Beautiful Pedlar Art Steel Ceilings and Side-walls, for instance, that take the place of unsightly, unsanitary, short-lived plaster. Also Pedlar Steel Siding for outside walls—that make a frame house or barn look as if it were built of stone or fancy cement blocks or brick. Actually cheaper by 20%. Fire-proof, too. Ask for full particulars and learn how you can make your money build a better building by "Pedlarizing." My large, finely illustrated book showing some of the 2,000 designs mailed free.



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318

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WRITE FOR DETAILS.

MENTION THIS PAPER.