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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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Dept. of Agriculture
Dec 31, 11

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

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LONDON, ONTARIO, APRIL 13, 1911.

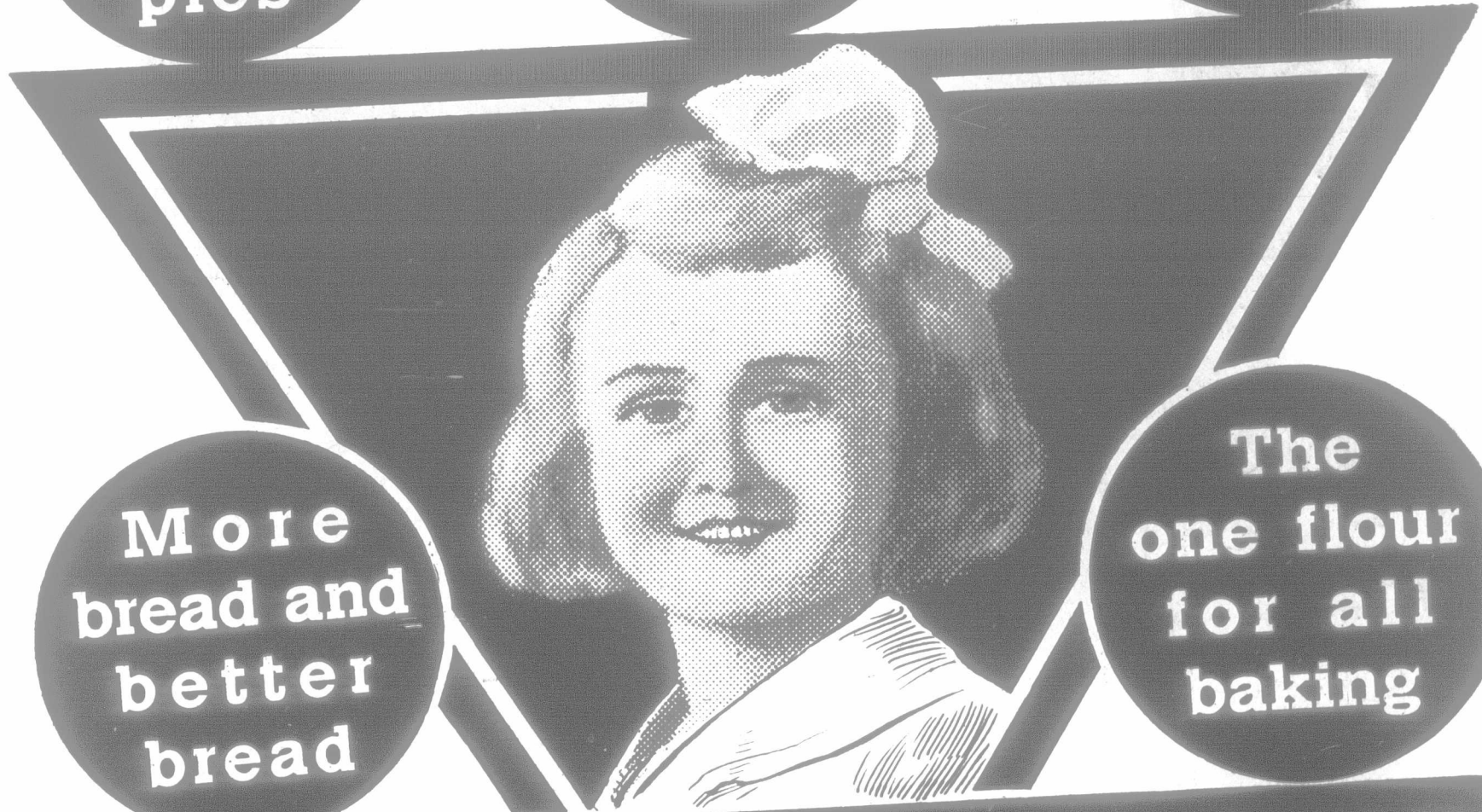
No. 968

Vol. XLVI.

For
bread
biscuits
cakes or
pies



Has
merit
all its
own



More
bread and
better
bread

The
one flour
for all
baking

PURITY FLOUR

EWING'S Reliable Seeds

Every seed you sow tries to reproduce its ancestors, in size, shape and flavor. But examine the seed as closely as you will, you cannot tell whether these parent plants were good or bad. You have to trust your seedsman for it.

You'll never go astray if you trust Ewing's Seeds. They

Stand On Ewing's Record

For over forty years we have been selling Field, Flower and Garden Seeds here in Canada, so people have had plenty of chance to prove Ewing's "Reliable" Seeds.

The result is that last year we sold far more than ever before. Could you ask for a better proof of quality?

Don't take chances! Get the seeds you know will turn out right—Ewing's Reliable. Send now for our Illustrated Catalogue, and if your dealer hasn't Ewing's order direct from us.

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Daily Until April 10 To:

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Exceedingly low rates each Tuesday, until April 25th, to principal points in Saskatchewan and Alberta, including points on Grand Trunk Pacific Railway.

Full particulars and tickets from:
ANY GRAND TRUNK AGENT.

Early Amber Sugar-cane Seed and White Cap Yellow Dent Corn for Sale.

Buy corn on cob and string as a guarantee of quality and vitality. My corn is well acclimatized to this northern zone, and improved by 19 years of continuous careful selection. My cane seed is an excellent sample, and greatly improved as regards type, color, etc. Buy same as a cheap, self-regulating water for cattle, horses, hens and hogs. It is a first-class product, as last year averaged 100 lbs. per acre. Write for seeds, etc., to: **Edgar M. Zastin, Cambridge, Middlesex Co., Ont.**

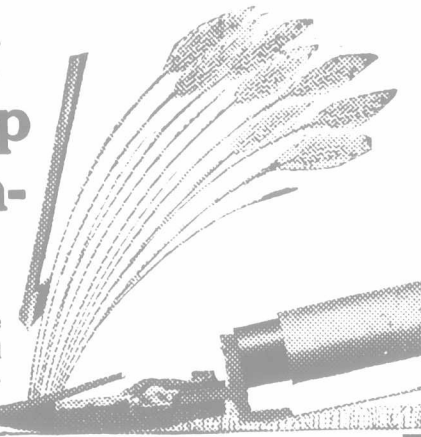
The Deering Binder Picks up Down and Tangled Grain

On the Deering Binder the guards are so placed that the machine can be tilted to cut close to the ground without pushing trash and stones ahead of the knife. This means that the Deering Binder picks up down grain.

The Deering Reel can easily be adjusted high, low, forward, or backward, to save grain in all conditions, short, tall, standing, down, or tangled. It can be shifted quickly to push short grain and green undergrowth from the guards to the platform canvas.

The Deering Binder is equipped with a third packer. It reaches up close to the elevator and pulls down the grain to the other two packers, preventing choking at the top of the elevator. The new Deering breast plate is designed to permit the needle to enter without pulling straws through the breast plate on to the bill hook. This also eliminates choking at this point.

The third discharge arm is a very effective aid in throwing out



the bound sheaves and assists in separating the tangled grain of the bound sheaves from the unbound grain on the binder deck. The binder shifter lever is directly in front of the driver, and convenient to operate.

There are many other features of Deering Binders which you ought to know about. The Deering agent in your town will tell you all the facts. If you prefer, write direct to the nearest branch house below for catalogue. Deering mowers, rakes, and other harvesting and haying machines and tools are as efficient as the binders. Ask to see them.

EASTERN CANADIAN BRANCHES:—International Harvester Company of America, at Hamilton, Ont.; London, Ont.; Montreal, Quebec; Ottawa, Ont.; St. John, N. B.

International Harvester Company of America (Incorporated) Chicago U S A

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.

Standard Wire Fence

Here's the Fence That is all Steel—

Steel wires, steel locks, steel posts. Standard Woven Wire Fence is all No. 9 hard steel wire, well galvanized. "The Tie That Binds" is hard, smooth steel that holds uprights and running wires absolutely secure without injury. Standard Patent Posts are 12 gauge steel, bent at right angles, and so constructed that wires are held without staples. Let us tell you a lot of other things about the Standard Wire Fence and our Metal Gates of Galvanized Tubing. Our books are full of fence facts. Write for free copies and sample lock.

THE STANDARD WIRE FENCE CO. OF WOODSTOCK, LIMITED, Woodstock, Ont. and Brandon, Man. 18

FREE STYLE BOOK FOR 1911 OF "Quality Line"

VEHICLES AND HARNESS

SEVENTEENTH YEAR OF SELLING DIRECT TO THE USER.

Our Catalogue will help you to choose just the Vehicle or Harness you require, and SAVE YOU MONEY. It describes and pictures many styles, gives prices, freight paid, and fully explains our method of Selling Direct and saving you the Middlemen's Profit. Remember, we pay the freight in Ontario and Eastern Canada. The Catalogue is Free, for the asking. Send for it To-day.

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GILSON ENGINE

"GOES LIKE SIXTY"

Always ready for work. Perfectly adapted for operating all farm machinery from the pump to the biggest Thresher. Improved cutting, governing and sparking devices. Up to date. All sizes. Write for catalogue.

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Cut all your straw, grind all your feed, and pump all your water at absolutely no expense by using the

CANADIAN AIRMOTOR

We mean it. We guarantee every wind engine we install to give the maximum power for the size of wheel installed. A Canadian Airmotor will run feed grinders, straw cutters or pumps as desired. All you have to do is to throw a lever which puts the wheel in gear. The wind does the rest. You should know what this means to you. Write for new catalogue.

The Ontario Wind Engine & Pump Co. (Limited)
WINNIPEG TORONTO CALGARY

160 Acres of Land for the Settlers

Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario. The soil is rich and productive, and covered with valuable timber.

For full information regarding homestead regulations and special colonization rates to settlers, write:

**The Director of Colonization,
DEPARTMENT OF AGRICULTURE,
TORONTO.**

EUREKA Glass Tank Sprayer

Solution tank is a quart Crown glass jar. If broken, it can be easily replaced for a few cents. Solution tubes are brass. None of the liquid used can be drawn back into the pump chamber, thus the chamber and valves are uninjured. This is the easiest operated and the most effective small sprayer on the market. Inquire of your hardware dealer.

Write for our complete catalogue of Sprayers and Garden Tools.

THE EUREKA PLANTER CO. LIMITED
Woodstock - Ont. 4

BOYS FOR FARM HELP The managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 13 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 60-62 Peter St., Toronto.

Build Silos, Dwellings, or any class of building from Concrete Block.

The London Adjustable Concrete-Block Machine makes every kind and size of block. High grade. Moderate price. We manufacture a full line of Concrete Machinery. Tell us your requirements.

**LONDON CONCRETE MACHINERY CO.,
Dept. B., London, Ont. 2**

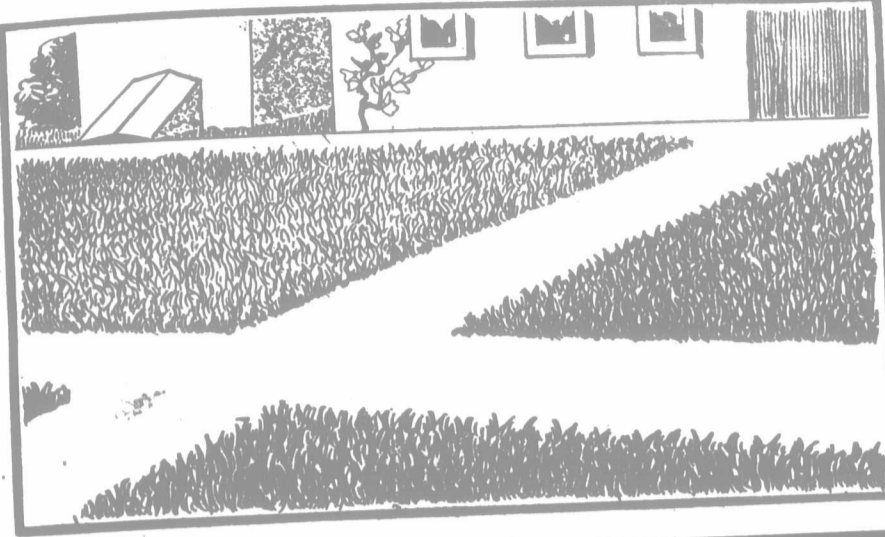
Strawberry Plants

40 leading varieties. Sold at reasonable prices. Catalogue and price list free. 100 plants sent postpaid to any address in Canada for \$1.00.

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and Pheasant Farm,
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Concrete Sidewalks are Safe, Sightly and Everlasting

THE extreme carefulness with which the footsteps have to be guided over dilapidated and worn-out sidewalks of wood prove how utterly unreliable and expensive this material is for this purpose.

Many a time perhaps, the insecurity of wooden walks has been forcibly impressed upon you, when, coming up from the barn at night, you have stumbled and fallen over a loose board. Or perhaps, it has been the women folk of the house who have been temporarily laid up from an accident due to this cause. At any rate, you probably have regretted more than once—especially during the busy season, when the fields required all your attention—that you hadn't sidewalks built of some kind of material that would never wear out.

It is a matter of common experience that the best of wooden walks require frequent repairs or they become a constant menace to life and limb. In con-

sequence they are also a frequent source of doctor bills and lost time. A wooden walk will often eat up in repairs its original cost before it is replaced.

A Concrete sidewalk, on the other hand, improves with age, and the very dampness which destroys lumber calls out the very best qualities of cement by making it harder and harder, until neither time nor traffic can affect it.

Concrete also has the advantage of being easily prepared and handled by the farmer, without the assistance of skilled mechanics.

A Concrete sidewalk can be trod by the feet of many generations and never show any appreciable signs of wear. Concrete sidewalks are safe, sightly and everlasting. They never need painting nor repairing. With Concrete, first cost is last cost.

You can build Concrete walks in

your spare time or have it done under your direction. Our new illustrated book,

"What the Farmer Can Do With Concrete,"

tells you how to prepare the ground, make the Forms and mix the Concrete. Everything is simply and thoroughly explained in plain, direct language easily understood. Write for this book to-day. Read it and prepare to start in and build a Concrete walk.

You'll find "What the Farmer Can Do With Concrete" as intensely interesting as the best story you ever read. You'll find it valuable, too, because the book will show you how to save money. And if there's anything will show you how to economize wisely in farm expenditure, you certainly ought to know about it. You will know, if you send for and read this book.

Send for your copy of

"What the Farmer Can Do With Concrete."

Tells how to use Concrete in constructing

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|----------------|----------------|--------------|
| Barns | Hitching Posts | Stairs |
| Culverts | Hog House | Stalls |
| Dairies | Houses | Steps |
| Dipping Tanks | Milk House | Tanks |
| Foundations | Poultry Houses | Troughs |
| Fence Posts | Root Cellars | Walks |
| Feeding Floors | Silos | Wall Copings |
| Gutters | Sheds | Well Curbs |
| Chimney Caps | Shelter Walls | Wind Walls |
| Hens' Nests | Stables | Etc., etc. |



Canada Cement Co., Limited
65-70 National Bank Building, MONTREAL

You may send me a copy of "What the Farmer Can Do With Concrete."

Name

Address

QUESTIONS AND ANSWERS. Miscellaneous.

LOST QUARTER OF UDDER—CEMENT TILE.

1. About a week before her second calving, cow's udder became congested. When I began to milk her, three teats gave milk all right, but the left hind quarter would give no milk. The swelling has all gone, but the milk has not started, although the hole in the teat seems open. Will that quarter come right another year?

2. Are cement tile giving good satisfaction for draining farms? Which is the heavier, cement or clay tile?

A SUBSCRIBER.

Ans.—1. A blind quarter of udder is like many other things, much more easily lost than recovered. It is very unlikely indeed that the quarter in question will ever give milk again.

2. Cement tile promise very well indeed, but it is yet too soon to say what the popular verdict may prove to be.

COST OF CEMENT WALL AND FLOOR.

1. What would it cost to build a cement wall under a barn, the wall being 9 feet high, 49 feet wide, and 75 feet long?

2. The cost of cement floor for same barn? I have lots of gravel and sand.

C. V. K.

Ans.—1. So far as cost of labor is concerned, estimates must differ greatly, depending upon local conditions and the proportion of work done by the farmer himself. Neither is it wise to give cost of cement. That may vary also. The cement required for wall under barn, 49 feet by 75 feet, 9 feet high and 1 foot thick, mixed 1 to 9, would be about 70 barrels; gravel, 20 cords.

2. For the floor, mixed 1 to 7, and averaging three inches thick, about 8 cords of gravel and 38 barrels of cement would be needed.

LOOSE BARK ON OLD TREES.

What do you think of scraping loose bark off old apple trees, and then whitewashing them? Do you think it will do the trees any good, and do you think it will destroy any of the moths that sting the apples?

P. F. G.

Ans.—Careful scraping off of the rough, loose bark on all trees, is something of a benefit as a preliminary to thorough spraying, but is seldom very necessary, though it enables you to reach scale insects better with the spray. Thorough spraying alone for two or three years will improve the appearance of the bark without scraping. In our orchards, we have not practiced scraping. Whitewashing the trunks alone will do comparatively little good. Better to wash the limbs and let the trunks get the benefit of what runs down. But the proper thing is to spray the whole tree thoroughly before the leaf buds open, with lime-sulphur (spring strength), and then follow later as per directions in our Spray Calendar. See issue April 6th.

WAGES—ABUSIVE LANGUAGE.

A hires B for one year from, say 1st November. Now, regarding work I have nothing to say, but he has been terribly rough and abusive to my stock, both in language and otherwise. He has run the limit of my patience, and, on gently chiding him, he gave me a dreadful cursing, damning me for all he could lay his tongue to, and also saying as soon as I was dissatisfied with him, all I had to do was to tell him to go. Now the busy season is just coming. If he leaves—as leave he must if another occurrence happens like the former—can he demand to pay him for time put in if I tell him to go? If he can, what rate or per cent. of wages does he deserve (five months)?

2. Must I pay upon his leaving, or when his year is up?

3. What is the penalty for abusive language?

FARMER.

Ans.—1. Yes; but only such amount as would be reasonable under the circumstances.

2. From his leaving.

3. It depends upon the local by-law (if any) and pursuant to The Consolidated Municipal Act, 1903, Sec. 549, Sub-

Refuse Any Roofing Which is NOT Guaranteed for at Least 25 Years

Why should you take ANY risk when you can make the maker take ALL the risk? The cost to you now will differ very little, no matter what roof you put on. So you might as well get the most you can for your money. Don't you think so?

It's only natural that salesmen for other roofing should "knock" this guarantee of mine. How else are they going to get around it and induce you to buy their roofing, which is NOT guaranteed? What do you think my business reputation would be worth in a year or two if I issued a guarantee that wasn't absolutely square? Don't let any man bluff you—get his promises down in writing, and signed—like mine are. Then the roof will HAVE TO make good. Then FIRST cost will be the WHOLE cost, and you'll know what you can count on.



The ONLY Roof That is Guaranteed At ALL

Isn't it reasonable to assume that makers of other roofing would give you a written guarantee if they dared? If they are so sure their roofing will last as long as mine, why can't they do as I do—give a guarantee that's good for a new roof if the first one gives any trouble? There is nothing to prevent them giving you such a guarantee except their roofing. Is it because they are afraid to take the risk of having to give you a new roof? They want YOU to take that risk. Will you do it? Or will you buy our guaranteed Oshawa Steel Shingles, and have something you can positively depend on? Which is the best bargain from your point of view?

For the life of me I can't understand why any sensible man will go blindly ahead and buy an out-of-date wood shingle roof, or a metal roof which is not guaranteed in writing, without seriously investigating the facts about my Oshawa Steel Shingles. It is so clearly to his own advantage to get the most he can for his money—that you'd think he would be glad to know more about roofing material which is better than any he has yet used. Surely it must be that tendency in human nature to doubt things which seem "too good to be true." By giving way to it many a man robs himself of the fruits of modern industrial progress.

Here I offer to sell you a roof which you know to be good, and which I guarantee (with a guarantee I have to back up or go out of business) to stay a good roof for all of 25 years. Now will you please give me any good reason why any man—YOU, my friend for example—should not be interested enough in getting the best roof for HIS OWN buildings, to send for my book and get all the particulars about my Oshawa Steel Shingles? The book is free—the information it contains is valuable to any man who owns or will ever own any kind of a building. Will you please write for it?

PEDLARIZE All Your Buildings—Inside and Out

By "Pedlarizing" I mean doing for the whole building what Oshawa Steel Shingles do for the roof. I make other kinds of sheet metal building materials—for ceilings, side walls, outside—that make your whole building more fire-proof, more sanitary, more beautiful, more substantial. You should know about them. May I send you a booklet and pictures that tell the whole story? It's free. Just ask me to tell you about "Pedlarizing."

Isn't This The Kind of Roof YOU Want?

A roof that you are absolutely sure will settle every solitary bit of roofing expense for a whole quarter-century. A roof that you pay the same for NOW as you pay for other kinds of roof, but which will need no patching, no fixing or replacing for the next twenty-five years. A roof that makes your building absolutely weatherproof, with never a crack or hole for water or wind to squeeze through, a roof that is fireproof, wind-tight, lightning-proof, a roof that needs no painting, no repainting—spring or fall, summer or winter, for all of twenty-five years. They SAY these things about some other roofs—but I positively guarantee them for my Oshawa Steel Shingles.

Can't Leak, Rust Rot, Warp or Burn

Oshawa Steel Shingles cover your roof with one big, seamless sheet of heavyweight galvanized steel, without a crevice or crack anywhere for water or wind to get into. And it stays that way for twenty-five years. I guarantee it. No leaks of any kind. Keeps out the cold of winter and heat of summer—and being steel affords the best kind of fire protection. Can you imagine any better kind of roof?

I Want to Send You My Valuable Book—"Roofing Right"

Let me have your name and address, please. I want you to read my book, I believe that when you really get a clear and correct understanding of all sides of this roofing question you'll never be bamboozled with flimsy, unsatisfactory roofs which soon become little better than no roof at all. Do get my book of facts. Write the address nearest you (see below) and they'll send you a copy entirely free.

Write to Address Nearest You. Ask for "Roofing Right" Booklet No. 16

The PEDLAR PEOPLE of Oshawa Established 1861

- HALIFAX 16 Prince St. PORT ARTHUR 45 Cumberland St. ST. JOHN 42-44 Prince William St. WINNIPEG 76 Lombard St. QUEBEC 127 Rue de Post REGINA 1901 Railway St. S. MONTREAL 321-3 Craig St. CALGARY Room 7, Crowe Block. EDMONTON 633 Fifth Ave. North of Jasper. TORONTO 111-113 Bay St. LONDON 46 King St. VANCOUVER 319 Pender St. CHATHAM 200 King St. W. VICTORIA 45 1/2 Kingston St. MENTION THIS PAPER. WRITE FOR DETAILS.

Frost Heavy Poultry and Garden Fence

Just the thing for Poultry, Pigs and Calves

Close--Strong--Durably Made

Top and bottom wires, No. 9; Intermediates No. 12; Stays No. 13—one ft. apart. Poultry tight—Spacings, 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 4 1/2, 5, 5, 6, 6 (16 wires). Also made 14 wires high, spaces the same, with the two 6 in. spaces left off.

Cost little more than light Poultry Netting and will last twice as long.

The big point about Frost Fence is that it is woven from Wire specially made and galvanized by us in our own plant here and exclusively for our own fence trade. We make this wire up to full size, true to the gauge represented. To make prices attractive, smaller wire than advertised is used

in some fences. A difference of one-half a size smaller means a saving in material to the maker of about 3c. a rod on a ten wire fence. Insist upon getting fence that is not robbed of 8% of its weight through the use of smaller wires.

There are now 49 distinct styles of Frost Woven Fence to suit any condition or for any purpose.

Other Frost Specialties

Galvanized Gates, fancy and plain; Coiled Wire, each bundle guaranteed; Barb Wire; Soft Wire; Hay Wire; Stays and Galvanized Locks for field built fence; Hooks for wood picket fence; Iron Posts for farm fence; Tube Fence material; Maple Leaf designs; Fancy Woven Fence; Wire straightened and cut to lengths for re-inforcing in concrete posts.

Your Fence, Gate and Wire needs can all be supplied to your best satisfaction and by some reliable Frost dealer near you. If he is not known, write us.

Frost Wire Fence Co., Ltd. 34 Hamilton, Canada

"Frost" Fence

START A BANK ACCOUNT WITH US

to-day or on pay-day. Deposit what you can spare every week from now on, and your New Year's, 1912, will be happier than any before. \$1.00 will open an account at 3½%—or you can invest \$100.00 at 4% by buying our Debentures.

\$2,000,000 Assets

insures the safety of your money. If you already have an account, start one for your boy or girl—it will teach them how to save.

3½
PER CENT.

Agricultural Savings & Loan Co'y
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4
PER CENT.

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If your capital is small, so much more the reason.

Become a capitalist. If you don't make a beginning, you never will. Small beginnings, many times, lead to great success.

No order too small. All receive our best attention.

Write to-day for booklet that fully informs.

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Stock and Bond Brokers
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THE NEW FISH BRAND REFLEX SLICKER

LOOKS LIKE AN ORDINARY COAT.

The inside storm lap with our Reflex Edge (patented) absolutely prevents water from running in at the front. Only five buttons. Ask for the Fish Brand REFLEX and get a better wearing, better finished, better looking slicker in every way.

SOLD EVERYWHERE.
TOWER CANADIAN OILED
CLOTHING CO., LTD.
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"SNAP" does what soap cannot do—takes out ink stains, paint stains, fruit stains and acid stains.

"S-N-A-P" is the original and genuine antiseptic hand cleaner. At all dealers—15c. a can.



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Bax's Legal Will Form enables you to make your own will as legal and binding as any lawyer can do it for you. Insures privacy and saves costly law fees. Each form has full and plain instructions, also specimen will properly made out for your guidance. By mail, 35c., postpaid.

BAX'S WILL FORM COMPANY
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A Popped Question

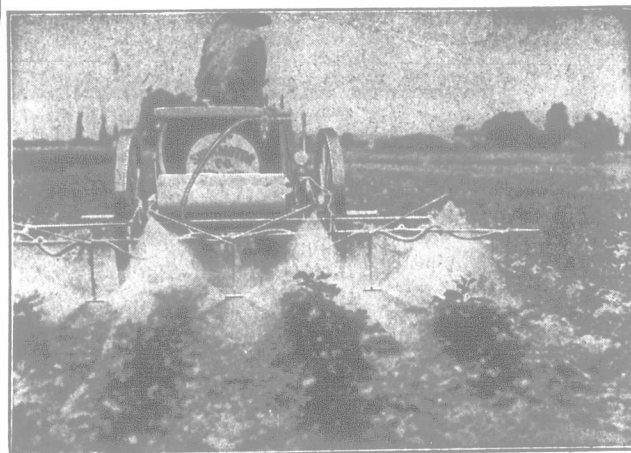
Will you Buy a
DE LAVAL
CREAM SEPARATOR

or do with a poor imitation?

Why do practically all competing machines imitate, if not infringe, the De Laval patents?

The De Laval Separator Co.
173-177 William St.
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LOOK AT THE H.-P. SPRAMOTOR

spraying an acre of potatoes in 15 minutes. There are three nozzles to a row and four rows, two spraying from the sides and one from the top. Adjustable as to height and width up to 40-inch rows. Absolutely non-clogging nozzles. 12-gallon air-tank, automatic and hand-controlled. 125 lbs. pressure guaranteed with 12 nozzles open. Has agitator clean-out pressure relief into tank and nozzle protector, all under control of driver from seat. For one or two horses. Fitted for orchards, vineyards and grain. Write for booklet.

SPRAMOTOR, LIMITED, 1362 King St., London, Can.

A HARROW BARGAIN

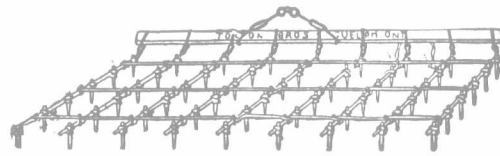
That Will Pay You to Know More About

TOLTON'S

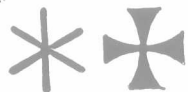
High-grade Steel Harrows

Section and Flexible All-Steel Harrows with an unequalled record. Pre-eminently the most efficient, strongest and longest-wearing Harrows ever manufactured is our unprecedented guarantee. Send to-day for descriptive circular furnishing the facts. Address: Dept. F.

TOLTON BROS., LIMITED, GUELPH, ONTARIO



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JOSEPH RODGERS & SONS, LIMITED,
SHEFFIELD, ENG.

AVOID IMITATIONS OF OUR

CUTLERY

BY SEEING THAT THIS EXACT MARK

IS ON EACH BLADE. SOLE AGENTS FOR CANADA:

JAMES HUTTON & CO., MONTREAL.

S. A. VETERANS' SCRIP

Our specialty is S. A. Veterans' Scrip. We sell Scrip at the current market price, whatever that may be from time to time. We advise the purchase of Scrip now by those who have opportunities for homesteading, because, not only are good homestead locations being rapidly taken up, but S. A. Scrip is rapidly disappearing from the market. On Jan. 18th, 1911, there were 1,510 Scrips outstanding. On March 25th, 1911, there were only 1,271 Scrips outstanding. In that time only 29 new Scrips were issued—against the 239 that were taken off the market. This was during the three winter months, before homesteading started. If you have any thought of taking up a Scrip, write or wire us. The present market prices are more of an opportunity now than they will be later on.

THE HOMESTEAD REALTY CO'Y
14 King St. East
Dominion Exchange Building
TORONTO CANADA.

NO INTEREST CHARGED

WILSON'S
GUARANTEED SCALES
LISTEN!

WILSON pays the freight. Get special prices to-day.

C. WILSON & SON,
79 Esplanade Street
Toronto, Canada.



100 Styles of Hay and Stock Scales

DOING ALL WE CLAIM

"I shall certainly recommend your College wherever I go as one doing JUST WHAT IT CLAIMS—and it rightly claims much." So writes C. L. Gesner, Westport, N.S. YOU CAN LEARN by mail from us in your own home in spare time: Commercial Work, Matriculation, Teachers' Certificates, Beginner's Course, Engineering, Mechanical Drawing, or almost anything you need. Write for information, telling us what you are interested.

Canadian Correspondence College.
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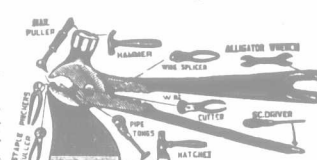


TORONTO, CANADA

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.

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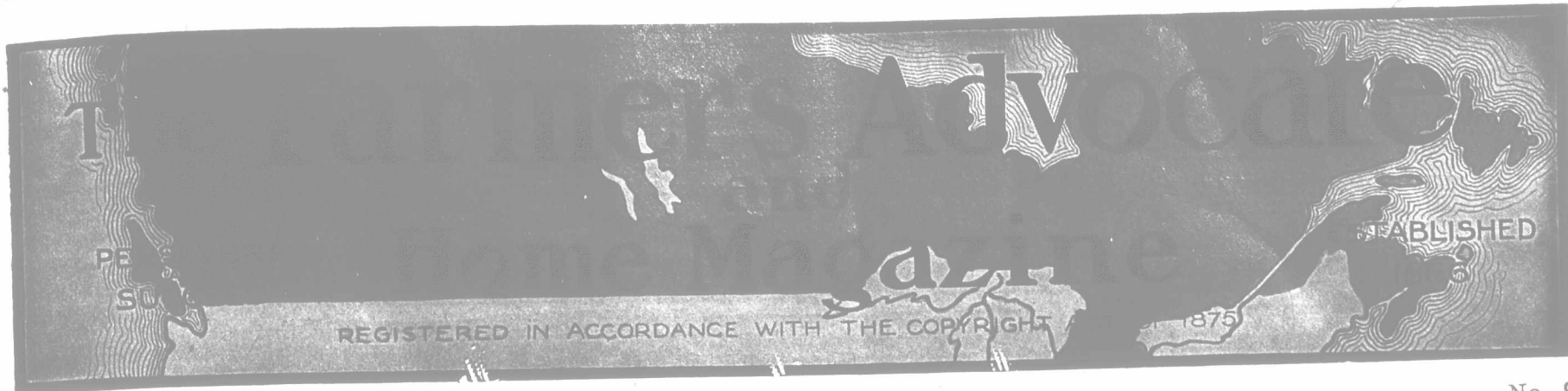
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EDITORIAL.

How many farmers are going to renovate the old orchard this season? Hold up the hands.

Uninformed men know a great many things about which wiser men hold qualified opinions or reserve judgment entirely.

Too many men ask merely whether a certain-sized implement will do their work. It is a wrong way to look at the matter. The real question is whether it will do the work most economically, all things considered. Profit is a matter of margins.

Several acres of bindweed are one of the little diversions we shall have on "The Farmer's Advocate" farm. Unfortunately, the infested area is not part of what we should like to cultivate this year. When we do get at that bindweed, we intend to do a thorough job.

There seems to be a sort of fellowship about this run-down-farm business. One day's mail last week brought two interesting private letters from prominent agriculturists four hundred miles apart, both of whom are tackling such farms. Of course, the farm we have finally fallen back on is not so dirty as might be wished. One friend suggests that if there are not enough weeds to suit us, we might just let the farm run itself one summer. However, we are not ready for anything quite so foolish as that—not yet awhile.

It has been often observed that some of the loudest protesters of loyalty are among the least loyal when it comes to a practical personal issue. There are probably as large a percentage of smugglers among avowed protectionists as among free-traders, and we have all seen red-hot tariff advocates forget all about their principles when a chance presented itself to save half a dollar by purchasing a foreign-made implement, or to earn an extra fifty dollars a year in some foreign country. "The Farmer's Advocate" looks at this matter just the other way around. It believes in freer trade as a means of regulating prices and reducing economic waste. At the same time, it gives a voluntary preference to Canadian merchandise when values are equal, or nearly so. All the implements so far purchased for "The Farmer's Advocate" farm are made in Canada.

There are people who think that editing a paper is a snap. They come into the office and chat away about little or nothing. As the editor whirls around on his chair from the stack of manuscript on his desk, like as not they pass some remark about his office being a nice place to put in short hours on a winter day. Meanwhile, the would-be pencil-pusher, anxious to be at his accumulation of work, ransacks his mind for an opportunity of terminating the conversation courteously. Very few people have any adequate idea of the amount of mental energy required to edit a paper such as ours. Ten years of active journalism will take more out of a man than a decade of farming. The hours may be shorter, but the strain is greater. At the very best, with as few interruptions as possible, the tax is severe. So, while we like to meet our friends, we respectfully request that they make their visits brief, say what they have to say, ask what they have to ask, and take prompt leave. It is as to allow us a few minutes' time for work before the eighteenth or twentieth interruption of the day occurs.

Labor-savers' Competition.

With pleasure, the announcement is made that twenty-four essays or letters were received in the competition for labor-savers, announced in the issue of March 2nd. Not only was the competition entered into quite freely, but it is also a source of great satisfaction that the character of the contributions was almost uniformly high. It was a decided pleasure to read the letters over, for no one could help observing that he was in the company of those who have active brains and are using them. who are enthusiasts in their work. "The difference between the ordinary and the extraordinary man, or woman," as one of the two ladies who contributed says, is "that one sees 'things' and immediately adopts them, while the other doesn't." While the prizes have been awarded, and the winning articles will, of course, be published, yet so excellent are the others that we shall publish nearly all of them, also, paying for them at our usual rates.

Neither of the lady contributors was awarded a prize, which may be accounted for by the fact that the judge was a "mere man." In truth, a judge in any kind of competition lays himself open to attack from many quarters. The full measure of knotty points was present in this competition. For instance, the one contrivance or arrangement which stood away above all the rest as a labor-saver, viz., the water system in use on the farm of John Campbell, Woodville (who has been a prizewinner in so many stiff contests), was, after long consultation, ruled out altogether. It was held that the clause in the announcement of the competition, that "patented articles or devices on the market were not admissible," excluded Mr. Campbell's excellent contribution.

The first prize has been awarded to Gordon Banting, Middlesex Co., Ont., and the second and third prizes have been divided equally between George Smedley, Algoma, Ont., and Peter B. Fick, Norfolk Co., Ont.

Rabies Again.

In public as in private affairs, thoroughness pays. Owing to lukewarmness of public opinion, reflected in an indiscreet laxity of municipal enforcement, the joint Federal and Provincial dog-muzzling order became practically a dead letter last summer, and has been officially regarded as inoperative since December 7th, 1910. Shortly following the enactment of the order, a marked diminution in the number of outbreaks of rabies occurred, but a short-memoried public insisted on premature relaxation of vigilance. As a consequence, we again hear disturbing reports.

During the month of December, 1910, and the three months which have expired in 1911, four small outbreaks of rabies have occurred, nine premises, in all, having been quarantined because of the existence or suspected existence of rabies thereon. Of these, one outbreak, which involved the quarantining of four premises, was dealt with in the County of Welland during the month of December; one premises was quarantined in the County of Grey in the month of January; one premises in the County of Dufferin in the month of February; and it was found necessary to deal with another outbreak involving the quarantining of three premises in the County of Welland within the last month. Had the muzzling order previously in force been properly observed by owners of dogs, it would have been possible to remove these restrictions before December, and these small, scattered outbreaks would, in all probability, not have occurred. It is, under the circum-

stances, impossible to state with any certainty whether or not it will be found necessary to renew the order, though we understand that in any event this will not be done without the matter being given very full consideration.

What a pity we did not make a thorough job of exterminating rabies while we were at it!

For the Good of the Country.

We refer our readers to a rejoinder by Lawrence Scratch to his critics on the question of reciprocity. He belabors them well, and incidentally gives the editor of "The Farmer's Advocate" a few whacks. We confess to being innocent enough to suppose that, for a farmer to follow his inclinations and buy as cheaply as possible was to his advantage, and, through his increased prosperity, an advantage to the country at large. But not so, according to our correspondent. He plainly states that for a Western farmer to pay \$40 more for a horse from the Eastern Provinces than for one brought in from the Western States, was for his own good and everybody else's. But if \$40 extra is a good thing, why not \$140, or even ten times that? It could be managed. The C. P. R. have never shown any disinclination to take all that could be got for carrying freight, and might like another \$100 on every horse. Our Eastern manufacturers, whose industries are by this extra toll to be "stimulated to greater output," have also always shown themselves quite ready to accept a little more, in order to exert a "beneficial influence upon the whole commercial net work of this country," and might be induced to join in the game.

Our correspondent's argument, "in the long run," is, that the more expensively trade is carried on, the better for the country. We would venture to suggest what might be an improvement even over Mr. Scratch's high-tariff proposals. Have the railways carry freight three times over their lines before unloading, charging, of course, full rates for the extra work. Their earnings would be wonderfully increased. There would be some more dead horses to pay for, but it would be all for the good of the country. In the eloquent words of our correspondent, "Then the roar of our multitudinous industries, and the whirl of our commercial activities will forever drown the sinister eagle-scream of annexation."

Electric Spark for Farm Work.

Will electric energy, brought to the doors of Ontario farm homes through the instrumentality of the Hydro-Electric Commission, prove more economical than gasoline? Hon. Adam Beck, "Minister of Power," appears to think it may be profitably employed for many purposes, including irrigation of land, operation of cream separators, churns, pumps, milking machines, machines for cleaning horses and cattle, threshing outfits, saws, grindstones, plowing and the like, and for heating, lighting, cooking and ironing. This sounds like solving the labor problem inside the house, as well as out. It is estimated that three horse-power is the average amount required for farm purposes, and it is proposed that when heavy work, such as threshing, is to be done, farmers should co-operate in groups of ten or twelve, the others conserving while one man's work is being done. The prospect is alluring if the plan is feasible and the power economical. The Commission is doing wisely in sending a couple of its engineers to Europe to study the question, the party to be joined by Hon. Mr. Beck some time during the summer. With them is to be sent a man from the Provincial Department of Agricul-

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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12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
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.

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ture. This is also wise. Undoubtedly, there should be someone to study the matter with an eye single to the farmer's need. He should be a practical, level-headed man, in close touch with the farmer's needs, and should have a knowledge of electricity.

At the moment of writing it has not been announced who is to be the representative of the Agricultural Department, but it certainly ought to be Wm. H. Day, Professor of Physics at the Ontario Agricultural College. Keen, painstaking, and practical, he enjoys to an extraordinary degree the confidence of Canadian farmers. He studies and expounds scientific subjects in their practical bearings. His professional knowledge of electricity was supplemented by the careful preparation of a thorough, lucid and very popular article on "Electricity in Agriculture," published in the 1907 Christmas Number of "The Farmer's Advocate and Home Magazine." For the sake of his collegiate work, Prof. Day should be chosen, but, more important still, we urge his selection because probably no one else could bring back a report that would so completely command the confidence of Canadian farmers. We shall await with eagerness the Commission's report.

"The Garden of the Gulf."

Not how big, but how good, may aptly be said of Prince Edward Island Province, and the annual report for 1910, by Hon. John Richards, Commissioner of Agriculture, deserves similar commendation. The outlook is most encouraging, nearly every branch of farming being taken up with energy, enthusiasm and success, largely due to the dissemination of reliable information. It is gratifying to know that the area under crop was the highest ever yet reached on the Island; and, still better, that one of the judges in the field-crop competitions was able to say that he had never reviewed crops of higher or more uniform quality. That such heavy grain should stand stiff and straight is attributed to fertilization with sea mud carrying a great deal of salt. The chief dangers in sight are the incursions of weeds, and a tendency to rely on a one-crop system, instead of a short rotation with clover,

which would supply humus that the soil appreciably needs. With regard to weeds, as elsewhere in Canada, a more rigid enforcement of law is called for. The superiority of grain selected under the rules of the Canadian Seed-growers' Association is reported clearly in evidence. The Island farmers justly take pride in their operations and their homes, and orcharding is making good progress. Horse-breeding has enjoyed a revival, and last autumn lambs reached a higher point than ever before, while egg production showed an increase of 14 per cent., with continued high prices. Like several other Provinces, Prince Edward Island began shipping cream to the United States, receiving 30 cents per pound butter-fat, delivered at Charlottetown. The Island cold-storage plant is being utilized to some extent to hold products over periods of depressed prices. Classes in agriculture and botany are conducted in Prince of Wales College by Prof. Ross, and sixty-five scholarships of \$10 each were granted to encourage farmers and farmers' sons to attend the short course at the N. S. College of Agriculture, upon the nomination of local Farmers' Institutes in good standing. The report embraces an admirable chapter by A. E. Morrison, President, and E. T. Carbonell, Secretary of the P. E. I. Fish and Game Protection Association, with illustrations of many varieties of birds, which farmers are encouraged to protect as an aid in the war against insects, thus promoting the general prosperity of the Island.

Growing Into Value.

The present condition of a majority of the wood-lots in Ontario leads to a great deal of wrong thinking and false argument. Because a neglected wood-lot yields small return, those who are indifferent to the question of reforestation, or opposed to it, find it easy to figure out just how much a man loses every year by having part of his farm under trees. The acreage represents a definite part of the farm investment, and if there is no return, there must be a loss. Those who argue in this way miss the whole point of the reforestation movement. Its purpose is to restore the wood-lots to a condition in which they will be productive. If they had been kept in the state in which they were at the coming of the first settlers, they would now be yielding, at a very conservative estimate, a revenue of from two to six dollars an acre from trees that matured each year. If the cattle had been kept from pasturing in them, and the young trees had been protected, the trees that matured each year would be constantly replaced by the young trees. Another favorite argument against reforestation is that the man who plants the trees will not live to reap the benefit. This is not true, any more than it is true that if his land increases in value, he will not receive the benefit. Every year, a wood-lot that is properly cared for increases in value, just as land in a thriving community increases in value, and if at any time the owner should decide to sell out, he will get his profits. They are there all the time, ready to be realized. Of course, direct cash returns are slow in coming in, but they differ only in degree from the returns the farmer gets for all his other work. When he plants corn, he must wait for months for payment of the work of plowing. The work he puts on his wheat will not be repaid for a year, and the work of clearing or reclaiming land will not bring returns for several years. The returns from forestry are the slowest of all, but they are no less sure than the others, and the man who leaves a good wood-lot to his descendants is leaving them a first-class investment that may yield them as much as a block of stock—a good deal more than some stock. But, beyond the question of the neglected wood-lots, there is the question of reclaiming waste land, hillsides, gullies, and useless stretches of sand. All these can be made productive by planting them with suitable trees. At present they are not only a waste, but an eyesore. None of the arguments that apply to good fertile land that is kept under trees applies to them. Only by planting them with trees can they be made of any value at all. This is the time of year to begin with the work, and, as the Department of Agriculture is ready to supply enough trees to plant two acres each year, there is no excuse for neglecting this work. The labor in-

involved is small, and the returns will be almost immediate in the improved appearance of these waste places.

Prosperity, Comfort, Contentment.

"Taking these Maritime Provinces as a whole, I believe, man for man, and acre for acre, there is no country under the broad canopy of heaven in which there is a greater degree of comfort and contentment." Hon. J. D. Hazen, Premier of New Brunswick, amid the approving applause of a prosperous agricultural audience, concluded a public address last season with the foregoing words, which are incorporated in the annual report on the agriculture of New Brunswick for the year 1910. The expression is the keynote of the document, which resounds with a hopeful confidence. This is evidenced not merely in the utterances of those who officially direct the agricultural affairs of the Province, but reappears again and again in the reports of the local agricultural societies, where the views and aspirations of the rank and file of the farmers find expression. Among other details in the latter is the encouraging attention paid to alfalfa-growing, in some cases futurity prizes being offered for the best plots.

In another address, Hon. D. V. Landry pinned his faith to education as the secret of continued progress. If farming had not in the past proved the success it should have been, the reason was because young men did not realize the necessity of preparing themselves properly for so important a work. In a Province like New Brunswick, where so many young men are making their living on the farm, there should be two agricultural colleges like the one at Truro, Nova Scotia; but he laid it down as fundamental that education should begin in the public schools.

Referring to the work of agricultural societies, W. W. Hubbard, Secretary for Agriculture, called attention to the valuable results possible by systematic co-operation among farmers, but said one of the very first things was to inspire the faith of the individual members, particularly the boys and girls, in their own country, which, under proper development, should enable them to make more money, live better lives, and have more real pleasure right here in New Brunswick than in any distant districts about which so much boasting is heard.

It is significant and hopeful that fruit-growing occupies so conspicuous a place in this report. The conviction has secured a firm hold on the minds of the leaders of agriculture that the production of the staple fruits is destined to become one of the most profitable branches of New Brunswick farming, not only because of the adaptability of the St. John Valley, the Petitcodiac Valley, and many other sections, for producing fruits of fine quality, but because of their advantageous position in relation to markets. The Province has some nineteen illustration orchards, under the supervision of the Department of Agriculture, and the efforts of the Fruit-growers' Association, and A. G. Turney, as Provincial Horticulturist, during 1910, were exceedingly encouraging.

New Brunswick readers of "The Farmers' Advocate" will find a great deal of helpful information in the papers and discussions at meetings reported in this volume, in relation to fruit culture, dairying and other branches of farm work. In order that people may be put intelligently upon their guard in regard to possible invasions of the Brown-tail moth, a fine, full-page colored engraving of the moth at various stages as it operates upon foliage, is given.

The illustrations constitute an admirable and useful feature of the report, which does the Province credit, and will prove useful in many respects as a work of reference in farm libraries.

Not maximum yields, but maximum profit, is the commercial end of good farming. Big crops are sometimes produced at a loss. It is the long-term average that counts on the balance sheet. It is poor economy to devote fifty dollars' worth of manure, cultivation, seed, etc., to produce forty dollars' worth of wheat or corn. Yet, we have known farmers to win local fame as "good wheat farmers," because they made a practice of growing big wheat crops by bare-fallowing and excessive manuring. A farmer of this species was once boasting of an enormous yield of wheat that he had secured from a certain field. He dealt, of course, in expletives. "The greatest crop ever seen," "hardly room for the shocks to stand," etc. "but," said he, "it ought to be good, for I covered it a foot deep with manure." "Well," said a Scotch Canadian present, "A' think eleven inches is a gey gude dungin'."

The Seed Control Act.

Editor "The Farmer's Advocate":

Noting an article in your issue of March 23rd, page 510, "Amendments to Seed Control Act," I would like to know who can clearly understand such? On its face, it seems like a lot of contradiction; and I think the best way would be for the Hon. Mr. Fisher to take over the whole business, as he knows all about it, and then the public would have pure seed, or else be able to know the reason why.

It is not particularly elevating to feel that at any time you may be made a criminal of, and so advertised, notwithstanding that you may be doing your best out of such material as you are supplied with to make a satisfactory showing.

I maintain that the farmer that is worthy the name, and has an interest in keeping his land clean, is just as competent to select what he wants for seed, perhaps more so than the Government, or anyone else, for that matter; while the farmer who doesn't care, likely has his land full of all these weeds to start with, and they are going on reseeding themselves annually, and a few seeds more or less than he may get in seed he buys will not count for very much one way or the other.

J. HUME.

[Note.—Impeachment of the Seed Control Act, on the ground of a lack of clearness, is fair and proper. We find the Act difficult to understand ourselves. We are informed that it was originally drafted in plain English, but, after it was clothed in legal language by the law clerks of Parliament and the Department of Justice, so as to abridge the technicalities of the court, its own sponsor almost despaired. We must remember, though, that it treats with the technical subject of an intricate trade, and the finishing touches, especially as to exemptions, etc., were put on by Parliament itself, so that it is not strange the average man finds it difficult to understand. However, the inspectors and other officers of the Seed Branch are always glad to explain in print or orally the meaning of any clause or clauses. By co-operating with them, most of the seed merchants have managed to avoid serious embarrassment, while the Act has been of immense value in securing to careful, as well as careless, Canadian farmers better seed than they would otherwise have been likely to obtain. We cannot agree that "Any farmer who is worthy of the name is competent to select what he wants for seed." We know something about seeds, but we do not pretend to be able to detect and identify new weed seeds so well as the Government experts. Accordingly, we are buying our seeds according to sample, and sending the samples down to the Seed Laboratory at Ottawa for free examination, and report upon purity and germination. We advise every reader to do the same. —Editor.]

One of the first things being done on "The Farmer's Advocate" farm is to trim down the scattering, neglected wood-lot to a square block of eight or ten acres, fence it off, and keep stock out till it reseeds itself into a vigorous thicket. On some of the larger open spaces Nature may be assisted by planting select species.

HORSES.

Welsh and Shetland Ponies.

The increasing interest in and demand for ponies at present prevailing, especially in the larger cities and towns of our country, and to some extent on the farm, as well, as a luxury for children, will justify the using of a little space for the following condensed sketches of their origin, history and characteristics, quoted from "Horses of the British Empire."

Nature and man have combined to make the Welsh pony the hardiest, most active, and probably the most intelligent of his kind. The climate of the Welsh hills during a great part of the year is rigorous, the herbage is poor and scanty, and the grounds whereon the ponies run are always rough, and often treacherous. Foaled in the wastes, like any truly wild animal, the colt follows its dam and shares the wanderings of the drove from the day of its birth. Its life from the hour it stands upon its feet is one long education in picking the way among stones, holes and bogs; thus it acquires an activity and sure-footedness which is foreign to the colt foaled in the stall or paddock, which is never required to exercise its limbs, save on smooth ground from which has been removed every object against which it might injure itself. Such shelter as the Welsh pony may find from the storms of winter is of nature's providing, the leese of some precipice or some 'fold' in the ground affords him all the protection he gets or requires. To the healthy conditions of their lives, breathing the purest air, drinking the purest water, and ranging over the wide tracts of country to find food, these ponies owe their immunity from disease; the soundness of their legs and feet is remarkable; they never become roaners; and display a power of resisting disease that is not possessed by any domesticated breed of horses.

The hill ponies vary in height from ten to eleven hands; one of twelve hands two inches is regarded as very large, and this is the maximum height recognized in the pure breed.

The Welsh Cob, the product of crossing the ponies with Hackney sires, has proven a very satisfactory horse for general purposes in Wales, and is the horse of that country. Size, 13 to 14 hands 2 inches; active and quick-stepping, they carry their owners to market with supplies, and perform much of the work of the farm, as well.

THE SHETLAND PONY.

The Shetland pony, or Sheltie, as it is more familiarly called, takes its name from its native home, the group of islands known as the Shetlands, which constitute the northern division of the County of Orkney and Zetland. Shetland is a poor country, and, except in certain favored localities, vegetation is of the scantiest description.

The Sheltie is the smallest of all British ponies. Indeed, it is doubtful if there is a breed anywhere in the world that can equal them in this respect. The smallness alluded to, however, refers to height only. In size of bone, compactness of form, muscularity and strength they will compare very favorably with many others even a hand taller. The true Shetland is short in the leg, with a broad, muscular back; and, as far as constitution and power of endurance is concerned, is unsurpassed by any other breed.

The prevailing color of the Shetland is black, not, however, a jet black, but what is

known as Shetland black, a lighter or a more slaty hue; browns, bays, duns, chestnuts and piebalds are also common. The three latter colors, however, are not much in request, and, by careful breeding, may be got rid of.

The Shelties range in size from 9 to 11 hands. When care and selection are exercised in breeding, the average will not exceed 9½ hands, but in ordinary circumstances, where indiscriminate mating is permitted, it will average 10½ hands. This is the extreme height at which a pony is allowed to be registered in the studbook. The pony lives to a great age, thirty years being quite common, but some have exceeded that age. The photograph of a mare named Topsy appeared in the Scottish Farmer in July, 1899, when she was 41 years old, and she survived for three years after that, or until she was 44 years.

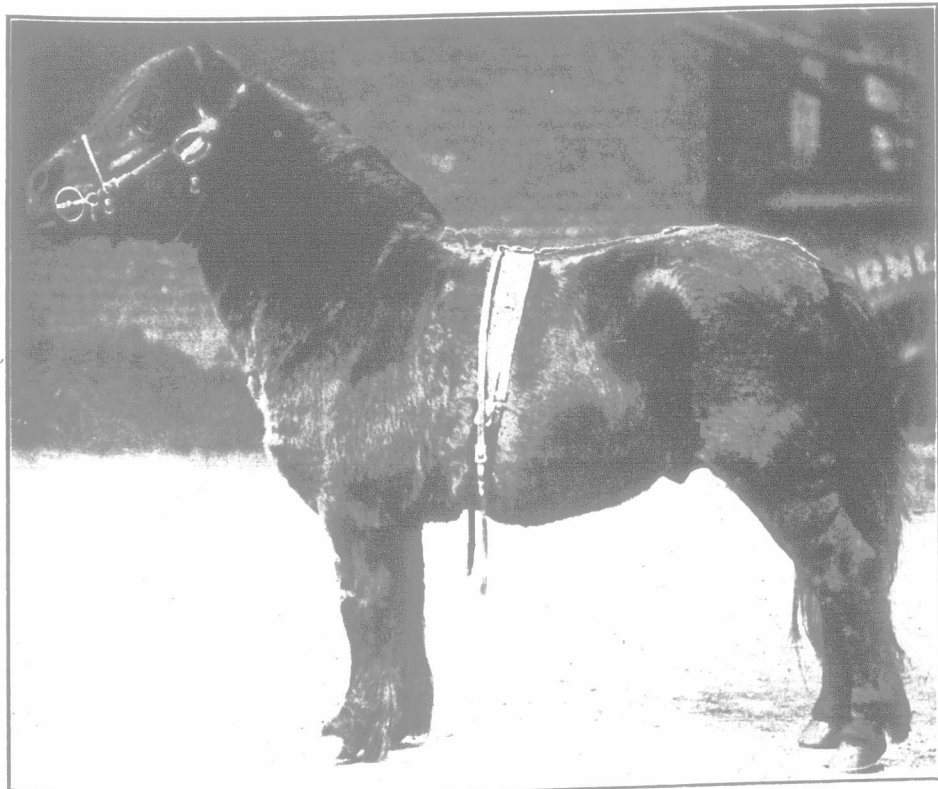
Crossing Shetland ponies with other breeds has been tried, and when done where the ponies can be housed and well fed, excellent results have been obtained, particularly with the Hackney pony, which is, as a rule, very successful. But crossing any mountain breed on its native heath cannot be too strongly condemned, as it impairs their natural hardiness, and lessens their adaptability to the climate and conditions under which they live.

Judging the Draft Horse.

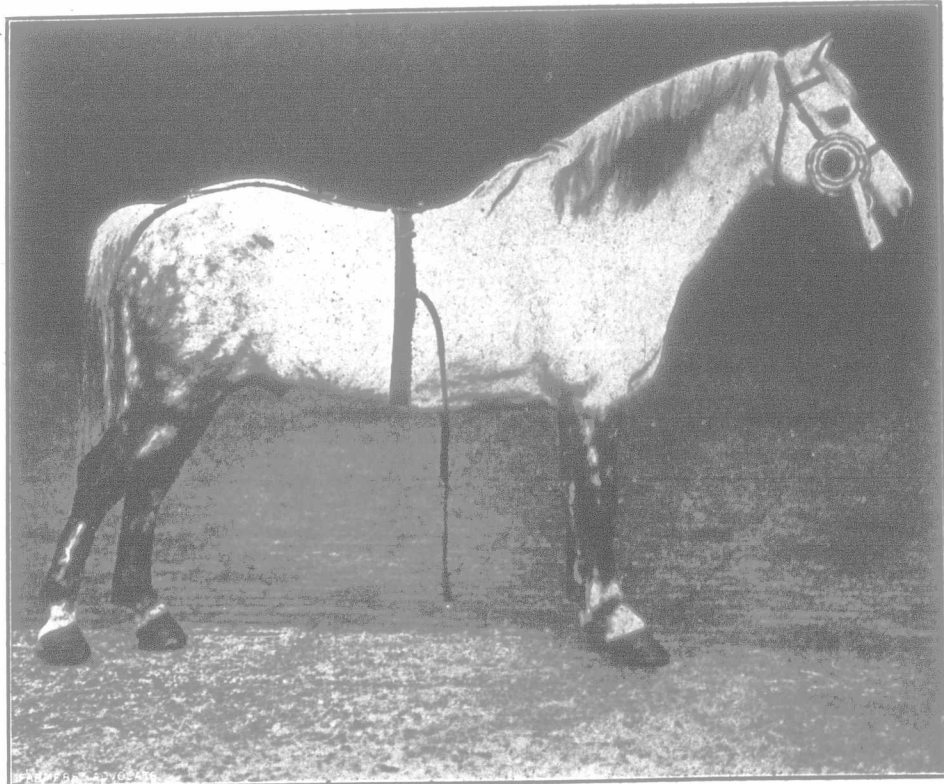
Horse-judging is an art that some men are born to, and are naturally expert at, and which others acquire by study, practice and experience. Not all men become expert, no matter how conscientiously they apply themselves, or how well they acquaint themselves with the points of the horse, the types of the breeds or the use of the score-card, for the reason that their observation powers are not sufficiently keen to enable them to become proficient in sizing animals up, in comparing them in general merit, or in points of merit or demerit between individuals. It is an art, however, which anyone may become, in a measure, reasonably proficient in, providing he takes advantage of such opportunities as offer for comparing animals one with another, and has some clear idea of what he is looking for.

The judge, first of all, needs to have an ideal in mind, a picture of what would constitute perfection in a horse of the particular class the animals before him represent. This ideal may be best acquired by familiarizing oneself with the appearance of horses that are recognized as representative specimens of their kind. Observing closely the kind of horse that judges of repute select for the higher awards in the showing, is the most practical way of forming opinion as to what constitutes nearest to perfection for each particular class. These observations, augmented by a study of types and forms from photographs of prizewinners and horses of accepted high standard in their class, should furnish a man with a good working ideal to follow in judging of the merits of a single animal, or in comparing the horses in a class of some numbers, and in deciding which one comes nearest his notion of the ideal, where and why it is meritorious, and where and how far it falls short of what constitutes perfection.

The beginner in the study of animal exteriors most quickly acquires the art of "sizing up," if he trains himself to the systematic observation of the horse's "points," if he so arranges his work that the "essentials" become emphasized in his mind, and if he learns to go over a horse in such a



Shetland Colt, Halcyon.



Welsh Pony Stallion, Bledfa Shooting Star.

way that the component parts are considered in order, and nothing important is overlooked. This is the chief purpose in practicing with the score-card, to arrange a method of observation. This is unnecessary after one has become familiar with the relative values of "points," and has acquired the faculty of making in his mind the discriminations between animals which he learned to express on the score-card in figures. At the start of a systematic study of horse-judging, the score-card is helpful, but in work in the showing or elsewhere, its use is rarely resorted to. To the expert, score-card judging is cumbersome, and, when the finer points of judging are considered, not always to be relied on.

For the use of the beginner is reproduced here a score-card, the production of Dr. J. H. Reed, V. S., of Guelph, which has found general favor throughout Canada; also a half-tone reproduction from a photograph of a typical heavy-draft stallion, marked to show the "points" of this type of horse. The subject in this case is the world-famous Clydesdale stallion "Oyama," a particularly good specimen of the draft horse, as developed after the ideals of Scotch breeders.

STANDARD OF EXCELLENCE FOR CLYDESDALE AND SHIRE STALLION.

	Stu- Possible dent's Score.	Score.
Scale of Points.		
HEAD—Ear of medium size and pointed; cranium nicely rounded; forehead broad and flat; eye-full, prominent and mild; nasal bones straight; nostrils large, firm and flexible; muzzle rather small; mouth of medium depth; lips compact; muscles of cheek well developed and prominent; space between branches of lower jaw wide at angles.....	4	.....
NECK—Of medium length, deep and full where it joins the body, being continuous with the withers without any line of demarcation; crest well developed, well arched, broad and strong, but not so heavy as to turn to either side; the whole neck to be well and prominently muscled, surmounted by a good, full mane of hair of good quality, and attached to the head in a graceful manner, not too thick and heavy at the throat; the general appearance of the head and neck to be strongly masculine.....	5	.....
WITHERS AND BACK—Withers in line with the posterior part of the upper border of the neck tolerably high, rather broad and well muscled; back straight and rather short; loins broad, strong and well muscled.....	8	.....
CROUP—Rather long, well and prominently muscled, not too drooping, dock coming out fairly well up and well clothed with straight and not too coarse hair, and well carried.....	4	.....
CHEST—Ribs long and well sprung, with well marked angles; false ribs long, deep through girth; breast broad and well muscled.....	10	.....

SHOULDER—Moderately oblique from above downwards and forwards and heavily muscled; the muscles covering the blade thoroughly developed and prominent.....	5	.....
ELBOW—Strong and muscular, and fitting closely to the chest.....	2	.....
FOREARM—Large and strong; rather short and well clothed with prominent muscles extending well down the limb.....	4	.....
KNEE—Straight and well developed, and strong in all directions.....	5	.....
KNEE TO FOOT—Canon bone rather short, broad, strong and flat, with an absence of beefiness; ligament and tendons well developed and not too much tied in below the knee; skin lying close to bone and tendon; the posterior border of the limb to be well feathered with a moderate quantity of straight, silky hair, especially in the region of the fetlock (wavy, woolly, or coarse hair very objectionable). Fetlock joint large and strong; pasterns of medium length and well marked obliquely.....	10	.....
FOOT—Of medium size, rather round, with good, strong and moderately deep wall, sole not flat; frog well developed and strong; heels broad and strong and not too deep. There must be an absence of an appearance of hardening or thickening of the lateral cartilages. Must not turn toes either in or out when standing; must stand straight, with feet firmly planted, not too far apart, nor yet very close together. Feet must be of equal size.....	10	.....
HAUNCH—Strong and heavily muscled, thick through ham; quarters broad and strong.....	4	.....
STIFLE—Strong, compact and well muscled.....	2	.....
GASKIN—Muscle strong and prominent, and extending well down the limb; bone large and substantial, hamstring prominent and strong.....	4	.....
HOCK—Large, strong and well developed in all directions; an absence of coarseness and puffiness; point well developed and posterior border straight. Must stand with hocks fairly well together, but straight.....	5	.....
HOCK TO FOOT—Canon bone broad, flat, strong and rather short; ligament and tendons well developed and strong, and not pinched in below hock; an absence of beefiness; skin lying close to bone and tendon; limb must be feathered on the posterior border with hair of good quality, the same as fore limb. Fetlock joint large and strong; pasterns of medium length and well marked obliquely.....	10	.....
COLOR—Bay, chestnut, brown, black, roan; gray with reasonable modifications; reasonable white markings not objectionable.....	3	.....

FOOT—Smaller, narrower and more concave in sole than forefoot; wall strong and moderately deep; frog well developed and strong; heels broad and strong, and not too deep. Feet must be of equal size.....	10	.....
SKIN—Soft, mellow and loose, not like parchment.....	4	.....
TEMPERAMENT—Energetic, docile; not nervous.....	4	.....
STYLE AND ACTION—General appearance attractive; movements firm, smart and elastic; must be a good walker, all joints moving freely; knees and pasterns and hocks and pasterns well flexed, showing the soles of the feet quite plainly; must not roll or paddle with the fore feet, but lift them smartly from the ground, fetch them forward in a straight line and plant them firmly; must not go wide with hocks or hind feet, nor yet close enough with the feet to interfere. In a trot these movements to be carried out in a more marked degree.....	10	.....
WEIGHT—Say 1,700 pounds and upwards.....	6	.....
HEIGHT—Say 16 to 17 hands.....	6	.....
SYMMETRY—All points well proportioned.....	10	.....
Total.....	145	.....

The desirable points in the mare or gelding of these breeds differ from those of the stallion only in the absence of the masculine appearance noticeable in the head, neck and general physiognomy. The head lacks this appearance, which is more easily recognized than described. The neck is not so massive in general, nor the crest so highly developed, the withers not so broad, nor so heavily muscled. In temperament there is more docility. The weight is usually less and the action not so heavy.

Student's Name.....
Animal Scored.....Date.....

DRAFT TYPE.

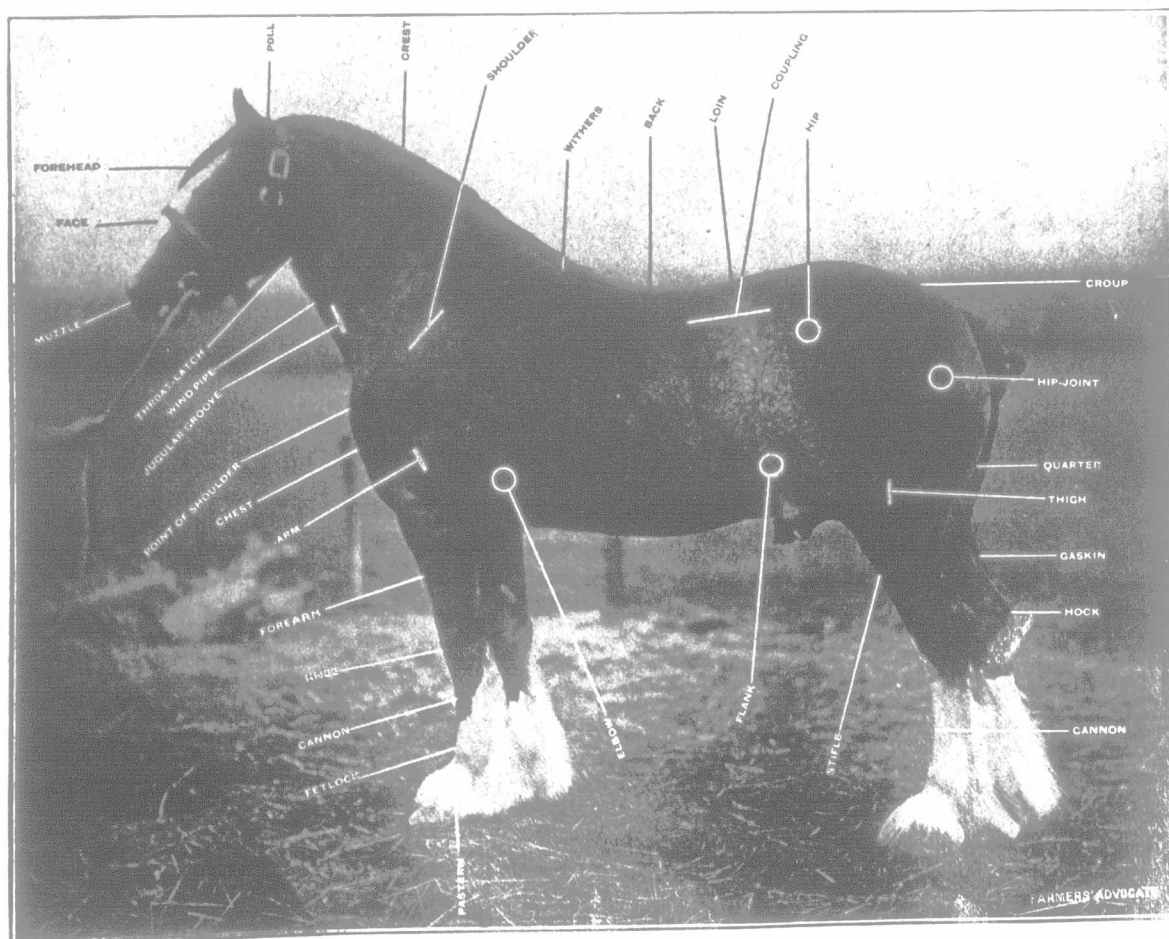
The draft horse should be massive in form, compact and blocky in body, and stand on short, strong limbs. There should be a blending of all parts in harmonious proportion. In weight the class may be grouped into two divisions, heavy and light. A heavy-draft horse at maturity should weigh from 1,600 pounds, and a light-draft from 1,500 to 1,600 pounds. The height is not so material, provided there is the necessary weight to go with it. Draft horses usually stand from 16 to 17½ hands. Substance is determined from general appearance, weight and height, and from the size of the bone. Quality is judged from smooth bones, neatly-turned joints, lower limbs free from superfluous fleshiness, and from the texture of the hair and skin. Coarse joints usually go with poor bone and poor feet.

Action is not a minor point. Upon the way he propels himself depends a good deal the wearing quality of the horse, not to mention the peace of mind that a clear-away straight-goer produces in his drivers. The limbs should be carried forward true and straight, the feet picked up with snap and energy, whether at the walk or trot. High knee action is not looked for, except by cranks in the matter of a horse's going. Knee and hock action should be free and easy, with no suspicion of stiffness or dragging. The horse should move his limbs forward straight in line, without throwing the front feet out or in, or "sprawling," with the hind limbs too far apart. He should be an active walker. To be sluggish at the walk is a serious defect in an animal that does most of his work at this pace.

MEASUREMENTS OF DRAFT HORSES.

The following draft-horse measurements are taken from a report of the Ohio State College of Agriculture, and show some interesting average results from a study of a considerable number of drafters:

Kind of Measurement.	Class of Draft Horse.	
	Ex. good.	Med. good
Number of horses measured.....	55	17
Weight.....	1613 lb.	1579 lb.
Height at withers.....	16½ hd.	16½ hd.
Height at croup.....	16½ hd.	17 hd.
From point of shoulder to point of buttock.....	67.8 in.	68.85 in.
From lower point of chest to ground.....	33.5 in.	34.12 in.
Circumference of body at girth.....	90 in.	87.8 in.
Circumference of front canon at center of chest.....	9.66 in.	9.75 in.
Depth of head.....	26.66 in.	26.8 in.
Depth of shoulder.....	27.25 in.	27 in.
From point of back to ground.....	25.5 in.	25.9 in.
From point of chest to ground.....	20 in.	19.5 in.
From point of hip to ground.....	25.2 in.	25.12 in.
From point of knee to ground.....	22.5 in.	22.75 in.



The Points of the Draft Horse Clydesdale Stallion, Oyama.

APRIL 13, 1911

THE FARMER'S ADVOCATE

The figures for measurements are probably approximately correct, though men do not measure horses when judging. They must estimate symmetry and measurement by the eye, as they do type and general characteristics.

COMMON UNSOUNDNESS TO BE NOTED.

A horse is either sound or unsound. He may be too unsound to work, or able to work in spite of unsoundness. The serious nature of the particular unsoundness present is to be estimated by the judge, and for that, intimate knowledge and experience are necessary.

For breeding purposes, any disease is undesirable. A disease considered hereditary is most serious. A distortion, deformity or blemish, due to accident, is not serious on the score of transmissibility, but depreciates sale value. In work horses, the degree to which a disease or unsoundness is temporary or permanent, and likely to detract from serviceability for work, must be carefully considered. A horse may be afflicted with strangles (distemper) and recover perfectly; or the attack may pass off, but leave the animal a "roarer." The attack of strangles would constitute a temporary unsoundness; the "roaring" a permanent and serious unsoundness in a work animal. In a breeding animal it should constitute an unsoundness, unfitting the horse for breeding purposes. A large barb-wire cut scar would ordinarily be considered a blemish or "eye-sore"; but, should it have caused permanent lameness, it would be a serious unsoundness in a work animal. In a breeding animal, not used for work, the blemish, and even the lameness, would be of slight gravity, not being transmissible to progeny.

Among the common unsoundnesses are: Poll evil, blindness, deafness, parrot mouth, broken crest, swoony shoulders, shoe boils on the elbow, broken or calf knees, splints, windgalls, ringbones, cocked ankle, grease heel, scratches, sidebones, quittor, navicular disease, founder, sand crack, quarter crack, thrush, bog spavin, bone spavin, thoroughpin, curb, abscesses, fistula, skin diseases, roaring, heaves, corns, or fleshy or bony growths on any part of the body or limbs. Vices, such as wind-sucking, cribbing and weaving, are equally as objectionable in a horse as the unsoundnesses above mentioned.

The student who undertakes to train for reasonable expertness in horse-judging should provide himself with a more detailed explanation of methods of examining for unsoundness than can be given here. He should secure what every horseman should have, an authoritative textbook on the horse in health and in disease.

Speed Records.

What is the fastest record known as to horse trotting, pacing or running; also, the names of horses holding such records?

P. J.
The American Trotting Register Association cites the following records as official: Lou Dillon, trotter, Memphis, Tenn., October 24th, 1903, 1.58½; Dan Patch, pacer, Lexington, Kentucky, August 29th, 1905, 1.55¼. As to running records, you would have to specify distances. Daily Racing Form, 57 Plymouth Court, Chicago, publishes what is known as a racing annual, which gives running records at all distances.

LIVE STOCK.

Raising Calves from the Factory Cow.

In raising calves, we let them suck for about two weeks. Then we feed new milk by hand for about ten days or two weeks, at which time the calves will begin to eat a little hay or bran that may be thrown in the pail after they have had their feed of milk. Now we begin to slacken the new milk, and add skim milk, until the calf is getting all skim milk, to which is added a little scalded linseed meal to make up for the difference in the milk.

If the milk is going to the factory, we just give the calf one quart of new milk, with some scalded linseed meal in it, night and morning. The calf is let run loose in a box stall, and there is a trough or feed box with some bran or oats in it, that it can eat at its leisure. Some hay or grass, and water, are also placed where the calf can help itself at will. The way the calf will thrive will surprise everyone. We do not take the calf up after it is two weeks old, as it is better running loose.

FARMER'S BOY.

While the United States farmer is the only one who really has some cause to criticize the treaty as unfairly opposed to his interests, even he stands to lose little, if he gains something in the long run. The day Evening Post sentimentally observes whoever assists in frightening the farmers of the American Middle West back into line for high prices is playing the standpatter's game, and being the true interest of the farmers them-

Cow and Her Care at Calving.

Editor "The Farmer's Advocate":

To all cows that are regular breeders there comes regularly a critical time, the parturient stage, or time of freshening.

How successful she is handled at this time by her owner or herdsman very largely determines her usefulness during the following lactation period, and frequently her usefulness as a producer or breeder for all time.

It is imperative that we do more than give them proper care just at this time and after; we must also give proper care previously. On this preparation much depends. It not only in a large measure determines the progress the dam will make, but also the development of the calf, and the production of the dam during that lactation period.

During the last two months of the gestation period, the fetus is exerting a decided drain on the dam, and the heavy producer deserves and absolutely needs some time to build up in condition, and to store energy, to be expended in the following season's production. We should endeavor to give the cow eight weeks' rest, or, if that is impracticable, as long a period as possible.

Just here I would interpolate that, in managing cows of large production, I think it much better to allow them a period of twelve, or, preferably, fourteen months between calves. If a shorter time is allowed, it is often very difficult to get a real good cow dried off in time to have any rest, and in this case the dam and the calf both suffer, while the life of usefulness of the dam as a producer and breeder is shortened. Aside from the benefits enumerated, resulting from a short rest and improved condition, cows in best condition are much less susceptible to disorders in general at this time, and can be put on full feed and got under way after calving much earlier than the cow in poor flesh. Cows in high condition, however, require very careful feeding previous to freshening and immediately after. Such cows will show wonderful udder development, and must be handled intelligently in regard to selection of feeds and amount given, and to the care and handling of the udder; still, these cows with large, swollen udders are much safer to handle than the cow in poorer condition, whose udder will also, of course, contain much swelling and inflammation.

If we were fortunate enough to have the cow dried off for a few weeks, we should have fed her liberally on feeds rich in flesh-forming constituents, such as cornmeal or barley chop, etc., with bran, in order to make the most of the time at our disposal to put the cow in best condition. This feeding must, however, not be continued too long. The heavy meal ration should be very much decreased, and changed to bran, chiefly, with a little oat chop or oil-cake, from ten days to a fortnight previous to freshening. If feeding heavily of silage, the amount should be lessened very considerably, and in its stead, roots, preferably mangels, substituted. The feeding now should be largely governed by the udder development, and all feeds used should be of a laxative nature, easily digested, and of a cooling effect upon the digestive system. This applies after calving, as well as before. Easy digestion and low temperatures, with the bowels moving freely, are the conditions of health the herdsman should aim at in feeding. Silage (but not much), clover hay, roots, and, if possible, some bran, make an excellent combination; while, after freshening, for 48 hours or longer, I consider best-quality clover hay, with a little bran, sufficient; while, later,

roots may be added, and oat chop mixed with the bran. Immediately on calving I like to give a hot bran mash, using a gallon of bran, filling the pail up with water, and a pinch of salt. Many administer a purgative of epsom salts at this time. When this is considered necessary at any time, I find two pounds epsom salts, one pound molasses, and some ginger, mixed with nearly a pail of water, given as a drench, most effective. This may seem like a lot of waste, but I find that results are much better when this amount of water is used.

It not infrequently happens that a case of malformation or wrong presentation occurs, and, in such event, it is best to call in a competent man early and before trying home remedies or acting on the suggestions of neighbors. This point cannot be emphasized too strongly, as doing otherwise does not give either veterinarian or cow a fair chance.

But, aside from this trouble, the cow is subject to many other ills at this time. Parturient apoplexy, or milk fever is a disease to which our largest producers are particularly subject. The first precaution against this trouble is careful feeding before and after calving. It is very important that the bowels be kept loose, while, as well as proper feeding, exercise is a great aid to this condition of digestion. The practice of milking a cow immediately the calf is dropped is a practice very conducive to an attack of milk fever. Drawing a large flow causes a great rush of blood to the udder, and often the disease follows. As a preventive measure, the udder should be milked out only partially for the first three days. It usually begins to show itself about 12 hours after the calf comes, the first symptoms being a refusal to eat and a general uneasiness. In a short time the cow gets down, loses the use of her limbs and the muscles of her throat, and becomes unconscious, death ensuing in a few hours more. When one has any number of well-fitted, good cows, he should by all means be provided with a milk-fever outfit to administer the air treatment. Such wonderful cures have been wrought by this treatment that the disease has lost none of its terrors for us. The bicycle pump has been frequently used successfully. There is always some danger from the filling of the udder with unsterilized stable manure or unsterilized instruments, and, as a safeguard, it is wise to use pure oxygen, administered by a veterinarian.

Garget, or caked udder, of one or more quarters of the udder is a source of great loss to dairy farmers. While very seldom causing the loss of an animal, in a great many cases it seriously impairs the cow's future usefulness as a producer. At calving time, the udder is especially susceptible to attack; an exciting cause is all that is necessary to start trouble. An attack may result from any one of many causes, as, for instance, taking a cow from a warm stable to one of a lower temperature, or placing anywhere in a cold draft. Improper feeding, or a sudden change to heating or constipating food, as well as lying on a cold, damp or hard floor, such as a cement floor, not properly bedded down, are all potent causes of garget. The udder may have suffered some injury from a bruise; while, milking, improperly done, or at irregular intervals, may also act as exciting causes. Garget may develop to any stage, from the perfectly natural swelling of the udder after calving, to gangrenous infection and death from blood poison. Simple inflammation and caking of a quarter or more, is the commonest type of garget, and it should have prompt attention. With the feed right, and the bowels moving freely, frequent diligent bathing with



Lambing Pens in Use.

H. C. Stephens' Hampshire flock, Cholderton, Salisbury, England.

water as hot as the hand can bear, with a little turpentine in solution, is often effective. Massaging should always be done with the use of goose-oil or vaseline freely rubbed in, but this is not nearly so effective as the hot-water bathing. The milk should be drawn frequently, being careful to get the last drop each time. With this treatment, the affected quarter or quarters may be expected to remain caked for just a short time. But, if only a slight improvement is realized, by continued milking and massaging, the end of the lactation period will in many cases find the quarter or quarters in normal condition. In other cases no cure can be effected, and the parts remain useless for life.

The retention of the placenta, or afterbirth, very frequently occurs. This condition is sometimes brought about by a chill, and the practice of moving the cow just before calving to another stable should be discouraged, for, aside from the great danger of lower temperature, new surroundings tend to agitate or excite the animal unduly, and this nervous state often gives rise to this trouble. A draft of cold air, even in her own stable should by all means be avoided. With every condition favorable, the afterbirth occasionally refuses to come, having become fastened naturally, so to speak, during the period of gestation. Many practice the removal of this by hand in some instances, by those who know something of the internal organs of the animal; in many other instances by those who know absolutely nothing of this. Unquestionably, from this cause alone many good cows are ruined. Personally, I consider these organs too delicate, too vital, for any but qualified men to tamper with. In our own herd, nature is allowed to take its course, assisted by three 25-drop doses of carbolic acid on alternate days for the first week, using plenty of disinfectant around the animal, and, after the removal, which will not be later than the ninth day, treating her with some good reliable anti-septic and tonic for three weeks. We find this method protects our cows against sterility, and eliminates danger of blood poison. Don't, under any circumstances, be so brutal as to pull the afterbirth, or hang weights on it.

We always give each cow a roomy, comfortable, well-bedded box stall of the same temperature as the stable for a few days before calving and a few days after. A man should be present at the critical time to render any assistance needed and repress any attempt at inversion of the uterus, in which case careful watching will be necessary for a little time. The calf is allowed to remain with its dam for twenty-four hours; this is only nature's way. Exercise is essential at this time; it aids digestion and tends very materially to allay inflammation of the udder, but should be taken indoors.

C. HAMILTON.

Dundas Co., Ont.

Would License Only Sound Pure-breds.

Since 1893 the Province of Manitoba has had a Stallion Licensing Act, which stood practically without amendment until 1906, when a fairly comprehensive measure was adopted, embodying most of the provisions of the old bill. Stallion legislation has also been in force in what used to be the North-west Territories, and in British Columbia. At the last session of the Provincial Legislature, the Horse-breeders' Association of Manitoba presented a more radical bill than the Act hitherto in force. This was introduced in the Legislative Assembly by Hon. R. P. Roblin, Premier and Minister of Agriculture, and was received and read a first time. This bill proposed to license none but pure-bred registered horses that passed an official veterinary inspection certifying them to be free from certain infectious, contagious or transmissible diseases or unsoundnesses. The Act would make provision for the stallion owner to file a lien for service fee upon any colt got by his horse, but it was expressly provided in the bill that no grade stallion travelling should have any bills or cards printed or posted up setting forth his breeding, nor should the owner be able to charge or collect a fee.

The bill was most thoroughly discussed by the Legislature in committee, but the committee as a whole thought the request of the Horse-breeders' Association was a little too advanced in asking for the virtual elimination of all grade stallions, and insisting upon a license as an absolute condition of license. A compromise of the bill has been deferred for twelve months, and agricultural societies of the Province are expected to give expression for or against the bill. The Horse-breeders' Association committee has the signature of the bill was the president of the board of a Board of Veterinary Medicine, and in sending the veterinarian to the district of another. Protests to be settled by three appointed by the stallion register by the owner of the stallion, and other two.

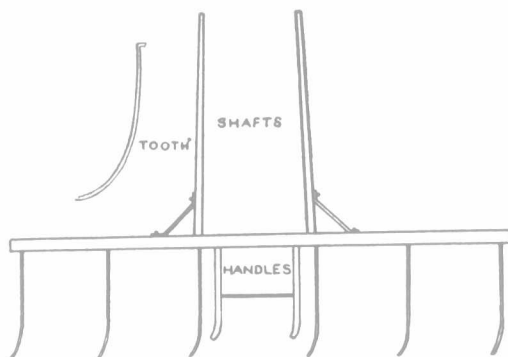
As Manitoba has many sound pure-bred stallions, a milder enrollment law, and was not until the bill came into force till 1914, by which time owners of grade horses would have appeared

dispose of them, it would seem that public opinion should sanction the proposal. Hereditary unsoundness should disqualify any stallion, and rarely, indeed, should a grade sire be used if a decent pure-bred is available. Some grades are good specimens, and an occasional one gets good stock, but the chances are strongly against it, as a rule. We may well consider whether a farmer who would deliberately choose grade horses to save a few dollars in service fees should not be protected from his own folly.

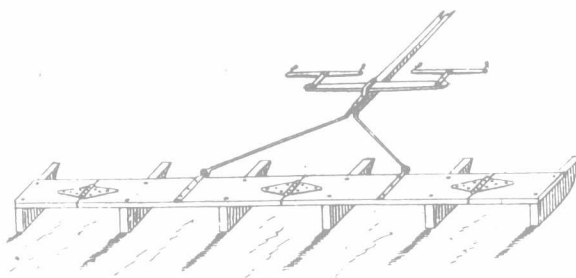
THE FARM.

Corn Markers.

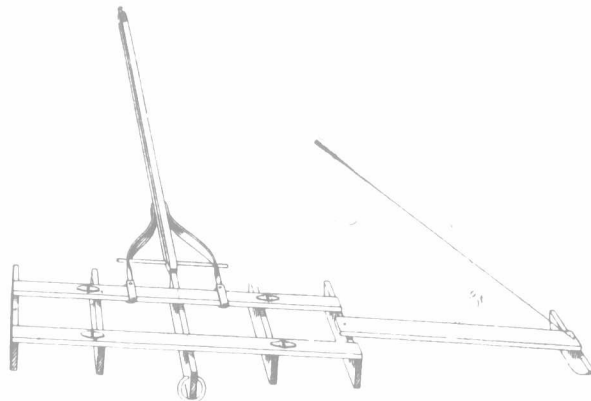
A request has come in from a correspondent for a cut and description of a four-horse corn-marker. Descriptions and illustrations of different styles have from time to time appeared in "The Farmer's Advocate." We give at this time three illustrations. If any of our readers have a marker which they consider better than any of these, we should be pleased to have a



No. 1.—Handy One-horse Marker.



No. 2.—Folding Two-horse Marker.



No. 3.—Two-horse Sled Marker, with Guide-board.

sketch and description of it for publication. No. 1 is light, and, though not so steady-running as the sled style, is more easily handled. Two decided improvements might be suggested for this implement. The teeth, presumably, are of steel, and could make at best but an indistinct mark. If—as is done by one of our subscribers—short wooden blocks, two or three inches in diameter, had a hole of the proper size bored in the center of one end, and one block were driven firmly on to each tooth, the marks made would be easily seen; and, the teeth being springy, the implement would accommodate itself somewhat to furrows or ridges. The other improvement would be to have one or, better still, two handles placed at each end, instead of in the center. If that were done, with one man to lead the horse, and another to guide the marker, with the inner tooth on the last mark, and holler at the other fellow when he doesn't lead the horse straight, the marks could be kept right across the field almost absolutely straight.

No. 2 can be folded when not in use, and the outer runners may be folded up when turning. In either of these, only five rows will be marked, as the marker will follow the outside mark already made.

No. 3, an improvement on No. 2, is a style that is much used in Elgin Co., Ont. This sled marker has five rows, with man standing on center, and a line made by the tracer or guide-board drops on pin on either side and is drawn across the width of three rows, and is drawn across the same ring.

Fair Building with Circular Roof.

We purpose erecting a building next summer for use at the fall fair. It will be what is called the "Main Building," for exhibiting everything excepting live stock. We have decided to build a building 100 feet long by 50 feet wide, and want to construct it without any center posts, the building to be supported on the foundation walls. Some of the committee have proposed to build a concrete wall 100 x 50 feet, by 10 feet high, and use a plank frame for the rest. We want a broken hip-roof. Whether would the cement or wood be cheaper for side walls, say, 10 feet high? Providing we build the wall as described, and the balance plank-frame, would you kindly give an estimate of the lumber required, and also a full estimate of the cement wall? We can get rough lumber at \$15 per M., and may say gravel at one-half mile distance. The openings will consist of two doors and twenty ordinary-sized windows. This building will also be needed for spring shows, judging classes, auction sales, etc.

ANDREW KNOX.

A building with circular roof and dome ends would meet your requirements, and cost less than any other, besides being strong and pleasing in appearance.

The inside being circular at each end, is of the best possible form for showing up horses, etc., at spring shows, auctions, etc.

The ribs are made of two thicknesses of 2-in. x 10-in. x 10-ft. plank, and are on 4-ft. centers, thus allowing of 12-ft. lumber being used in boarding in roof and sides. The end ribs set about 7 ft. apart at bottom, and all run to one point against side of end rib of main roof at very center, like a lot of large hip rafters from a circular-like plate.

The planks lap one-half on each other, thus breaking joints, and are bolted and spiked very securely together.

The sill is built of two thicknesses of 2 x 10-in. planks, which are bolted securely to cement or stone wall, or in some cases to concrete or wood piers.

The ribs and bents are tied and trussed with 3-in. cable in three points, and are very strong and cheap, considering the span they cover, giving an entire open space 50 x 100 feet, without a single obstruction from floor to roof, except these few truss wires.

The vault-like ceiling, being smooth and high, without corners, causes a band to sound at its very best, the height of this ceiling being 25 feet, if simple circle is used, but the sides can be raised to any height, and this roof thrown over it.

The work of framing is very simple, and quickly done; but, if convenient, it would be possibly money saved to employ an expert to instruct the builders for a day or so.

If the Exhibition Association decide to go on with this form of building, I will be pleased to submit drawings for publication, if the editor cares to give the space in "The Farmer's Advocate."

But, as this style of construction is not of much use for farm building, I do not think it advisable to take up valuable space with drawings until the Society have decided to build after this particular style.

The following is the bill of material, and I might add that anyone desiring to see one of these buildings can see the Ormstown skating rink and the Huntingdon skating rink, both of which I designed. Also, the Colosseum in Montreal is after this design, with an unobstructed span of 100 feet, by 50 feet high.

BILL OF MATERIAL FOR BUILDING 50 x 100 FEET.

14 main ribs, 16 pieces, each 2 in. x 10 in. x 10 ft.—224 pieces.....	3,808 ft.
20 half ribs, 8 pieces each, 2 in. x 10 in. x 10 ft.—160 pieces.....	2,720 ft.
Surfaced wall and roof boards, 1 in. x 12 ft.	9,512 ft.
40 pieces, 2 in. x 10 in. x 14 ft., end circle sills.....	920 ft.
18 pieces, 2 in. x 10 in. x 14 ft., side sills.....	360 ft.
	17,320 ft.
17,320 sq. ft., at \$15 per M.....	\$267.60
90 squares roofing iron, at \$5.....	450.00
1,600 lineal feet 2-in. wire cable, at 4c.....	64.00
768 1 x 1 1/2 in. bolts and washers.....	18.56
200 lbs. 4 in. nails, at \$2.70.....	5.40
100 lbs. 5 in. nails, at \$2.65.....	2.65
300 lbs. 3 in. nails, at \$2.80.....	8.40
Labor of building.....	280.00
	\$1,096.61

Cost of low wall or piers would be same for this as any kind of frame. The windows are set dormer-like, about 8 to 10 feet above the ground. Huntingdon Co., Que. A. F. A. GILMORE.

Green Mold in Silage.

A. O. Telfer, of Middlesex County, a couple of weeks ago brought in a sample of silage which was infested with a green mold. Mr. Telfer informed us that the mold is not found near the outer edge of silage, but at least two feet from the wall. In his silo this year this mold is found principally on one side, where it shows in a sort of half circle about two feet wide and two feet clear from the silo wall. Small spots of it are seen also in other parts of the silo. Once in a while he seems to get below the mold-affected part, but mold either starts again in the same place, or else more of it is again uncovered. Alex. Robb, a neighbor of Mr. Telfer, mentioned to us last year having trouble with this particular green mold, but this season his silage is free from it. He is inclined to attribute the presence of the mold to his corn not having been mature enough. Mr. Telfer says his corn this year was not as ripe as he prefers to have it, but declines to asser-t the probability of that being the cause of the mold.

The sample was sent to Professor Harrison, Bacteriologist, of Macdonald College, Que., who finds that it contained mostly the common blue-green mold (pencilarium glaucum), but that there was also another green fungus present, a species of Aspergillus. The only explanation Prof. Harrison offers for the facts as given by Mr. Telfer, is that the exterior of the silo was sufficiently cold to prevent the development of this mold. It is quite possible, he says, that mold will develop as the silage is removed, particularly if the temperature is favorable. The spores of many of these molds are probably present on the silage, and only require the usual conditions for germination, which are moisture, suitable food supply, air, and sufficient temperature. Remove any one of these conditions, and the mold will fail to develop. In the silo, the condition which is usually absent is lack of air or oxygen, hence the spores cannot germinate, and the mycelium cannot grow. I do not think that the spores of these molds are killed by the fermentation which goes on after the corn has been put into the silo, and hence they may be said to be awaiting favorable conditions for germination."

Inoculation and Lime in Alfalfa Culture.

Judging from correspondence received by "The Farmer's Advocate," discussions at farmers' meetings, and inquiries for seed, there is likely this season to be a greater area on Canadian farms this season sown to alfalfa than during any previous year. In New York State, where the natural conditions are not greatly dissimilar to those of Ontario, an investigation to determine the real need for inoculation and applications of lime has been going on for several years at the New York Experiment Station, Geneva, and on some 200 farms throughout the State. In summing up, about one-half of these were eliminated because of inaccuracies. In each case there were four plots: (1) No lime and no inoculation; (2) lime and no inoculation; (3) no lime and inoculation; and (4) lime and inoculation. The inoculating soil was from an alfalfa field at the Station, sown broadcast at the rate of 200 to 300 pounds per acre just before sowing the seed. The stone lime, finely slaked, was applied to the soil and thoroughly worked in, two or three days before the seeding to alfalfa, about 1,500 pounds to the acre. (See illustration, page 650.)

Dr. W. H. Jordan, the director, reports that where neither inoculation nor lime is applied the chance of a successful crop is not more than 20 per cent., or one chance in five; where lime is added, the chance is raised to about 60 per cent.; and where both are used, the chances of success are raised to four out of five. Sensitive litmus paper is used as a test of the soil to determine the need for lime. The conclusion is drawn that the natural lack of inoculation and of lime in the fields of the State is responsible for the larger part of the difficulty in establishing alfalfa. Of the two, the lack of lime is reported the more common, as practically all fields respond to its application. However, the lack of inoculation is more often the controlling factor, and the application of soil changed about twice as many fields from a failure to a success, as did the application of lime. When sufficient inoculation is already present in a field, the addition of more is without apparent effect. Good results are not to be expected unless the soil is thoroughly drained, reasonably fertile, and so well prepared as to destroy the maximum number of weed seeds. Then, the best and most economical way to determine the need for inoculation and lime is to try an experiment according to the plan in the New York Experiment. In Canadian practice, good stands of alfalfa are usually secured without either inoculation or liming, but it is well worth considering whether still better and more profitable results might not be secured by their application. In the way of experiment, why not give the treatment a trial?

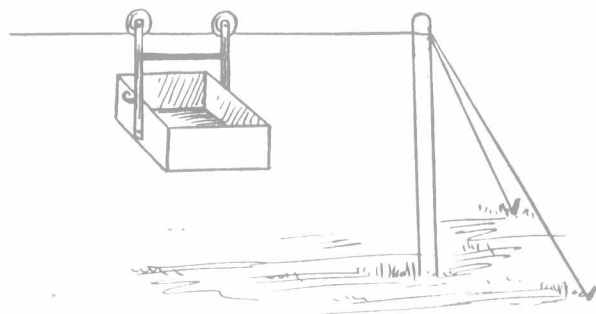
Labor-saving Devices.

FIRST-PRIZE ESSAY.

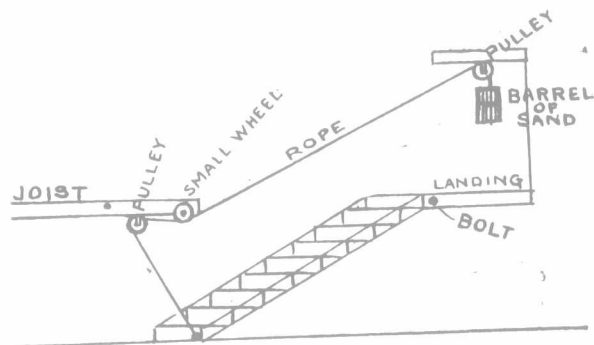
Editor "The Farmer's Advocate":

The labor-saving devices on our farms are many. A man can very seldom walk through a neighbor's building or over his farm but he will, if he is wide-awake, get an idea, or see something done that is an improvement on his own methods, thus saving time and many inconveniences. I believe in the old saying, "Two heads are better than one."

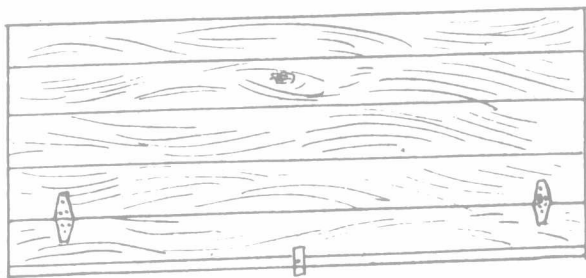
No. 1.—One day, when I was drawing my turnips into the barn, taking the box all to pieces, and letting them roll into the root-house below through the trap-door in barn floor, they were unusually scattered, when I noticed the sling ropes there, and wondered if I could not save time by using them. Accordingly, I unfastened my team from the wagon by just removing the draw-bolt. I then took a sling rope and fastened the ends to the two front wheels of the wagon. The big rope was then fastened firmly to the scaffold beam above, and on it was the hook pulley. The rope



Homemade Litter Carrier.



Device for Raising Steps.



Manger Trapdoor, Closed.



Manger Trapdoor, Open.

(Our artist should have had trap fold clear back, with a button to hold it.)

was allowed to hang down several feet, and then returned again and went through a pulley that was fastened to the same beam above. It then came down and went through the pulley that is at the floor on the side post—the one that is always used when "drawing off." We then blocked the hind wheels of the wagon, fastened the hook on the hook pulley to a ring on the sling rope that was attached to the front wheels, pulled out the end board of wagon, opened up the trap-door, hitched the horses to the end rope as if to draw off. We went out far enough to have the front wheels raised about three or four feet, rolling the turnips into the root-house in a hurry. The horses are soon backed up to lower the wagon. They are then unfastened from slings, and hitched to wagon after rope has been taken off, and we are soon out in the field again.

It does not take long to fix up this contrivance in the first place, and, after it is once prepared, we can unload in from three to five minutes, saving labor, as well as time. I have unloaded my roots in this way for several years, and would not think of going back to the old-fashioned way.

No. 2.—Every farmer knows that clover chaff and dust are not good for horses, and there always seems to be a large amount in the bottom of their mangers. I took a narrow bottom board off the front of their mangers in the feed-room, and with my hand I could clean out these mangers very easily every day. I left it off while feeding hay of any kind; but I feed some cut straw in the winter, and I found that it came out, so I put the board back into its former place, and fastened it there by hinges. I put a button to hold it closed at the bottom, and one at the top to hold it open; and so I have a handy little trapdoor, and my horses' mangers are always clean. My feed-room is between the horses and the cattle, and everything that comes through the trapdoors as left-overs is given to the cows, and nothing is wasted.

No. 3.—One can go into some barns, and the steps leading upstairs are conspicuously present, because they seem to be so much in the way; but as they are absolutely necessary, they must be tolerated. The steps in my barn were very much in the way, and one stormy winter's day I undertook to remedy this. At the top I fastened them by large hinges to the barn floor (our steps lead first to a small landing). I fastened a stout rope to the bottom of the steps, and then attached a pulley to the joist, directly above. Another pulley was then attached at the edge of the landing to another joist. At the ceiling above the landing was placed another pulley. I then put the rope that was attached to the bottom of the steps over the first pulley, under the second, and over the pulley attached to ceiling above landing. To the end of the rope is attached a nail keg, in which is placed enough sand to balance the steps. It takes a very slight lift to put them out of the way, and one can have the floor clear to use as desired. If the landing is not built high enough to allow the keg to come down far enough to put the steps out of the way, why, put a hole in the floor of it, and the keg will come down the desired distance.

No. 4.—I made a cheap litter carrier by making a box about three by four feet, and a foot deep. I took it to the blacksmith, and got him to strengthen the corners with iron bands. He also made the frame that goes over the top out of an old wagon tire. The frame is fastened near the bottom of the box, about an inch to one side, so that it will dump. The dumping is regulated by a weighted pin. I made the cable out of No. 13 wire, about fifteen strands. I twisted it by fastening all the strands together to a post and the other end to a wagon wheel, and, by turning the wheel, the wire was twisted. The cable was fastened to the far end of stable, and from there to a high post in the barnyard. The post was braced solidly, and I found it to work very successfully. GORDON BANTING.

Middlesex Co., Ont.

The Closet on the Farm.

Editor "The Farmer's Advocate":

In "The Farmer's Advocate" of March 16th, "Onlooker," writing on the above subject, rightly remarks, "delicacy prevents a great deal being said." Nevertheless, it is a vital one to the health of the women and children. I am sure the draft and coldness of many of the closets is the unsuspected cause of many an illness. We have no modern improvements in our house, yet we get over the difficulty in a way at once simple and effective. We have an unused room, and in this is kept a "night stool" or commode. I do not think they are costly things to buy, but, at any rate, one could be easily made. A zinc pail is used, and a pan of ashes, with a shovel kept beside it. A free use of these will prevent anything unpleasant arising. The pail should be emptied at least once a day, rinsed round with hot water, and if handy, disinfectant used. The pail is emptied at some little distance from the house into a hole dug before the frost hardens the ground, and when winter is past, it is covered over with earth. Two pails, one to use, and one to air, are better.

Everyone has not an unused room, but a clothes closet, with a window made in it, would do; but never use any closet without a window. If this is not possible, a closet, with night stool and pails, could be made for winter use, much closer to the house than that used for summer, and a way made to it through a woodshed, perhaps.

It is the hole in the ground that makes the usual closet such a cold, drafty place, and we have never let the little children be exposed to it. A FARMER.

Brant Co., Ont.

Passing a Good Thing Along.

I have been so pleased with your agricultural journal, "The Farmer's Advocate," that I have decided to make a present of a year's subscription to a relation of mine in Scotland, who is a Clydesdale breeder, and a good judge of horses in general. I have received some very valuable information on different subjects through your valuable paper, hence my desire to let my friend have the same benefits. JAS. D. CARRUTH.

Hochelaga Co., Que.

Wants Government Ditching Machines.

Prof. W. H. Day (Bulletin 174) says that, after careful inquiry, he has made the calculation that at least one-third of the cleared land of the Province, or 4,710,000 acres, is in urgent need of underdrainage, which would bring an annual increase in crop worth \$94,200,000, and this leaves out of the question altogether 5,000,000 acres of swamp, marsh and waste lands that are useless because too wet for cultivation; but he says that, at the present rate, it would take one hundred years to accomplish the drainage. But does it need to take 100 years? Does it need to take 25 years? If it is left to individual enterprise and to old methods it will likely take 100 years to accomplish, but if it is taken hold of by our Government, and with the steam ditchers, and put through with the energy that could be put into it, 25 years would see a vast change for the better throughout our Province. But it might be said that such a scheme is out of the realm of Government enterprise, but we understand our Government to exist to look after the general wellbeing of our Province. It takes hold of many large interests of our Province—our mineral and timber lands, building of railways, opening up new parts of the Province for settlement, development of electric power, etc.—into which it puts many thousands of dollars, and all for the material wellbeing of our Province; and which of these, or all of them put together, will give anything like the immense and perpetual profits that the underdrainage of our country will give? The Government did a wise thing to inaugurate and carry on through the O. A. C. Department of Physics the systematic surveying of wet lands for underdraining, but we are practically where we were, and are waiting the next move. I have realized for many years, though my farm could not be classed as a wet farm, that a thorough system of underdrainage would greatly benefit, but the thing was to get the system at a reasonable cost, and then get the right men to carry it out, neither of which seemed to come my way, until the Government's proposition to meet the farmers' wants through the O. A. C. Department of Physics. This I considered a splendid proposition, and I made early application, which was responded to by Prof. Reynolds (by whose suggestion, I believe, the plan was adopted) coming up to my place, and not only taking a survey, but also giving a public demonstration on underdrainage; and a short time afterward a chart of my system was forwarded, and a good deal of information in detail relating to the working-out of the plan. Well, so far, very good; but the next thing was to get capable men to do the work, which has proved unattainable. The Government has also another splendid standing proposition, and that is to advance money at a low rate of interest, and repayment in easy annual installments; but, to round up this whole plan, we think the Government needs to go one step further to enable the farmer to put into operation the two standing offers now before them, and that is to purchase one or more steam ditchers to begin with, and increase the supply as the demand for their use increases, have them properly manned and placed at the disposal of applicants, regardless of distance between places. It might be said, perhaps, that a plan of that kind would interfere with private enterprise, but we don't think it would materially affect any machines that are now in the country; at any rate, there are some things that can't afford to wait for private enterprise. The same might be said of other public works undertaken by the Government. Last spring we made inquiry of Prof. Day as to the probability of being able to secure the use of a steam ditcher in the near future, and his reply was that, while several new machines were coming in, they were all heading for Essex and Kent Counties, and he could give us no assurance when one would be obtainable. So much for private enterprise; the machines go where the best promise of steady work is offered, and rightly so. Then, let the Government take hold of the more scattered jobs of drainage. A farmer could then make application for a machine, and depend on getting it at the time agreed upon, and in the meantime get his survey and have the tile on the ground; and if he needs to borrow Government money, he will know that it can all be used at once, and he will get the immediate benefit of his outlay. And then, think of the ease and pleasure with which land is cultivated under such conditions. We think this a grand opportunity for our Minister of Agriculture to launch out into. We feel confident that, were a plan adopted somewhat after the method outlined, a new era would dawn on the agriculture of our Province. Our sons would see such great possibilities in agriculture that, instead of seeking a living anywhere else, they would be satisfied with the farm, and a thorough training at our Ontario Agricultural College, and return to the old home after the most intelligent preparation. The education of farmers would come first, and then their place socially,

politically, or professionally, with any class or calling in our country, and agriculture would be looked up to as one of the most desirable professions in our land. RICHARD HAMPSON.
Wellington Co., Ont.

Experimental Errors.

By B. Leslie Emslie, P.A.S.I., F.C.S., C.D.A. (Glas.).

In chemical terminology an "experimental error" is the exceedingly small or infinitesimal discrepancy between the actual and detectable results of a test. It is the limit of error permissible, an unavoidable but negligible quantity. With such errors it is not at present our intention to deal, but with the grosser errors, whose enormity, in that they are avoidable and almost unpardonable, approach in degree the sins of omission and commission. "To err is human; to forgive, divine." We are all prone to the former, but, unfortunately, slow to exhibit any little spark of the divinity which may repose in our natures, and if there are any "angels in disguise" amongst us, the disguise is usually so thorough as to defy detection. Well, lest this should assume the nature of a theological discussion, let us get down to the hard facts of the present work-a-day evil world.

The object of an experiment is to discover some unknown truth or to establish or confirm this truth. The experimenter owes it to himself and to those in whose interest the experiment is conducted, to thoroughly satisfy himself that he has got a proper basis on which to make the test and to endeavor to eliminate any undue elements which might become factors in influencing the results.

A careless experimenter in a position of trust becomes virtually a "blind leader of the blind," and morally responsible for the consequences of his inadvertency. Having realized, then the necessity of exercising the greatest care and prudence in the conduct of experiments, let us consider the application of these principles to those experiments in which we, as farmers, are most intimately interested, confining ourselves, for the present, to those which have to do with soils and cropping.

A farmer's experiments are numerous and varied. A few of the more important may be classified as feeding tests, milk-production tests, and crop-production tests. The last embraces tests of quantity and quality of crop yields, as produced by different varieties of plants of the same species, change of seed, various methods of cultivation, manuring and fertilizing.

For purposes of illustration, we shall only deal with crop varieties and fertilizer tests.

The selection of plots would appear to us to demand much judicious care, since in both cases it is fundamentally essential that the plots should be as nearly equal as possible in the nature and quality of soil and previous treatment. If the land has a considerable slope, we should naturally decide to have the plots run as nearly as possible parallel with the direction of the slope, so that the drainage in all cases might be equal.

The size of the plots is another important consideration, and something can be said in approval and disapproval of both large and small plots. Confronted with the choice, we should argue that it is much easier to find equal conditions within a small area; but then, we shall have to be more accurate in details when making our computations at seed time and harvest.

The nature of the crop to be experimented upon might also guide us in this respect. For instance, in an experiment with potatoes, the failure of a few tubers to germinate would more seriously affect the ultimate total yield of a small than a large plot; whereas, with a cereal crop, the failure of a few grains to germinate would have a relatively lesser effect.

When very small plots are employed, we would prefer to have them separated by a margin of at least two feet in width, which would serve as a footpath, and at the same time facilitate seeding, fertilizing and harvesting the small quantities involved, besides obviating, in the case of the fertilizer experiments, the blending at the borders of the different fertilizers employed.

The treatment of the plots, as regards cultivation, must be the same in every case, and in the variety tests the manuring or fertilizing must be the same over all. In fertilizer tests, the variety of the crop must essentially be the same on all plots, but, of course, the fertilizer will be varied, since here the fertilizers are at test.

The fertilizer ingredients which we have to consider are the three, nitrogen, acid phosphate, and potash, and it might be in place to give here the recognized basic plan of experiment:

- Plot 1.—Check plot, no fertilizer.
Plot No. 2.—Complete fertilizer (nitrogen, phosphoric acid and potash).
No. 3.—Without potash, but same amounts of phosphoric acid and nitrogen.
No. 4.—Without phosphoric acid, but same amounts of potash and nitrogen.
Plot 5.—Without nitrogen, but same amounts of phosphoric acid and potash.

The results may be augmented by the addition of further plots, or series of plots to test the effect

of each ingredient applied separately, or of varying combinations or quantities of two or more ingredients. If barnyard manure is used as an adjunct, it is obviously essential to apply it equally on all the plots of the series.

We have now outlined the necessary precautions to be taken in conducting the experiments, under discussion, and it all appears to us very simple and self-evident, yet the curious fact remains that frequently men of more than average intelligence, in conducting such experiments, either lose sight of, or ignore, the use of these precautions, which is the sine qua non of success.

We have heard such men explain the superiority of one variety of grain over another, in a variety of tests, as being probably partly due to the fact that the plot on which the highest yield of grain was produced was in a more fertile condition, having had a heavy manure application in the previous season. Likewise, we have known—not one, but many—fertilizer experimenters state in their reports that the reason that a certain plot gave such a low yield in comparison to the others might be owing to the fact that a different variety of potatoes was grown on that plot, this variety being naturally a lower yielding than the other. These men are samples of what we should call gross experimental errors.

We could even cite instances of men, posing as authorities among us, who will point to the result produced by the application of a single fertilizer ingredient, and because the increase in the yield may have been insufficient to return a profit in that particular case, owing to the deficiency of the other essential ingredients, pretend to deduce therefrom the fact that the fertilizer employed is unprofitable on that crop and soil.

An analogy would be represented if the experimenter would diet himself for a certain period on water alone, and then, because he did not gain in weight on his water diet, declare that water was useless to the human system. Likewise, he might diet himself for another period on bread alone, and, because the results were still unsatisfactory, declare bread to be unprofitable to his bodily requirements. But let him try a combined bread-and-water diet, and the results will be very different. Now, do not show such alacrity in jumping at the apparent insinuation that we would condemn such experimenters to a term on bread-and-water diet, with its usual attributes. Let us rather exercise the forgiving spirit, and try to reform them by less rigorous methods.

The successful experimenter ought to be careful and painstaking, possessing, besides, a keen observation, and yet not depending too much on his visual powers, or he may fall into error. We know experimenters who have had such faith in their powers of observation that, because they could see no difference between the plots of grain, at once condemn the experiment as a failure, without troubling to harvest and weigh the produce separately. Now, he is a very clever experimenter who can measure results in this way, for we have often seen a crop of growing grain, where the difference in growth of the various plots did not appear evident to the eye, produce, after harvesting widely-varying results, particularly in the quantity of grain and weight per bushel.

The residual effects of fertilizers seem to be taken rarely into consideration by experimenters, and yet how important they are, as we shall endeavor to prove. How frequently we find the efficacy of a fertilizer measured only by the results produced in the season of its application; whereas, if means were taken to ascertain its after effects, it would be found effective for at least three subsequent seasons. This is certainly true of the mineral fertilizers, although not in the case of nitrogen, which gets leached out of the top soil.

Now, the "Agricultural Holdings (Scotland) Act," which provides compensation for unexhausted improvements being paid to an outgoing tenant of a farm, assumes in its scale of compensation that fertilizer materials are exhausted at the following rate:

Fertilizer applied.	Rate of Exhaustion.
Nitrate of soda	On arable land entirely exhausted by first crop.
Sulphate of ammonia.	On arable land, $\frac{1}{2}$ exhausted by first crop, and $\frac{1}{4}$ of remainder by each succeeding crop.
Acid phosphate and all potash fertilizers.	On arable land, $\frac{1}{2}$ exhausted by first crop, and $\frac{1}{4}$ of remainder by each succeeding crop.
Basic slag.	On arable land, $\frac{1}{2}$ exhausted by first crop, and $\frac{1}{4}$ of remainder by each succeeding crop.
Dissolved bones.	On arable land, $\frac{1}{2}$ exhausted by first crop, and $\frac{1}{4}$ of remainder by each succeeding crop.

From this table can be seen the estimated period of efficacy of some of the more popular fertilizer materials in a moister climate than ours. So we would naturally assume that in this country the effects would be even more prolonged. Fertilizers require a certain amount of moisture to produce their solution and assimilation, so that in a dry season, especially if applied late, we should not expect them to produce so much effect as they would in the subsequent season. In our experimental work we ought to take advantage of the base lines laid down for us by those who have gone before, and have spent their money in wresting from nature some of her

manifold and marvellous secrets, that we should not have to grope after them in the dark. Let us endeavor to prove ourselves assiduous in our application to whatever experimental work we undertake, praying, meanwhile, that we be not led into complications, but delivered from error.

THE DAIRY.

British Columbia Dairying, and Succulent Feeds.

Editor "The Farmer's Advocate":

In my opinion, British Columbia is one of the best places in the world for the dairy farmer. First, because of the high prices paid for butter and milk; second, our mild and open winters make it very easy to keep cows, as compared with the colder Provinces east of the Rockies; third, owing to our more humid climate, the pastures are very luxuriant; fourth, the winter betures are very short, it is not necessary to stable the cows as long as in most places. With the exception of about six weeks, the cows can stay out five or six hours a day, pick up quite a lot of feed, and get a good sun-bath. Fifth, our crops are excellent, clover growing luxuriantly.

Thousand-headed kale is coming to the front as one of our succulent feeds. This gives a crop of from fifty to one hundred tons to the acre. To get the best results from this plant, however, the farmer must have his land in the best of condition.

In a large part of the country, clover is the greatest of all the plants, not only for hay, but is preserved for feeding green through the fall and winter. A. C. Wells, of Chilliwack, the owner of the Eden Bank Creamery, and one of the most successful dairymen of the Province, puts his green clover in stacks. He has followed this plan for many years, and always finds it quite successful. On the side of a steep hill he has excavated a pit, with a high earth wall on one side and both ends, and on the other side he carefully builds up the clover as it is hauled in. He sends the mower out in the morning, right after breakfast, to cut the clover, which must be in the right stage of ripeness (about one-tenth of the blossoms dead). When the dew and dampness have dried out, which perhaps takes two to three hours, he starts hauling in. The wagons are loaded, and are driven on the high side of the pit, and it is very easy to unload down hill. The clover must be well spread and tramped, and the one side must be cut plumb, and the clover kept tight against the walls of the other side and the ends. In this manner he keeps on filling his pit until it is about six feet above the wagons, which is about as high as it is profitable to pitch his clover. This makes a stack about thirty feet high, and has over two hundred tons of good feed ready for use. Then, when he has tramped his silage thoroughly, he puts about two feet of earth on top, and his silo pit is finished. He finds that not more than two inches spoils on the outside, and that only on the one exposed side. When he wants to start to feed, he begins on the open side, removing about a four-foot strip of the earth roof, and cuts his strip down as far as he thinks he will require for the day's feed, continuing this strip day by day until he reaches the bottom. He finds that the best implement for this purpose is a hay knife. By doing this, but very little of the silage is exposed to the air at a time. He does not haul this silage to his stables, but loads it in a wagon and hauls it to a long, open shed which is provided with mangers. After the cows are milked in the morning, they are turned out to get a drink, and are then let into this shed, where they eat their fill, and then lie down for the remainder of the day. He feeds his hay and concentrates only in the stables. Many other farmers in the Chilliwack Valley follow the same method, and all speak well of it.

Thousand-headed kale has almost displaced corn silage in the neighboring States of Washington and Oregon. The best method for growing this plant in British Columbia is as follows: About the first of January, after the heavy rains are over, plow a piece of good clover sod, selecting a piece of good clay loam, if possible; manure it heavily, putting on at least thirty tons of barnyard manure to the acre. About the first of February apply a commercial fertilizer rich in potash and phosphoric acid. Put on about 500 pounds to the acre, broadcast. As soon as the sod begins to mellow in the spring, give it a good harrowing with a disk or spade harrow. About the middle of April cross-plow the land and harrow alternately, every ten days, with spring-tooth or disk harrow, till about the middle of June. The land should then be in good heart for growing a good crop. About May 15th set a seed-bed for sowing the kale seed. This should be good rich soil, and free from weeds. Sow in drills about 12 inches apart. Put the seed in rather thickly—about one-half inch deep. Water occasionally, but do not thin out. The plants should be about five or six inches high by

June 15th. It is about the right time to transplant. Make the team and plow, and, starting on one end, draw a furrow across the field. Have a board drop the plants, right end up, about twenty inches apart. Another man follows and draws the earth around the plants. The team continues marking the furrows, three feet apart, until the field is finished. A cloudy day is best for transplanting. Kale grows so rapidly that very little cultivation is possible. About two or three good scuffings with the horse-hoe is all that can be done. After that the leaves begin to touch, shading the ground so much that weeds cannot grow. About the first of October the kale is ready to be fed. To gather it, two men can work to the best advantage. Take a team and wagon, and, while one man sticks a fork in a plant, the other cuts it off with a long sickle close to the ground. It is then thrown into the wagon. Three good plants, weighing 20 pounds apiece, fed right after milking, make a good ration for a cow. Of course, she needs good clover hay and some meal. Leave the kale in the ground all winter; it will stand at least forty degrees of frost. It does not seem to affect the quality of the milk like turnips, as the condensed milk and butter factories in Washington and Oregon are quite willing that their patrons shall feed it.

In growing corn, we find that a clover sod is the best foundation for a good crop. Plow in January, haul out the manure as it is made, and put on about fifteen tons to the acre. Work the ground up well with the disk and spring-tooth harrow all spring. We find that the last week in May is the best time to plant. Put it in check-rows three feet apart each way, and drop about five kernels to the hill. We always drag-harrow the land as soon as the corn is planted. This breaks any crust that may have formed, and is a good cultivation. Run the horse-hoe both ways, keeping on cultivating till the corn is quite high. We find it necessary to go through the field once with the hand-hoe to kill the weeds that the cultivator has missed. When the corn is well glazed, and before the frost comes, put in the silo. As grain is the most expensive part of our ration, we like to have our corn a little ripier than most authorities recommend.

R. M. HALLIDAY.

Ontario Agricultural College.

Effect of Cream Freezing.

When cooler cans are used in making butter, does it hurt the cream to freeze, and how long should milk be allowed to stand in cans to get the full benefit of it?

A. CUNNINGHAM.

We have not noticed any particularly bad effects from allowing cream to freeze, though it is generally considered better not to allow freezing, if it can be prevented. Freezing is supposed to make butter "crumbly" in texture, whiter in color, and insipid in flavor; but, by churning and working properly, using butter coloring judiciously, and a pure culture (starter) to ripen the cream, these supposed defects may be largely overcome. When cows are all fresh, and the milk can be cooled rapidly (within two hours) after milking and setting in deep cans, practically all the cream which will rise on milk set in cans will be up in twelve hours. However, where some of the cows are "strippers," and in summer when ice is not available to cool to 45 degrees F., or lower, it is wise to allow the milk to set for 24 hours. It is seldom necessary to leave milk set longer than 24 hours, or, at most, 36 hours, in deep cans. The main points for good results in raising cream by the deep-can system is to have cows fresh, and cool the milk rapidly to 45 degrees F. or lower, but prevent freezing, if possible.

H. H. D.

What Will the "Average Cow" Do?

Dairy farmers are rapidly awakening to the necessity of weighing and testing each individual cow in the herd. Twenty new cow-testing associations have been organized in Quebec since the beginning of this year; twelve new ones have commenced operations in Ontario, two more in Nova Scotia, and one more each in Prince Edward Island and New Brunswick. This means at least four thousand more cows being checked up each month, in addition to the 11,800 in 1910. Probably many more members will be added this month.

The extension work provided for by the establishment of Dairy Record Centers is proceeding briskly. Centers are already in working order in Oxford and Peterboro Counties, Ont.; St. Hyacinthe, Que., and at Kensington, Prince Edward Island, with others contemplated. A supervisor has been appointed to extend cow-testing in British Columbia.

Some cows have started with excellent records for January and February. Yields of 1,690 and 1,490 pounds of milk, and over 50 pounds of fat, for the two months, are good indications of dairy possibilities for this season. What is the "average" cow intending to do this year?

Forms for recording weights of milk are sup-

plied free on application to the Dairy Commissioner, Ottawa. When applying, the number of cows should be stated, and whether forms are required for weighing daily or on three days each month.
C. F. W.

GARDEN & ORCHARD.

Spraying: Why, When, and How.

From the writer's experience at fruit institutes, and from his observations in different parts of Ontario, and conversation with fruit-growers, he finds that there is no subject connected with the orchard on which information is more desired to-day than on spraying. So far as possible, an attempt has been made to keep the fruit-growers supplied with up-to-date information on this important subject by bulletins, spray calendars, articles in the press, fruit institutes, and short courses, but there is constantly need of presenting the facts in a new light. Consequently, the present article is meant to help to put spraying and its importance before readers of "The Farmer's Advocate" in a clear and simple way. For details as to the proper time to spray and the best mixtures to use, see the Spray Calendar, issue April 6th.

IS SPRAYING A NECESSITY FOR SUCCESSFUL FRUIT-GROWING.

We have no hesitation whatever, from our own experiments and observations, even without referring to the experience of others, in answering "yes." It would be a crime against the public to advocate spraying if one were not thoroughly convinced of its value. There seems, however, no necessity for discussing whether spraying pays. Every day, letters are coming to us asking for information on how to spray, and what mixtures to use. Many of these queries come from districts where we had no idea that anyone was interested in this matter. Moreover, whatever may have been true in past years, it is a rare thing this year to meet anyone who makes light of spraying, because last season made it very clear that only in sprayed orchards need one look for good clean fruit. Hence, thousands of men all over Ontario are planning this year to spray their orchards for the first time. So much is the case that manufacturers of spray machines are finding difficulty in supplying the demand. To illustrate the remarkable progress that is being made in this matter, I shall mention the case of Prince Edward County. Four years ago there were not more than half a dozen men who sprayed their orchards. This year I was informed, when in the county, that nearly one thousand men are preparing to do so; and this is all due to the results that they have witnessed the last three years from careful, thorough spraying on the part of a few progressive men.

The value of spraying is also well attested by the fact that we do not know of a single really successful fruit-grower of high reputation to-day who is not an enthusiastic advocate of thorough spraying. Moreover, the apple-buyers, who should certainly know what they are doing, passed a resolution last November at the Fruit Exhibition in Toronto, to the effect that they would no longer buy apples from any man who did not spray.

That our orchards are badly in need of spraying, is also clearly demonstrated from the statement of our chief fruit inspector, that less than 10 per cent. of the total apple crop of Ontario last year graded as No. 1, and the year before not more than 30 per cent. Yet, in contrast to this, we have seen well-sprayed orchards this year that graded at least 75 per cent. of No. 1 apples, and we have been informed of others that went as high as 80 per cent., or even higher.

REASONS FOR SPRAYING.

- There are three great reasons for spraying:
1. To keep the trees healthy and vigorous, so that they may live longer and bear better.
 2. To prevent the fruit from falling off the trees prematurely.
 3. To keep the fruit tree from injury by either insects or fungous diseases, so that it may grade high and bring a high price.

We shall now briefly discuss these three points.

HOW SPRAYING HELPS TO KEEP TREES HEALTHY AND VIGOROUS.

In addition to the insects and diseases that attack the fruit, we find that there are also present insects and diseases that attack the trunk, branches and leaves of the trees. San Jose scale is found in hundreds of our orchards, from Sarnia to Hamilton; oyster-shell scale is present in almost every unsprayed orchard; blister mite, during the last few years, has spread to numerous orchards in almost every county, and is constantly increasing; bud-moth, case-bearers, canker-worms and several other biting or sucking insects are always more or less prevalent. Some of these, such as the scale insects, by attaching themselves to the bark of the trunk and branches, cause a great drain upon the strength of the tree, and sometimes even kill it. Blister mite and other leaf-injuring insects weaken the trees

by attacking the foliage. In the same way, we have fungous diseases, like black-rot canker, always ready to get into injured places, such as wounds or sunscalds, and, by gradually extending into the healthy tissues on each side, at last completely girdle the part, and thus cause all the portion above it to die. This disease is frequently the cause of the dead branches one sees on trees. It also, in some cases, kills the whole tree. This is true especially of districts east of Toronto. Apple scab regularly attacks the leaves just as severely, or even more so, as it does the fruit, and causes dead areas in them. This last season much of the sickly-looking foliage of trees was caused by apple scab. Now, we often fail to recognize how important the leaves are to a tree. They are not only breathing places for the rest of the tree, but they are also the part where all, or almost all, the food of the tree is manufactured. Along little tubes or vessels in the sapwood the sap is sent up to the leaves. Here in the green tissues, by the energy supplied by the sunlight, it combines with gases taken in out of the air, and is changed into sugar and starch, and is then distributed to every part of the tree where food is required, and is also stored up for the next spring's growth. It is only the green part of the leaves that can manufacture the food, therefore every injury to the leaf from insects or disease, by lessening the green area, also lessens the amount of food supply for the fruit and for the whole tree, and thus diminishes the profits of the owner. Most of this injury can be prevented by thorough spraying.

HOW SPRAYING HELPS THE FRUIT TO HANG ON THE TREES.

In many districts this last season the only orchards that bore a crop of apples were the well-sprayed orchards. In other orchards the fruit almost all fell early in summer. Every one of the hundred or more men who attended the demonstration in the orchard of M. C. Smith, at Burlington, on September 7th, last autumn, must have been forcibly impressed by the great contrast between the way the fruit hung on Mr. Smith's excellently-sprayed trees, compared with the unsprayed trees in an orchard only about 50 yards away. There were scarcely any apples under the former trees, while the ground under the latter was almost covered with fallen fruit. We do not claim that this was all due to spraying, because cultivation helps, but even sprayed orchards in sod show that spraying is the main factor in keeping the fruit on the trees. There are several reasons why it does so:

1. Spraying controls apple scab, and apple scab is one of the main causes of the early dropping of fruit. The reason for this is that the spores of this disease are carried from old leaves on the ground to the new leaves on the trees in spring, and begin to germinate about the time the blossoms are bursting. If the season is damp and cold, and thus favorable for the growth of the fungus, and if the trees are not sprayed with a fungicide just before the blossoms burst, the scab soon produces a host of new spores, which spread everywhere, and, by alighting on the stems of the young forming fruits, begin to grow there. Little by little the disease circles the stem, cuts off the supply of food, and then the young fruit falls. This shows the great importance, in wet, cold springs, of spraying trees just before the blossoms burst. This last season, a good fruit-grower followed the advice of some well-meaning but mistaken friends, and omitted this application, and trusted to the application just after the blossoms fell to control the scab, as well as the codling moth. I visited his orchard in July, at his request, and found his foliage badly diseased with the scab, and nearly all the fruit on the ground. He estimates that his mistake cost him about \$1,000. He will not omit this application again.

2. The codling moth and plum curculio are great causes of the premature dropping of fruit, hence, by keeping these under control, spraying assists greatly in causing the fruit to hang on the trees.

3. Spraying, as mentioned above, helps greatly to keep the whole tree vigorous and healthy, and thereby gives the fruit a better chance to remain on.

HOW SPRAYING GIVES CLEAN FRUIT.

It scarcely seems necessary to go further into the explanation of this point. It is perhaps desirable, however, to add that, in the case of diseases like apple scab or brown rot, spraying is not intended to kill the diseases after they are once started, as it does in the case of insects, but our whole object should be to apply the spray at the right time, so that the spores which spread the diseases may not get a chance to grow. Experience has proven that if the leaves or fruit are covered with lime-sulphur or Bordeaux mixture at the times indicated in the Spray Calendar, the spores will not be able to grow in these mixtures, and, therefore, both leaves and fruit will be kept clean and healthy. Spraying will not kill the disease; it merely prevents the spores from growing, and in this way prevents the disease getting a foothold.

COMMON FAULTS IN SPRAYING.

There are a great many men who do not get nearly so good results from spraying as they should. This is because they have not sprayed intelligently. We must not expect spraying to work miracles. It will not kill an insect unless the insect gets the poison into its body. Insects do not seek the poison; the poison must be placed wherever the insects may be. It cannot ward off disease from a leaf or fruit unless the leaf or fruit is covered with the spray. We find, therefore, the following common mistakes made in spraying:

1. It is often done at the wrong time. This is a very grievous mistake, and often means that time and material are wasted. It is absolutely essential that the spraying be done at the times indicated in the Spray Calendar. Especially is this true of the second and third sprayings. More latitude may be allowed for the first. To illustrate the importance of spraying at the right time, it is only necessary to mention the codling moth. There are only ten days, at the most, in the whole year when this insect can be successfully sprayed for, and these are the ten immediately after 90 per cent. of the blossoms have fallen. At the end of this time the calyxes have closed, and it is impossible to get the poison inside, and unless this is done, the insect cannot be controlled. What has been said about apple scab above also shows how important for this disease it is to spray at the right times. If the orchard is infested with blister mite or oyster-shell scale, it will be found that far better results will be obtained by giving the first application as near as possible to the time when the buds are ready to burst, or are actually bursting, than earlier, though even earlier spraying helps against these.

2. Many men fail to spray thoroughly. They want to keep down expenses, and, by making one barrel of the mixture go over as many trees as four barrels ought to be required for, they simply throw their money away. It pays every time to spray thoroughly; in fact, the chief reason for poor results, in nine cases out of ten, is lack of thoroughness. Do not leave a tree till every leaf and fruit is well covered. Let thoroughness be your watchword. Insects will not be killed if the poison is not there to poison them; diseases will not be prevented unless the fungicide is on the leaves and fruit to prevent the spores germinating. Thoroughness is true economy.

3. Some men have such poor machines, or keep them so poorly packed that they cannot get sufficient pressure to scatter the spray properly. Have as good a machine as you can afford. A barrel pump costing about \$21 will do for about five acres of orchard; but, for a larger orchard, a better pump is required. Do not expect even a good double-acting pump to be able to do more than 10 or 12 acres of apple trees over 30 years of age. Keep the pump well packed. Use a tower for tall trees. Never spray with less than about 100 pounds pressure, if you can help it, and higher if possible. Clean the pump out by running clean water through it at the end of each day's work.

4. Sometimes one forgets to keep the liquid well agitated. This is very important, especially when a poison has been added, because even arsenate of lead will settle to the bottom of the tank, unless well agitated, and, therefore, the first few trees will get all the poison, or nearly all, and the rest get none. Good agitation will result in a uniform mixture for every tree.

WIND AND RAIN.

We are sometimes asked whether it is wise to spray in a high wind. Our answer is, yes, go right ahead; the wind will help you, especially in the case of large trees; it gives extra force to carry the spray to the furthest branches. One should always spray with the wind, except in the case of very small trees. Try to spray two-thirds of the tree from the first side, so that even if the wind does not change right around, you may yet be able to take advantage of a partial change to finish out what was left.

Will rain coming soon after the spraying require that it be done over again? No, not unless the spray has not had time to dry before the rain came. It will usually dry in about half an hour. It is true that prolonged or very heavy rains do to some extent lessen the value of the spray, but our standard mixtures to-day are quite adhesive, and will usually give excellent results, in spite of wet weather. If the weather, however, happens to be wet or foggy, in about two weeks after the third spraying it is usually wise to give a fourth application at once, lest there be an outbreak of apple scab.

NEW SPRAY MIXTURES.

From time to time new spray mixtures are advertised, and many are tempted to use them. We wish to advise fruit-growers to stick to the standard mixtures that have been well tested and that are recommended in the Spray Calendar. Leave others to test the new mixtures. If they are good, you will soon know of it. None of them, so far, are as good as the old mixtures, and they are much dearer.

WHAT PERCENTAGE OF CLEAN FRUIT MAY ONE HOPE TO OBTAIN FROM CAREFUL SPRAYING.

Our own experiments on old, unsprayed orchards, and our observations of the work accomplished by others, have convinced us that in an average year any careful sprayer should be able to get at least 75 per cent. of clean apples, and often he will get as high as 95 per cent. In some cases he cannot get this percentage, however, without careful cultivation of the orchard and the destruction of rubbish in and around it, because the plum curculio may be very abundant, and these things are necessary to supplement the spraying for this pest.

In conclusion, we wish to say that spraying alone will not give large fruit, though it will help. To get large fruit, the orchard should be carefully pruned, given whatever manure is necessary, and well cultivated from as early in spring as the land is fit, to go on until about the end of June, after which red clover or some other crop should be sown to act as a cover crop, and, by taking up the moisture, ripen up the wood for winter, and help give color to the fruit. Thinning fruit also helps greatly. The man who sprays well and finds he can get clean fruit, will usually take the other steps at once; and if he can get a few of his neighbors to co-operate with him, so that they have sufficient fruit to make a carload or more, they will find buyers anxious to bid for their apples; and, in consequence, will get higher prices than they have received before, thus paying them well for their labor. Successful fruit-growers claim that they can make an average of at least \$100 per acre clear gain from apple trees over 30 years of age and upwards.

L. CAESAR.

O. A. College, Guelph.

"No Fruit Without Bees."

That hive bees are an essential factor in the growth of fruit, is the conclusion reported in the Journal of the British Board of Agriculture, by W. B. Little, Instructor in Horticulture, Armstrong College, Newcastle-on-Tyne, as a result of a series of pollination experiments last year in England. The bushes in the trials were apples, black and red currants, and gooseberries. By means of posts, wire netting and white muslin, the berries and currants were enveloped before the blossoms had expanded, and continuing for about three weeks. When the netting was removed, a few undeveloped berries were found, but these soon dropped off, leaving not a berry on the bush. Similar bushes in adjoining rows had abundance of fruit. The currants similarly protected from visits of the bees during blossoming made an excessive growth of shoots and foliage, but no fruit; while the unprotected currants were laden with fruit. In the case of the apples, trees were chosen making a good show for fruit, and one representative branch was covered with muslin before the flowers opened, the others being left exposed. In each case the covered branch bore no fruit, while the other branches carried a good crop. As the non-setting or non-development of fruit might be attributed to the exclusion of sun and air by the muslin, a branch was covered with muslin after the flowers had been open several days, but before the petals had fallen, and thus had an opportunity of being pollinated. The muslin was then put on, and kept there until August 4th. Six well-developed apples were found on this branch, so that the exclusion of a certain amount of air and sunshine did not affect the setting of the fruit. In the case of another orchard of apples and berries, the nearest hives had been one and one-half miles east, and the prevailing winds from the west; the plot had very rarely given a satisfactory crop of fruit. Last year two hives of Italian bees were placed in the orchard, but, though the weather was very unfavorable, the bees were busy among the flowers during occasional gleams of sunshine. Not another variety of insect could be seen at work. An excellent crop of all kinds of fruit was harvested. The inference drawn was that in previous seasons the plantation had not been visited by bees in sufficient numbers. Other insects might play a part in the distribution of pollen, but few were found to be on the wing at flowering time. Prof. Little observes that whole colonies of wild bees die off in the winter months, with the exception of the females, which lie dormant until spring. The domestic bees, on the other hand, retain their full strength, and are ready for work with the first gleam of sunshine and appearance of blossoms. In favorable seasons, the wind undoubtedly aids in the distribution of pollen, but when wet weather is experienced in spring, it is probable that the pollen is not dry enough to be wind-carried, and the bees are still able to perform their useful offices as working partners with the wind, in accordance with the wonderful provision of nature.

The Co-operative Movement in Nova Scotia.

The history of co-operation in the packing and disposal of fruit in this Province has been much the same as in other Provinces. The necessity has arisen from the fact that the producer gets too small a percentage of the consumer's price.

In Nova Scotia, however, fruit has never been handled with as little reference or profit to the growers as in some parts of Ontario. As I understand the situation in the latter Province, a great deal of the fruit is or has been sold tree-run, or by the lump, so much being given for the fruit on an orchard, the buyer or speculator doing the picking, packing, etc.

This would be considered an evil, or, rather, a crop of evils, which has not arisen to any extent in Nova Scotia. Another rumored evil in Ontario, which has not been very successfully tried in our Province, is the understanding supposed to exist among different buyers to each take a certain territory to himself, leaving the producer practically without the benefits of competition.

This is simply to show that the necessity of co-operation in Nova Scotia, while present, has not been as apparent to the ordinary producer as elsewhere. As a result of the competition among shippers and buyers, Nova Scotians have averaged through the years rather larger prices than in the sister Province. The commercial bond between these shippers has been growing stronger, however, and the situation worse for the farmer, until, in this year of lean crops, the wolves on both sides of the Atlantic have, in their hunger for trade, lost some of their fellowship, with the result of good prices to the producer.

HISTORY OF THE MOVEMENT.

In 1906 a few farmers in the western end of Annapolis Valley tried to co-operate in shipping apples. They lacked the business enterprise to form a joint-stock company, and sought to hold the organization together by signatures to a paper promising to ship a certain number of apples through the association. The looseness of the organization killed it. The speculators jumped on it, and, by prevarication, misrepresentation and ridicule, scattered its members. To Berwick, which, by the way, exported 85,000 barrels of apples in 1909, or about one-eighth of the export from the whole Province, belongs the honor of starting successful co-operation. The Berwick orchardists felt that they might as well have the 75 cents to \$1.00 per barrel for their own use, which had been lining the pockets of middlemen, whose sole interest in the producer was to use him as a stepping-stone to wealth. Feeling that a joint-stock company was too exacting in its demands, and that a simple agreement amongst themselves was too loose for success, an act was produced in the Local House "To facilitate the incorporation of Farmers' Fruit, Produce and Warehouse Associations."

Since this act is the basis of organization of all the associations which have been successful, I will give a summary of its principal clauses:

1. Five or more persons may form a company to buy, sell or deal in fruit and farm produce, or to operate warehouses, by subscribing to a memo of Association provided for the purpose, witnessed before a Justice of the Peace.
 3. This Memorandum of Association shall be registered by the Registrar of Joint-stock Companies, who shall certify that the company is incorporated.
 7. The capital stock of any such company shall not be less than five hundred dollars, one-half of which must be subscribed.
 8. The directorate shall consist of from three to seven persons, the subscribers being directors until others are appointed.
 9. Election of directors annually.
 10. Each shareholder shall have one vote at all meetings for each share held by him, all questions being determined by a majority of voters.
 12. Officers shall be appointed by the directors.
 14. The company shall have power to make, amend or repeal any by-laws not contrary to the provisions of the act, and shall send notice of such changes to the registrar.
 15. Any shareholder's stock may be cancelled by the directors on neglect to pay any calls payable upon his shares.
 16. A shareholder shall only be personally liable to the extent of the value of his shares.
 17. No fee for incorporation or annual registration fee shall be payable by any company incorporated under this act.
- The last clause is the most important from a point of success, since the farmer hates to put out money for the privilege of forming a company. If the ordinary farmer can join a company for nothing, with no immediate likelihood of having to pay out cash, he is more willing to join than where there were initial expenditure. In the operation of these companies, very little or no actual capital is advanced. Warehouses are rented or built, and part principal, as well as all running expenses, are taken pro rata from the producer from sale of fruit. Each subscriber puts in his apples as they come from the trees. They are sorted into Fancy, No. 1, No. 2, No. 3, and

culls, and sold or otherwise disposed of. From the total amount received is deducted cost of packing and his proportion of all other expenses, and the net proceeds handed to him.

Thus, each shareholder's apples are handled to the best advantage by intelligent, practiced packers, without any worrying to himself. Each year the expenses are met, and the capital account for warehouse, etc., is gradually reduced, without being felt by the producer.

In ordinary years, only Fancy, No. 1 and No. 2 are exported, the remainder going to the evaporator or cider mill. This year, however, good prices have been realized for No. 3's.

Following are some prices netted to the growers by the association at Berwick this year:

	Fancy.	No. 1.	No. 2.	No. 3.
Gravensteins	\$3.75	\$3.39	\$2.25	\$1.33
Emperors		2.73	2.00	1.22
Wolf River	3.13	2.69	1.89	1.32
Kings	4.18	3.03	2.79	1.78
Blenheims	3.58	2.84	2.44	1.40

These are for the early apples. As high as \$5.00 per barrel has been netted for Golden Russets and Spies, and later varieties.

The companies subscribe from five to ten thousand dollars, and pay 10-per-cent. calls yearly on capital account.

At Berwick, each member subscribed \$500, and they have been paying 5-per-cent. calls yearly out of the sales proceeds. Here they have built a warehouse costing \$3,000, and an evaporator costing \$1,600.

A central organization is being organized to combine the operations of all the companies for the strengthening of the movement and getting better rates and prices. The following associations are in operation at present: Berwick, Kingston, Round Hill, Port Williams, Pereaue, Aylesford, Lawrencetown, Sheffield Mills, Waterville, Middleton.

The factors necessary to a successful association are a good manager who has the confidence of the shareholders; confidence in the organization, doing away with all petty jealousies; each member must feel personally responsible for the success of the association, and work toward that end.

R. J. MESSENGER.

Although one of the coarser vegetables, cabbage finds a place in the home garden, as well as in the market garden and the truck farm, and in some sections of the United States it is extensively grown as a farm crop. No adequate estimate, however, can be placed on the value of this crop, as it fluctuates very decidedly from year to year, both in acreage and price; but the output is large; the three States of New York, Pennsylvania, and Virginia, which outrank all others, grow commercially about 50,000 acres of this vegetable, either as a spring or autumn crop, in addition to the home-garden supply which was consumed at home.

POULTRY.

Decomposition in Drawn and Undrawn Market Poultry.

The results of the investigations into the comparative rate of decomposition of drawn and undrawn market poultry, made by the United States Department of Agriculture during the season 1909-1910, have just been published in Chemistry Circular 70. The conditions of the experiment were strictly commercial, as the fowls were killed and dressed by the regular employees of a poultry-packing house; were shipped in the usual one-doxen-to-the-box package in a car lot of dressed poultry; were received by a wholesaler and handled with his stock, and went to the retailer when he purchased fowls from the same car lot, remaining in his shop for the period which the market happened to require for their sale.

The shipments extended over a period of six months from January to June, inclusive, and the haul was about 1,700 miles, requiring on the average of 7½ days. The birds were mature hens, large, and fairly fat, and the method of killing was by bleeding through the mouth and puncturing the brain through the skull, just below the eye. The carcasses were dressed according to methods known, respectively, as "full drawn," "wire drawn," "Boston drawn," and some are undrawn, all being dry-picked, and the evisceration was conducted with sufficient care to render washing unnecessary.

The routine of dressing, packing and shipping, and general handling, in these experiments, is far above the average. In fact, if all market poultry should be handled so well, the problem of decay would become insignificant.

The investigations, which are described in detail in the pamphlet, demonstrate (1) undrawn poultry decomposes more slowly than does poultry which has been either wholly or partly eviscerated; (2) "full drawn" poultry, completely eviscerated, with head and feet removed, decomposes the most rapidly; (3) "Boston drawn" and "wire drawn" stand midway between the un-

drawn and "full drawn" in speed of decomposition, the "wire drawn," which is most like the undrawn, being usually the better; and (4) that these deductions apply to dry-picked, dry-chilled, dry-packed, unwashed fowls, which have been marketed with what would be called promptness.

The effect of different methods of dressing, in case of delayed marketing, is now under investigation.

THE FARM BULLETIN.

Glad He Stayed on the Farm.

Editor "The Farmer's Advocate":

Having read in your issue of March 30th, re "Farming Without Wages," and also having read "The Boy on the Farm—Farm vs. Railroad Life," in your issue of March 16th, I am going to attempt to offer some comment upon the subject therein discussed, as "Dugald," the writer of the latter, requests.

Both of these able writers have, like myself, seen the day when they became dissatisfied with farm surroundings, and sought, or would seek, something preferable. Both writers seem to have been touched by the "get-rich-quick" epidemic, and even at this late date seem to be looking in at the wrong end of the telescope.

There seems to be a tendency for the young people to wish to leave the farm. This subject has been discussed through these valuable columns by many competent writers, so I will not dare to offer any suggestions at the present. However, as I read these two articles, something seems to strike me as being seriously wrong with both illustrations offered.

In the first letter, it would appear as though "Farmer's Son" had placed a very improper valuation upon his present worth. He states that he is the only son on a farm of 140 acres of more than ordinary value; yet he claims to be worth only \$800, minus his four years' expenses. It seems to me as though nothing but the lack of proper relationship between father and son prevents "Farmer's Son" from being an equal shareholder with his father. This, at the lowest estimation, would be \$4,000.

The illustration given by "Dugald" is somewhat similar, with the exception that the young man, who is a few years older, is enjoying the company of a sweetheart; but, for some cause unknown has neglected asking his father about his future plans. Perhaps the father, like the son, is somewhat dilatory about speaking on this all-important subject. In this case I claim the boy is more at fault than the father, as it would seem to me that a young man at this age should ask for some understanding. I do not believe the Great West would have any influence over this young man, who does not seem to know, or care, whether he has any interest in his "present" home.

If either of these young men is convinced that he was not meant to be a farmer, but was called to control the throttle of one of the great iron horses that have done and are doing so much for the welfare of our fair country, he should not lose a single moment in obtaining a position as railway engineer. One life is just as noble as the other; also, just as necessary. But what are we living for? Do our lives count for nothing until we can control a bank account of some thousands? I consider the young men in both of these illustrations have nothing but themselves to blame in not living happy and fruitful lives, and I fear lest the articles they have written will not do anything toward bettering the position of hundreds of young readers, but will prove to be seed that will spring up and yield dissatisfaction, misery and sorrow.

My position in life is, or has been, almost identical with those pictured by these two discontented young men. At the age of about 18 I became so discontented that I sat down and applied for a position in a large manufacturing establishment. Later I took the "West" fever, and in both cases nothing but the influence of the home kept me on the farm. However, being the only boy on a farm of 100 acres, I must say there never was a day that I was not an equal shareholder with my father. But had I insisted on leaving home, or in different other ways allowed my dissatisfaction to be felt in the home, I think I could only fairly consider myself heir to mere wages.

Thirty summers have come and gone, and I respect my parents and sisters more as I grow older for using their influence to keep me at home on the farm. The trouble with me was—as it is with hundreds of others—that I was living my "fool" days, and did not stop to consider the real value farm life is to a young man.

I can name instance after instance where boys have left the farm in search of those "far-away green fields," but have come home, after wasting several years of the best part of their lives—to the dear old farm. I know a young man, a High-school teacher, commanding one of the highest salaries in the Province, who told me that, if in some way he could secure his father's farm, he would give up his thousands yearly and farm.

Life is, after all, just what we make it. If we are going to value our lives by dollars and cents, then I claim we are not qualified to enter the ranks of the true, happy, open-minded tillers of the soil. While it is the duty of everyone to make a good comfortable home, with plenty stored away for the rainy days, yet I believe there is no class of people who are so willing and anxious to help their brother workman as the farmer; no class of people are more contented, and, while the young people do seem to have a desire to leave the farm, I think that desire is nothing as compared with the young clerks or employees of the many cities who spend their lives in looking with torturing envy at some (comparatively few) employees who are getting a princely salary.

To the boys on the farm I would say, I was once a boy, and know what boys' troubles on the farm mean. I am glad that I stayed on the farm and worked. I have travelled many miles to play football and baseball and hockey; and as a young man on the farm, I am willing to compare my life—so far as pleasures in the past and hopes for the future are concerned—with any of those high-salaried engineers, everything considered. While I may never be very rich, I know if I continue as I have done in the past, and am doing at present, I will be able, at the close of life, to be it sooner or later, to look back with pleasure to the ever free and independent life lived in the country, and will again thank my friends who persuaded me to remain a

FARMER.

The Sinister Eagle Scream of Annexation.

Editor "The Farmer's Advocate":

In a recent issue of your esteemed paper I have encountered two pretendedly critical articles in which there is an attempt to minimize the fears I expressed a few weeks ago regarding the safety of our more important market, should the reciprocity negotiations with the United States be carried into effect, many of the statements made by the writers being so absurdly overdrawn, so incongruously misconstrued, as to be worthy of scarcely any serious refutation. Concerning the opinions expressed regarding our horse-breeding industry, little better can be expected, when we consider the sources from which they are derived, coming, as they do, from a "Beef King" of Huron County, and a "Yankee corn-dealer" of Essex County. Yet, beneath the mass of confused jargon they seem to vaguely express a sort of desire to help build up this nation. Magnanimous, indeed! But how? By supporting a scheme that threatens to cramp and ruin its leading agricultural, as well as commercial, enterprises? Poor, pitiful pipe-dreamers! They strongly suggest to my mind the example of the cow that gave the great big pail of milk, and then foolishly kicked it over.

Had our friend the "Beef King" studied the horse-breeding problem as closely as he claims to have studied that of producing cattle, he would scarcely have wasted ink or energies in an attempt to reconcile the farmers of Eastern Canada with the new conditions which must result from the proposed scheme of tariff tinkering by suggesting the preposterous impossibilities that Canada will still retain the big markets of the West, as well as gaining the best ones across the line, because of the preference of oat-fed horses to those fed on corn, and that only the inferior grades of horses will be cheapened. Now, everyone knows that, according to feeding experiments carried on in the corn belts of the United States, the horse fed largely on a ration of corn has proven, in point of stamina, to be equal, if not superior, to the oat-fed horse; while "The Farmer's Advocate," posing as a free-trade journal, simply endorses my fears that our horse market will be seriously menaced, in its feeble attempt to rake up data upon which to construct such a market across the line.

Now, in regard to the statements that only the inferior grades of horses will be cheapened—those the breeding of which no one should encourage—are they right? Let us see. Throughout the past few years we have noticed that as high-class horses have risen in value, so have inferior ones advanced accordingly. Is it not consistent with reason to predict that, if inferior horses decline, superior ones will follow suit? Then, everyone has heard of Herbert Smith, Manager of the Union Stock-yards, Toronto. In speaking of horses at the Winter Fair, Guelph, last December, and his words are recorded on page 2038 of "The Farmer's Advocate," he said that, while there was a scarcity of heavy-draft horses, yet the horse most largely in demand was the light-draft or agricultural horse, weighing from 1,300 to 1,400 pounds, and this was the type of horse he advised farmers to breed. Why? Because they were the horses used in the West, were the cheapest to raise, and sold for a big price, from \$200 to \$225 per head. Then, is the horse that will suffer, and that which has been making many Eastern Canadian farmers prosperous. But is he an inferior horse? Mr. Smith, one of the most prominent horsemen in Canada, says not, or why should he advise

breeding him? Now, as Mr. Smith hints, this horse is undoubtedly the cheapest and easiest to raise. Why? Because of the manner of his production. He is got by the mating of a mare weighing from 1,300 to 1,400 pounds with a draft stallion, the mare helping to do largely of the work about the farm while suckling the foal, which, when weaned, is allowed to grow up leisurely on moderate feed until he is four years old, when he is ready for the Western market.

Now, if we compare the heavy, high-class draft horse, in the cost of his production, with the foregoing, it will be plainly seen why the agricultural horse is the most lucrative proposition.

In an editorial in the Christmas Number of "The Farmer's Advocate," headed "Draft-horse Opportunities," we read that the big transport companies demand horses weighing not under 1,500 pounds, rather preferring those that will tip the beam at from 1,700 to 1,800 pounds, and such horses are desired to reach these weights only in average condition; besides, they must be clean and sound, and are not wanted under five years old. Now, in order to get an 1,800-pound gelding, it is almost essential to use a 1,600-pound mare, and to mate her with a 2,000-pound horse; besides, the foals must have an extra-good chance, and be well fed summer and winter from start to finish, which period, unlike the agricultural horse, is not reached until the fifth year. Now, as to the risk of breeding these horses, it is a notorious fact to every horseman that animals from the soundest breeding stock are liable to blemish. Well, if the heavy-draft horse is by chance blemished, what is to be done with him? The transport companies won't have him; he is too heavy to suit the average farmer; so the outcome will be he will prove an encumbrance on his breeder's hands; while, if the agricultural horse is blemished, he will, under existing conditions, find an outlet at a fairly good figure on the Western prairies, where he will wear as long as though sound.

dealer at \$250, who, in his turn, has purchased it from an Ontario farmer, out of the \$250 the dealer gets \$10, the transportation company gets \$40 while the breeder gets \$200. Now, this \$40 transportation charge, that bothers some people so much, passes, it is true, into the coffers of the railway systems. But does it remain there? No; these companies employ thousands of men, the greater the amount of traffic, the more men are required. These employees must live. Where and on what? Their homes will be found expanding our city limits, and the bread that nourishes their palates is made from Western wheat. Thus is the food-consuming public enlarged, and, consequently, the markets improved. Then, what about the \$200 that is caught in the pocket of the breeder? It is apparent that he is made more prosperous, hence in a better position in which to purchase the commodities of life. Where are these purchased? Here at home, from our own manufacturing establishments. Hence, these industries, owing to increased demand, will be stimulated to a greater output, consequently will help build greater food-consuming centers, and again the home market will be strengthened. So, in buying his horses at home, the Western farmer, even if he has to pay more for them is exerting a beneficial influence upon the whole commercial network of this country, and at the same time helping to build up a stable home market for his agricultural product. Now, supposing, on the other hand, he purchases a horse at, say, \$200, from a dealer who, in turn, has purchased it at Chicago, it appears that he has saved \$50. But what becomes of the \$200? This passes into the hands of an American farmer and American transportation enterprises, the latter's share being in accordance with the distance the horse has to be hauled. What is the outcome? The American farmers are made more prosperous, and consequently are better enabled to purchase the commodities of life. Where? From American establishments, which in turn are made more active.

The transportation lines of the United States, owing to increased traffic, will also be stimulated to greater activity, and the whole beneficial reaction will be felt among the commercial enterprises of that country. It is true the Western farmer has saved \$50, but the country has lost \$200. This, indeed, is more suggestive of trading a "steer for a cat," than "a cat for a steer."

The same argument can be especially applied to the wheat and cattle industries of Western Canada. Should the Western farmer, as Hon. Clifford Sifton asserts, get no more for his wheat under reciprocity, still, a large amount will be purchased by American buyers, will be milled across the line, and will pass through American channels and American ports, over American steamship lines, to find a market in the free ports of Great Britain. John Bull foots the whole bill, the Canadian getting no more for his product than at present, while the extra money that is helping to make of Canada a nation of commerce will be diverted to enhance the commercial enterprises and prosperity across the border.

Again, Great Britain purchases the surplus cattle of both Canada and the United States, the American corn-fed cattle commanding a fraction of a cent more than Canadian cattle. Our export cattle are purchased in our markets by members of the "Big Four," and are shipped through our channels of trade to their destination. But, introduce reciprocity in cattle, and what is the outcome? The whole Western trade will be turned into American channels, again swelling them enormously, to the stagnation of our own. Even "The Farmer's Advocate" has the good grace to state that the consensus of public opinion throughout Canada is strongly in favor of Interprovincial and Intercolonial trade.

Will we then stand passively aside, and see the prodigious volumes of our ever-increasing traffic diverted into American channels, to swell the commercial tide and enlarge the urban centers of that country, thereby deadening similar enterprises of our own? The leading diplomats of the United States are pointing to this. They are telling their people that reciprocity in farm products is the stepping-stone to unrestricted reciprocity, and, in the annexation; that, in refusing reciprocity to Canada, they are creating of her a competitor, and a manufacturing competitor. This should be sufficient to make us sit up and think. It is true that at present we are an intensely agri-



Hay from Equal Areas Alfalfa With Different Treatment.
(See article, page 645.)

Now, in reference to the breeding of fancy light horses, the average farmer knows the fallacy of an attempt in this direction, the risk being greater still, because, if a light horse carries so much as a scar he is turned down by the big dealers. So it is quite obvious that there are many ups and downs in the production of horses that the "beef man" and the "Yankee corn-dealer" must know little about. Now, will these visionaries who have been preaching a market in the Eastern States come forward and show us where this agricultural horse, the mortgage-lifter of our older Provinces, will find an outlet? It is quite plain that he is not a city horse, being too light for drayage purposes, besides the wrong type for van, express, livery, carriage or road. Then, it is apparent that his sphere of usefulness must be the country, and that country must be new and developing, where new farms and farmers are being created. Large numbers of these horses are now being shipped from Essex County, and from all over the Province, to find exit into the Canadian West, the only stable market for such horses on the American continent.

Again, as to the assumption of my critics, endorsed by "The Farmer's Advocate," that, being able to purchase cheaper horses across the line will prove an advantage to the Western farmer, and, therefore, to the country at large. Will this hold good in the long run? Let us reason a little. In a computation handed us a few weeks ago, the editor of "The Farmer's Advocate" estimates the cost of sending a horse from London, Ont., to Saskatoon at about \$40, and seems to take exception to this expense in a tone indicative that this \$40 were as good as lost. It seems to me that this is an extremely flimsy hook upon which to hang an argument. Supposing a farmer in Saskatoon purchases a horse from a

cultural nation, but is it sufficient that we remain as such? The republic to the south was once in a similar position, but were they contented to remain there? No; they built high their tariff wall, shut out competition in both agricultural and commercial spheres, and consequently have become one of the most prosperous and powerful among nations. Might we not do the same? Or will we stand by and see the splendid advantages, resources and possibilities of our magnificent country fall a prey to a people by whom in the last forty years we have been constantly scorned, buffeted and ignored—a people who, in the words of the Hon. Clifford Sifton, "Only a year ago were brandishing a club over our head, threatening to impose a surtax on our goods." To-day they say they are friendly. How long will they be so? Alas! nobody knows.

No, build high our tariff wall, impose export duties on our resources, if necessary, and we will checker the whole face of this country with bands of steel. On the bosom of our virgin prairies we will erect cities that will rival the twins of Minnesota, and, on the far-distant Pacific coast a newer and more healthful Frisco will flourish; while around the historic precincts of old Fort Garry is being and will continue to be built a great Western metropolis of our own. And then the roar of our multitudinous industries, and the whirl of our commercial activities will forever drown the sinister eagle-scream of annexation.

But, alas! the car of doom is already thundering along the tramway, and on that car is written "Reciprocity with the United States," and behind it, pushing, shoving, hurling with all its might, is the Laurier faction; while, lying helplessly on the rails ahead is our national ideal. Only may the broad electorate of this vast Dominion have the opportunity to cast in front of its wheels the boulder of Public Opinion, which will unfailingly stay its mad rush and hurl the whole diabolical machination to irrevocable destruction.

LAWRENCE SCRATCH.

Essex Co., Ont.

Telephone Charges.

The report of the Ontario Railway and Municipal Board, for the year ending December 31st, 1910, shows that out of an approximate total of 460 rural-telephone systems in the Province, only 215 had filed reports of their tariff charges, in accordance with the provisions of Section 6 of "The Ontario Telephone Act, 1910." Several additional tariffs have been filed this year, but there still remain a large number of systems which so far have not obtained the Board's approval to their charges.

As the Ontario Telephone Act provides that no charges of any kind can be made for service until they have been approved by the Ontario Railway and Municipal Board, it is to the interest of owners of every telephone system who have not yet reported their tariffs to the Board, to obtain the necessary approval without delay.

The proper forms can be obtained by application to the Ontario Railway and Municipal Board, Manning Chambers, Toronto.

Electricity for Rural Purposes.

Hon. Adam Beck, before the Middlesex County Council, outlined the plans of the Ontario Hydro-Electric Commission for the supplying of energy to rural municipalities and individuals, and incidentally announced a decision arrived at some days ago, but not previously made public, regarding a scheme for the securing of data for the application of electricity to farm purposes. One of the Commission's engineers, and a man selected from the staff of the Provincial Department of Agriculture, will leave in a few weeks on a tour of European countries which have developed the use of power in rural sections, and upon their return the matter of distributing electricity through the townships will be seriously undertaken. Mr. Beck will join the investigators selected in May, and will take part in the inquiries which are to be made in Switzerland, Germany, France, Sweden, Austria and Italy.

Population Unequal.

Editor "The Farmer's Advocate":

I would like to ask some of the wise reciprocity men whether they think that the American farmer, with his market of ninety millions, is any better off than the Canadian farmer? If he is, why did 150,000 of them migrate to Canada last year, and how do they account for the hundreds of abandoned farms in the New England States? To hear reciprocity men talk of the American market, one would think that they could not supply their own demands, and that they were in desperate need of our produce. They perhaps don't know that the United States exported something like \$150,000,000 worth of meat and \$216,000,000 worth of breadstuffs last year. It seems to me that a nation of ninety millions of people is bound to get the best of a trade of seven millions in a trade.

E. C. PARKER.
Brookville, Ont.

A Breeze from Nova Scotia.

Our little Province by the Sea is surely just beginning to wake up to realize her true value, and her sons are taking notice of her. If the present feeling of optimism grows, they will in a few years be aiding in her development, instead of turning their backs upon her in search of better fields of labor. She stands as the greatest bundle of possibilities on the continent, with her many and varied resources. She only needs the men with confidence, enterprise, capital, and a spirit of Provincial co-operation, to make her the greatest country of her size on earth. The signs of the times that go to prove this are:

1. Steps have been and are being taken to preserve her great forest wealth before injurious depletion occurs. A very efficient system of forest supervision, fire-ranging, etc., is being practiced. A forest survey has been made, with a view to controlling the wasteful practices of greedy lumbermen. Reforestation, in view of this vigilance and care, may never be needed, and a century hence the Province, if our present forest policy develops and is made increasingly efficient, will be still able to boast of its timber value. These same forests, in conjunction with our coal and iron mines, constitute, with the introduction of enterprise and capital, a combination which could make its manufacturing facilities greater than those of any other country.

The manufacturer should find a bonanza in the fact that we have the materials necessary for the production of all staple articles, the coal for the furnaces, and, better still, an enviable proximity by water carriers to all the great markets of the world.

Her fisheries, also, are a great asset, and capable of being of still greater industrial value. Motor boats are taking the place of the old sail boats, and both outfits and methods are improving.

It is in agriculture, however, that we hope for great development in the future. The College of Agriculture is Maritime in its influence, but the effect on the farming operations of our own Province has already been marked. The practice at the College, and the spirit of the teaching emanating from it, is that the best is none too good for Nova Scotia. Excellent judgment in selection and purchase has filled its buildings with the best stock obtainable, and now that the surplus is being distributed throughout the Province, the improvement will soon be seen in all the counties.

In Ayrshires, Holsteins and Yorkshires, they particularly excel.

Dairying throughout the Province is receiving a great boost, due in a great measure to College and Institute teaching. Undoubtedly, in the higher lands dairying is the most profitable. It certainly provides a constant income, and, in conjunction with hog-raising, is very remunerative, as well as efficient in soil upbuilding. But where our valleys provide meadows and marshes, which are self-supporting in a great measure, the present high prices of beef make the industry of beef-raising a most remunerative one. In the Annapolis Valley beef is higher and scarcer this spring than ever before, prices for beef being double those of ten years ago.

One of the most important steps taken toward improving conditions during the past year was the purchase by the Government of a ditching machine. This has done splendid service in several counties of the Province, and has given a great impetus to the practical interest in drainage by the farmers of the sections where it has been used.

The subject of underdrainage is also being given prominence in farmers' meetings by Institute workers and others.

It is also possible, now, by recent legislation, for a farmer to borrow money for draining purposes, and repay it in easy instalments.

Considerable effort is being made, also, to improve the quality of seed, by offering prizes for best fields of standing grain.

All these improvements are the outcome, directly or indirectly, of the establishment of the Agricultural College, and the energetic agricultural policy of the leading officials.

The purchase of the Dominion Atlantic Railway, running from Halifax and Truro to Yarmouth, by the Canadian Pacific, marks, in the opinion of many, the dawning of an era of better freight rates and railway accommodation, and of desirable immigration and settlement, to be followed, of course, by great industrial development. Formerly, this railway system has drawn all the immigrants to the West by its extensive advertising propaganda; but now that it runs through the little gold mine of a Province by the Sea, it is expected that we may come in for a share of its attention along these lines. The advent of the Canadian Northern, running from Halifax to Yarmouth, and into the western end of the Annapolis Valley, by increasing competition, and giving the impulse of its own progressive immigration policy, will also, no doubt, help boom the Province.

All these factors are strongly at work, and only recently, toward the placing of Nova Scotia where she belongs—among the richest and most desirable countries on earth.

R. J. MESSENGER.

Notes from Ireland.

FARMERS FRATERNIZING.

Some wit has said that in most countries there are three miles to a league, but that in Ireland you invariably find three leagues in every mile.

Everybody acquainted with our history is aware that Ireland is a great place for leagues and unions; but, alas, many of these institutions are of questionable value so far as their practical use to the country or its inhabitants is concerned. With regard to the desirability of one new organization that is contemplated, however, there can be no two opinions. I refer to the proposed union, on an absolutely non-party and non-sectarian basis, of the various Farmers' Associations that are doing in their respective spheres of local influence such excellent work. Taking the initiative in this laudable project, the Co. Dublin Farmers' Association has invited kindred bodies throughout the country—there are upwards of 100 of them—to send delegates to a conference in the Irish capital later in the year, in order to formulate a definite scheme for consolidating the work of these local organizations, so that the farmers of the entire country may ultimately be the better organized for action, in view alike of the innumerable encroachments on agriculture on the one hand, and the great potentialities of the industry on the other. A host of matters await strenuous attention from such a powerful combination of farmers. The following may just be mentioned as a few typical topics that will indicate the scope of its purview, e.g.:

- (1) The great transit problems that affect Irish agriculture;
- (2) The arterial drainage of the country;
- (3) The voicing of practical farmers' opinions on the manner in which public money is expended;
- (4) The necessity for the prohibition of the coloring of margarine to resemble butter;
- (5) The vital urgency of a meat-marking bill;
- (6) The crying need for legislation to suppress "the sheep-worrying-by-dogs" nuisance;
- (7) The wisdom of feeding the Army on home-bred and home-finished meat, and of using native fodder in the service, etc.

Whenever such a movement as this is talked about, people often sneer at what they consider the selfish, grasping proclivities of farmers, who, they contemptuously allege, want everything for themselves. However, "the man in the field" should never be deterred by such an unworthy taunt from taking drastic steps, when necessary, to protect his interests. As Shakespeare has truly and philosophically remarked:

"Self-love, my liege, is not so vile a sin
As self-neglecting."

REVIVING A VALUABLE EQUINE TYPE.

The old Irish draft horse is an asset of Ireland which has been sadly neglected, and allowed to decline to almost vanishing point. The Dept. of Agriculture, as the result of persistent entreaties, have made some efforts to preserve the strain, but they do not appear to have been very enthusiastic in the matter. Recently, however, they promulgated a scheme which will, we hope, go a long way to save from extinction the grand old strong-boned, clean-heeled, general-purpose horse which suits the Irish farm as no other equine type can. With the object of registering all surviving animals of the old stock, a series of local shows of mares are now being held throughout the country, and for these fixtures about 3,000 animals have been entered. It is doubtful, however, whether much more than five or eight per cent. of these will be found true enough to type to be registered. Every mare passed as sound and typical will be awarded a prize of £5, and fillies out of such mares, and sired by duly-registered Irish draft stallions, will be eligible for entry when two-year-olds, if sound. Colts out of such mares, and by such horses, will, on inspection as two-year-olds, be purchased by the Department for a sum not less than £200 each, provided, of course, they are suitable and sound; and special encouragement will be provided at local shows by the State for such animals. These efforts should be attended with success, and the only pity is that they were not made many decades ago. It may interest Canadian farmers to know that the type of animal it is desired to preserve and encourage is one free from all trace of English or Scotch cart-horse blood, standing not less than 15.2 hands high, with short, clean, flat legs, well-set joints, and good feet, good head and rein, well-laid-back shoulder, and displaying throughout its conformation a sufficiency of power to warrant it doing general farm and harness work. The action should be free and light-stepping. The attempt to revive this fine, clean-legged strain should be interesting to Canadians, as I read not long ago that in some parts of the Dominion the Clydesdale and Shire were being objected to on account of the hairy legs and heels that characterize these breeds.

THE GRAIN-GROWER AND HIS GRAIN.

Between Mr. Lloyd-George's heavy spirit duties and the existence of a big monopoly in the Irish brewing trade, the grower of barley in this country complains of having been hit very severely during the past couple of seasons, and farmers in

many parts declare that the growing of grain for malting purposes is no longer remunerative at the prices they are forced to accept. The new situation thus created has been of late seriously faced, and the idea has become widely disseminated that, as the Irish farmer is obviously "up against" a serious proposition, his best plan might be to ignore the brewer and the distiller, and find a more profitable outlet for his grain in feeding it to live stock on his farm, thereby helping substantially to reduce the huge national expenditure—running into millions of pounds annually—for imported manufactured cakes and meals of foreign origin, sold very often at excessively high prices. Of course, a great many farmers do use home-grown grain on their farms for feeding purposes, but the agitation under notice is working for a much wider adoption of the practice. It stands to reason, need it be said, that the prevailing market prices current for grain, and the prices the farmer has to pay for cakes and purchased meals, constitute the factor that determines the best method of disposing of grain. Such prices fluctuate from season to season, but undoubtedly, under existing circumstances, there are strong indications that the utilization of grain as a foodstuff on the farm is the best-paying outlet for such produce. Seeking the benefit of expert information, a representative deputation of farmers has lately gone to the Vice-President of the Department of Agriculture, and urged on him the great importance of instituting a thoroughly practical test, in order to ascertain definite information for the guidance of farmers as to the actual feeding values of the different grains, compared with imported cakes and meals, and, further, to determine the proper proportions in which the grains grown in Ireland should be blended by themselves, or mixed with other ingredients, so as to give the best feeding results. This the Department have expressed a willingness to do, and useful information of a practical kind may be expected as an outcome of their investigations.

THE "ILL WIND" AGAIN.

The moment that the recent English outbreak of foot-and-mouth disease became known, all Irish ports were almost automatically closed against stock from across the channel; and though the likelihood of infection has been considerably lessened in the interval, the Royal Dublin Society have decided to take no risk in admitting any British animals to be exhibited at their great spring show at Ballsbridge, in Easter week. Nearly seventy cross-channel entries were made, but all have been declined. "England's difficulty: Ireland's opportunity," is an old political cry, reminding of rather rancorous reminiscences; but, in a commercial way, we can fairly revive it without embittering anybody's feelings. Hence, it is expected that the great South American buyers of Shorthorns and other pedigree stock who dare not send animals to the Argentine from any British port for many months, will be induced to turn more extensively than ever this season to Irish sales, in order to satisfy their requirements. Efforts are being made to cater for their convenience by getting direct sailings established between Dublin and other Irish ports and South America, so that there may be no need to send purchased animals to Liverpool for embarkation on the big boats there, as has formerly been the custom.

LAWS IN THE MAKING.

Some say it is a scandal, others say it is a matter for indifference, that T. W. Russell, as Vice-President of the Irish Department of Agriculture, is still without a seat in Parliament. I will content myself with moderate language and say it is at least a pity that he is not able to personally look after the interest of Irish agriculture in the House. A number of recent discussions there were obviously incomplete without direct representation of the body over which Mr. Russell has charge. The far-reaching Butter Bill, which is to control the dairy industry of the country, gives no signs of appearing on the legislative horizon; but then, with the so-called constitutional crisis still looming, most of the legislative machinery is at a standstill. A private measure, fathered by Wm. Field, M. P., and extensively backed, is, however, "on the road." It is called the Meat-marking Bill, and, as its name implies, is designed to check the sale of frozen foreign meat as genuine home-fed produce—a dishonesty that is extensively practiced with shameful flagrancy in our consuming centers, both large and small.

"Richer Than the West."

The chairman of the Temiskaming and Northern Ontario Railway Board, J. L. Englehart, gave two hundred of the business men of Toronto the other day an interesting address on the wonderful new North West of Ontario, with which he is so intimately acquainted, and for the development of which he is so anxious. While the minerals and timber resources are the only sure foundation of the country's agricultural development. From a geological standpoint alone, the land of Northern Ontario was richer than the West. Its soil has been proved to be of a higher quality than that of the West, and its climate is more favorable for the growth of grain than that of the West.

yield greater returns than the land of the West. Where, in the West, work was provided for only six or seven months in the year, in New Ontario there was work for the whole year round. The soil of the great clay belt was equalled nowhere else in the world.

Eastern Dairy School Examinations.

Of the seventy-four students who registered at the Eastern Dairy School for the session of 1911, only twenty-nine completed the full course, which closed on March 25th.

The subjects covered by the written examinations were: Cheesemaking, Separators and Buttermaking, Milk-testing, Dairy Chemistry, Dairy Bacteriology, and Miscellaneous (Boilers, Engines and Mathematics); also practical examinations on Cheesemaking, Buttermaking and Milk-testing. The total marks obtainable were 900; 33 per cent. was required for a pass on each subject, 50 per cent. of the total for second-class honors, and 75 per cent. for first-class honors. The following is a list of the successful candidates, in order of general proficiency: First-class honors—Aaron Stoodley, 709; J. W. Charbonneau, 683. Second-class honors—W. E. Ralison, 666; R. A. Grant, 642; Roy Richards, 634; Lorne Merkle, 633; J. A. Mitchell, 623; D. Connell, 607; H. G. Villeneuve, 580; H. McDonald, 561; S. J. Landon, 554; H. Woods, 550; H. Richards, 542. Third-class honors—E. S. Beales, 531; Geo. Thimms, 524; H. Greatrix, 495; G. H. Phillips, 489; A. A. McRae, 483; and E. T. Rogers, 470.

L. A. ZUFELT, Supt.

Algoma Notes.

Our winter is almost a thing of the past. One hardly knows whether to take the sleigh or the wagon. We had a comparatively mild winter, with sleighing from start to finish.

The stock are coming out well this spring, with feed left over, if the number of hay stacks tell the story. Pressed hay, \$9 per ton; oats, 35 cents; peas, 65 cents; pork, about \$9.50, dressed, with butter from 25 cents to 30 cents, and eggs at 20 cents a dozen now.

So far, the apple trees have stood the winter well, but the alternate thawing and freezing will tell the tale later on. The heavy crust of the snow has played havoc with the bush fruits; many are broken right down, and need to be cut off, and let them make fresh start from the roots.

We have organized an energetic Farmers' Club of twenty members in our neighborhood.

There is no registered heavy-draft stallion in the township of Johnson that I know of.

SAMUEL G. FISCHER.

Have just received from Herbert J. Reid, Secretary of the County Dublin Farmers' Association, Ireland, a copy of the sixth annual report, together with the printed rules under which the Association works. The objects of this farmers' organization are: To protect the members in carrying out their business, to secure the best possible market facilities, to provide technical instruction and demonstrations, e. g., lectures, plowing matches, etc., and to enter into agreement with municipal or other authorities to further the aforesaid objects, as well as to obtain from these authorities desirable rights and privileges. Social intercourse among the members is also to be encouraged. The committee are to meet at least once a month, and the annual general meeting is held in January, besides other general meetings in April, August and November. The report of 1910 claims that the Association has surmounted its infantile difficulties, and promises to flourish with robustness and vigor. Three lectures which the Association had the pleasure of hearing during the year, on "Veterinary Hygiene," "The Irish Farmer's Interest in Tariff Reform," and "The Living Soil," are mentioned, with much appreciation.

For some weeks past persistent rumors have been circulated through the press to the effect that deposits of potash had been discovered in the neighborhood of Goderich, Ont., and that companies were being formed to exploit these resources. A representative of the German potash syndicate recently visited the Goderich locality in the interests of his firm, to find out, if possible, what truth there was in the rumors. He writes us to the effect that, while he heard from some gentlemen the statement that potash had actually been discovered in paying quantities, but that the few people "on the inside" were endeavoring to keep it quiet, he discredited the statement by interviews with officials of several saltpetre works, who obtained, and all agreed in believing, that potash would ever be mined in the Goderich district, if it wasn't there—at least, certainly not in paying quantities.

Pushing Fruit Business in Wentworth.

Editor "The Farmer's Advocate":

Last fall, every unsprayed and uncared-for orchard in the district between Hamilton and Guelph was a losing and a discouraging proposition for the owner, and for the buyers who bought and tried to dispose of the product, it meant trouble, and more trouble, from start to finish.

Carey Bros., of Hamilton, who owned an evaporator at Millgrove, and were the principal buyers and exporters from that district, decided they would cease the buying game, and rented for five years fourteen orchards, over eighty acres, and set to work at once to look after these orchards in the proper manner.

This started a general-improvement feeling, and a few of the most influential growers and best thinkers got together, and asked Carey Bros. if it would not be a wise act to organize a Fruit-growers' Association, and promised them their staunch co-operation and assistance if they would start the ball rolling. They agreed heartily, and did as follows: Interviewed four good speakers: M. C. Smith, of Burlington; Prof. Caesar, of Guelph; Mr. Gilbertson, Simcoe, and P. J. Carey, Dominion Fruit Inspector, Toronto; and, by individual invitation, called a meeting of all fruit-growers of the district, and met in the Town Hall, Millgrove. The two meetings, afternoon and evening, were largely attended.

That night, twenty-one men agreed to join in a co-operative concern, appointed their executive committee, and the committee in turn appointed Roy A. Carey as manager and secretary-treasurer.

More meetings were held, including as speakers J. E. Johnson, manager of Norfolk Fruit-growers' Association, of Simcoe. Seventeen more growers joined, and we now have a total membership of thirty-six, representing about 250 acres of orchard, and each member is pledged to spray his orchard thoroughly, and to prune and fertilize where necessary.

Through the influence of the Association, outsiders are waking up to the sense of their duty, and all over the country you will find orchards being pruned, scraped and sprayed thoroughly, as they never have been before.

Several power sprayers and a carload of traction and hand sprayers have been shipped in here and found their prospective homes. The Fruit Branch of the Department of Agriculture has sent to us for the entire season R. R. Waddle, of Simcoe, who is giving our members valuable information and assistance in their pruning, grafting, spraying and cultivation. He has also taken five small orchards as demonstration orchards, and will handle them something on the same plan as was followed by Mr. Kydd, at Collingwood, last season.

Our main idea and determination is to place on the market a better and more uniform pack of fruit, and the outcome is eagerly watched, particularly by growers who have not joined us yet, and who say they will join next season, if all goes well, which sounds to the enterprising leaders like the schoolboy days at the swimming pool, when one fellow says, "You go in first, and if the water is fine I'll come in too."

Wentworth Co., Ont.

R. A. C.

Rumor has been persistently connecting the name of Dr. James W. Robertson with prominent positions in the agricultural service of the country. So far as "The Farmer's Advocate" has been able to learn, the reports are not well founded, as Dr. Robertson is understood to have expressed in no uncertain words his intention not to accept again a position as civil servant, or any other position under permanent employment and salary. Friends of Dr. Robertson suspect that he has some aspirations in the direction of politics, and would not be surprised if at the next general election he were to offer himself as an independent candidate. A man of Dr. Robertson's attainments would render invaluable service to agriculture in the Dominion Parliament, or, better still, in the Cabinet, in case he should be called to assume a portfolio.

Hon. Mr. Fielding's fifteenth annual Budget statement, lately presented to the Commons, was remarkable for two things—it was short, and sweet. The speech only occupied 40 minutes in delivery—the shortest on record—and it announced a surplus of thirty and a half millions. The total estimated revenue for the past year is \$117,500,000, and estimated expenditure chargeable to consolidated fund, \$87,000,000. During the year, \$27,000,000 have been spent on Transcontinental Railway construction, and \$11,500,000 on public works and other items of capital expenditure. Addition to net debt, \$3,900,000. In answer to a question, Mr. Fielding announced that the Government has no intention of renewing the bounties on iron and steel rods, which expire on July 1st, next.

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, Monday, April 10th, receipts numbered 103 cars, comprising 2,150 cattle, 33 hogs, 511 sheep, 104 calves, 9 horses. Quality of cattle good; trade slow; exporters easier. Export steers, \$5.60 to \$6; butchers' steady, prime picked lots, \$5.80 to \$6; good, \$5.60 to \$5.75; medium, \$5.25 to \$5.50; common, \$5 to \$5.20; cows, \$3.50 to \$5.25; milkers, \$4 to \$6; calves, \$4 to \$7.50. Sheep—Ewes, \$4.75 to \$5.25; yearling lambs, \$6 to \$7.30; spring lambs, \$4 to \$8 each. Hogs, lower, at \$6.50 for selects, fed and watered, and \$6.20 to drovers for hogs f. o. b. cars, country points.

REVIEW OF LAST WEEK'S MARKETS
The total receipts of live stock for the last week at the City and Union Stock-yards were as follows:

	City.	Union.	Total.
Cars	227	190	417
Cattle	3,084	3,330	6,414
Hogs	5,596	1,110	6,706
Sheep	891	852	1,743
Calves	687	122	809
Horses	30	185	215

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

	City.	Union.	Total.
Cars	192	193	385
Cattle	2,739	4,447	6,186
Hogs	5,443	1,634	7,077
Sheep	430	88	518
Calves	646	177	823
Horses	—	237	237

The combined receipts at the City and Union Stock-yards for the past week show an increase of 32 carloads, 228 cattle, 1,225 sheep and lambs; but a decrease of 371 hogs, 14 calves, and 22 horses, compared with the corresponding week of 1910.

It will be seen by the above figures, that the receipts were larger than for the previous market, but not greater than the demand. Trade during the week on several occasions was slow. Trade for the ordinary run of cattle at times was slow, but there was little change in prices. Easter quality cattle sold all the way from \$6 to \$7 per cwt.

Exporters.—Nine hundred export cattle sold at an average of 7c. per cwt. higher than for the previous week. There were 521 exporters bought for the London market at \$5.95, which is 5c. per cwt. more than in our last letter. The cattle bought for Liverpool were the same as our last letter, \$5.80 per cwt. Exporters raised in price from \$5.70 to \$6.25, but only 9 cattle were bought at the latter price. The highest price for a straight load of export cattle, weighing 1,400 lbs., was \$6.15. One load of heifers, bought for export, 1,125 lbs. each, sold \$5.25 per cwt., by Coughlin & Co.

Milkers and Feeders.—One load of heifers, 700 lbs., sold at \$1.85; two loads of feeders, 900 to 950 lbs. each, sold \$5.25 to \$5.37 1/2 per cwt.

Milkers and Springers.—There was a fair supply, that sold at \$38 to \$70 each, but we only heard of two cows that were sold at the latter price.

Veal Calves.—Receipts of veal calves were large, and prices a little easier, at \$3.50 to \$7.50 per cwt.

Sheep and Lambs.—Receipts of sheep and lambs were liberal, for the season of the year. Ewes sold at \$4.75 to \$5.50; yearling lambs, \$6.75 to \$7.25 per cwt.; spring lambs, \$4 to \$8 each.

Hogs.—Prices were generally easier. Selects, fed and watered at the market, \$6.70, and \$6.40 to \$6.45 to drovers for hogs f. o. b. cars at country points.

Horses.—Trade in horses at the Union Horse Exchange, at the Union Stock-yards, for the past week has been good. Manager Smith reports having sold upwards of two hundred horses, and could have disposed of many more could he have got them in time. Mr. Smith shipped out eight carloads, nearly all of which went to the Northwest Provinces. Liberal consignments are expected this coming week. Prices ranged as follows: Drafters, \$175 to \$235, and \$250 for extra quality; general-purpose, \$160 to \$225; expressers and wagon horses, \$150 to \$210; drivers, \$100 to \$140; serviceably sound, \$30 to \$90.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 80c. to 81c., outside. Manitoba—No. 1 northern, 95 1/2c.; No. 2 northern, 93c.; No. 3 northern, 90 1/2c., outside points. Rye—No. 2, 66c. to 67c., outside. Peas—No. 2, 80c. to 81c., outside. Buckwheat—48c. to 49c., outside. Barley—For malting, 60c. to 65c.; for feed, 58c. to 57c., outside. Oats—Canadian Western, No. 2, 37c.; No. 3, 36c., lake ports; Ontario, No. 2, 31c. to 32c.; No. 3, 30c. to 31c., outside. Flour—Ontario ninety-per-cent winter-wheat patents, \$3.20 to \$3.25, sea-board. Manitoba flour—Toronto prices: First patents, \$5.40; second patents, \$4.90; strong bakers', \$4.70. Corn—American new, No. 3 yellow, 52c., track, Toronto.

HAY AND MILLFEED.

Hay.—Baled, in car lots, on track, Toronto, No. 1, \$12; No. 2, \$8 to \$10. Straw.—Car lots, on track, Toronto, \$6 to \$6.50 per ton. Bran.—Manitoba bran, \$21 per ton; shorts, \$23; Ontario bran, \$22, in bags; shorts, \$24, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—The market for the best is slightly firmer. Creamery pound rolls, 26c. to 28c.; creamery solids, 24c. to 25c.; separator dairy, 22c. to 24c.; store lots, 17c. to 19c.

Eggs.—Strictly new-laid eggs are quoted at 18c. per dozen, by the case.

Cheese.—Large, 13 1/2c.; twins, 14c.

Honey.—Market unchanged; extracted, 10c. to 11c. per lb.; comb, \$2.50 per dozen sections.

Beans.—Broken lots, \$1.85 per bushel. Car lots, \$1.50 to \$1.60, for hand-picked.

Potatoes.—Car lots of Ontarios, on track, Toronto, 85c. per bag; New Brunswick Delawares, 95c. per bag, for car lots, on track, Toronto.

Poultry.—Receipts light; prices firm. Turkeys dressed, 23c. to 27c.; yearling chickens, 18c. to 20c.; hens, 15c. to 17c. per lb.

HIDES AND SKINS.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 9 1/2c.; No. 2 inspected steers and cows, 8 1/2c.; No. 3 inspected steers, cows and bulls, 7 1/2c.; country hides, cured, 8 1/2c.; sheep green, 8c.; calf skins, 11c. to 13c.; sheep skins, 95c. to \$1.25; horse hides, No. 1, \$3; horse hair, per lb., 32c.; tallow, No. 1, per lb., 5 1/2c. to 6 1/2c.

TORONTO SEED MARKET.

The William Rennie Seed Company report the following prices, at which re-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, market firm; No. 1 Spies, \$6 to \$6.50; No. 2 Spies, \$5 to \$5.50; No. 1

Greenings, \$4 to \$4.50; No. 2 Greenings, \$4; Ben Davis, \$3.50 to \$4; carrots, 45c. per bag; cabbage, \$1.50 per barrel; or 30c. to 50c. per dozen; strawberries, 40c. to 50c. per quart basket.

Montreal.

Live Stock.—The supplies of cattle continued limited. Demand fair, and the market firm, prices fractionally higher. Some extra choice bulls, suitable for Easter, weighing as high as 2,300 lbs., were sold at 6 1/2c. per lb., and \$10 per head extra. Some very choice steers sold at 6 1/2c., choice at 6 1/2c., fine at 6 1/2c., good at 5 1/2c. to 6c., medium 5c. to 5 1/2c., common down to around 4c. and 4 1/2c. Choice calves scarce; lower qualities plentiful. These sold at \$2 to \$5 or \$6 each, the best bringing \$8. Old sheep scarce and firm, at 5c. to 5 1/2c. per lb.; yearlings, 6 1/2c. per lb. Spring lambs ranged from \$5 to \$8 each. Offerings of hogs fairly large; demand good. Sales of selects at 7 1/2c. to 7 3/4c. per lb., weighed off cars.

Horses.—Buying during the past week was light, and prices continue firm, but steady, as follows: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350 each; light draft, 1,400 to 1,500 lbs., \$225 to \$300 each; light horses, 1,000 to 1,100 lbs., \$100 to \$200 each; inferior, broken-down animals, \$50 to \$100 each, and choicest carriage and saddle animals, \$350 to \$500 each.

Dressed Hogs and Provisions.—Country-dressed hogs slightly cheaper and a fractional decline in barrel pork and lard. Fresh-killed, abattoir-dressed hogs sell at 9 1/2c. to 10c. per lb., country-dressed being 8c. to 9c. per lb.

Potatoes.—Shippers ask 80c. for 90 lbs., on track. Trade rather uncertain; market dull. Grocers' prices are in the vicinity of \$1 to \$1.10 per bag of 90 lbs.

Maple Products.—The weather has not warmed up sufficiently in the daytime to thaw out the trees, although it has been quite cold enough at night. Prices about \$1 per gallon.

Eggs.—Dealers claim that they have bought at 15c. in the West, and in the East at 16c. These sold here at from 19c. to 20c. per dozen.

Butter.—New butter going along more freely, and a good demand for it. It has cost about 24c. at country points, and has sold here at 26c. to 26 1/2c. to grocers. Choice fall butter, 24c. to 26c., according to quality. Dairy butter, at 18c. to 19c.

Cheese.—Some new cheese being received. Colored quoted at 12 1/2c. to 12 3/4c. per lb., and old about a cent more than this.

Grain.—Market steadier. No. 2 Canadian Western oats quoted at 38 1/2c. per bushel, car lots, store; No. 1 extra feed at 38c.; No. 2 Canadian Western at 37 1/2c.; No. 2 local white at 36c.; No. 3 a cent under, and No. 4 yet a cent under. No. 3 American yellow corn, 56c. to 56 1/2c. 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 unchanged, at \$4.50 per barrel; straight rollers, \$4 to \$4.25.

Millfeed.—Quotations \$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.—Market steady. No. 1 baled hay, \$10 to \$10.50, carloads, track, Montreal; No. 2 extra, \$9 to \$9.50 per ton; No. 2, \$8 to \$8.50. Clover mixed, \$7 to \$7.50; pure clover, \$6 to \$6.50 per ton.

Seeds.—Demand improving. Prices per 100 lbs., in bag lots, Montreal, 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 \$23.

Hides.—Calf skins, 11c. per lb. for No. 2, and 13c. for No. 1. Hides unchanged, at 8c., 9c. and 10c. per lb., according to quality. Lamb skins, 90c. each. Horse hides, \$1.75 and \$2.50 each. Tallow, 6 1/2c. to 7c. per lb. for rendered, and 1 1/2c. to 4c. for rough.

British Cattle Markets.

Liverpool.—States steers, 13 1/2c. to 13 3/4c.; Canadian, 13 1/2c. to 13 3/4c. per pound.

Chicago.

Hogs.—Mixed and butchers', \$6.30 to \$6.85; good heavy, \$6.40 to \$6.60; rough heavy, \$6.10 to \$6.30; light, \$6.45 to \$6.90; pigs, \$6.40 to \$6.90; bulk, \$6.35 to \$6.60.

Cattle.—Beeves, \$5.25 to \$7.10; cows and heifers, \$2.75 to \$6.25; stockers and feeders, \$4.25 to \$5.80; Texans, \$4.90 to \$5.30; calves, \$5.50 to \$6.75.

Sheep and Lambs.—Native and Western, \$3 to \$5.35; lambs, \$5 to \$6.40.

Buffalo.

Cattle.—Prime steers, \$6.50 to \$6.75; butcher grades, \$3 to \$6.40.

Calves.—Cull to choice, \$5 to \$8.75. Sheep and Lambs.—Choice lambs, \$7 to \$7.15; cull to fair, \$4.75 to \$6.90; yearlings, \$5.50 to \$6; sheep, \$3 to \$5.10.

Hogs.—Yorkers, \$7.20 to \$7.35; pigs, \$7.40 to \$7.45; mixed, \$6.85 to \$7.15; heavy, \$6.50 to \$6.65; rough, \$5.50 to \$6; stags, \$4.65 to \$5.

GOSSIP.

AYRSHIRE RECORDS.

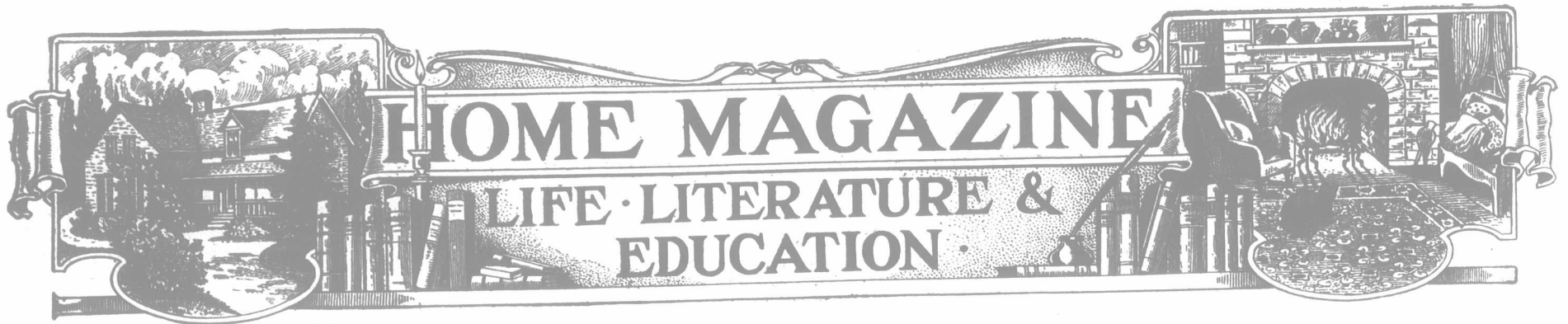
The cow Snowflake—19789—, owned by A. S. Turner & Sons, Ryckman's Corners, Ont., gave in 26 days in December, 1910, 61.27 lbs. fat, and in January, 1911, she gave 1,871.25 lbs. milk, and 85.48 lbs. fat, equal to 99.73 lbs. butter, or an average of 3.21 lbs. butter per day.

The Ayrshire cow Netherhall Brownie 9th (imp.)—23985—, American Herdbook, owned by J. W. Clise, Redmond, Wash., has lately closed her year's test with 18,110 lbs. milk and 780.91 lbs. fat, equal to 911 lbs. of butter. This cow was tested under the supervision of the Washington State Agricultural College. Netherhall Brownie 9th holds the world's Ayrshire record of milk and fat. It is up to our Canadian Ayrshire men to go one better than this record. We are constantly discovering some wonderful producers among our Ayrshires, thanks to the Advanced Registry and Record of Performance tests.

This year's show of the Royal Agricultural Society, of which King George V. is President, is expected to be the finest and most memorable exhibition of its kind ever held. The show, which is to be held at Norwich, will run for five days, beginning Monday, June 26th. As at least six months are necessary to bring the grounds into shape for the great exhibition, workmen are now busy running up the town of white and timbered buildings needed. The surroundings are beautiful. Twenty-five of the 150 acres of show park are picturesque plantations, breaking gratefully into the monotony of buildings and sheds. Clumps of trees are dotted here and there over the open. The upper side of the grounds is bounded by fine old woods, and on the lower side runs the river Yare, while through the middle of the ground, from the high woods to the river, runs a noble avenue of elms. Altogether, there will be six miles of sheds, where cattle, horses, sheep, pigs, implements, machinery, poultry, bees, forestry exhibits, etc., will be housed and displayed.

TRADE TOPIC.

From our readers, we receive hints and questions occasionally which indicate that they are well aware that molasses is quite generally fed to animals in the Old Country. That molasses has a high value as a conditioner and fattener for all kinds of stock seems to be admitted on all hands. But it is a disagreeably sticky substance, and when used by itself, had to be diluted with water and sprinkled on the fodder, and consequently its use was limited because of the extra work entailed. For a number of years, however, preparations known as Molasses Meals have been obtainable on the Continent and in England, and within the last three years this product has been brought upon the market in Canada. The Caldwell Feed Company, supported by Scotch and Canadian capital, whose advertisement appears in "The Farmer's Advocate," have built at Dundas, Ont., a large plant for the manufacture of Molasses Meal. Only pure cane molasses is used as the active principle. Literature and samples may be obtained on request.



Easter.

A song of sunshine through the rain,
Of spring across the snow;
A balm to heal the hearts of pain;
A peace surpassing woe.
Lift up your heads, ye sorrowing ones,
And be ye glad of heart,
For Calvary Day and Easter Day
Were just one day apart.

—Susan Coolidge.

Little Trips Among Eminent Writers.

The Garden of Gethsemane.

(From "Out-of-doors in the Holy Land,"
by Dr. Henry Vandyke.)

Come down, now, from the mount of vision to the grove of olive-trees, the Garden of Gethsemane, where Jesus used to take refuge with his friends. It lies on the eastern slope of Olivet, not far above the Valley of Kidron, over against the city gate which was called the Beautiful, or the Golden, but which is now walled up.

The grove probably belonged to some friend of Jesus or of one of His disciples, who permitted them to make use of it for their quiet meetings. At that time, no doubt, the whole hillside was covered with olive-trees, but most of these have now disappeared. The eight aged trees that still cling to life in Gethsemane have been inclosed with a low wall and an iron railing, and the little garden that blooms around them is cared for by Franciscan monks from Italy.

The gentle, friendly Fra Giovanni, in bare sandalled feet, coarse brown robe, and broad-brimmed straw hat, is walking among the flowers. He opens the gate for us and courteously invites us in, telling us in broken French that we may pick what flowers we like. Presently I fall into discourse with him in broken Italian, telling him of my visit years ago to the cradle of his Order at Assisi, and to its most beautiful shrine at La Verna, high above the Val d' Arno. His old eyes soften into youthful brightness as he speaks of Italy. It was most beautiful, he said, "bellissima!" But he is happier here, caring for this garden, it is most holy, "santissima!"

The bronzed Mohammedan gardener, silent, patient, absorbed in his task, moves with his watering-pot among the beds, quietly refreshing the thirsty blossoms. There are wall-flowers, stocks, pansies, baby's breath, pinks, anemones of all colors, rosemary, rue, poppies—all sorts of sweet, old-fashioned flowers. Among them stand the scattered, venerable trees, with enormous trunks, wrinkled and contorted, eaten away by age, patched and built up with stones, protected and tended with pious care, as if they were very old people whose life must be tenderly nursed and sheltered. Their boles hardly seem to be of wood; so dark, so twisted, so furrowed are they, of an aspect so enduring that they appear to be cast in bronze or carved out of black granite. Above each of them spreads a crown of fresh foliage, delicate, abundant, shimmering softly in the sunlight and the breeze, with silken turnings of the under side of innumerable leaves. In the center of the garden is a kind of open flower-house, with a fountain of flowing water, erected in memory of a young American girl. At each corner a pair of slender cypresses lift their black-green spires against the blanching azure of the sky.

It is a place of refuge, of ineffable tranquility, of unforgetful tenderness. The inclosure does not offend. How else could this sacred shrine of the outdoors be preserved? And what more fitting guardian for it than the Order of that loving Saint Francis, who called the sun and the moon his brother and sister, and preached to a joyous congregation of birds as his "little brothers of the air"? The flowers do not offend. Their antique fragrance, gracious order, familiar looks, are a symbol of what faithful memory does with the sorrows and sufferings of those who have loved us best—she treasures and transmutes them into something beautiful, she grows her sweetest flowers in the ground that tears have made holy.

It is here, in this quaint and carefully-tended garden, this precious place which has been saved alike from the oblivious trampling of the crowd and from the needless imprisonment of four walls and a roof; it is here in the open air, in the calm glow of the afternoon, under the shadow of Mount Zion, that we find for the first time that which we have come so far to seek—the soul of the Holy Land, the inward sense of the real presence of Jesus.

It is as clear and vivid as any outward experience. Why should I not speak of it as simply and candidly? Nothing that we have yet seen in Palestine, no vision of widespread landscape, no sight of ancient ruin or famous building or treasured relic, comes as close to our hearts as this little garden sleeping in the sun. Nothing that we have read from our

of sacrifice, and the anguish of that wrestling wrung the drops of blood from Him like sweat. Here, for the only time, He found the cup of sorrow and shame too bitter, and prayed the Father to take it from His lips if it were possible—possible without breaking faith, without surrendering love. For that He would not do, though His soul was exceeding sorrowful, even unto death. Here He learned the frailty of human friendship, the narrowness and dullness and coldness of the very hearts for whom He had done and suffered most, who could not even watch with Him one hour.

What infinite sense of the poverty and feebleness of mankind, the inveteracy of selfishness, the uncertainty of human impulses and aspirations and promises; what poignant questioning of the necessity, the utility of self-immolation, must have tortured the soul of Jesus in that hour! It was His black hour. None can imagine the depth of that darkness but those who have themselves passed through some of its outer shadows, in the times when love seems vain, and sacrifice futile, and friendship meaningless, and life a failure, and death intolerable.

Jesus met the spirit of despair in the Garden of Gethsemane; and after that meeting, the cross had no terrors for Him, because He had already endured them; the grave no fear, because He had already conquered it. How calm and gentle was the voice with which He awakened His disciples, how firm the step with which He went to meet Judas! The

in the vestibule, with its tall candelabra; then in the Angels' Chapel, with its fifteen swinging lamps, making darkness visible; then, stooping through a low doorway, we came into the tiny chamber, six feet square, which is said to contain the rock-hewn tomb in which the Saviour of the world was buried.

Mass is celebrated here daily by different Christian sects. Pilgrims, rich and poor, come hither from all parts of the habitable globe. They kneel beneath the three-and-forty pendent lamps of gold and silver. They kiss the worn slab of marble which covers the tombstone, some of them smiling with joy, some of them weeping bitterly, some of them with quiet, businesslike devotion, as if they were performing a duty. The priest of their faith blesses them, sprinkles the relics which they lay on the altar with holy water, and one by one the pilgrims retire backward through the portal.

I saw a Russian peasant, sad-eyed, wrinkled, bent with many sorrows, lay his cheek silently on the tombstone, with a look on his face as if he were a child leaning against his mother's breast. I saw a little bare-foot boy of Jerusalem, with big, serious eyes, come quickly in, and try to kiss the stone; but it was too high for him, so he kissed his hand and laid it upon the altar. I saw a young nun, hardly more than a girl, slender, pale, dark-eyed, with a noble Italian face, shaken with sobs, the tears running down her cheeks, as she bent to touch her lips to the resting-place of the Friend of Sinners.

This, then, is the way in which the craving for penitence, for reverence, for devotion, for some utterance of the nameless thirst and passion of the soul leads these pilgrims. This is the form in which the divine mystery of sacrificial sorrow and death appeals to them, speaks to their hearts and comforts them.

Could any Christian of whatever creed, could any son of woman with a heart to feel the trouble and longing of humanity, turn his back upon that altar? Must I not go away from that mysterious little room, as the others had gone, with my face toward the stone of remembrance, stooping through the lowly door?

Easter.

At all times in the earth's history, early spring has been a time of especial rejoicing. In Egypt, in the early days, Easter-time marked the vernal equinox and the rising of the Nile, a very important time in that land so dependent upon this great stream for its fertility. Hence great ceremonies marked the month, and the priests watched for the "turning of the sun northward" from what seemed to them its southward journey.

The Phœnicians, who worshipped the sun under the name Baal, held their sun festival at this season; and later the Israelites adopted the same time for their feast of the Passover; the early Christian church, in turn, associating it with the resurrection.

The name "Easter," however, is derived from Ostara, goddess of the Saxons, who was worshipped in England by the Druids, and throughout Northern Germany, as the personification of the east, of morning, and of spring.

At first, the date of the Christian Easter was identical with that of the Jewish Passover, but in A. D. 325, the Nicæan Council decided up-



One of the Old Olive Trees in the Garden of Gethsemane.

Bibles in the new light of this journey has been for us so suddenly illumined, so deeply and tenderly brought home to us, as the story of Gethsemane.

Here, indeed, in the moonlit shadow of these olives—if not of these very branches, yet of others sprung from the same immemorial stems—was endured the deepest suffering ever borne by man, the most profound tragedy of the greatest Soul that ever lived upon the earth. It was here that the Saviour of the world enacted the drama of His life, the purpose

bitterness of death was behind Him in the shadow of the olive trees. The peace of Heaven shone above Him in the silent stars.

The Place of the Holy Sepulchre.
(From "Out-of-doors in the Holy Land,"
by Henry Vandyke.)

The center of all this maze of creeds, ceremonies and devotions is the Chapel of the Holy Sepulchre, a little edifice of precious marbles, carved and gilded, standing beneath the great dome of the church in the middle of a rotunda surrounded by marble pillars. We bought and lighted our waxes, and waited for a lull in the stream of pilgrims to enter the stone. First we stood

on a change. The equinox was set for March 21st, disregarding its variations, and Easter arranged to fall on the first Sunday after the fourteenth day of the moon that is in the ascendancy at that time. The use of eggs, of course, is symbolical of resurrection, although eggs have been held as sacred or symbolical by many non-Christian peoples, as among the ancient Brahmans, for instance, who told of a primeval "water" upon which arose an egg which gave birth to Brahma. The custom of eating hot-cross buns on Good Friday has descended from the pagan worship of the Queen of Heaven with cakes which were made to resemble the sacred heifer in Egypt, and so called "bons," or "boun," hence "bun."

The Windrow.

Until the reign of James II., it was customary at Easter for the British sovereign to wash the feet of a number of his subjects corresponding to his own years of age. When Queen Elizabeth was thirty-nine, she washed the feet of thirty-nine courtiers, but it is recorded that the feet had been put through a double washing and perfuming process before the ceremony. William III. was the first to break loose from the custom, deputing the task to his almoner, and finally gifts of money, "maunds," were substituted for the service.

In paintings, even quite famous ones, of the women at The Tomb, the conceptions of the artists have often shown the women attempting to roll away a huge stone. Archaeological research now shows that these pictures give an erroneous idea. These stones at the tombs were really shaped like wheels, and were made to roll in a groove. They were usually placed before a "shelf-tomb," in which the body was placed on a shelf placed in a recess excavated in the rock. The traditional tomb of Jesus, in the Church of the Holy Sepulchre, at Jerusalem, is a tomb of this kind. It consists of two chambers, an antechamber or vestibule, now called the "Chapel of the Angel," and the tomb proper, containing a shelf now overlaid with marble. The doors of these tombs were small and low, this explaining why Mary Magdalene and again Peter "stooped down" to look within.

Hope's Quiet Hour.

The Same To-day.

JESUS Christ the same yesterday, and to-day and for ever.—Heb. xiii: 8.

"The world sits at the feet of Christ, Unknowing, blind and unconsented; It shall yet touch His garments' fold, And feel the heavenly Alchemist Transmute its very dust to gold."

On the first Easter Day, the men and women who knew that their Master was living, and at hand, could not be expected to think or talk about any subject of less vital importance—at least when they were with any of His friends. They had loved Him as their dearest earthly companion, now they revered Him as Divine. Some were still feeling that all the sunshine of life had gone out; they still mourned over a dead King, not knowing that He was Risen. Those who knew the glad tidings of great joy could not rejoice alone, but must run quickly to carry the good news from house to house. Breathless, but radiant, they repeated the story over and over again, wherever a wondering listener could be found. Then, in the evening, the apostles talked together about the Lord they loved; and He was listening to every word, though they did not know it. And, as they talked about the wonderful story of the Risen Christ, scarcely believing that His Resurrection could be a general fact, without any warning, Jesus Himself stood visibly in the midst of them, "and upbraided them with their unbelief and hardness of heart, because they believed not them which had testified of Him after He was risen." At first they were frightened, supposing that they

saw only a disembodied spirit, so He showed His hands and feet and side, and even shared with them their interrupted meal. He was eager to prove His identity with the Friend they fancied they had lost, saying tenderly: "It is I Myself; handle Me, and see."

Bishop Wilkinson says these words might be more clearly translated, "I am Myself," and goes on to say that the Risen Lord "seems to forget the little parenthesis of the grave and Paradise, of death and the Resurrection, and takes up the broken thread of the discourse." What a comfort it is to us to know that death does not destroy identity any more than life does. If our identity depended on this changing body of ours—the tent where the soul lives—then we should not be the same people that we were ten or twenty years ago. Every moment I am losing part of my body. In a very few years, not a particle of it will remain, yet I shall be the same person as before. We not only live and love as we did long ago, but even our changed appearance is not enough to keep our friends from recognizing us—though, after a long absence, we may have to show some marks of identity. The mother who parts with a smooth-faced boy, and does not see him again for many years, may find it hard to believe that a bearded, weather-beaten man is really the same loved son. But she soon gets used to the change, and knows that it is only a surface matter. It is her son himself.

So it will be with us when death lies behind us instead of before. We shall soon grow accustomed to the changed life, as we have grown accustomed to the change from childhood to manhood or womanhood in ourselves and others. We shall step out of this room of the King's palace into the Park of Paradise, and we shall not have to go alone even that short distance. The dear Master, who has led us so carefully here, will not lose His strong hold of our hand. He is the same to-day as He was yesterday, and will be unchanged through all the ages of eternity. We, like the apostles, shall "be glad when we see the Lord."

The one thing which filled the thoughts of the disciples at that first Eastertide, was the Living JESUS, and no other thought can begin to compare with it now. We may be interested in business or pleasure, but in a short time these will have faded out, and we shall have new interests. The child is interested in toys or games, but in a few years he feels amused to think that he ever cared for a toy gun or a rocking-horse. A

few years more pass and he can hardly understand why skating or coasting were once a keen delight. The dearest earthly joys slip out of our grasp, or out of our affections, but JESUS is "the Same" yesterday, to-day, and for ever. A very clever Professor was drawing daily nearer to death. His friend read to him one of the learned books that he used to enjoy. "Oh, I'm awfully tired of it!" he remarked. Then he spoke about the living Christ, and said, "There is nothing else of any use to me now."

Our own experience tells us that we grow away from many things, and the experience of those who have passed triumphantly or peacefully into the unseen life on the other side of death, leaning on Christ, and said, "There is nothing else of any use to me now."

But the Easter message that "JESUS LIVES!" is not to be kept to ourselves. The women, who were first told the glorious tidings, were sent to bring the disciples word. Even if they had not been commanded to spread the good news, even if they had tried to keep the secret, their glad faces would have spoken plainly. So it is to-day. If we live every day consciously with our Master Christ; if we tell Him about our pleasures, consult Him in our difficulties, and endure His strength, then others will be more sure that He is really close at hand. If only one or two people in the world believed that they could speak to Christ and he answered by Him, then they might often doubt their own conviction of His Living Presence. If only one person had seen Him on the first Easter Day, that one might have doubted his own experience. But the faith of one was strengthened by the witness of another. And it is always so. If we allow our faith to grow weak, we are injuring the faith of other people; without intending to do them any harm, of course. If we have a clear vision of our ever-present King, then others will find it easier to believe.

But how can we make ourselves believe? Faith is the gift of God, and we can ask Him for it. Faith comes to us through the Holy Spirit, and He is always given to those who pray for His indwelling Presence. Faith was given to those who loved Christ at first, and He is "the Same" to-day. We do not hear that He showed Himself alive after His death to anyone but friends. Of course, the people who do not want to believe, do not want to fight each favorite sin to the death, are not easily convinced. The

witnesses were not sent to tell Caiaphas or Pilate, they were sent to the sorrowing disciples.

A few weeks ago I heard a missionary tell the story of an old man who had been converted from heathenism. "But," said the eager convert, "how long have you known that God loves us all?"

When told that the good tidings of great joy had been known for many hundreds of years, he said: "Oh, why did you not let us know sooner? Perhaps I might have died, like others of my people, without knowing anything about it?"

Christendom is waking up to a sense of its responsibility, but are we—each one of us—virtually interested in Missions? If we have had our eyes opened to see the Face of the Living JESUS, are we satisfied to enjoy the knowledge of His Love without trying to let others know? I don't mean only sending money to missionaries—though that is very important, too.

JESUS is the same to-day as He was yesterday. Then He hid Himself under the commonplace. Many saw Him working in the carpenter's shop, and yet did not know Him to be God. Now He touches us in every sorrow and in every joy. He comes to us in every man, woman or child we meet, He puts each moment's duty into our hands, and pours wonderful gladness into our hearts when we lay our lives at His feet. He still reveals Himself sometimes in dreams. A few weeks ago, I dreamed that I saw Him, not clearly, but in a shadowy vision. The face was hidden entirely, and I did not hear a voice, but I knew that His orders were to do something that was against my own wish. In the dream came a sudden rush of joy as I yielded my will to His. The remembrance of that dream has helped me to rejoice in the privilege of obeying when obedience is hard. You have that privilege too.

"As a King with many crowns He stands,
And our names are graven on His hands;
As a Priest, with God-uplifted eyes,
He offers for us His Sacrifice;
As the Lamb of God for sinners slain,
That we too may live He lives again."

DORA FARNCOMB.

Near Home at Last.

The following is an extract from "Near Home at Last," a poem, by Rev. J. V. B. Monsell, written a week before his own



A Fine Back Yard.

Good alike for tennis, for bleaching, or for quiet enjoyment of its beauty. Residence of Mr. Rowland Stephens, Middlesex County, Ontario.

happy death. At the time of writing, he was seemingly in good health.

From the still hush and curtained gloom
Of the dear old familiar room
When all that round about it lies
Is full of happy memories,
When watchful love with silent tread
Steals gently round the dying bed,
And whispered accents soft and dear
Fall gently on the dying ear,
And hands the tenderest wait by
To close in faith the dying eye,
When the last dull, dim sense of feeling
Is consciousness of dear ones kneeling
Devoutly round, and breathing there
The last commendatory prayer.
Then, suddenly, to open mine eyes
And find myself in Paradise!
The Gates of Death forever past
To find myself with Christ at last;
To see that look of welcome given
Which is the very Gate of Heaven,
To feel through all my being move
That holy atmosphere of love,
And as His Hand is on me laid
Hear these sweet words, "Be not afraid!"
I know in Whom I have believed,
By Whom I shall be then received,
The dignity and tender grace
Of that oft-imagined face,
The well-known and familiar voice
That made my heart on earth rejoice.
To see, as Stephen; hear, as Paul;
And then at last to see it all!
See my own Jesus standing near
And His soft, "I am Jesus!" hear.

Then, when my race on earth is run,
My day of work and waiting done,
And I with tottering footsteps wend
Nearer to what men call my end,
And they in whom life's tide is high
With pitying whispers pass me by,
I ask no pity for my fate;
Nay, rather, friends congratulate,
For Home is near, and it is late!
J. V. B. M.

Resurrection.

Breezes of spring, all earth to life waking;
Birds swiftly soaring through the sunny
sky;
The butterfly its lonely prison breaking;
The seed up-springing, which had seemed
to die.

Types such as these a word of hope have
spoken,
Have shed a gleam of light around the
tomb;
But weary hearts longed for a surer token—
A clearer ray, to dissipate the gloom.

And this was granted! See the Lord as-
cending,
On crimson clouds of evening calmly
borne,
With hands outstretched, and looks of
love still bending
On His bereaved ones, who no longer
mourn.

"I am the Resurrection!" hear Him say-
ing;
"I am the Life; he who believes in Me
Shall never die; the souls my call obeying
Soon where I am for evermore shall be."

Sing Hallelujah! Light from heaven ap-
pearing,
The mystery of life and death is plain;
Now to the grave we can descend, un-
fearing,
In sure and certain hope to rise again.
—From the German.

The Dawning.

Was't a bluebird's wing
Or the deepening hue
Of the sky's dim blue?
Did a blossom cling,
Rose-pale, in the hedge,
For an April pledge?

Ah 'tis Eastertide,
And the lily's flame
With its dawning came,
Flower'ing far and wide
As a soul's pure grace
In a sin-marred place.

There's a faint and fleet
Moist marvel of scent
With the gray mist blent
And the wings that beat
Far south, northward swim
It is spring—yes, spring!
—Grace Stone 1904

The Beaver Circle.

[For all contributors between the ages of ten and fifteen, inclusive, who are in Fourth Book, Continuation Classes, or who have left school.]

Dear Beavers,—I have an interesting announcement to make to you to-day. In order to encourage you to do some gardening at your home, we are going to give you the following competition. Get your father to give you a small plot of ground, plant in it five kinds of vegetables—your own choice—and the following flowers: Nasturtiums, asters, white candytuft, phlox drummondii, verbenas. In the fall, when your garden is at its best, have a picture taken of it—a snapshot, taken by anyone near who has a kodak, will do—then write us a letter about it, and send us one of the snapshots.

For the best letter, with photo, we will give a prize of \$5.00 in cash; second prize, \$3.00; third prize, \$2.00; fourth prize, \$1.00.

Now, won't you try this? You must supply your own seed—ten packets in all—or two of you can club together and divide each packet in two. Get the seed from a good seedsman (any of those who advertise in our paper are good), then give your garden the best of care. You will run the chance of getting a prize, and even though you should fail, you will still have gained, for you will have the flowers and the vegetables. All letters and photos must arrive at this office not later than September 30th. Address them to "Beaver Circle," "The Farmer's Advocate," London, Ont.

Our Letter Box.

Dear Puck.—This is my first letter to the Beaver Circle. I saw in one of "The Farmer's Advocates" that some little girl was asking about "The Flying Squirrel." I can tell you about them, as my friend next door had three squirrels. They are brown, and when they fly they look like skin-mats. You can get them in Gowganda. My friend's father brought them to her. Sometimes they are very hard to catch. One little squirrel bit a man when he was helping to catch him. They can get very tame. Sometimes they will run up your arm if they are used to you. But sometimes they are very dangerous to handle.

I wish some of the Beavers would correspond with me.

MARGARET TANTON

(Age 10, Book III.)

Toronto, Ont., 655 College St.

Dear Puck and Beavers.—This is my first letter to the Beaver Circle, although my father has taken "The Farmer's Advocate" for a number of years.

I live in a little village called "Weston," which is situated on the banks of the Humber River. This is one of the thriving suburban villages of Toronto. Electric cars run between Toronto and Weston. Twenty-three passenger trains go through Weston daily. This is due to Weston being situated on the main line of the Grand Trunk and Canadian Pacific Railways.

Although I live in the village, we have a farm about five miles from Weston; it is called "Rosedale Stock Farm." I have two ponies. They are very quiet and good-tempered. My brother won first prize and championship at Toronto with one we call "Lady May." The other pony is a nice chestnut in color, and his gait is a pace. He (the pony) was imported from Ireland this fall.

I had another beautiful little pony, but we sold it at Toronto Exhibition, to go to Lashburn, Sask. I won five first prizes with her at three shows. I am sure any of the Beavers would have been delighted to have seen her. Her name was "Ladysmith," and my father imported her from Scotland.

"THE WREN" (age 14).

Weston, Ont.

You must have your own name published "Wren," if you wish correspondents to give you in your postscript.

Dear Puck and Beavers.—One day last week I saw a little bird which had a very beautiful red breast on the side of

at once went and got a ladder. My father climbed up and got the little bird out. We all looked at it in our hands, and then let it go. It flew away, seeming very happy to again be free.

We have the 'phone in our house now. My father has taken "The Farmer's Advocate" for quite a number of years, and we all think it is the best paper yet.

I live on a farm about ten miles from Kincardine. Our farm is called "Point Clarke." I have a mile and a half to go to school. We had a Christmas-tree at our school on the 21st of last December, and I took part in the programme. As this is my first letter to this famous Circle, I must not take up too much room. I will close now, hoping that this will escape the huge monster of a w-p. b.

I will give a few riddles:
Why is a cigar-loving man like a tallow candle? Ans.—Because he will smoke when he is going out.

Why should a horse not be hungry on his journey? Ans.—Because he always has a bit in his mouth.

Why does a chicken three weeks and two days old walk across the road? Ans.—To get to the other side.

SYLVIA L. BROWN (Book IV.)

Lurgan, Ont.

Dear Puck.—This is the first time I've wrote to the Beaver Circle. I have seen that some of the girls would like to have a badge. I think it would be nice. For pets I have a dog. She is only a little dog, but she can catch rats and mice to beat the band. In the summer she got in the well, and my father had to put a ladder down in the well and help her out. I was away, but I heard all that had happened to my pet. She will sit up and beg for something to eat, and she will eat apples just like a little boy, and she will play hide-and-go-seek with us. We have a cow, and she is so tame I can go up to her, and I can ride on her back. I had a little calf, and my uncle said he would take it for the winter. "I was up to see it one day, and it has got to be a dandy."

ADEN L. VAN SICKLE (Book III.)
Jerseyville, Ont.

Dear Puck,—I have long enjoyed reading the letters in this Circle, but never gathered up enough courage to write myself. I live about two miles from the village of Nilestown. I go to school every day, and like it very much. I have about a mile to go.

For my pets I have a nice old mother cat called Molly, a kitten, which I call Peter, and a dog called Fido. Peter is a nice kitten. He is gray and white, and catches lots of mice. Fido is best of all. He is not very large, and is black, with a white breast. He is not very old, about two years. I have a sleigh and a nice harness. I hitch Fido up to the sleigh and then jump on. He fairly goes like the wind. He will go anywhere you want him to go. My brother hitches him up and goes out to the village for the mail, especially on Friday nights, for then he gets "The Farmer's Advocate," which we all enjoy reading very much.

We have a nice sugar bush on our farm, and, with tapping, come the jolly times. We fly around emptying the sap pails, never caring whether we get our feet wet or not, and then watch father boil the sap down to syrup. We take some of the syrup, and, calling in some neighboring children, boil it down to sugar. What fun we have! Stirring the rich, warm sugar into patty-cakes; and then we eat some and take some to school. I have some nice playmates at school, and always remember them when they have not any. I think sugaring-off is such fun. Skating and coasting is fun too. I was skating nearly every night after school for a long time. There are lots of ponds around our place.

As my letter is getting rather long, I will close, wishing the Circle every success.

INEZ M. JEFFREY

(Age 11, Book IV.)

Nilestown, Ont.

The Flowers.

Written for the Beaver Circle, by Amelia B. Nicol, aged 11, Calgary, Alta.

In the garden the beautiful flowers grew. After being kissed by the morning's dew, While the sunbeams their fair faces kissed, In the cool forenoon's mist,

But, alas! one morning they did not raise their heads,
For the frost had come and frozen the garden beds.

At last the winter passed away,
And the flowers did no longer lie;
For they lifted their heads as if to say,
"Good-morning, good-morning, this beautiful day."

Beaver Circle Notes.

Agnes Sherk, Mulgrave, Ont., (age 12) would like some of the Beavers to correspond with her. Also, Florence Poole (age 11), Norwich, Ont.

We are sure Esther Strigley could write us a very interesting letter about Pelee Island. Try it, won't you, Esther?

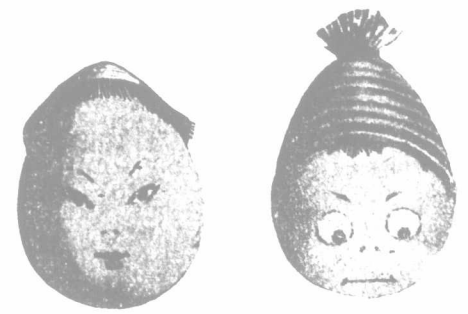
The Junior Beavers' Department has been crowded out this time, but it will appear next week.

Will the Beavers be kind enough not to send any more letters until requested to do so, as there are a great many on hand.

Our Junior Beavers.

Easter Eggshell Gifts.

Dear Little Beavers,—What a happy day Easter Sunday is! Spring is coming, Easter holidays are here, and there is another reason, too; some time on Easter Sunday, ask your mother to tell you why we keep Easter as we do, and why eggs are eaten on that day. Perhaps, on Saturday, you may like to color some eggshells, and make little Easter gifts of them to give to your friends. Perhaps



Egg Chinaman and Brownie.

the nicest of all is to make little flower-pots of some of them. Ask your mother to empty the eggs that she is using for baking very carefully, so as to have each like a nice little cup. Now color the shells with cochineal, coffee, or the water from boiled onion skins, and set each in a little pocket easily made of twine. Put a little hole in the bottom of the shell, fill it with nice earth, and plant a nasturtium seed in it. Your friend can then hang the little "basket" in her window, and watch the plant growing, and by and by she can transplant it into her garden.

You can make a Chinaman or Brownie pen-wiper this way: Empty the eggs by making a hole in each end and blowing the inside part out. The larger hole may



Stella Manson, Ayr, Ont.; her sister, and dog, "Baudy."

be the size of a five-cent piece. Now fill the egg, through a little paper funnel that you have rolled and placed in this hole, with plaster of Paris, mixed with water until it is about as thick as cream. When it hardens, paint the faces on the eggshell, and paste on the hair or cap made of fringed sticking-plaster (black) or fringed paper. Last of all, have two rounds of dark cloth nicely scalloped and sewn together, and stick the head on this "wiper" with some thick glue.

In some parts of Germany, an Easter Hare is supposed to bring the eggs for

the children, and on Easter morning all the little ones search for the hot, colored eggs, which have been hidden about the rooms of the home.

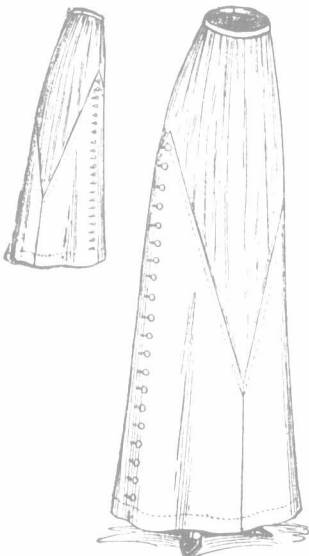
A DEADLOCK.

Johnny—"Grandpa, do lions go to Heaven?"
Grandpa—"No, Johnny."
Johnny—"Well, do ministers?"
Grandpa—"Why, of course. Why do you ask?"
Johnny—"Well, suppose a lion eats a minister?"—Life.

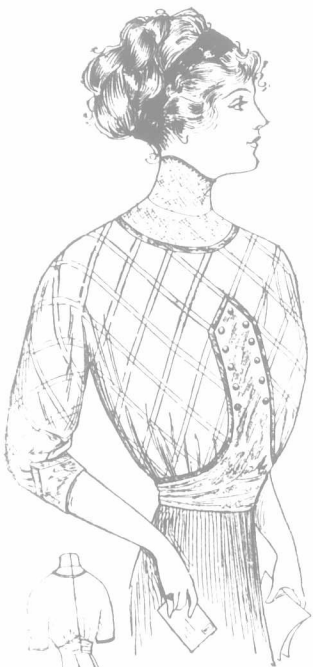
"The Farmer's Advocate" Fashions.



6960 Fancy Waist, 34 to 42 bust.



6961 Three-Piece Skirt Lengthened by Circular Portion, 22 to 30 waist.



6966 Peasant Blouse with Fancy Girdle, 34 to 40 bust.



6970 Nine Gored Skirt, 22 to 36 Waist.

Please order by number, giving measurement, and allowing at least ten days to receive pattern. Price, ten cents per pattern. Address, Fashion Dept., "The Farmer's Advocate," London, Ont.

News of the Week.

The new National Art Gallery of Canada will be opened in Ottawa, April 20th.

The first monorail for passengers and freight will be opened in Germany this summer.

The contract for the new Quebec bridge has been awarded to the St. Lawrence Bridge Co.

Hon. Mr. Fielding's Budget statement showed a surplus for the year ending with March amounting to \$30,500,000.

There is a movement afoot to establish model schools at Guelph and other points in Ontario, with a four months' term lasting from August to December.

The race for the South Pole now lies between the British explorer Scott and the Norwegian Amundsen, both of whom have reached a far southern latitude. A Japanese Antarctic expedition also left New Zealand last month.

President Taft promises to come forth as one of the most notable peace advocates of the time. Not long ago he made the statement that he could not see any reason why matters of national honor should not be invariably settled by a court of arbitration, and expressed the opinion that if the United States could negotiate a positive agreement with some other nation to abide by the adjudication of such a court, no matter what was involved, a long step forward would be taken. Subsequently, in the British House of Commons, First Lord of the Admiralty McKenna foreshadowed that no further increase in expenditure for naval armament will be made after this year, provided the Germans do not force the step by marked increase in their programme; while Sir Edward Grey intimated that Great Britain would be delighted to receive such a proposal as that embodied in President Taft's words. Both sides of the House applauded the suggestion; while, in the House of Lords, Lord Chancellor Loreburn expressed the opinion that the United States President's proposals might prove to be the most important utterances of the century, and a turning point in the history of the world. The French Chamber of Deputies also has declared in favor of limitation of armaments. In Germany the proposals have met rather generally with a cold reception, but the German So-

cialists will introduce a resolution into the Reichstag asking for an immediate international understanding regarding a general reduction of armaments and the abolition of the right of capture at sea.

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month, in this department, for answers to questions to appear.]

At Housecleaning Time.
(Continued.)

Now, having finished with the walls, furniture and floors, we may turn to windows, carpets, etc.

To Wash Lace Curtains.—Shake and brush them first to remove dust. Soak over night in a suds made with some good white soap, then work them up and down gently, and squeeze them between the hands to get the dirt out, but do not rub them on a board. Next, put them in a clean, warm suds, with ammonia added, put through this gently, and keep changing the water until the curtains are clean. Never wring curtains; press the water out. Now rinse well through two or three waters, and put through hot, thin starch. If the curtains are white, the starch may be slightly blue; if cream color, strong coffee may be added. Pin each point to the drying frame, and dry quickly. The curtains will not need ironing, except, perhaps, a little pressing about the points. . . . If the curtains seem almost too far gone for use, mend them with net, or a bit of coarse lace, soak as before, and put them in a mosquito-netting bag to wash.

To Make White Curtains Cream.—Dye with strong coffee, or saffron tea. Test with a bit of lace before putting the curtains in.

To Remove Old Putty from Windows.—Heat an iron rod or soldering-iron, and pass it slowly over the putty, which will become soft, and may be easily removed.

To Remove Paint and Putty Spots from Windows.—Wet them with hot vinegar and scrape very carefully.

To Wash Windows.—Provide plenty of clean cloths of old cotton. To half a pail of very hot water, add ¼ cup kerosene. Wring a sponge out of this and go over the window. When it just commences to dry, go over it with the clean cloths. Choose a rather dull day, so that the windows will not dry too quickly, as otherwise it is hard to keep them from being streaked. A chamois skin, instead of cloths, is good, and one, if kept clean, will last for years. (2) **Another Method.**—Take a pad of cotton rag soaked in glycerine and rub the glass; then lightly polish with clean, dry rag, until the glycerine is invisible. This is a method more suitable for winter, as it helps to prevent condensation.

To Join Matting.—Instead of thread, use raffia, dampened and split. Use a needle with a long eye. Finish the ends by ravelling out about 2½ inches from each end and tying the strands into a fringe. This can then be turned under, with a bit of the matting if so desired. This looks better than binding or hem, and can be more quickly cleaned.

To Remove Grease from Matting.—Cover the spot with French chalk, and sprinkle with benzine or gasoline. When the latter has evaporated, brush the chalk off.

To Clean Matting.—Wash with warm water to which plenty of salt has been added. Dry quickly.

To Clean Carpets.—Have a frame made of poultry netting, if possible, a foot or two from the ground. Lay the carpet on this, face down, and beat well, reversing and beating until all the dust is out. The carpet-beaters that may be bought for a trifle, are best—unless you can procure a vacuum cleaner.

To Clean Very Old and Soiled Carpets.—Shave a bar of laundry soap into enough water to melt it. Put this on the stove and let the soap melt, then remove, and, when cool, add half a bottle of ammonia. Apply to the carpet with a stiff, clean scrubbing brush, slightly

dampened, and scrub vigorously. Rinse and wipe, and see that the carpet is not walked over until dry, but do not use a drop more water than is absolutely necessary. This plan is not good for green carpets, as ammonia turns green red.

To Brighten Carpets.—Beat and sweep, then wipe with soapsuds, to which turpentine has been added, 1 tablespoonful to a gallon. (2) **Another Method.**—Beat and sweep, then apply plentifully cornmeal, dampened in clean soapsuds. Leave on for a few minutes, then sweep off. (3) After cleaning, rub with a cloth wrung out in vinegar and hot water, a cupful to a pail.

Blackening Stoves.—If the blackening will not adhere, add to it a few drops of glycerine or a little molasses. Use a leather mitten when blackening and polishing. (2) The following is said to be very satisfactory: Put equal parts of vinegar and linseed oil in a bottle, shake well, and apply to the stove with a soft cloth. This does not give a high polish, but cleans and blackens.

To Clean Enamelled Iron Bedsteads.—Apply kerosene on a cloth. Use just a small quantity, and rub well.

(To be continued.)

Pork Cake Recipe.

Requested by I. G., Middlesex Co., Ont. After looking through several years' of the earliest issues of "The Farmer's Advocate," I have failed to locate this special recipe. The following, however, are very good: (1) To 1 lb. salt pork chopped very fine, add ¼ pint strong boiling coffee, 2 cups brown sugar, 1 cup molasses, 1 teaspoon soda, 2 heaping teaspoons cinnamon, 1 teaspoon cloves, 1 nutmeg, 6 cups flour, 1 lb. seeded raisins, ½ lb. citron and candied orange peel sliced thin. This makes two large cakes. Bake in a moderate oven. (2) 1 cup chopped pork, 1 cup raisins, 1 cup molasses, 1 cup milk, 1 teaspoon salt, 1 level teaspoonful soda, 4 cups flour. Bake in moderate oven.

To Corn Beef.

Will you be kind enough to send me, in next week's issue, a good recipe for corned beef?
HOUSEKEEPER.

Make a brine of salt and cold water strong enough to bear up a potato. Add a pinch saltpetre, but this must be used sparingly or it will make the beef hard, 2 ounces saltpetre is enough for a barrel of beef. Boil the brine down, about in the proportion of 3 pailsful to 2 pailsful, then, when it is cool, lay the beef in and turn occasionally for two or three weeks. You may add allspice, cloves, etc., to the boiling brine if you like.

Will all who wish to write to this Department please read the standing notice at the head of it. It is often quite impossible for us to insert letters, etc., before a month after they are received. Please make this allowance.

Recipes.

Dear Dame Durden,—Would you kindly print in your valuable paper the recipe for candy—"Sea Foam," and also directions for cleansing the liquid chicken has been boiled in, so as to have it clear when jellied?

Am enclosing a recipe for candy, "Creamed Maple," which I think is very good: Two cups cooking sugar, 3 table-spoons syrup (either maple or corn), butter size of an egg, ¼ cup sour milk, ¼ teaspoon soda. Stir while cooking. Boil till it hardens when dropped in water. Add nuts after taking off stove. Stir, and pour on buttered pans.

Date Cake.—Two cups flour, 2 cups oatmeal, 2 cups buttermilk, 2 cups cooking sugar, 1 small cup butter, 1 teaspoon soda, 1 lb. dates.
PRISCILLA.

Middlesex Co., Ont.
Skim the liquid very carefully while hot, removing every particle of grease from the top with clean blotting paper. Strain and let cool. Break up the shell and white of an egg, beat slightly, and add it to a quart of the cold stock. Place all over the fire and let boil quickly five minutes, add half a cup cold water, stand aside immediately for five minutes, then strain; then pour over the chicken that is to be jellied. If you wish the jelly clearer than this, you will have to use

more water, and gelatine to thicken, but the flavor will not be as good.

Can anyone send a recipe for sea-foam candy?

Re Furnishing.

Dear Dame Durden,—I have received many valuable hints from the Ingle Nook, and it is for this reason, because I rely so much on your opinion, that I come to you for a little advice.

We are building a new house this year, and I am undecided how to have the walls of the dining-room finished.

Which would be the best way, or can you suggest a better way still?

(a) To have wooden panelling about three feet up, then the plate-rail up above that again.

(b) To have the panels run right up to the plate-rail. (By the way, how high from the floor is the plate-rail generally placed?)

(c) To have a baseboard, and then have canvas (I do not know the proper name for it) in a color to run from baseboard to plate-rail.

Would you leave ceiling and rest of walls white, or would you have them painted or papered (or what)?

What about white walls in a new house, anyway? Would you treat them in any way?

Our dining-room will face the south; what would be a good color - scheme for it, finished in the way which you would prefer?

Are dome-fasteners practical for fastening a rug to the floor, and is natural stained floors more in taste than that finished with linoleum about the rug?

There seems to be no end to the questions I could ask you, dear Dame, but I think if you condescend to answer these, you will have gone to a great deal of trouble.

Thanking you in anticipation, and hoping you will long remain in the Ingle Nook.

Oxford Co., Ont.

Sometimes, if the walls are very high, a low wainscoting and plate-rail, such as you suggest, are used; sometimes, too, a wooden panelling is run to the plate-rail, but this usually looks better for institutions, and even then it is not advisable unless a fine natural wood can be used, in which case the expense is considerable. I believe I should like a baseboard, then burlap to the moulding (with narrow slat panels of wood probably), then a deep, handsome frieze,—no plate-rail, a built-in cupboard with diamond panes being used instead for the pretty china. Above doors and windows, however, a moulding might be placed wide enough to hold handsome or quaint plates. This is often done. If, however, you prefer the plate-rail, you might have a baseboard, then a handsome foliage paper to the rail, then a plain paper above that. You see, it looks like decoration upon decoration to range plates, etc., over a handsome frieze, so the plain background is better. This would be very effective. The plate-rail is usually put about six feet from the floor. By the way, a good water-paint is often used for walls instead of paper, and looks very well indeed, although the cost is comparatively trifling. A very attractive room that I know has the walls to the moulding of this paint, in a deep, soft green, the space above the moulding being filled by a handsome paper frieze in tree design. Occasionally, too, the plaster is stained, being finished smoothly, and left without the putty coat. Such a wall-finish, of course, requires an arts-and-crafts treatment of the whole room to be effective.

The ceiling might be tinted a deep cream. Muresco would be a good finish, although paper is often used, preferably a plain, dull-finished one. Many people leave the walls of a new house white for a while, to save extra expense. It is thought better to do this, and not to have them at all until one can afford to have them done well, and, practically, permanently.

A south room always needs rather cool colors, gray-greens, gray-blues, purples, grays, etc., but deep cream and tobacco or wood-browns are not objectionable at all—though classed among the warmer shades—and they have the advantage of not fading quickly. In any case, it pays to get a good paper, quiet in tone, dull in finish,—two-toned papers being usually

safest if a pattern is ventured upon, although a harmonious blending in frieze or in foliage-papers may admit of more than two tones. Pure gray walls need very skillful contrasts in rug, frieze, curtains, etc., to be effective.

I never heard of fastening rugs to the floor with dome fasteners, although, possibly, large ones may be manufactured for this purpose. Heavy rugs need no fastening. Sometimes, if the edge is inclined to curl, the defect may be overcome by sewing a strip of stiff buckram or some such material under the edge. A stained floor is much prettier than linoleum about a rug. If a covering is absolutely necessary, because of ugliness of the floor, fine Japanese matting, without pattern, may be used.

Ask all the questions you like, Gretchen. It is a pleasure to help the Ingle Nook folk in any way.

Basket Pattern.

If the lady with the basket quilt pattern would try the way I have seen it put together: Put together with blocks; put two rows each side of quilt, handles pointing to center of quilt. Now put one row up center of quilt, handles pointing to head of the bed. This way, all handles point the right way.

MRS. DARBY.

Mother—"What are you doing, Harry?"
Harry—"I'm countin'. You told me when I got mad to count a hundred."

Mother—"Yes, so I did."
Harry—"Well, I've counted 237, and I'm madder'n when I started."—Harper's.

Easter Cookery.

Egg Croquettes.—Pour 3 pints boiling water into a pan. Put in it 8 eggs, re-heat quickly to boiling point, then draw to the back of the range, cover, and let stand for 20 minutes. Drop the eggs into

and serve on a nest made of boiled spinach, boiled asparagus, boiled rice, or mashed potatoes, which have been beaten with cream and browned in the oven.—Boston Cooking School.

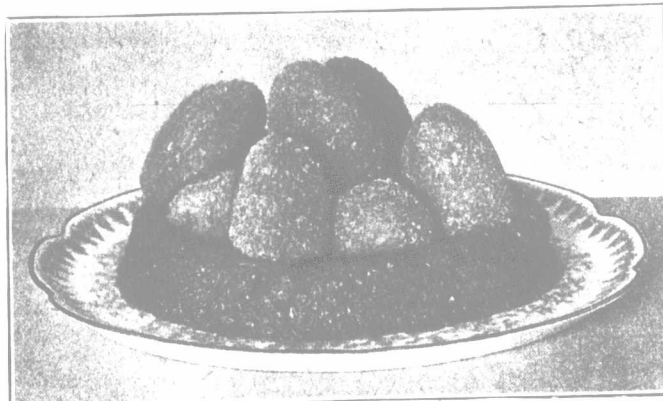
Stuffed Eggs.—Have some eggs hard-boiled as above. Cut them in halves, press the yolks through a sieve and add an equal mixture of chopped ham or tongue, a little Worcestershire sauce, salt, pepper, and curry powder to season, and enough tomato catsup to moisten. Fill the eggs with the mixture, and serve on a bank of boiled spinach or browned mashed potato.

Boiled Eggs.—To boil eggs ideally, put them in boiling water, cover, and let stand on the very back of the range, where they will not even simmer, for ten minutes. Another method is to put the eggs in cold water, and serve them the very moment the water begins to boil. The old method of boiling eggs hard for three minutes is not good, as it hardens the white so much as to render it indigestible.

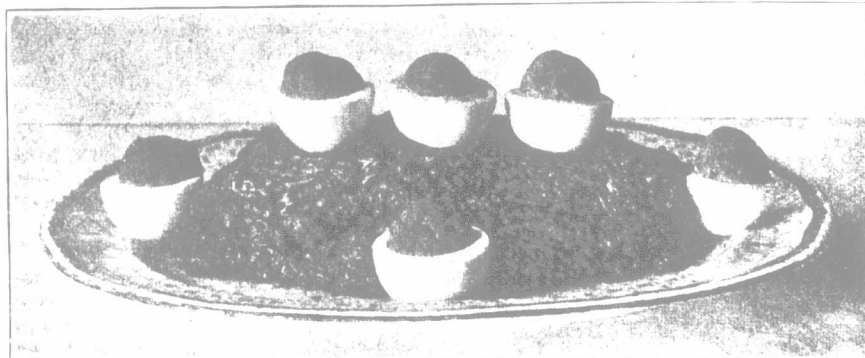
Poached Eggs.—Have the water salted and just simmering. Break the eggs one at a time into a saucer. Slip them in separately. A spoonful of vinegar in the water will help to keep them from spreading. With a small spoon, throw water gently on top of each egg until lightly done. Remove with a perforated ladle to small bits of buttered toast. Very excellent egg-poachers are now sold, or the eggs may be poached in muffin rings if you choose. A cream sauce may be poured over the egg and toast if you choose, and served with a sprinkling of grated cheese.

Savory Eggs.—Cut hard-boiled eggs in two, lengthwise. Remove the yolks, and mix with cream, pepper, butter, chopped parsley, or any relish you choose. Put the mixture into the hollows, and serve on buttered toast, with cream sauce poured over.

Hot Cross Buns.—Rub $\frac{1}{2}$ lb. butter into 2 lbs. flour and add a pinch of salt. Into



Egg Croquettes.



Stuffed Eggs.

cold water, shell them, and cut into small cubes. Melt $\frac{1}{2}$ cup butter, mix with $\frac{1}{2}$ cup cream, $\frac{1}{4}$ teaspoonful each of salt and pepper, and add 1 cup finely chopped ham. Stir until boiling, then add $\frac{1}{2}$ cup of range, stir in $\frac{1}{2}$ cup of finely chopped pieces of cooked ham, and mix all on a wooden spoon. Knead quickly. When ready, make them by making them into buns, then in a small pan of $\frac{1}{2}$ cup butter, $\frac{1}{2}$ cup milk, and $\frac{1}{2}$ cup cream, and fry in deep fat until brown, drain well,

a glass of fresh yeast stir 1 pint warm milk, and gradually stir this into the flour till it forms a light batter. Cover, and let rise, then work into it with a wooden spoon $\frac{1}{2}$ lb. sugar, $\frac{1}{2}$ nutmeg grated, $\frac{1}{2}$ lb. currants, 1 egg, $\frac{1}{2}$ teaspoon allspice. Knead well, cover again, and let stand until perfectly spongy. Then knead into buns, cut a cross on top, let rise until light, and bake 20 minutes. Just before they are done, brush over the tops a glaze made by mixing 1 tablespoon icing sugar with the white of an egg.

Seasonable Recipes.

If you were wise last fall, you left a few parsnips, vegetable oysters and Jerusalem artichokes in the ground. Now, before growth begins, you will find these crisp and fresh, all ready, with some horse-radish for an appetizer, to give variety enough for these early spring days. Here are a few new recipes for cooking them:

Parsnips.—Boil five parsnips, take off the skins and mash fine. Add a tablespoonful of flour and a beaten egg, make into small cakes and fry to a delicate brown.

Jerusalem Artichokes.—Wash the artichokes and scrape them well, putting them at once into salted water to prevent discoloring. Put to cook in boiling water to which a little milk has been added. Before they are quite done, add salt to season. Now you may finish them in several ways: (1) Drain, put them into a buttered pan, brush with cream or butter, and brown in the oven. (2) Drain, cover with a good milk or cream sauce, dot with bits of pepper, sprinkle with pepper or paprika, and serve hot. (3) Drain, mash with butter, and serve like potatoes. (4) With tomato sauce. Drain, and cover with a thick tomato sauce made with juice of capned tomatoes, thickened slightly with flour and seasoned with butter, pepper and salt.

Vegetable Oysters.—Let stand in cold water for a while, then wash and scrape, dropping at once into cold water into which flour in the proportion of a tablespoonful to a quart has been stirred to prevent discoloring. Now slice quickly, put into a very little boiling water and milk, and cook until tender, adding salt just before they are done. Add milk or cream, let boil up, thicken a very little with flour rubbed smooth in cold milk, season with butter, pepper and salt, and serve with crumbled crackers on top. A very little salt codfish or anchovy sauce added to the vegetable while boiling is a great improvement.

Escalloped Vegetable Oysters.—Boil as above, letting the water be nearly evaporated when the oysters are tender. Put layers in a buttered dish, dredging each lightly with flour. Cover with hot milk, seasoned with butter, pepper and salt. Bake from half to three-quarters of an hour.

Fried Vegetable Oysters.—Boil as above, drain, mash, season with cream or butter and pepper and salt. Form into flat cakes, roll in egg, and then in cracker-crumbs, and bake or fry.

Date Cake.—Cream one-third cup butter, gradually adding $1\frac{1}{2}$ cups sugar, and beat until light. Add the beaten yolks of 2 eggs, one-third cup milk, 2 cups flour sifted with 3 teaspoons baking powder, 1 lb. chopped dates, and the whites of the eggs stiffly beaten. Pour into a buttered and floured cake tin, and bake in a moderate oven. Always wash dates thoroughly before using.

A Date Filling for Layer Cake.—Boil 1 cup sugar and 4 tablespoons water until they thread, then pour over the beaten whites of 2 eggs. Flavor with vanilla, and mix with 1 cup finely-chopped dates.

White Sauce.—Rub together 2 tablespoonfuls each of butter and flour, stir into 1 cup boiling-hot milk. Let cook, and season. Serve with fish, codfish, etc., or add capers and serve with mutton.

Stuffed Beefsteak.—Prepare $1\frac{1}{2}$ lbs. rump steak by pounding out flat. Spread over it a filling made as follows: One quart stale crumbs, 1 small onion cut fine, 1 teaspoon sage, 1 teaspoon melted butter, salt and pepper to season. Roll the steak, tie with cord, and place in a pan with 1 pint water. Bake half an hour, basting frequently.

Whitefish.—Parboil the fish, and pick apart in flakes. Make a sauce of 1 pint milk, 2 eggs, 1 heaped tablespoon corn-starch, 2 tablespoons butter, salt and white pepper to season. Butter a baking dish, put in a layer of fish, then some of the sauce with a grating of nutmeg, and so on, until all is used. Cover the top layer with buttered bread crumbs, and bake golden brown.

Poached Eggs.—Never let the water more than simmer, and keep the dish tightly covered. When done, serve hot, with the following sauce: Melt 1 tablespoon butter, add a tablespoon flour, and rub to a paste. Place over the fire, and stir in slowly $\frac{1}{2}$ cup broth and $\frac{1}{2}$ cup

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cream. Before serving, sprinkle grated cheese over the whole.

Date Pie (to make three pies).—Wash 1 lb. dates, then soak them over night in a little water. Stew in the same water until very soft, then mash fine, add 1 quart rich milk, 3 eggs, a little salt and nutmeg. Bake without an upper crust.

Health Plum Pudding.—Two cups sifted graham flour mixed with $\frac{1}{2}$ teaspoon salt, $\frac{1}{2}$ teaspoon soda, 1 teaspoon baking powder, 1 cup raisins, (1 of chopped nuts also, if possible), 1 cup milk, $1\frac{1}{2}$ cups molasses. Put in a buttered pudding mould, and boil or steam three hours. Serve with lemon sauce.

The Garden of a Commuter's Wife.

(By Mabel Osgood Wright.)

CHAPTER XII.—Continued.

April 18. Early tulips ablaze. All the narcissi out except the polyanthus with its clustered blossoms, and the poets, with the lovely pheasant's eye. The hardy plants are now tufting the long beds with many shades of green. Forsythia is in golden glory. The scarlet quince at full, and the countryside white and pink with peach and cherry blossoms.

May 1. At last the Garden of Dreams has awakened. It is! After the healthful winter of snow the whole land is a-bloom. All the bulbs are out except the parrot tulips. Down by the spring hole, in the wild garden the marsh cowslips are heavy with gold, and the same color is swept across the pastures by the dandelions. Is it not all my garden? All the cultivated and the wild, every flower and fern in the wood and open as well, for not only what I plant is mine, but also everything that I enjoy. And the birds, too, do they not belong to me through the loving of them? Though they must not know it, even the thought of being possessed might mar their liberty.

Evan found his primroses yesterday morning, one tuft showing half a dozen blossoms. When I saw his face as he called me to him, holding them in his hand, I realized that, after all, it is the little things of life that count, for the primrose was not only precious in itself, but for all it stood for.

I was thinking this morning, as I watched the bluebirds flitting about their knot-hole in the apple tree, heard the meadow-larks down in the pasture, the flicker laughing in the wood-lot, the robins in the spruces, and the jolly song-sparrow almost by my elbow, that the important garden birds are like the flowers in number. How few, comparatively, of the hundreds listed in the ornithologies we can know well enough to call garden companions, even if the residents of the wood-lot and home woods be counted in.

Many come and go, travelling beyond us. We hear a strange note and see a flutter of unusual feathers. We may call them by name; but, like the flowers unsuited to the garden, they are not of our world. A list of twenty-five would cover the confidentially intimate, or fifty the really tangible.

Martha Corkle came to tell me mysteriously that Tim has a cold, she is quite sure, because he has taken off his flannels too soon, "which, Mrs. Evan, is risky for a man of his years" (Tim must be upward of fifty), and would you not kindly ask the doctor that he cautions him?

I asked her why she does not speak to Tim herself, as she has observed the cold and I have not, and as a middle-aged widow she could certainly mention flannels.

Indeed, Mrs. Evan, I thought it proper-like to come from a married woman that is recent, so to me being so long widowed is the same as not being; and as for age, I am not as old, ma'am. The shape of those common bought flannels of his leanin' figure might be at

the bottom of it. I bein' willin' to make up some more suitable from always making Corkle's, if you'd but give me the order so to do, Mrs. Evan."

After a moment the complicated sentences straightened themselves to my understanding, and I solemnly said:

"Martha, could you oblige me by making some spring flannels for Timothy Saunders if the doctor prescribes them for him?" Whereat the nearest approach to a smile I had ever seen there crossed her features, and she actually dropped an old-world curtsy, saying, "I will, and thank you kindly," becoming for the moment the comfortable English countrywoman, instead of the hereditary servant out of her class. Really, there are human possibilities in Martha.

May 11. I think there is a four-handed romance brewing in the kitchen sitting-room, the quartette being Bertle and Delia, sober-minded Eliza and Tim, who is perfectly unconscious that he is an admired party. In the evening I hear laughter, and know that "hearts" and "forty-five" are being played. I also know that Martha Corkle does not approve, for I see her rigid shadow sitting apart, taking no share, but bound to play the matron.

May 15. Color is swathing the land again—lavish color, the delicate whites, flesh and pink of apple blossoms; floecy clouds of lilacs drifting from the bank-wall before the house to the roadway; pinxter flower on the hillside, along the wood road blending with the white dogwood, and in the garden lilies-of-the-valley. Truly does the flower language translate their meaning as "Return of Happiness."

May 17. For two days we have picked and picked the lilies, and yet there is no end. They will last the month out if there is no heavy rain to make them yellow. Evan has gone to town each day laden like a Maypole, the neighbors have had their share, and to-morrow I take a clothes-basket of little bouquets to the hospital.

I think, if we were to fall asleep for ten years, the whole place would be overgrown with these lovely flowers, the soil suits them so perfectly.

The resting time is over for garden and gardener. All is push, excitement and hurry, the relentless hurry of growth. Every day something is planted, some long-watched bud unfolded. After the twentieth, it will be safe to move the seedlings from the hotbeds and set out the bedding plants, geraniums, heliotrope, and such like, that this year I've ordered from a wholesale florist in town.

One and all we rush outdoors twenty times a day, the dogs rebelling at the curbing of their liberty, "Down! charge!" being the order of the season. Bluff alone is discreet enough to be allowed within garden bounds at planting time, and he has learned to tread gently; often he is meekly apologetic for even overstepping on the grass border beside the path.

The breakfast table is drawn into the bay window looking toward the garden, and on balmy evenings we take our after-dinner coffee under the Mother Tree. Gardeners may not sit idly on the front porch at evening daintily apparelled. This is the best time for labor, the time to disappear from view, and, collarless, and wrapped in a russet apron, delve and grovel until dusk conceals one altogether.

For a woman, early morning is the time to gather flowers, not to cultivate them. The gathering and arranging brings their fragrance into one's life, but weeding or kneeling among dewy plants, stooping and mowing while the sun each moment blazes more fiercely, is for the workman only. To the woman it means fatigue before noon, and that sunken feeling in the chest that whispers of indigestion or desire for sodden sleep directly after luncheon. I have done it, and I know.

May 30. Decoration Day. Evan at home. The garden is time-true, and yields deep crimson peonies, white iris, and blue lupins, to be blended together for the soldiers' graves, as it did of old. The peonies, to be sure, are not true red, but they at least complete the symbol.

The hardy oriental poppies, scarlet with the black eye, are fast unfurling their green coverings, and the long bed that we left all of a jumble, is bright with iris of many hues—white, violet, purple, wine-red, yellow, and variegated; in fact, the long strip is a perfect iris rainbow.

This morning we planted the seven raying beds around the sundial. Evan conceived the idea of matching them as nearly as possible with the colors of the solar spectrum. These are red, yellow, green, blue and purple, with the intermediate shades. The difficulty is to get the various colors in flowers of even growth. We found all of the shades but blue among the double zinnias, a family of sturdy growth and willing bloom—crimson, scarlet, yellow, orange, lilac and purple. For the blue we chose the rich metallic cornflower (or centaurea), Emperor William, the grass between the rays giving abundance of green. Of course, this combination is a lottery. The wheel may be either gorgeous or hideous, for there is but a step between. It is such experiments as this, however, that keep the gardener alert. Yet there are people who are surprised if one is not bored by living in the country!

May 31. The first garden tragedy. Alas, that Evan should be the victim! This morning, when he was picking a few last sprays of lily-of-the-valley, his commutation ticket slid from his vest pocket unobserved and lodged among the leaves, where it hid until I discovered it in the afternoon. Not only did he have to pay his fare to town and back again at night, but he had no ticket to exchange for the next month's issue. The pathos of this tragedy cannot be written in words. Its inwardness is ethical, and not financial, and to be appreciated only by the commuter and—his wife!

XIII. JUNE.

Old Roses Worth Growing.

June 8. The first rose—only the frail, briery, Harrison's yellow, that came overseas in 1830 and still lingers in old gardens, but a June rose, nevertheless.

The garden of the long walk is all aflame with the oriental poppies, and the fall-planted Shirleys, as if kindled by them, are carrying the fire-line quite down to the sun garden, the deep red color paling through all shades of scarlet, rose and pink, to bluish-eried white. The poppy, though brief of days, is the garden hypnotist. Look steadily at a mass of these glowing flowers blending their multicolors in the full sunlight; then, as the petals undulate on the slender stems, your attention is riveted, as if a hundred eyes returned your gaze, and drowsiness steals over you, for each flower bears the spell of the hypnotic pod, whose seeds bring sleep.

"Why does the pine tree moan?" asked the poppy, answered the grass "It does not," that crept about the pine's roots. "That is its way of breathing." "I make oblivion," said the poppy.

"And I, love," said the rose. "Are they not both the same?" asked the tall white pine, stooping to shake the dew from its slender fingers.

In these days the morning scent lies heavy, and even the grass yields it. The mixed grasses of the early meadows are more fragrant than the later. The perfume of the vanilla grass is ravishing, while the stiff, stark timothy seems more like

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The St. Lawrence Sugar Refining Co. Limited
MONTREAL 30

straw. Now among the outdoor sounds, bird music at its height, the babbling notes of the nestlings, comes a new tone, the voice of the lawn mower. If you listen to it sympathetically, you will find it has a various vocabulary and that its moods may be easily interpreted by the human ear. If the grass is of the right height and condition for the cutting, then is the machine happy, cheerfully 'talks' to you, and you are glad. If, however, the grass is too long and wet, the machine is unhappy, and you are glad if it is clean. If one wheel is jammed, or if there is a rasp of metal, or a rattle, or a tone, denote a fault, if the machine is against a tree trunk, or a fence, or a wall, both

mental and physical is suggested by the angry growl and whirr.

All garden tools have speech, if the ear is keyed to hear it. The shovel working on the gravel path, can voice whether it is seriously searching out weeds or merely shuffling irresponsibly about. And the same tale is told by the common hoe in the corn fields.

The garden history of June would still be in many volumes if there were no roses, but, as it is, all else must give place to the head of a family that also yields us strawberry, peach, pear, plum, apple, and many of the most useful shrubs.

The scarlet poppies of early June introduce a color that seems to belong with the flowers of midsummer, and appears out of place among the more delicate hues of the early garden, even as the scarlet tulip looks gaudy in contrast with the narcissi and iris, though perhaps for well-blended richness the hardy flowers of June will match those of any season. The larkspurs, ranging from white through sky and mazarine blue to a metallic purple; Canterbury bells of a fine porcelain opaqueness, white, lilac, rose, and purple; columbines of every solid color and the white-lined varieties, too, that suggest the fairylike blossoms wrought by skillful glass-blowers; lemon-yellow day lilies that make a brave showing against a background of copper beech branches; peonies like great roses, beginning in May with the crimson Jacqueminot color; spires of old-world foxglove, four feet tall, swaying above the golden glow of hardy coreopsis; and mats of Sweet William, white, pink, crimson, pheasant's eye, and harlequin, that crowd the fringed clove pinks almost out of the border. Then, too, there is a day edition of the yellow evening primrose, and honesty (lunaria), the herb of magic, in three tints—white, lavender, and purple.

All these flowers are, of course, improved by frequent resowing and resetting, and by having ample elbow room, and yet nowhere do they seem so typical, so gracefully lovable, and so wholly what hardy folk should be, as in the bit of old border that we have not yet disciplined, where the soil is completely hidden by a tangle of poppies, sweet William, and foxgloves.

A book of praise might be written to hardy shrubs. June may claim many that in late seasons overflow from May—the newer lilacs (though they are never so satisfactory as the old, that, straggling into the hedges may be gathered by the armful), spireas, snowballs, Carolina alspice and syringas, while Deutzia, hydrangea, and althea carry the shrub flowers well on toward autumn.

Few things are so permanently satisfactory about the home acres as shrubs; and the commuter's wife may find refuge, likewise her table decorations, in them when mischance overtakes more delicate flowers.

"Shrubs are an awful bother to trim, aren't they?" said the Lady of the Italian Garden yesterday, on making her first call after her summer entry at The Bluffs, and professing astonishment at the number of our pickable flowers.

"We set out a lot two years ago," she continued, "and certainly should have flowers this spring, but you see the fault all lies in the trimming. The landscapist that started us off said of course the gardener would know which ones had to be trimmed in the spring and which at midsummer. But it seems he got mixed, and balled the thing up, so the first year there was not so much as a sprig of bloom, and hardly a leaf."

"Last fall, when we hired your Chris as second gardener for the outdoor things, I particularly charged him to find out which was which, and remember it. Instead, to make things sure, he has shaved 'em off all alike, round as cheeses, and the twigs as short as my French poodle's hair when he's clipped for the summer. Yes, my dear, not a bud left on the rhododendrons, two hundred bushes of them arranged with rocks behind to make a ravine effect on the left side of our lawn by the grand drive.

All connected, too, for lighting 'em with electrics. It is simply maddening. Jenks-Smith has just bounced him, and we've got to fill in the ravine with cannas and coleus. The landscapist was up yesterday, fifty dollars every time he comes, and he was shocked, and says the scheme is wholly inconsistent. But what can we do?"

"Perhaps your husband would come over some evening and suggest something, not in the way of business—just an informal call, you know—for those poor clipped things look like left-over Christmas greens. How do you manage your pruning, now?"

I smiled internally as I thought of Chris, and told her that the old shrubs had largely taken care of themselves, except for a little shortening of straggling branches and cutting out of the old wood as fresh growth replaced it, and we expected that the new shrubs would do likewise.

Then, too, I said that we do like father's old woman patient over on the charcoal hill. She had only six shrubs, and yet her little dooryard seemed overflowing with bloom. When people stopped to ask how she pruned to get so many blossoms, she answered, "Prune? Pickin' constant and givin' away, is the natural sort o' prunin', I reckon."

Of course, Mrs. Jenks-Smith did not believe me, however.

"I know very well that you've got some secret about gardening that you won't tell."

"You are partly right," I assented wearily. "Yes, there is a secret, but I'll tell it to you willingly, and in it also lies the reason why we let Chris go. 'First, be sure what you want, and then do it yourself, or at least see it done.'"

"Is that a rebus?" queried Mrs. Jenks-Smith, wrinkling her brows. "Ah, yes, I understand. But, my dear woman, it's impossible! Me stand out in the sun! Me cut flowers to give away! It would ruin my social position. Then the manicure says that arranging flowers is so bad for the fingers and greens the nails, and that I shouldn't even do that, for I must have good hands; I've got so many new rings, you know. Jenks-Smith gives me one every time he makes a coup."

June 10. The fuchsias that I planted two weeks ago in a shady corner between the end of the rose arbor and the bank are doing finely. I wonder why this flower is so neglected. True, the country women often cherish a plant or two on the porch, in company with the oleander, night-blooming cactus, and tub of amaryllis. It is also used in filling window boxes, but it has almost wholly departed from the gardens. Fuchsias, when well grown and trained against a wire screen, are not only one of the most graceful and decorative outdoor plants, but when gathered on long sprays, and arranged either in vases or laid on a white cloth as a table decoration, seem fairly to drape themselves under one's fingers. The plants are easy to keep from year to year in a light cellar or flower pit, and, by cutting them back in spring, they make vigorous and almost vinelike growth. Storm King, Elm City, Surprise and Mrs. Marshall are among the best, fairly covering themselves with scarlet, magenta, or rose and white flowers.

I gathered the first real bouquet of roses this morning—splendid Jacqueminots, a few clear pink Anne de Diesbachs, and half a dozen moss buds and heavy-tinted leaves from a bush that was very old even when father bought the place, and, being ungrafted and on its own root, has kept perpetual youth by aid of new suckers. It is always best, when possible, to plant ungrafted roses. Our seasons are so variable that, in spite of covering, all but the sturdiest bushes are liable to die down below the graft; flowerless briars spring up undiscovered, so that the untutored may cherish them a whole season.

Of course, no other flower can compete with the rose, except, perhaps the carnation; that, owing to its

qualities of endurance and fragrance, rich vivid or delicate coloring, is almost an equal. The greenhouse rose and the rose of the American garden are almost two different flowers, however. Of course, in England, with its humidity that always veils even though it does not obscure the sun's intensity, the outdoor conditions are more even and like those of a greenhouse. There the roses, even of cottage gardens, are perfect, thick fleshed, and sturdy, while the climate allows Gloire de Dijon and Marechal Neil to festoon second-story windows unchecked, in company with white jasmine; and Marie Van Houtte, a tea rose, grows to the size of a great lilac bush.

Those who plant their rose garden with the memory of English roses blending with their dreams must be disappointed, as well as those who read the English garden papers telling of gathering La France buds outdoors in January, and then start out to do likewise by buying the latest offerings of the "Yellow Journal" catalogues.

Of course, the new bushes that we set out last fall will only show their colors and yield a few tardy buds this June, and it takes at least a two-years' trial of a bush to prove its hardiness, color, fragrance, and vigor of growth. But my present hope is in the old bushes that are proven, and, as they bloom, I shall make a list of them to give to my friends who have small gardens and are always asking for the names of roses that are "not cranky."

Some of these bushes are old settlers, like the white moss, Harrison's yellow, the nameless wine-colored rose of many petals, and Madame Plantier, the bush that Dan'l gave me so long ago, now grown a huge shrub, while its children, trained as vines, are mingling on the rose arbor with Baltimore Belle, climbing Victor Verdier, and the shell-pink, thornless blush rose, also an old-time favorite in English gardens. Some of the others are of later fame, though all have borne the test of at least a score of years—the original growth renewing itself from the root—and one and all are faithful, satisfactory bloomers, asking only deep, rich soil, a shelter of cedar boughs in winter, a light April pruning, and two sprayings with weak whale-oil soapsuds before the buds show color; while, in return, they will yield armful, apronsful, yes, clothesbasketsful, of roses.

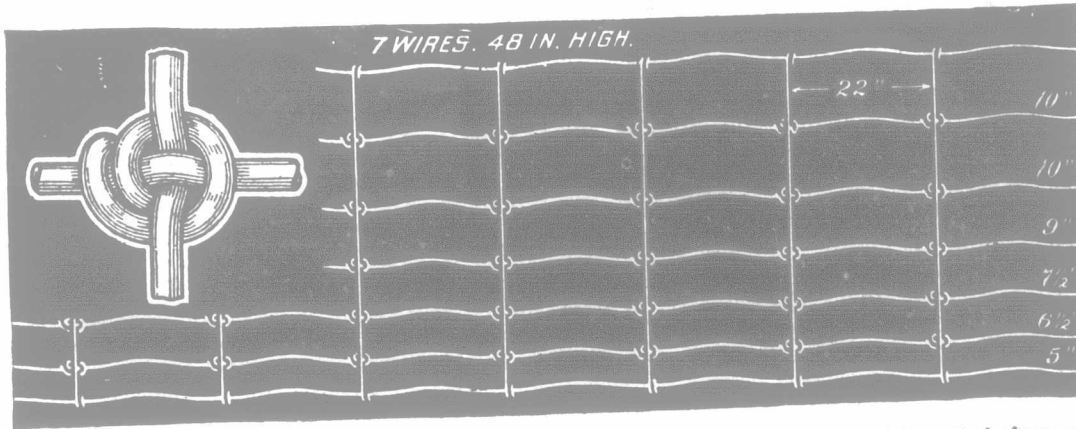
June 14. Saturday. This morning, as I was pottering among the roses, making ready for the June festival now beginning, by tying up a branch here and there, and seeing that the bushes were well supported in case heavy showers should come when the bloom was at its height, I heard a babel of voices that seemed to come from the wood-lot in the direction of the wild walk.

I hastened down there because we have already transplanted many ferns and wild plants to the edge of the path, and the trees and bushes are full of nesting birds that I knew of old used to attract unregenerate school children on egg hunts bent, so that either father or Tim had been frequently obliged to patrol the place on Saturdays in May and June.

Guided by the voices, I soon came upon a group of perhaps a dozen females standing about a stunted maple, gesticulating wildly. At the moment I appeared, as if obeying a signal, they sank to the ground in unison like a band of conspirators on the stage, and there remained squatting uncomfortably, the grass being deep and soaking wet, while they gazed at the maple.

For a moment I was nonplussed. The women ranged from youngish to middle-aged, the chief conspirator (I judged her to be the chief because she stood up and pointed, though not with a dagger) was perhaps fifty; tall, thin, in the legs and hair, but bearing an untrimmed sailor hat, and a very short divided bicycle skirt. She carried a book and an open glass, while a luncheon box was slung over one shoulder. Then I saw that all the others were equipped in a similar manner. As I went for-

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Seeds, Bulbs, Plants. **TORONTO, ONT.**

ward to warn them away, I heard the voice of the chief say:

"Ladies, in that tree is the clay-lined nest of a wood thrush. The mother-bird is now brooding. In a few moments, when you have observed her patient immobility, I will see whether the nest contains eggs or young birds; if the latter, we may hope to observe the method of feeding and home sanitation practiced by our feathered little sister in the bush."

"Not while Barbara and six dogs are on the premises," I thought. Then the whole thing flashed across my intelligence. The conspirators were doing a Cook's Tour in Bird-land! For a moment I expected to see the group arise solemnly, take hands and dance around the chief, singing: "Follow the man from Cook's," then I took action, steadying my voice, and using father's pacific formula for such cases.

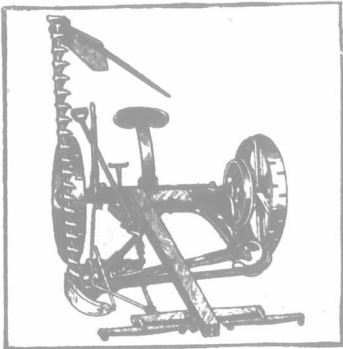
"You are probably not aware that you are trespassing, but this is private ground," my voice becoming more emphatic as I saw that the thrush had left the nest, and was summoning assistance by means of her cluck of alarm, which was instantly answered by the near-by robins' "quick, quick," the veery's "whew" from the woods, the catbird's "miou" from the garden, as well as a chorus of others.

"Oh, not at all, not at all," said the chief, beaming upon me patronizingly. "That is, I mean we are not in any way trespassing. We are studying birds—a Bird Class, you know. Of course, I was aware that this land belongs to the doctor, and that is the very reason why I have chosen it as a meeting-place for my class for the next two weeks, as I hear that he has protected birds for a long period, so that more species can be found nesting in a small radius than in any place conveniently near town. This fact guided my choice, for we've quite exhausted the city park; and later on we are going into the deep woods to observe the moulting, and to differentiate the plumage of young and adult birds. Ladies, look quickly! the female wood thrush is just above your heads, giving a tender maternal call to attract the attention of her young. Observe her smaller size, and the difference in the breast marks."

(To be continued.)

Youngwed—I always crack up my wife's biscuits.
Mr. Bachelor—Heavens! Are they as hard as that?

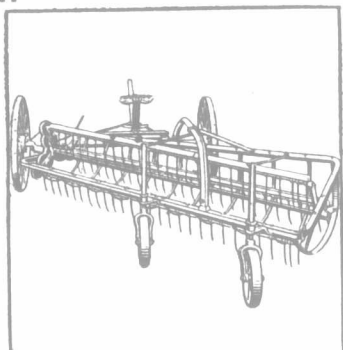
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Dain Mowers are so built that, in the rare event of a smash, an inexpensive part repairs them. Consider the value of this detail.



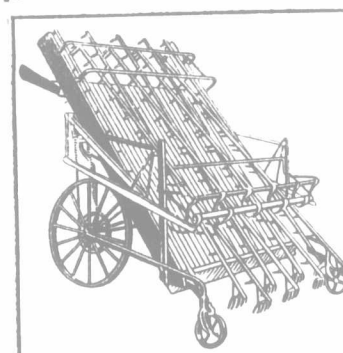
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The weight of the cutter bar is carried on the wheels, held down to its work by a giant-strength spring. The moment the horses move, the knife begins cutting, — not a motion wasted. Whole machine built with surplus strength in every part. You'll not be bothered by breakages if you get a Dain Vertical Lift Mower.

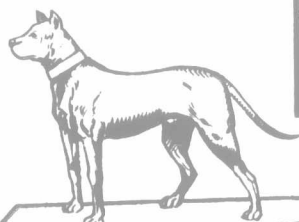
YOU WOULD VALUE THIS RAKE

This Side Delivery Rake double-discounts any hay-tedder you ever saw. Its triple set of teeth, turning slowly, put the hay in shape for curing without injuring the leaves or stalks. Turns the swathes upside down in a loose windrow, open to sun and air, so it cures quickly and retains all its nutriment. Simple construction, and almost break-proof. Priced most reasonably, too.



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Besides the Success Roller-Bearing Manure Spreader, we make Vertical Lift Mowers, Side-Delivery Rakes, Hay Loaders, Hay Presses and Pasture Cutters. Each is ahead of all its kind. Ask for details about any of these you are interested in. Write to us today—NOW.



The Goddesses of the Camera.

In the "Reminiscences" of T. S. Arthur, Lord, in the "Piccadilly to Pall Mall" (London, 1880, Co.), something is said of the "beauty" of the English world in the "seventies and early 'eighties of the century." It was the day of the "Professional Beauty," whether she truly make a profession of her art, or only used them as an amateur's and admiration. The "beauty" of the "seventies and early 'eighties of the century," or perhaps half-century, of whose loveliness was not a few or three were

born and married, others were "actresses," at least, by convention; some did not even make pretence to any social status at all. It mattered not. To only a few were they real beings, who dined out, or played at the halls, or consorted with young men about town. In London, people would sometimes stand on the curb to look at them in the park, or in drawing rooms and at private parties. But most men, I imagine, regarded them as creatures of the "stage," who lived somewhere in the "theatrical" district, and took them as "actresses" in their own right. Their "beauty" was an abstraction, the "beauty" of the "stage," the thousands of "actresses" who were seen in the

shop windows, or caught faint glimpses of their features crudely rendered on the lids of chocolate-boxes and in other poor reproductions, they were goddesses revealing their glory from the empyrean to worshippers on this clouded earth.

Commentators then and since have spoken slightly of this "craze." I do not know that it deserves the term; it was less a craze than a cult, and one not without its elements of nobility and reverence. True, the objects of all this adoration were perhaps (I do not know) only frivolous "society" dames, or sometimes, it may be, light damsels whom our fathers would have called wantons. But in the emotion they created there was little of vulgarity or animalism. The portraits displayed of them were nearly always delicate, and so far as the coarseness of the medium allowed refined. They were fully arrayed in garments that represented to the contemporary eye the type of feminine elegance. Whether they were ladies or not, their habits and demeanor were those associated with aristocratic, luxurious womanhood. They were not to be confused with the half-naked females then just beginning to expose themselves to the camera, and now sprawling tumultuously on all sides. We have come to live amid an orgy of nudity, exhibited in the ballroom, at the theater, on the stage, in the street: every man of us has become a Peeping Tom whether he will or not. Crowds press to the music-halls to gaze on women who cannot dance, who are not even beautiful, whose sole attraction is that they are very nearly undressed; a whole brood of illustrated newspapers, at sixpence for the gentry, at a penny for the multitude, thrives on this art of the baignoire and the alcove. Compared with it our riot of indecent inquisitiveness, the late-Victorian love of lovely faces seems reticent and chaste. To many thousands of clerks in offices, of assistants in shops, soldiers, sailors, settlers far away in the bush and the backwoods, the cheap-framed photograph was like the picture of the Virgin or St. Catherine to some Catholics: a type of goodness and purity as well as beauty, a revelation of the ideal womanhood that hovers dimly before most men's minds at some period of their lives.

Several years ago I was in the log hut of a prospector in the mining district of British Columbia. With two companions I had lost my way, and was compelled to seek refuge for the night in this little cabin. The owner was a good-looking young Canadian from an Ontario farmstead, who received us hospitably, and did his best to make us comfortable. The furniture and appointments of his one small living-room were as scanty as is customary in those parts. There was the usual miner's equipment—picks, shovels, high boots, a shotgun, a rough pine table, and some stools, a bear-skin robe, for literature, a mining manual, a textbook of mineralogy, several worn paper-covered novels; and for ornament some colored prints from the Christmas numbers of illustrated newspapers on the wall, and on another, above the stove, three photographs. One was of a side-whiskered elderly gentleman, another that of a comfortable middle-aged matron; our host's parents, no doubt. The third was more arresting. It was a reproduction of perhaps the loveliest of all the lovely faces which had been wont to gaze from the shop windows during that era of beauty-worship whereof mention has been made. One could not look at it, familiar and almost hackneyed as it had become, without a start of surprise that Nature had made anything so perfect. The delicate symmetry of the features, the exquisite modelling of the chin, the soft sweetness of the lips, the grace of the smooth hair rippling low over the forehead, were only part of the indefinable charm of a countenance that seemed bathed in an atmosphere of virginal purity. The impression was heightened by a kind of hood suggesting that of a nun, which loosely draped the girl's head, and by the rapt eyes turned a little upward as if in prayer. It was the face of a young saint, the index, one might believe, of a soul as beautiful as its outer vestment.

Unfortunately, the picture prompted no such reverential thoughts in one of my companions, a gentleman well acquainted with the gossip of the London coulisées for long past. "Hallo," he said, taking

the portrait from its nail, "there's little —"; and he mentioned the lady's name with a brief and somewhat indecorous allusion to her career, which had been by no means so edifying as her appearance suggested. As it happened, our host, who had gone into the outlying shed to fetch provisions for us, came into the room at the moment and caught the flippant remark. He dropped the tin pot he was carrying with a clatter; a dark flush surged through the healthy bronze of his cheeks; and with a rough Western oath he strode across to my friend so fiercely that I feared he was about to strike him. The Londoner turned in surprise. "I beg your pardon," he said. "I thought—" The Canadian controlled himself with an effort. "See here, mister," he said, "I don't want your thoughts and I don't want your words about that—that picture. It's got nothing to do with you."

"Of course not. I only said—but I am sure I apologize if I have hurt your feelings. I didn't know the lady was a friend of yours."

"I guess," said the young fellow slowly, "she is a friend of mine in a manner. Anyway, we've got no call to talk about her."

His brow cleared, and he remembered the duties of hospitality. "Just sit down to the table. I reckon you'll be ready for your supper."

He took the portrait quietly from my friend and hung it on the wall again. No more was said on the subject. We gathered round the pine board and fell to on the corned beef and the lake trout with an appetite born of many hours in the open air. Warmed by food and tea and rye whiskey and much tobacco, we all grew conversational and expansive. Our Canadian proved a genial entertainer, a wholesome, cheery, sanguine youngster, full of confidence in himself and his pioneering work in this new land, intellectually a little raw, but with the shrewd colonial instinct for realities. Our talk was of mines and prospects and the local politics and many other things, and the hours sped lightly. It was past midnight when my two friends retired to the other apartment of the shanty, our host's bedroom; the Canadian and I were to sleep in the living-room.

"Well, I suppose we had better turn in, too," said the young man.

But I lingered, and suggested a final pipe. I wanted to hear about the portrait. I got up and looked at it again. The young man's eye followed me, and I thought I would risk something.

"Was she really a friend of yours?" I asked.

He laughed lightly enough. "No, sir, of course she was not; I never saw her. How should I? I guess she doesn't come to Canada, and I have never been in Europe."

"You don't know anything about her but her name?"

"No, and don't want to. I just got that picture because there ain't no face in the whole world like it—no, not one. Well, you look at it; you can see for yourself."

"Certainly," I replied, "it's very beautiful."

"Beautiful! I suppose so. But that ain't it so much. You see, we live a rough sort of life out here, and the men I meet—yes, and the women, too—they can't say things that a chap wants to hear sometimes. Perhaps you don't know what I mean; but when I was a boy at home in the East with them"—he jerked a thumb towards the parental portraits—"I thought a lot of religion and used to go to chapel a good deal. Well, when I came out here, somehow it all went away from me; it didn't seem real, and I used to wonder how I could have believed all them queer Bible stories and the flappoodle the ministers talked. I was down in Revelstoke, and I got about in the saloons and other places with the boys, and had a pretty lively time. But I tired of that, too, after a spell, and was at a sort of loose end, and then one day I saw that picture in a shop window and I bought it and put it in my room. I tell you, sir, I was a bit sorry I had got it at first. I couldn't get away from those eyes of hers. When I came in after a bit of a burst, she seemed to be talking to me. 'Dicky Drummond,' I almost heard her say, 'Mr. Richard Drummond, are you doing the sort of thing you think you like? Are you doing the sort of thing you think I'd like?'"

Now, Why Should I Buy a
KNECHTEL KITCHEN KABINET ?

ARE you asking yourself that question, Madam? Or do you, Sir Husband, wonder just what good one of these time-money-and-labor-saving devices would be in your home? Give it five minutes' study, and you will wonder why you have been keeping house without a K. K. K. You will see in one minute, how many, many, many steps it must save every day, because it groups in one compact space practically every item of the culinary battery.

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THE KNECHTEL KITCHEN CABINET CO., LTD.,
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LOOK FOR THIS TRADE-MARK.



YOU, Madam, would hardly dream of doing sewing day after day without a sewing machine. Yet you use your sewing machine but once where you would use this labor-saver fifty times. For you cook three meals a day, and this Cabinet will gain you fully ten minutes' time in getting each meal ready. In a week's cookery you will gain more than three hours—just because it saves so much trotting back and forth.

IF you keep help, it does much to keep the girl contented, for it gives her more time for her other work, and spares her from getting so tired out. It economizes foodstuffs, because it abolishes much waste—keeps the supplies in better shape—keeps them clean—protects them from mice and insects. After you've had a K. K. K. a month you wouldn't sell it.

Knechtel Kitchen Cabinets are made in five handsome styles, all beautifully fini-hed, all with shining, rustproof extension tops of bright aluminum. Each has a dust-tight flour bin with sifter bottom, an ingenious sugar bin, plenty of shelf and cupboard room



Well, it got on me, and I chucked Revelstoke and came out here."

"A very sensible thing to do," I observed.

"I should say! I am going to make money, you bet. That claim of mine, you know—" and he relapsed suddenly from sentiment to very practical matters, as is the way of healthy youth. But presently he went back to the other theme. "I believe she brought me luck. Anyway, she brought me something else. When I came in and out, or after I have been down with the boys, and playing euchre and so on, I want to look at her and think there's somebody like that in the world—with those eyes."

"You will be getting married some time, you know, Mr. Drummond," I said. "Haven't you ever thought of it?"

"I have thought of it," he said. "There's a girl down here now at the township—she ain't like that one there, but she's a mighty good sort. Well, I dunno." There was a pause. "Say," he broke out suddenly. "You live in London when you are at home, don't you? Yes; well now, I suppose you might see her," and he indicated the portrait, "some time. You might tell her from me—"

I laughed. "My dear friend," I said, "do please consider that, in the first place, the photograph from which that one of yours is copied was taken a dozen years ago at least. The original is—I looked at his face, and my sentence did not end quite as I had intended—"is—married, I daresay, or perhaps she is dead. At any rate, I do not think she is in London. And if she were, there are about ten thousand chances to one that I shall never come within speaking distance of her."

"So?" Well, of course. I guess I have kept you up too late talking nonsense. You have got to make an early start to-morrow, you know."

It must have been nearly twelve months later that I received a letter in London with the British Columbian postmark outside and something stiff within. I opened the envelope and read:

"Dear Sir,—Mr. — was along here the other day and I took your address from him. Perhaps you recollect that evening you got lost on the trail, when you and me sat up talking after your friends turned in. I thought you might like to know that I got married last fall. Enclosed, I please find portrait of Mrs. D. I guess you'll think I am a lucky man when you look at it. She is as good as she is pretty, just about as good as they make them. The claim is panning out O.K., too, so you see I'm getting it bully all round. I am sending you another portrait, that one you noticed on my wall. Mrs. D., she don't like it much, and I ain't so fond of it as I was, now I have got Annie to look at, which is better than cardboard, anyway. But somehow I didn't care to put it in the stove, and I thought you would not mind if I sent it to you. Excuse me for troubling you. I am building a new house, and when it is done, you can have a better shakedown than I gave you that night; so if ever you are in B. C. again, don't forget to come along here and see me and Mrs. D., and, maybe, a kid or two before long. With kind regards, I am, dear sir, yours truly.

"RICHARD DRUMMOND."

I set the two photographs before me on my writing-desk. "Mrs. D." did not altogether belie her husband's eulogy. She had prettiness of a kind, the trivial prettiness of youth and good nature, a dimple in the cheek, simpering conscious eyes, hair lying in a ringletted "fringe" above an insignificant brow, a suggestion

of cheap finery about the neck. The pure and noble face in the nun's drapery seemed to smile with a gracious indulgence on its commonplace rival. So my young pioneer had gone the way of many men before him, and had got his feet upon the comfortable earth after a brief flight into the azure. He had descended upon the Real Woman, and would make her, I daresay, no worse a husband for having conversed for a space with the Ideal.

—Sidney Low, in British "Nation."

Conscience Makes Cowards.

A quiet, bashful sort of a young fellow was making a call on a Capitol Hill girl one evening not so very long ago, when her father came into the parlor with his watch in his hand. It was about 9.30 o'clock. At the moment the young man was standing on a chair straightening a picture over the piano. The girl had asked him to fix it. As he turned, the old gentleman, a gruff, stout fellow, said: "Young man, do you know what time it is?"

The bashful youth got off the chair nervously. "Yes, sir," he replied. "I was just going."

He went into the hall without any delay, and took his hat and coat. The girl's father followed him. As the caller reached for the door-knob, the old gentleman again asked him if he knew what time it was.

"Yes, sir," was the youth's reply. "Good night!" And he left without waiting to put his coat on.

After the door had closed the old gentleman turned to the girl.

"What's the matter with that fellow?" he asked. "My watch ran down this afternoon and I wanted him to tell me the time, so that I could set it."—Denver Post.

POSSESS A

UNITED WATCH

AND BE ON TIME—ALWAYS



Here's a watch on your terms
—a watch as accurate as the
law of gravitation, and guaran-
teed for a lifetime.

We guarantee the movement of this watch to be mechanically and scientifically perfect. So certain are we of this Timekeeper's accuracy that we offer to return the purchase price to any dissatisfied customer. **\$9.50 brings you this handsome, open-face, 10-Kt., gold-filled watch, Alpha or Empress case, by return mail. Wear the watch, test its accuracy, and if you are not convinced of its splendid value you can have your money back.** There'll be no quibble—no argument. Your word will be accepted as final. This watch must satisfy you absolutely or we return the price. You can secure this watch by return mail—Lady or Gent's size, as preferred. The case is heavy gold-filled—the movement is the famous Standardized Buren 7-jeweled. The 10-Kt., gold-filled Fob, as illustrated, goes with the watch—all for \$9.50.

Same movement, 14-Kt., gold-filled, Banner or Fortune case, with Fob—\$11.00.
14-Kt., gold-filled Sovereign case, with Fob—\$14.00.

N.B.—Reference: Home Bank of Canada.

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Please Mention The Advocate

Up at Cobalt.

You make a pile of money,
Or lose the pile you've got,
You may find a paying silver mine,
Or find, just where it's not,
Up at Cobalt.

Some people there get wealthy,
But ten to one you'll find
That lots of wealth of which they boast
Is simply in their mind,
Up at Cobalt.

You hear of veins and ledges
And promoters by the score,
And if you have some money there
They'll love you all the more,
Up at Cobalt.

They point to snaps and options,
Where there is wealth galore,
And whisper that they'll let you in
Sure! on the bottom floor,
Up at Cobalt.

They speak of this and that one
Coming here a year ago,
Who now are worth a million,
So easy, don't you know,
Up at Cobalt.

You think, perhaps, you'll take a shot,
Just have a little "shy,"
Then stand aghast to see how fast
They make your money fly,
Up at Cobalt.

You wait for coming dividends,
But lemons come instead,
It don't take long to figure out
How far you are ahead,
Up at Cobalt.

—Saturday Night.

Teacher—Who is the greatest inventor?
Shaggy-haired Pupil—Pat Pending. I
guess. I see his name on more inven-
tions than I do any other man's.—Chi-
cago Tribune.



Hackney Poultry Tonic

To try HACKNEY STOCK REMEDIES. If not satisfactory your money is refunded by the dealer you buy it of. You are dealing with a man you know, not us. Ask him about Hackney goods. They are made in Canada, and give results, as any one will tell you who has used Hackney goods. Every farmer has need of them, and all we ask is, try at our expense, if no results. Isn't this fair? Will you try them? Go to your home dealer and try any article, he will protect you, backed by us. Ask any bank in Canada if our guarantee is any good.

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For all kidney troubles, bad water, swamp fever, and if these cases are not attended to at once, will result in very serious loss and trouble.

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For all galls, either saddle or collar, burns, sores. You can work the horse while using. Put up in 25c. and 50c. cans.

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Has never failed. Put up in 50c. bottles.

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To keep the flies off your horses and cows. Especially the cow and the horse need the help of keeping away the fly. \$1.00 can.

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IT COST NOTHING

HACKNEY POULTRY TONIC

A positive cure and a prevention from all kinds of diseases with all kinds of poultry, either young or old. A wonderful egg producer. 25c., 50c. and \$1.00 size packages.

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HACKNEY LOUSE POWDER

Is death to all lice, mites and small vermin. A 25-cent can will save you \$1.00. Try it on your fur coats for the summer. You need it on the cabbage plants and currant bushes.

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HACKNEY STOCK TONIC

Is a medicine for the animal that is not doing as it should on the feed you are giving it. Get your horses in shape for the spring work.

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HACKNEY HOG TONIC

Is an article you will appreciate after once using same. For a bunch of pigs that are not thriving, it is worth double its cost. It has no equal, for young pigs at weaning time, for the mothers that are short of milk, or to finish for the market.

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HACKNEY CALF TONIC

For the young calves, or the calf with scours; also to take the place of the mother's milk. READ what one of our dealers says, after using for two seasons: He would not try to raise a calf without it.

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Hackney Fly Nocker



HACKNEY HEAVE POWDER

Will cure any case of heaves, except bilious or whistling heaves, which cannot be cured, but helped, so the horse can be worked with ease.

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HACKNEY COUGH AND DISTEMPER POWDER

For horses with coughs, colds, distemper, pink-eye. It has saved thousands; it will save yours.

REMEMBER OUR GUARANTEE.

HACKNEY WORM POWDER

For all kinds of worms, and bots in horses, colts, sheep and hogs.

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Write to 18 Millstone Lane, Toronto, for our Booklet.

Hackney Stock Food Co'y

Toronto and Winnipeg.

The Horse and the Dog and the Man.

The horse and the dog had tamed a man and fastened him to a fence.

Said the horse to the dog, "For the life of me, I don't see a bit of sense

In letting him have the thumbs that grow at the sides of his hands, do you?"

And the dog looked solemn and shook his head and said, "I'm a goat if I do."

The poor man groaned and tried to get loose, and sadly he begged them, "Stay!"

You will rob me of things for which I have use by cutting my thumbs away! You will spoil my looks, you will cause me pain! Ah, why would you treat me so?

As I am, God made me, and He knows best! Oh, masters, pray let me go!"

The dog laughed out and the horse replied, "Oh, the cutting won't hurt!

You see

We'll have a hot iron to clap right on, as you did in your docking of me!

God gave you your thumbs and all, but still the Creator, you know, may fail To do the artistic thing, as he did in furnishing me with a tail!"

So they bound the man and cut off his thumbs, and were deaf to his pitiful cries,

And they seared the stumps and they viewed their work through happy and dazzled eyes.

"How trim he appears," the horse exclaimed, "since his awkward thumbs are gone!

For the life of me I cannot see why the Lord ever put them on!"

"Still it seems to me," the dog replied,

that there's something else to do;

His ears look rather long for me, and

how do they look to you?"

The man cried out, "Oh, spare my ears!

God fashioned them, as you see,

And if you apply your knife to them you'll surely disfigure me!"

"But you didn't disfigure me, you know,"

the dog decisively said,

"When you bound me fast and trimmed

my ears down close to the top of my head!"

So they let him moan and they let him groan

while they cropped his ears away.

And they praised his looks when they let him up,

and proud indeed were they!

But that was years and years ago, in an

unremembered age!

Such things are ended, and we have

we've reached a higher stage of

The case and thumbs that grow at the

sides of his hands, and we have

Let us hope that the Creator, you know,

may fail to do the artistic thing,

as he did in furnishing me with a tail!"

The Music of the Rain.

Listen to the rain, on the roof and down the eaves;

Listen to the rain.

Put the windows up and let the sound fill the room.

There is a smell of sodden leaves

On the air,

And the eastward-standing mound

To-night is bare;

I can see the dim shape of the trees, standing there.

The pines are dark and the birches gleam

Through the rain,

Wrapped about and misted in the quiet night;

Hushed it is,

Yet with the murmurous pulsing of the rain;

And a little stream

Gurgles somewhere out of sight:

To-morrow there will be brown earth,

To-morrow there will be green grass,

To-morrow mayhap a song sparrow will sing,

To-morrow is spring!

Listen to the rain, on the roof and down the eaves;

And the fresh, good air is in the room,

Clean and sweet,

Filling all the murmurous gloom:

While the noises of the rain blend as they meet.

—Arthur L. Phelps, in Canadian Magazine.

Genuine Roquefort Cheese

One who, remarks a writer in Harper's Weekly, has never visited the village of Roquefort, in the department of Aveyron, France, can form no idea of the extent of that cheese industry whose product is known the world over from the name of the town where it is manufactured. No pains are spared to secure the best results.

The kind and quality of the milk is important. It must be pure unskimmed sheep's milk, unadulterated with water or with any other milk. Inspectors are employed and instruments used to detect fraud. The green hills of the Aveyron, which furnish fine pastures for feeding the sheep, play no small part in the quality of the milk and the celebrity of Roquefort cheese.

In the Roquefort industry, the cans and everything pertaining to the milk must be scrupulously clean. The dairies are in dry and airy spots, and the whitewashed walls, cemented floors, and screened windows all conduce to cleanliness. The dairy consists of three rooms, in the second of which a temperature of sixty-three degrees Fahrenheit is recorded by a thermometer the year round.

The milk is first heated to a temperature of over ninety degrees Fahrenheit and then cooled by the addition of rennet. It is then allowed to curdle through various processes of moulding, etc., but it is not until it has become only a slight

From start to shipment, it requires fifty to sixty days to turn out a satisfactory product. The various operations might be briefly stated as follows:

(1) Treatment of the milk—skimming, heating, curdling, dividing the curds, draining, putting into moulds and scattering with powder of stale bread crumbs, tasting, hardening; (2) treatment of cheese at factory—receiving and weighing, first and second salting, brushing, piercing and classifying, placing in caves, first turning, second turning, maturing in caves, second turning, second classifying, maturing continued, third and last turning before shipment.

The preparation of the bread is a long and interesting part of the process. A special kind of bread is moistened and left to mould in a cave for about two months. It is then cut into small pieces, dried, ground, and bolted. The powder thus obtained is scattered over the layers of curds as they are placed in the moulds. This makes the bluish-green streaks noticed in the cheese, and helps to give Roquefort its aroma.

The caves perform an important part in the fabrication of this cheese. It is largely by maturing and mellowing in them that Roquefort cheese is celebrated throughout the world for its delicate flavor and particular aroma. These caves are excavations, some natural and some artificial, hollowed out in the side of the steep and rocky mountain which dominates the little village clinging to its side. They are cold and damp, but ventilated by the air which penetrates through the fissures in the stratified rocks. There are several stories in each cave containing shelves on which the cheese is placed.

After the cheese ripens or mellows for about forty-five days in the cave, it is ready for shipment or to be placed in the refrigerating rooms, which are cooled by an ammoniac process operated by electric machinery.

Entertaining a Prejudice.

Of all the occupations known to men, entertaining a prejudice is the most absurd. Yet the practice is almost universal.

The prejudice is usually uninvited. He comes in quietly, removes his hat and coat, saunters up to the guest chamber, and prepares to become a permanent feature of the establishment. You entertain him royally, strain him to your bosom, exhibit him proudly to everyone, fight for him, defend him, and perpetuate him. Yet you do not even admit that he is present. "I entertain a prejudice?" you say, with becoming concern. "Never!"

Birds of a feather flock together. It therefore happens that if there is one prejudice present, there are also others. They always come in unawares, and take their places silently and unobtrusively! But oh, how they hang together in an argument!

A group of prejudices is invincible. They have never been beaten.

The strange part of prejudices is that one would think they would prefer more commodious quarters. But no, the narrower the mind, the more content they are. They don't mind close quarters. The closer the better.

Prejudices are always busy. If they are not tampering with one's eyesight, they are screening the mind from the open; putting blinds on, and making it dark enough to sleep in comfortably.

A man can get insured against almost anything else but prejudices. He can insure himself against fire and water and loss of life and accidents and depreciation in his property. But there is no company so fortified that it would take the risk of insuring against prejudice. And then no man would ever think of taking out any insurance against one, because he would never admit that he had it. The prejudice himself fixes that. The first thing he does is to make the man think he isn't there.

That is why prejudices, no matter how much damage they cause to character, are never evicted. They have come to stay.—Thomas L. Masson, in Lippincott's Magazine.

The Antis.

She was an Anti-Suffragist, from somewhere up the State, who thought it was her duty to offset the coming fate. So, altho she was a spinster, she went lecturing here and there. On "Wife and Mother, Home and Child, the Nursery, and Prayer."

Another of the Antis—a mother of thirteen—Saw Votes for Women coming and stepped boldly on the scene; She packed her little carpetbag and went from Troy to Rome, Just preaching to creation that "A Woman's Place is HOME!"

And there was still another—with a husband meek as sand—She used to tell the neighbors "she could train him with one hand!" She said "he didn't know as much as their old Texas mule." But the text of all her lectures was, "Wives, Let Your Husbands Rule!"

The next one was a widow who would gladly wed again; To her the weighty question was not altogether plain; But throught her lengthy lecture all the subject matter ran That she wouldn't vote for women, but she would vote for a MAN!

The last had done the housework and the farmwork all her life, Altho there was a farmer and she was this farmer's wife. She'd churned and hayed and gardened, paid the taxes, saved the farm— But she lectured on "The Comfort of a Man's Protecting Arm!"

—New York Times.

Good Form and the Reverse in Speech.

"When men and women begin to frame their thoughts in language," says a critic, "they depend not at all upon recorded rule and precept, not upon anything that can be taught or learned, but they spring out of that finer taste, which may, indeed, be cultivated and still more refined, yet which is itself the fairy birth-gift that ensures enlightenment to the possessor."

This "fairy birth-gift" consists in fine tact, the discerning of delicate distinctions and shades of meaning in words and expressions. It is far removed from vanity, affection or pedantry. It permits the truly initiated person to use language with a certain sort of "masterly carelessness" that always keeps within the bounds of good taste. The initiated person does not fear to be colloquial, but is never vulgar.

In social life there is ever a search for novelty, and this results in a special vocabulary which is always subject to change in fashion. Words which are used for a time are quickly dropped as soon as they are adopted by the multitude. The word "swell" has long ago passed away, and "smart" has taken its place, no doubt to be discarded in the course of time. Words or expressions which are supposed to be a sort of society jargon, often have a very short life. An example is in the famous social classification of a noted leader, who originated the phrase, "The Four Hundred." This expression is so absolutely ruled out now, that anyone who uses it would show ignorance.

Slang has been aptly defined as a sort of "vagabond language," which forces its way into the most respectable company. Often it is descriptive, but it needs discrimination in its use. It is not wit, and the avoidance of it is advisable. It gives one a shock to hear it from the lips of a pretty girl, who speaks of having a "cinch." Even worse is it to hear anyone assent to a statement by saying, "That's right," or "Sure." These are vulgarisms.

Very small things in talk reveal refinement of personality or the reverse. Words which are bad form are "wealthy," "elegant," "homely." Instead of these, the form would be "rich," "beautiful," "plain." No one who knows the distinctions in refined words would say "folks" for "family," or "relatives," or "fellows" for "young men." The expressions "lady friend" and "gentleman friend" are never heard in social life, and would stamp a person immediately as being ignorant of good form.

Provincialisms are peculiarities of speech which should be resolutely corrected. Such expressions as "quit," "poorly," "rest," "dress suit," "spell of bad weather," "reckon," "depot" and "store" may be classed among these.

No person of education would use the expression, "Say, Mary," when wishing to call one's attention, nor would say, "Is that so?" "You don't say!" in conversation.

Grammatical errors are inexcusable. Confusion in the use of pronouns is a fatal mistake. An educated person would not say, "It is me," or "Mary and me are going," or "Sarah is coming to see my sister and I," or "between you and I," but would say, "It is I," "Mary and I are going," "Sarah is coming to see my sister and me," "Between you and me."

Other unpardonable errors are to use "learn" for "teach," or "have got" for "have," or "those kind of things" for "things of that kind," or to say "he don't for 'he does not,'" or "you was" for "you were," or "we are at home evenings" instead of "in the evening."

A fault to which some persons are prone is to use French words and mispronounce them.

The fear of using simple words troubles the uninitiated person, who is likely to adopt those which he fancies will sound well, but which are not in use. For instance, no one peruses a letter, one reads it; one does not retire, but goes to bed; one writes, but does not correspond; one helps at a fair, one does not assist; one goes to the opera, one does not attend the opera.

Extreme precision in speech may be as faulty as extreme slovenliness. The avoidance of things that have been considered will help in the correct use of the mother tongue.—Bellevue.

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.

BARRED Rocks, Rhode Island Reds, S-C Brown Leghorns. Eggs: \$1.00 per 13. W. J. Bunn, Birr, 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 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 Rock 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, 226 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 stock, one dollar for thirteen. Satisfaction guaranteed. Nelson Smith, Jerseyville, Ontario.

BIG MONEY in Anconas, S-C. White Leghorns. Free circular. 98% fertile eggs, any quantity. Baby chicks. Write quick. E. C. Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

BARRED ROCK EGGS—From well-bred, heavy, heavy-laying, prizewinning birds \$1 for fifteen; \$2 for forty; \$4 per hundred. Chas. Hilliker, Burgessville, Ontario.

BUFF ORPINGTONS—Good laying strain. Three pens, containing prizewinning females, headed by first and second winning cockerels, and sire of last year's winners. Large, vigorous birds. Satisfaction guaranteed. Eggs 15 for \$2; 45 for \$5. Edgar Staples, Bright, Ontario.

BARRED ROCKS—Right good-laying strain; cockerel, 218 egg strain. Price, \$1.00 per 15. Edward Musgrave, Wroxeter, Ontario.

COLUMBIAN PLYMOUTH ROCKS—My foundation stock imported direct from the originator's. Eggs: \$2 per 15. P. C. Gosnell, Ridgetown, 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 SALE—From prizewinning Single Comb Black Minorcas and Indian Runner ducks. Prices right. Jno. Ogram, Listowel, Ontario.

EGGS FOR SALE—From prizewinning Pekin ducks, \$2.00 per 13 David C. Planz, Hanover, 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 Brahmans, 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. Ten fertile guaranteed. Baby chicks, 25c each. Percy Maxwell, Sharpton, Ontario.

EGGS from Barred Rocks, twice winners of utility pen prize at Ontario, Guelph (O. A. C. strain), one dollar per fifteen, four dollars per hundred. Pen of high-scoring exhibitors per hundred, with an A. C. Hawkins (Rhode Island) male, one dollar and a half per eleven duck eggs, one dollar and a half per eleven.

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

EGGS—Single Comb Rhode Island Reds; winter layers; \$1.00 per 15. Grand laying Indian Runner ducks, 10c. each. Frank Bainard, Glanworth, Ontario.

"EDELWEISS" White Rock eggs for hatching, at \$2.00 the 15. Only trap-nested hens with records as pullets used as breeders. Their mating with a grand cock bird insures results. J. A. Butler, M. D., Newcastle, Ontario.

EGGS FOR HATCHING—From Al heavy-laying strain of S-C. Black Minorcas, one dollar for thirteen. Special prices on incubator lots. Ed. Hacker, 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 Tutts, 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, and Andalusians, Black Javas, Houdans, Anconas, Black and Spangled Hamburgs, Silver Gray Dorkings, Light Brahmans, Buff Cockerels, White and Brown Leghorns, Golden Sebright, Buff and Black Cuckoo 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. Glenoro Stock Farm, Rodney, Ontario.

GOLDEN WYANDOTTES—World's most beautiful fowl. Large, hardy, great layers. Choice cockerels, \$1.50 up. Breeding pen; ten of the best females that money can buy mated to Canada's greatest winner and sire of winners. Eggs: only \$2 per 15. Glenoro Stock Farm, Rodney, 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 9; \$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.

LOCHABAR POULTRY-YARDS offers eggs from selected breeding birds, Barred P. Rocks and Houdans, \$1.50 per 13. Pekin and Rouen duck eggs, \$1.50 per 9. All eggs delivered free of charge in Ontario. D. A. Graham, Wanstead, Ontario.

PURE-BRED SINGLE-COMBED WHITE LEGHORN EGGS—Grand layers. Satisfaction guaranteed. 50c. for 13. Inspection invited. A. Lawson, Trenton, Ontario.

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.

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 RHODE ISLAND REDS—Heavy laying imported stock. Eggs for setting, one dollar for fifteen. Fred Colwell, Cookeville, Ontario.

S-C. BUFF LEGHORNS—Eggs for hatching from splendid laying strain, \$2 per 15; \$5 per 50; \$9 per 100. H. Bazett, Springfield Farm, Dunbars, B.C.

SINGLE-COMB BROWN LEGHORNS—Prize-winners and grand layers. Seventy-five a dozen. Wm. Livingston, Vickers, Ontario.

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

SINGLE-COMB BROWN LEGHORNS—Best laying strain; 20 eggs, \$1.00; 50 for \$2.00; 100 for \$4.00. Mrs. D. W. Kean, Orillia, Ont.

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 Cochins Bants, \$1.50 setting. Wm. J. Kay, Guelph.

SINGLE-COMB WHITE LEGHORNS—Trap-nest records, 278, 245, 227, \$1 setting. W. G. Cowan, Wemyss, 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.

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

WHITE ORPINGTON EGGS—From prize-winning 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.

WHITE WYANDOTTES—Eggs, \$1.25 per 15. Good layers. Satisfaction guaranteed. Clare Kirkland, Teeswater, Ontario.

WHITE WYANDOTTES—Pure Regal strain. Eggs for hatching, one dollar per fifteen. Wm. Howe, North Bruce, Ontario.

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

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

282 FIRST PRIZES last year on my Cochins, Brahmans, Orpingtons, Wyandottes, Dorkings, Houdans, Leghorns, Polands and Hamburgs. Eggs guaranteed fertile. Stock sold on approval. Circular free. C. H. Wilson, Hawkstone, 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 23,532 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.

IF YOU HAVE Poultry for Sale PERKINS, 1830 Dundas St., Toronto.

The Change He Needed.

Mr. Lloyd-George is famous, of course, for his brilliant repartee and biting sarcasm. "I am here—," he remarked once at a political meeting, but before he had time to finish the sentence, a noisy interrupter had chimed in, "And so am I." But the retort was as quick as it was overwhelming. "Yes—but you are not all there!"

"What do our opponents really want?" he inquired in a recent speech. In the momentary pause that followed the question there came a voice husky from the effects of alcohol, "What I want is a change of Government."

"No, no," was the ready reply, "what you really want is a change of drink."—M. A. P.

"Willie, did you put your nickel in the contribution box in Sunday-school to-day?" "No, mama. I ast Eddie Lake, the preacher's son, if I couldn't keep it an' spend it for candy, an' he give me permission."—Denver News.



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

TERMS—Three 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. No advertisement inserted for less than 50 cents.

AN English widow woman, with one boy ten years and one girl 12 years old, wishes a situation as working housekeeper on a farm. Was a farmer's daughter, and thoroughly knows how to manage a farmhouse. Will be ready to come immediately on being cabled to do so. Apply, stating wages you can offer, and any particulars you have an idea will be necessary. Robert Miller, Stouffville, Ontario.

FOR SALE—Eighty acres, all fenced, thirty in cultivation. Good buildings and water; town, three miles; near school. Half cash, remainder three payments. R. A. Burriss, Port Arthur, 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.

FARM TO RENT—Township of St. Vincent, near Menford, 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, \$3.50; Alfalfa, \$13.00; bags extra. Ask for samples. Caledonia Milling Co., Ltd., Caledonia.

MARRIED MAN, Canadian, 25, two children, desires situation on gentleman's place. Thoroughly experienced with horses, cows, furniture, lawn, vegetable garden, etc. Life abstainer. Excellent references. Open May 1st. Apply: Box E. L., "Advocate," London, Ont.

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.

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.

WESTERN FARM LANDS—Large returns, easy payments. For reliable information regarding choice farm lands, write H. H. Suddaby, Box 111, Herbert, Saskatchewan.

WANTED AT ONCE—Some good practical farm hands to work on Bow Park Farm, Brantford, Ontario. This is one of the largest and finest farms in the Province. Good wages for good men. Canadians preferred. Write to Manager at once, or call at farm.

WE CAN FIND A PURCHASER for your farm. If you desire to sell, why not write us to-day? Or if you are thinking of buying a fruit, grain or stock farm, we can locate you. Woolley & Farewell, 177 King St. E., Hamilton.

205 Acres FOR SALE OR RENT

35 miles from Toronto; 1/2 mile to school; 14 miles to post office, store and blacksmith; 1 mile to shipping station; 60 acres bush and pasture, spring creek through this, frame house, 7 rooms, stone cellar, barn 30x100, frame cattle stable for 38 head, horse stable for 10 head; new pigery and henery, 20x40. This is a good clay loam, level, free from stumps and stones, and is a splendid stock or grain farm. Six acres orchard out about 12 years. Price, \$9,000; \$3,000 cash down. Address:

PHILP & BEATON
Whitevale, Ont.

HOLSTEIN-FRIESIAN BARGAINS AT SPRINGERBROOK

Offering: Two registered bulls, 11 months old, R. O. Jones, one bull 2 1/2 months old, 11 months old, and Price \$275 to \$385 each for quick sale. Come and see them. Don't lose time.

A. C. HALLMAN, BRELSAU, ONT.

PLEASE MENTION THE ADVOCATE

THE BAILIFF'S LIST

FOGARTY & CO., BAILIFFS AND BANKRUPT-STOCK BUYERS, 103 VICTORIA ST., TORONTO, offer the following seized and bankrupt stocks for sale, consisting of silverware, watches and jewelry of all kinds, field and marine glasses, telescopes. Everything must be sold regardless of cost, some of which will be sold for less than half price. All goods guaranteed as represented, and all mail orders given prompt attention.

12 only, telescopes, magnifying 40 times, 45" when open, 5 tubes, finest quality achromatic lenses, worth regularly \$25; our price to clear, \$15, with leather case. Also 9 telescopes, magnifying 20 times, to clear, \$6.50. Just the thing for sailors or sea captains.

50 gents' solid silver watches, with Waltham movements, worth \$15; our price to clear, with chain or fob, \$6.50 each. Same movements with nickel cases, \$5.25 each.

50 ladies' and gents' genuine gold-filled watches; cases made by American Watch Case Co.; some movements stamped 15 jewels and 17 jewels; worth \$17.50; will accept \$5.50 for choice. A snap for intending purchasers.

Carving sets, Sheffield steel, John Howard & Son, England; three pieces, staghorn handles, silver mounted, regular price \$6.50, ours to clear, \$2, including satin-lined morocco case.

60 ladies' solid-gold rings, any color birthstone, in tiffany setting, worth \$4.50; our selling price this week, \$1.75 each. Signets, solid gold, \$2 each.

100 fountain pens, vulcanized rubber, ideal feed, very high class, with 14k. solid-gold nib, worth \$3; our price to clear, 90c. each.

50 safety razors, high-class, 12 steel Clause blades, in velvet-lined leather case, complete, 80c.

100 ladies' long chains, best quality, gold-filled, with or without slide, soldered links, price \$7; our price, \$3; rope pattern, \$3.50 each.

10 gents' open face, best quality, gold-filled watches; "Fortune" cases, 17 jewels; Walthams, Elgins and P. S. Bartlett movements; must be sold, \$11 each, with chain or fob.

100 gents' best quality gold-filled vest chains, single, worth \$5; our price to clear, \$2.25; double chains, same quality, \$3.

Three walnut cases, satin-lined, containing 26 pieces silver, "Martin Hall," Sheffield, Eng., consisting of 6 dinner knives, 6 forks, 6 dessertspoons, 6 teaspoons, sugar shell and butter knife, worth \$21; will accept \$8; also, one case only, 26 pieces silver, "Rogers," in oak silk-lined case, \$7.50 to clear.

Any of the above lines will be sent by mail or express upon receipt of money order, or a small deposit will hold goods for 10 days. Intending purchasers will do well to order at once. Satisfaction guaranteed.

Fogarty & Co.,
103 Victoria St.,
Toronto.

A Lullaby.

Little groping hands that must learn the weight of labor,

Little eyes of wonder that must learn to weep—

Mother is thy life: that shall be to-morrow

Time enough for trouble—time enough for sorrow.

Now—sleep!

Little dumb lips that shall wake and make a woman,

Little blind heart that shall know the worst and best—

Mother is thy love now; that shall be hereafter

Time enough for joy, and time enough for laughter.

Now—rest!

Little rosy body, new-born of pain and beauty,

Little lonely soul, new-risen from the deep—

Mother is thy world now, whole and satisfying,

Time enough for living—time enough for dying.

Now—sleep!

—Brian Hooker, in McClure's Magazine.

Kansas newspapers are getting a lot of pleasure out of this incident, which is said to have actually happened in an eastern Kansas county. A farmer received a note from a young man who had been "going with" his daughter. It read: "Dear Dad, would like your daunters hand in a divorce. She and me are in love. I don't need a wife. Yours truly," "The girl," answered by letter, saying: "I don't need a wife, you don't need a wife, you don't need a wife. Get one and study the divorce law. I'll come again."—Kansas.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Veterinary.

DOSE FOR HORSE.

What is the largest dose of fluid extract of belladonna, with tincture of opium, that can with safety be given to a horse with colic?

MRS. A. C.

Ans.—The dose depends greatly upon the size of the horse. Horses vary in weight from, say 800 lbs. to 2,300 lbs., hence the size of the dose that can be given with safety must also vary.

Tincture of opium is of definite strength, each ounce containing 33 grains of opium. The maximum dose for an average-sized horse, say 1,300 lbs., in combination with belladonna, would be about 2 ounces.

Fluid extract of belladonna is not of definite strength; I have often given 2 ounces without danger, but the quality of the drug that is on the market now is stronger, and cannot be given in such large doses.

For a horse of the size mentioned, the maximum dose should be 1/2 ounce. We must remember that the condition of the patient indicates to the practitioner the quantity to be given; often, on account of the stage of the disease, very large doses are required in order to get results.

For amateurs, the above doses should be the maximum.

COW WITH COUGH.

I bought a cow that was all right and led her home behind a sleigh. She became warm, and was put in a cold stable. In a few days she began to cough, and has been getting worse ever since. She eats well, and is gaining in flesh and increasing in milk production.

H. W.

Ans.—The symptoms strongly indicate pulmonary tuberculosis, for which nothing can be done. If the cough were due to disease of the respiratory organs, due to a chill, her general health would be seriously affected. It is possible the conditions mentioned were the immediate cause of the development of the symptoms of tuberculosis. The only means of determining whether she is tubercular is to have her tested with tuberculin by a veterinarian. If she does not react, do not be alarmed about the cough, as it does not interfere with her health, and will disappear in time; but if she reacts, it will indicate definitely that she is tubercular. Tuberculosis is the only disease that causes habitual coughing for a continued time in cattle without interfering with the general health.

V.

INVERSION OF VAGINA, ETC.

1. Ewe inverted the vagina and rectum a week before lambing. I lost one from the same cause last year. Would feeding silage once daily cause it?

2. Two-months-old calf, fed three parts separated milk to one part new milk, with low-grade flour and chop, bloated and died. Would tapping have been good practice?

E. C. G.

Ans.—1. The trouble was probably caused by constipation. Treatment consists in washing inverted parts with an astringent, as alum water 1 ounce to a pint, returning, and applying a truss, which must be removed occasionally, and the contents of the rectum removed. The patient should be given sufficient raw linseed oil to keep bowels loose.

2. The bloating was caused by the flour, which is too hard to digest to be given to young animals. Puncturing certainly would have been good practice. In fact, when immediate relief is necessary, it is the only treatment. When the bloating is not extreme, the administration of about 4 ounce oil of turpentine in 6 ounces raw linseed oil will often effect a cure.

V.

Miscellaneous.

ABSCESSSES.

Two mares bruised their breasts on the mangers. Abscesses formed, and the swellings have almost disappeared, but on one there is a thickening of the tissues about two inches long and one inch wide. How should these abscesses be treated in order to avoid permanent enlargements?

W. A. McI.

Ans.—After the abscesses were lanced, or had burst, the cavities should have been flushed out three times daily with a five-per-cent solution of carbolic acid, and the external openings kept pervious until the internal cavity was healed. It is probable the enlargements will gradually disappear, but if not, blistering will hasten absorption. If the external opening healed while there was still pus forming, a fresh abscess will form. In some cases, a fibrous tumor results, in which case excision is the proper treatment, but this should be performed by a veterinarian.

GLUTEN MEAL.

How is gluten meal compared with wheat bran for dairy cows; cows are getting silage and hay?

N. M.

Ans.—As average analyses of digestible constituents, Henry (revised edition) gives the following:

	Protein.	Carbohydrates.	Ether extract (vegetable fat).
Gluten meal...	29.7	42.5	6.1
Wheat bran...	11.9	42.0	2.5

From this it is clear that gluten meal is, roughly speaking, about 2 1/2 times as rich as bran in protein and fat, though standing about the same in carbohydrates.

Taking everything into consideration, it might be considered worth about twice as much as bran per pound, when fed in limited quantities to dairy cows getting corn silage and hay. It is not as safe a feed as bran. Its composition varies, and it should be purchased according to guarantee of analysis. Gluten feed is a more common commodity, and not so rich in composition.

GOSSIP.

The death at his home in Victoria, B. C., on April 5th, of Kenneth McKenzie, is announced. Mr. McKenzie was one of the pioneer farmers and stock-breeders of Manitoba, who was formerly a successful farmer in the neighborhood of Guelph, and later a leading agriculturist in Manitoba, where he acquired a large extent of first-class farming land at Burnside, near Portage la Prairie, which district he for several years ably represented in the Provincial Legislature. Mr. McKenzie was a man of sterling character, energetic, enterprising, and enthusiastic in his confidence in the Canadian West as a farming and stock-growing country. He was 85 years of age, and is survived by a widow and family.

Dalgety Bros., London, have recently sold to John Mowat, of Shelburne, Ont., the imported Clydesdale stallion, Baron Johnnie (13990), bay, rising five, stands 17 hands high, on short, clean, flinty-boned legs, nicely feathered, with oblique pasterns, and first-rate feet, winner of first prize at Marr Agricultural Society's Show as a yearling, very highly commended at the Royal Northern as a two-year-old, and awarded the Arran Farmer's Premium to travel their district last year.

Baron Johnnie's sire is Cairnbrogie Chief-tain, winner of many first prizes and medals in Scotland, a son of the noted Prince Thomas, and tracing on his dam's side to Prince of Wales (673). The Shelburne district is fortunate in securing the service of this superior horse.

TWO OF A KIND.

Stuttering Blacksmith (to new apprentice, who also stutters): "T-t-take th-the iron out of the f-f-fire. N-n-now hold it round th-th-the other way."

Apprentice: "O-o-o-oh! th-th-this way. N-n-now w-w-where sh-shall I pu-pu-put it?"

Blacksmith: "O-o-oh, pu-pu-put it back in the f-f-fire; it's co-co-co-cold."—The Tattler.



Try this Thirsty Flour

A very thirsty flour. Absorbs a lot of water. Because it contains so much *gluten*. Manitoba wheat is wonderfully rich in sturdy *gluten*. And, think of it, FIVE ROSES is milled exclusively from the very cream of the Manitoba wheat berries. So FIVE ROSES must be awfully thirsty, don't you see. In your mixing bowl it greedily absorbs more water. So you get more loaves than usual without using more flour. You use less. Your flour lasts longer, doesn't it? Less trips to your dealer. That's how FIVE ROSES saves money. Actually saves YOU money. Use this economical flour.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

QUESTIONS AND ANSWERS. Miscellaneous.

ENLARGED LEG.

Valuable mare had lymphangitis, and it left her with a big leg. Kindly publish a recipe for an absorbent liniment that would possibly reduce the same. T. G.

Ans.—An excellent authority advises light feeding, regular exercise, hand-rubbing, and bandaging, and the administration of one dram iodide of potassium twice daily. If this affects the appetite, the dose should be reduced to 40 or 30 grains.

PRIZEWINNING HORSE.

1. What was the name of the horse that took first prize at the International Live-stock Exposition at Chicago, in December, 1909, in the three-year-old Clydesdale stallion class?

2. What was the name of the sire?
 3. Who was his owner? J. B. A.
- Ans.—1. Very Likely (14883).
2. Durbar (11695).
3. Mclay Bros., Janesville, Wis.

COWS EATING WOOD.

My cattle eat wood. They are in good order, and seem all right other ways. Is it a habit, or is there something wrong? W. E.

Ans.—The chewing of wood becomes, with some cows, a chronic habit. It is believed to be induced in the first place by deficiency of some of the mineral elements in the food, the lacking element being most probably phosphoric acid. In such cases fertilizing the land with bone meal, phosphates, and sometimes lime and ashes, will result in the growth of fodder that more nearly meets the animals' requirements. The feeding of a balanced ration, containing plenty of nitrogenous food, such as clover, alfalfa, bran and meal, is advised, though not

A CANADIAN SCHOOL FOR BOYS.

RIDLEY COLLEGE

St. Catharines, Ontario.

Three separate residences; new, specially built and equipped. 1. Lower School for Boys under fourteen. 2. Dean's House, for Boys of fourteen and fifteen. 3. Upper School, for Advanced Pupils. Gymnasium and Swimming Bath just erected. Fine Hockey Rink. Athletic Fields and Playgrounds unsurpassed. Eighty acres. Mild climate. University scholarships won in 1909 and 1910. Boys prepared for Agricultural College.

REV. J. O. MILLER, M. A., D. C. L., PRINCIPAL.

RECIPROCITY

You do not need reciprocity if you buy your drills direct from us, without selling expense. We manufacture the **IMPERIAL HORSE-LIFT DRILL**. Let us tell you why this drill is the best drill on the market to-day.

THE W. I. KEMP COMPANY, LIMITED
Stratford, Ontario.

guaranteed to cure the habit. Give all the salt they will take, and give one ounce phosphate of lime in a pint of cold water as a drench to each, night and morning, or give it in a little bran or chop.

PLOWING SOD IN SPRING.
In a late issue, you advised plowing sod early in the spring for peas, and not sowing until the rest of seeding is done.
1. Why do you advise this method, and would you give the plowed ground any

cultivation between plowing and time to prepare for seeding?

2. What is the proper way to give and prepare cow's milk for a motherless lamb, and how much to feed it at once? J. S.

Ans.—1. It would be all right to plow sod for peas immediately before sowing, but there is usually considerable time before the ground can be worked for seeding when sod can be plowed, and plowed the most easily. It is wise to do it then, and save time later. Besides, plowed ground, if harrowed down, is acted upon by the elements, and becomes better fitted for growth.

2. Whole milk, warmed to blood heat, is the best feed for orphan lambs for the first six weeks. After this, warm sweet skim milk may be fed. It is well to teach a lamb at the first to drink from a pail or dish, but if the lamb is very weak, a bottle, or horn and nipple, may have to be used for a time.

GOSSIP.

The four-year-old Clydesdale stallion, Brogie's Stamp [8865], is advertised for sale by D. C. Platt & Son, Millgrove, Ont., sire Imp. Prince Cairnbrogie [4785], by Prince Thomas, dam Imp. Grace Anderson, by Up-to-Time, by Baron's Pride, dam by Macgregor, by Darnley. Brogie's Stamp is represented as a show horse, sound, and without a fault, and will be priced right to a quick buyer, as the owners do not care to keep a stallion.

TEXAS PHILOSOPHY.

"Many a man," remarked the home-grown philosopher, "spends his courting-days in telling a girl that he is unworthy of her, and his married life in proving it."—Houston Chronicle.



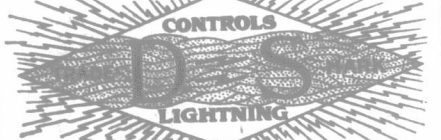
LIGHTNING
It strikes! Home and hopes gone! When the stroke comes you may be left to mourn, but mourning will be useless.

BE WISE IN TIME. PROTECT YOUR HOME AND LOVED ONES WITH
THE DODD SYSTEM
of Lightning Control

The only real system. Prof. West Dodd perfected it and demonstrated its efficiency to the world. Fire Insurance Companies welcome it because it saves them all losses from lightning. Old Line Insurance Companies are joining with the thousands of Farmers' Mutual Companies in lowering insurance rates on buildings protected by D.S. lightning rods.

PURE SOFT COPPER CABLE RODS
SCIENTIFIC INSTALLATION

Get the standard system that has universal endorsement. See trade mark—then you will know you are right—and it will be put up right. Look out for imitators and followers who offer you "bargains." Our Great Lightning Book is FREE. Write for it now—first of all. It explains everything and will keep you from being taken in by lightning rod "sharks." Big book, vivid lightning scenes. Address
DODD & STRUTHERS, 465 6th Ave., Des Moines, Ia.



GET THE WASHER RUN BY GRAVITY!

We have harnessed the Power of Gravity in the 1900 Washer. It is the Greatest Combination known for quick, clean, easy washing. The Washer almost runs itself! In just six minutes it washes a tubful of clothes spotlessly clean. Over half a million housewives have tested this and proved it. So can you, without spending one cent! Here is the offer!

WASHERS SHIPPED FREE FOR 30 DAYS' TEST

We make this offer to any reliable man or woman anywhere. We send the Washer by freight, at our expense and risk. That's because we absolutely know you will be as delighted with the Washer as the thousands who have tried it. Get one of these wonderful Washers and say "good-bye" to the washboard forever. Good-bye to backaches, worry and washrday drudgery! Let Gravity Power do the hard work! Let the Washer cleanse the clothes! We sell the Washer on little payments—only 50 cents a week. It pays for itself in a hurry. Then works for you—free for a lifetime! Drop us a postal card for the Free Washer Book and tell us your nearest freight station. Send to-day. Address me personally for this offer. F. A. H. 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. 218911

Don't Wear Trusses Like These!
Get rid of Straps and Springs and be CURED



Box 109
125 East 23rd St.

QUESTIONS AND ANSWERS.
Miscellaneous.

RUPTURED PIGS.

I have a litter of eight young pigs, all born healthy, now three weeks old. One has a rupture. Is there any cure for this? It is a boar. One of the others has a lump on the hind quarter. Should this be lanced? Both pigs are seemingly well, and thriving.
W. B.

Ans.—Ruptured boar pigs usually (possibly always) recover without treatment. Care needs to be exercised in castrating, but the writer has never known an impossible case. Whether the lump on hind quarter of pig should or should not be lanced, depends on the nature of it. Not knowing that, we would advise letting it alone unless it gets much worse.

FLAX-SEED MEAL FOR CALVES

In feeding linseed meal to calves, along with skim milk, should the meal be fed raw or boiled, or mixed with the milk, or feed dry, say mixed with oats?
W. S. M.

Ans.—Ground flaxseed for calves is usually fed mixed with the milk, after first having been simmered in water until a thin jelly has been formed, or having had boiling water poured over it and stirred well before the milk is added. Until the calves are a month old, it could not be fed separately, for they would not eat it. Oil-cake meal should be fed in a similar way, at least until the calves begin to eat grain, when it, and also ground flaxseed, may be fed dry, and mixed with the grain.

LUMP JAW.

I have a heifer due to calve in about a month. She has a lump on the side of her jaw, close to the mouth; also, one under, close to the throat. What treatment would you advise? Would her milk be fit for use while using treatment? Would it be safe to use treatment when she is coming in so soon?
A. N.

Ans.—This is probably a case of lump jaw, though you give no particulars as to size, whether movable or fixed, etc. If lumps are loose, the proper treatment is to have them dissected out by a veterinary surgeon, and give the iodide-of-potassium treatment. Commence with one-dram doses, given three times daily, and increase by half dram daily until appetite and thirst fail, tears run from the eyes, and saliva from the mouth, and the skin becomes scruddy. When any of these symptoms appear, cease giving the drug. It would be prudent to defer treatment until after she calves. Her milk would not be affected by the treatment, except in quantity, and is not affected by the disease, at any rate, unless it is in an advanced stage.

DISSATISFIED BUYER OF HORSE.

A bought a horse from B, A paying \$30 down and taking the horse home with him, agreeing to return three days after with balance of money, as he did not have it with him. A fails to fulfil agreement, but works the horse for three months, at which time a settlement is sought for. He refuses to settle on plea that the horse was not sound. A bought the horse as he saw him, without any guarantee.

1. Can A compel B to repay the thirty dollars?
2. Or can B collect wages for horse's work?
3. Or can B compel A to settle for horse as he agreed when he took horse home with him?
4. This horse has been boarded out all winter—who is responsible for feed bill, A or B?

Ontario.
Ans. 1. No.
2. No.
3. Yes.
4. A.

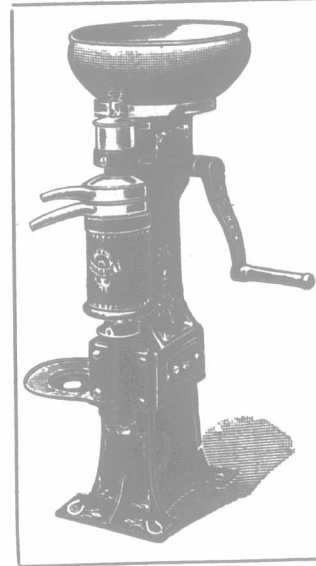
GOSSIP.

Colwill, Arthur, Ont., writes to J. P. & Son, of Brampton, Ont.: "My cow, Brampton Foxy, arrived last week. I am more than pleased with her size and kind, a splendid milk-er. If I could afford to buy more, I cannot say I would buy any more strongly to my satisfaction than my present Jersey."

A Perpetual Harvest

MONEY MADE EVERY DAY BY THE DAIRY FARMER

MAGNET
Cream Separator



in your dairy brings pure cream and butter, which is sold every day in the year. Cream and butter are necessities. The MAGNET Bowl is supported at both ends; will not wobble; therefore, skims perfectly every day.

MAGNET Skimmer is in one piece, separates all impurities from the cream and milk. MAGNET is easily washed, all parts perfectly cleaned in less than five minutes.

The MAGNET is built with SQUARE GEARS, twice as strong as required for everyday use, will not wear out, and so easily turned children operate; there is no friction.

Sanitary Strainer on every tank.

Our big factory makes MAGNET Cream Separators and nothing else, and we make them good. A postal card to us will insure a demonstration of the MAGNET in your own dairy.

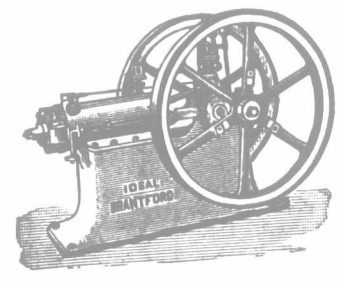
The Petrie Mfg. Co., Ltd.

Vancouver Calgary Winnipeg Hamilton Montreal and St. John

IDEAL GASOLINE ENGINES

1/4 TO 50 HORSE-POWER

- Windmills
- Grain Grinders
- Pumps
- Tanks



- Water Boxes
- Concrete Mixers
- Etc., Etc.

SEND FOR CATALOGUE.

Goold, Shapley & Muir Co., Limited
BRANTFORD, CANADA.

The ONTARIO LOAN DEBENTURE CO. and

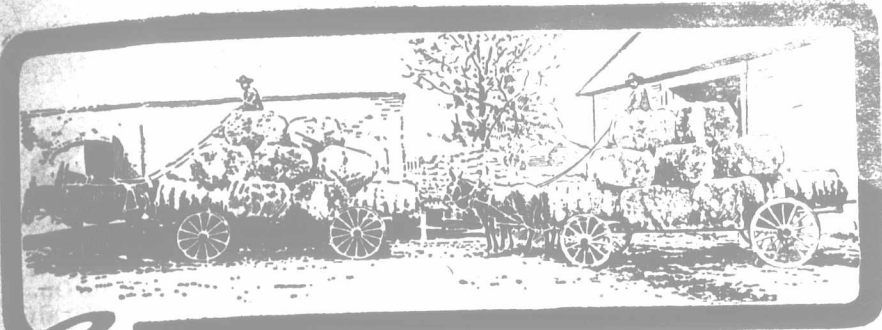
The Value of Money

If you would know the value of a dollar, try to borrow one.

Recollections? Then you should by all means build a barrier against the necessity of borrowing by opening an account here—if only with a dollar as a start. 3 1/2% interest paid.

LONDON, ONTARIO

Please Mention this Paper.



IHC WAGONS HAVE STOOD THE TEST OF ALL LOADS AND ROADS FOR YEARS

THE real proof of the strength, durability, and value of I H C wagons is what they have done and are now doing for thousands of farmers throughout the Dominion. Light loads and heavy loads have been carried by I H C wagons, over good roads and bad roads, for so many years that there is hardly a farmer who is not familiar with the high quality that these names on wagons represent—

Petrolia Chatham

Either of these should be your choice if you want to be sure of lifetime service. The quality in both is the highest possible—the result of years of wagon-building experience, and the use of the best materials, shaped by skilled workmen operating with the finest manufacturing equipment.

Petrolia Wagons are constructed of the finest quality wood stock which is thoroughly seasoned by being air dried. The ironing is of the very best. The inspection of each part is most rigid. Petrolia Wagons must be made so that they will live up to the I H C standard of excellence or they are never sent out of the shops.

Chatham Wagons have a long record for satisfactory service in Canada. Made with hard maple axles, oak bolsters, sand boards, rims, and spokes, and oak or birch hubs—they represent the highest standard of wagon construction. When you buy a Chatham wagon it is with the assurance of getting the utmost service and satisfaction out of it.

Be sure to call on the I H C local agent. Get a pamphlet. Let him show you one of these wagons. If you prefer, write for literature or any other information you want to the International Harvester Company of America at nearest branch house.

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

International Harvester Company of America
(Incorporated)
Chicago USA



I H C 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 I H C Service Bureau, they will receive prompt attention.

"BANNER" Gold Blast LANTERN

Welcomes hard usage

Burns 15 hours longer than any other

Guaranteed Windproof



Double-seamed well, cannot leak

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Perfect combustion

Costs No More Than Inferior Lanterns
If your dealer doesn't stock "Banners," write:

Ontario Lantern & Lamp Co., Limited
HAMILTON, ONTARIO.

When buying Advertisers, Please Mention "The Farmer's Advocate."

QUESTIONS AND ANSWERS. Miscellaneous.

PROMISSORY NOTE.

A lent B \$300; B gave a note for the money; eight months after date; B's wife's name is on the note also; B is a store-keeper; B sells his business and goes West. The note is not due till October.

1. Is a note drawn in Ontario good any place in Canada?
2. If B got a job on the railroad, could A garnishee his wages each month; or could he seize on property if he had any; or what would be the best plan to take if he did not want to meet the note?

Ontario. BUFFALO BILL.
Ans.—1. Yes.
2. It would depend largely upon the laws of the particular Province in which B happened to be employed or resident. In the event of the note being dishonored by non-payment, it should be placed in the hands of a solicitor for collection.

SHOCKED CORN IN SILO.

Will it be advisable for me, having my silo, which is 12x13x22, refilled with silage? My silage is just done, and has kept fairly well. My silo is cemented up four feet all around inside, and has a rod running across through center, which keeps it very firm. The corn is all well put up in three long stooks. It was well cured before stooking. It has been badly drifted in with snow this winter. Some claim the silage will not heat properly, and will, therefore, be of no use. Is it advisable to put water on it? I have enough corn for about thirteen to fifteen feet of silage. W. R. C.

Ans.—We would not advise filling a silo at this season with shocked corn. We should expect it to mold. We have had reports of silos being filled in October and November with shocked corn, usually wet when run through cutting box, which was said to have made good silage, but have never felt safe in recommending it unless in emergency. At this season, it would be still more questionable. In fact, we should anticipate failure.

TRANSPLANTING LARGE TREES —ROOF FOR SILO.

1. Can cedar shrubs from ten to fifteen feet high, be raised uninjured, and successfully transplanted around buildings for ornament and shelter; and, if so, by what means are they raised? Give full particulars as to raising, and time of transplanting. The trees are growing on dry land, and are large, bushy trees.

2. Which is the best roof for a cement silo 12 feet diameter inside, and how put on?

Ans.—1. If anyone is willing to go to the necessary expense, and to take the time, he can transplant large trees successfully. There must, of course, be as large a percentage of uninjured roots taken with the tree as possible. To secure this, a very good plan is to dig a deep trench in the fall around the tree, some distance from the trunk, and cut off the main roots, then fill in with straw or other material which will prevent the ground freezing. After the ball of earth has frozen solid the straw may be removed, and the tree, with the ball of earth, raised by means of a windlass or levers, placed upon a stoneboat or sleigh, and removed to where it is to be planted. The hole for the tree should, of course, have been dug in the fall, and protected from freezing by straw or other covering. Care should be taken to fill in earth as closely as possible around the roots, and a generous mulch should be provided for the summer, to retain moisture. If it is thought best to transplant trees this spring, have conditions as near as possible to what is recommended above, covering the roots to protect them from the sun while being moved.

2. There is no best roof for silo. Look up "The Farmer's Advocate" of July 21st, 1910, where two very efficient and inexpensive roofs are described and illustrated. These may briefly be described as conical, having plates of two boards an inch thick on wall, four rafters, four false rafters dividing spaces between the others, and girths between rafters. Boards ten feet long, ripped diagonally, nailed to plate, girths and peak, form roof, cracks battened with strips 1/2 inch by 3 inches, all painted. Gothic and door for filling.

Barn Roofing

Fire, Lightning, Rust and Storm Proof

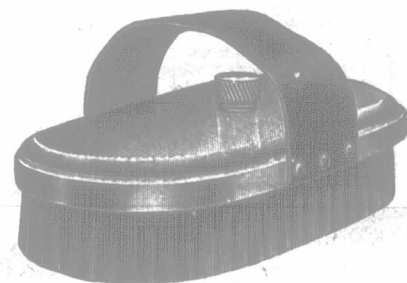
Durable and Ornamental

Let us know the size of any roof you are thinking of covering, and we will make you an interesting offer.

Metallic Roofing Co.
(LIMITED) 45A
MANUFACTURERS,
TORONTO and WINNIPEG.

AGENTS WANTED IN SOME SECTIONS.

SANITARY HORSE and CATTLE BRUSH



Sirs.—I can cheerfully recommend your Dustless Horse Brush. It is just the thing every horseman should have for the benefit of both horse and man.
FRED ENGLISH,
Famous Horse Trainer.

Besides being everything else that is good in a Horse Brush, this is a Sanitary and Dustless Brush. It carries a chamber in every horseman should have for the benefit of both horse and man.

Kerosene is the best germ-killer known; it not only cleans the hair, but prevents attacks from vermin and small flies.

To keep your horse or your cattle free from these things is humane, but it is also most wise, because it holds them in good health and free from worry.

This splendid brush will be sent you on receipt of \$2.75, registered, post prepaid.

Our guarantee—If you are not satisfied after a ten days' trial, return the brush to us and your money will be refunded.

THE SANITARY HORSE & CATTLE BRUSH CO.
29 Colborne St., Toronto

A FLOOD OF LIGHT FROM KEROSENE COAL OIL THE ALADDIN LAMP. THE ALADDIN LAMP generates, with Coal Oil (Kerosene), a light far more brilliant than gas or electricity. It is simple, durable, portable, economical and safe. Satisfaction guaranteed. AGENTS MAKE BIG MONEY by showing the lamp, the light makes the sale. It revolutionizes rural lighting needed in every home. The SUNBEAM harness fit all ordinary lamps. Ask for Agency proposition or how you can obtain a lamp FREE to introduce it. The LANTERN LAMP CO. of America, Chicago, Winnipeg and Dept. 8 MONTREAL.

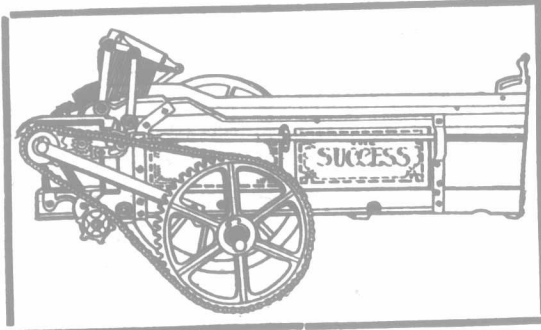
PLEASE MENTION THE ADVOCATE.

YOU NEED THIS CROP BUILDER!

You can increase your crop-yield many per cent. with a SUCCESS Manure Spreader—the machine that's modern. For with it you can spread the manure evenly, instead of much-here-and-little-there. You increase the value of your farm

manure fully five dollars a ton when you spread it with a Success. For then it is pulverized—and delivered to the soil in the form plant life can quickest and most easily utilize—to your profit and the land's permanent betterment.

Strongest Built
Easiest Running
Distributes EVENLY



Works Right Always
Won't Clog It
Pulverizes

Study the Success Construction

Get the book we want to send you. It shows how and why the Success Pulverizing Rake (placed right over Beater Axle) must positively pulverize every shred of manure. No other machine does this so thoroughly and makes the distribution so even.

Easiest on Team and Man

Thirty years of manure-spreader building has made the Success the simplest to operate; the staunchest in construction; and the smoothest and steadiest running machine built. It runs easier and does its work better. This we can prove to you beyond question.

Note the Sturdy Direct Drive

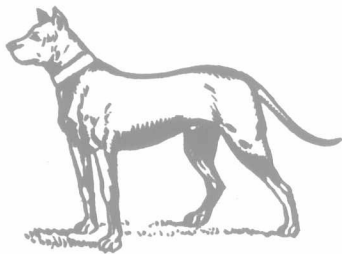
Right-hand direct chain drive, with heavy, almost unbreakable steel-pinned chain, makes this the lightest-draft manure spreader known. Worm gear that drives the apron is enclosed and runs in an oil bath—another wear-lessening and draft reducing feature.

The Success Keeps Going

Powerful axles (bigger than other machines); roller-bearing apron; extra-strength frame of unspliced Rock Maple; and a dozen other exclusive merits assure you the Success will stand up to its work under all conditions. Allow us to send you all the facts—they will profit you.

GET ACQUAINTED WITH THE GREAT DAIN LINE

Besides the Success Roller-Bearing Manure Spreader, we make Vertical Lift Mowers, Side-Delivery Rakes, Hay Loaders, Hay Presses and Ensilage Cutters. Each is ahead of all its kind. Ask for details about any of these you are interested in. Write to us today—NOW.



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SEND FOR SAMPLES AND SEE FOR YOURSELF THAT

Keith's Seeds

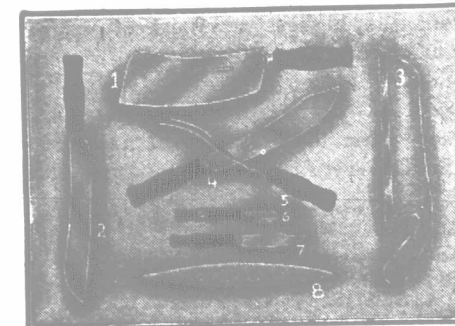
are good, and are of exceptional value. If you feel there is no time to get samples, and you have never done business with us before, send in your order, and we will ship C. O. D. to your nearest station, and grant you permission to examine goods before paying for them. We will pay the freight in Ontario on Clovers and Timothy orders of 200 lbs. or more; all other prices herewith quoted are F. O. B. Toronto.

CLOVERS.		Per bush.	BARLEY.	
		Bags 25c. extra.		Per bush. Bags free.
Red, "Sun" No. 1, Gov. Standard		\$10.00	O. A. C. No. 21	\$ 1.10
Red, "Moon" No. 2, Gov. Standard			(Our stock of this is going fast.)	
(choice)		9.00	Mandscheuri	.85
Mammoth, "Sun" No. 1, Gov. Standard		10.25	Duckbill	1.10
Mammoth, "Moon" No. 2, Gov. Standard				
(choice)		9.25		
Alfalfa, "Gold" No. 1, Gov. Standard		13.75		
Alfalfa, "Silver" No. 2, Gov. Standard		13.25		
Alsike, "Ocean" No. 1, Gov. Standard		10.50		
Alsike, "Sea" No. 2, Gov. Standard				
(choice)		9.25		

OATS.		Per bush.	TIMOTHY AND GRASSES.	
		Bags free.		Per bush. Bags 25c. extra.
Lincoln		\$ 0.80	Timothy, "Diamond" No. 1, Gov. Standard	\$ 7.00
White Cluster		.80	Timothy, "Crescent" No. 1, Gov. Standard	6.65
White Wave		.80	Timothy, "Circle" No. 2, Gov. Standard	6.50
Canadian-grown Regenerated Abundance		.80		
Scotch "Banner"		1.25		
Danby		.90		
Goanette		.90		

FERTILIZERS.		Per ton.
		225 lbs.
Nitrate of Soda		\$57.00
Sulphate of Potash		58.00
Muriate of Potash		49.50
Acid Phosphate		18.50

SEND FOR CATALOGUE.
Geo. Keith & Sons
124 King Street, East, Toronto, Canada.
SEED MERCHANTS SINCE 1866.



Agents Make Big Money
Selling this fully guaranteed, eight-piece Kitchen Set. Write to-day for our agents' offer.
May Mfg. Co., Elora, Ont.

When Writing Advertisers, Please Mention "The Farmer's Advocate."

QUESTIONS AND ANSWERS. Miscellaneous.

VENTILATING BASEMENT.

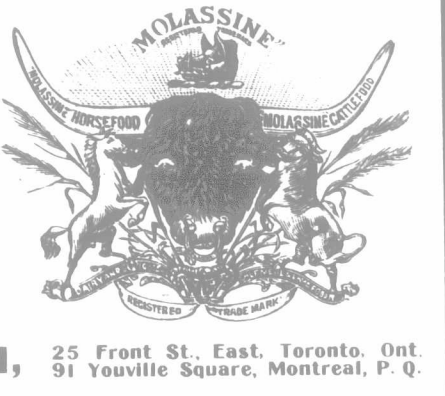
I am building this spring, stone basement 40x70x8 feet high, for barn, and would like to know the best way to ventilate the same. How many intake pipes, and what size they will need to be? Would one or two large pipes do, if run underground, say a hundred feet back from building, so that when the fresh air would enter basement the chill would be off it? What size of pipes would be required for the outlet?
J. T. C.

Ans.—Look up Prof. Grisdale's excellent article on "Ventilation" in "The Farmer's Advocate" of March 23rd, page 503. In a barn of D. & M. McVicar's, Middlesex Co., Ont., of which an illustrated description was given in the issue of February 15th, 1906, one large pipe thirty inches in diameter was used to introduce air through underground pipes into basement, 82x54 feet.

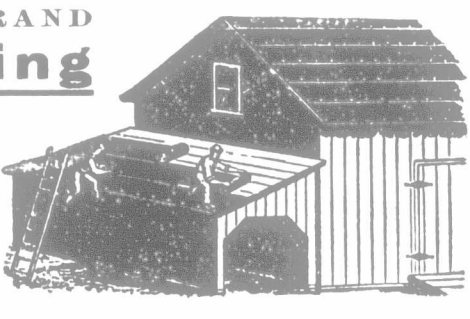
WHITE SCOURS IN A COW.

1. Please give a remedy for white scours in a calf.
2. I would also like to know how many calves I can feed with this and what would be the cost for one year.
3. I have a calf that has white scours. It is a yearling and has been sick for some time. I have tried several remedies but nothing has helped. Can you give me any advice?
4. I have a calf that has white scours. It is a yearling and has been sick for some time. I have tried several remedies but nothing has helped. Can you give me any advice?
5. I have a calf that has white scours. It is a yearling and has been sick for some time. I have tried several remedies but nothing has helped. Can you give me any advice?

World's record for butter-fat from a cow fed with
Molassine Meal
MADE IN ENGLAND
"Missy of the Glen" 18390, Advanced Register No. 936, bred and owned by H. A. C. Taylor, Newport, Rhode Island, U. S. A. Produced in 12 months 954.76 lbs. butter-fat, equal to 1,100 lbs. of butter. This constitutes a world's record for any cow in connection with an Advanced Register.
MOLASSINE MEAL was fed regularly throughout the whole twelve months.
Imported by
ANDREW WATSON, 25 Front St. East, Toronto, Ont. 91 Youville Square, Montreal, P. Q.



Do You Want the Cheapest and Most Durable Roofing?
USE DURABILITY BRAND Mica Roofing
For steep or flat roofs; waterproof; fireproof; easy laid. We pay the freight on all orders of five square and over to any railroad station in Ontario or Quebec. Send stamp for sample, and mention this paper.
Hamilton Mica Roofing Co., 101 Rebecca St., Hamilton, Can.



ECZEMA—RURAL DELIVERY.

1. I have just lately got hold of an aged horse, and, judging from the looks of his tail and mane, he has mange. But he seems to be more itchy all over his body now than either at tail or mane.
2. What is the best way to procure rural-mail delivery in a community, and how are the expenses paid?
W. J. B.

Ans.—1. Not mange, but eczema, is probably the trouble. As the case seems a severe one, the horse had better be first purged with 7 drams aloes and 2 drams ginger. After purgation ceases, if his hair is not short, get him clipped. Then give a thorough washing with warm soft-soap suds, well applied with a scrubbing brush. After this, wash the affected parts twice daily with corrosive sublimate 30 grains to 1 quart water. Give 1 ounce Fowler's Solution of Arsenic night and morning every alternate week for a month or six weeks.
2. Those concerned should apply for a form of petition to the Post-office Department, Mail Contract Branch, Ottawa, or the Post-office Inspector of the postal district in which the proposed rural-delivery route is situated, which petition should be circulated over the route and signed by those who are willing to accept rural delivery on the terms and conditions set by the Department, and, when completed, should be forwarded to the Post-office Department, or to the Inspector of the Division. A copy of the regulations governing rural delivery will be forwarded by the Department, or by the P. O. Inspector, on request.

COULDN'T MISS HIM.
Police Sergeant—"Can you give me a description of the person who ran over you?"
"O! can that. He had on a fur coat an' an' automobile cap an' goggles."

Dr. Williams' Fly and Insect Destroyer

IS MANUFACTURED SOLELY BY

BAKER & BOUCK, MORRISBURG, ONT.

Points of Emphasis.

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.

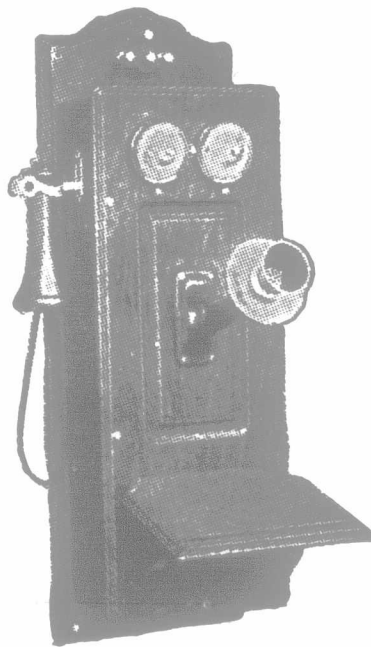
The Three Grandest Disinfectants: 1. Sunshine; 2. Air; 3. Dr. Williams' Fly and Insect Destroyer.

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.

Shall we assist you to organize an independent rural telephone system?



You are a progressive man and recognize the need of a telephone system in your locality, but you don't exactly know how to get the company started. Ask us. We are in a position to furnish accurate information in regard to every detail of the organization and incorporation of rural and local telephone systems. If desired we will furnish you with copies of by-laws, and will actively assist you in getting efficient telephone service for your locality.

Our business doubled in volume last year. This fact speaks well for the high standard of quality we put in our telephone products. Ask about our FREE TRIAL OFFER.

Get our prices on construction material. We can give you prompt shipment from stock.

Canadian Independent Telephone Company, Limited
20 Duncan Street, Toronto

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
A few good agents wanted. **Galt, Ontario.**



MAKE YOUR OWN TILE

One man can make 300 to 600 perfect tile a day with our

Farmers' Cement Tile Machine

At a cost of \$4 to \$6 per 1,000. CAN YOU AFFORD TO BE WITHOUT IT? The only farm tile machine that does not require hand tamping; the only farmers' machine operated by either hand or power. Machine makes 3, 4, 5 and 6 inch tile. Our Waterproof FLEXIBLE CASING holds tile in perfect shape till set. NO FALLET.

TEN DAYS FREE TRIAL. If after 10 days' trial it does not meet with entire satisfaction, return at our expense. Write to-day for illustrated catalogue.

Farmers' Cement Tile Machine Co., WALKERVILLE, ONTARIO.

QUESTIONS AND ANSWERS. Miscellaneous.

VICIOUS SOWS.

Had three young sows in a bunch of store hogs. Was preparing them for market. The market kept going down, so I decided to breed them. They had been well fed and nearly ready for market. The first two came in the 20th of March. One had eight pigs; the other ten. The third came in March 29th, and had thirteen pigs, all strong and hardy. The first one seemed somewhat vicious, but I managed to tame her down, and after a while she became reconciled. The second one was more vicious than the first, but after a good deal of care and kindness, I got her to take her litter, too. The third one was furious, and would kill the little ones as fast as they were born. Kept them away for a while, but that did not seem to make any difference. I then tried to raise them on cow's milk, but the third died. Now, I'd like to know:

1. Why because they were too highly fed and without exercise that they were so vicious?
2. What proportion of milk should young sows get that had never nursed?

S. C.

Ans.—It is hardly likely that the viciousness of these sows was owing to their being so well fed. Sows with their first litters are usually more nervous at first than later on in life. A sow who has become accustomed before birth to regard the man who comes about her pen as her friend, but even then, if she will show plainly that

they wish to be left alone, as is natural, and generally best. Some sows are of the ill-natured kind, and probably yours were of that type. When sows seem furious, and determined to eat their pigs, the following treatment has been recommended: "Give her pork enough to

EUREKA Wagon Box and Rack



After a farmer puts the "EUREKA" on his wagon, he marvels how he ever managed to get along without it. The "EUREKA" can be instantly adjusted for any load you want to carry—Hay, Live Stock, Corn, Wood or Poultry. Placed in any position in a moment without wrench, hooks or rope, yet it is impossible for the wings to get out of position. Made of the best Yellow Pine, Hardwood and Malleable Iron—and GUARANTEED TO CARRY TWO TONS IN ANY POSITION. Made in 14 and 16 foot lengths—and 38, 40 and 42 inch widths.

Some of the other Eureka Lines

"Eureka" Sanitary Churn is the ONLY sanitary churn, Barrel is finest stoneware—not absorbent wood. Top is clear glass. Churns by hand lever, cleanest, easiest, best churn on the Market, 8, 10 and 12 Imperial gallon sizes.

"Eureka" Seed Drill will handle the most delicate seed without bruising—and sows evenly to the last seed. Easily converted from straight drill to hill dropper. A few additional parts make a complete wheel hoe, plow and cultivator.

"Eureka" Fountain Sprayer is just what you need for small Fruit Trees, Plants and Shrubs. Light, strong, compact. Two nozzles with hose attachment. Tested to stand Five Times the pressure required to expel liquid. Two gallon capacity and all expelled by one pumping.

"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.

Write for Catalogue. Every farmer should have one. 14
EUREKA PLANTER CO., Limited, WOODSTOCK, Ont.

satisfy her, and salt pork is better than fresh, as it will take less. Cut into thin slices, and feed them one at a time until she will eat no more, and she will let the pigs alone afterwards." A very vicious brute should be fattened off.

2. The best authorities we have been

able to consult, recommend simply warm, whole milk, for pigs that have to be raised by hand. If pigs have never nursed, it is doubtful whether anything can be got to take the place of the laxative first milk of the mother. The milk of a newly-calved cow might, if available, be tried.

COATING FOR CEMENT—SCRATCHES.

1. I veneered my house with cement blocks last summer. Is there any way to paint the corner blocks? What kind of paint would be best to use? How would I have to put it on? I would like to have it white.
2. I would also like to have a good remedy for scratches on horses.

B. S.

Ans.—1. Ordinary paint should not be applied to concrete structures. Linseed oil combines with the alkali in cement, forming a sort of soap, and disintegrating the surface. Special coatings for cement are sold at \$1.50 per gallon. A gallon will cover 300 square feet.

2. For a serious case of scratches, give a purgative ball (except with mare in foal) of 8 drams aloes and 2 drams ginger. Apply hot linseed-meal poultices to the pasterns for two days and two nights, changing the poultices about every eight hours. Then dress the parts three times daily with oxide-of-zinc ointment, to which has been added 20 drops carbolic acid to each ounce. Do not wash. If the parts get wet or muddy, rub well until dry, or allow the mud to dry, and then brush off, if you have not time to rub.

ALFALFA PODS IN SEED OATS.

E. R.—Spiral seed pods in your seed oats are pods of alfalfa.

A Good Bicycle in the House IS WORTH TWO CHEAP ONES IN THE REPAIR SHOP

Because a good bicycle is always at your service.

Always ready for your work and your pleasure.

Always ready for you to ride into the village or into town.

Notice headline: "Worth Two Cheap Ones—"

Only two? Are fifty bicycles you cannot use worth anything at all?

If you were an employer, and one of your men was often away sick (in the repair shop, so to speak), would you keep that man on?

No; you would let him go.

The only way to avoid having a SICK wheel is to know the marks of a Good Wheel.

The Marks of a Good Wheel

REPUTATION.—Ask the man who owns a "Cleveland," a Massey "Silver Ribbon," a "Brantford," or a "Perfect."

They are wheels perfected during years of experience.

FRAME.—Best British seamless tubing, reinforced joints, four coats of enamel over a coat of rust-proof.

PLATING is over a copper base; heavy; rust-resisting.

CUSHION FRAME.—Ask the man who own a Cushion Frame Bicycle if using it isn't "joy-riding."

BRAKE.—The "Hercules"; the brake for the rider who doesn't want to "fuss" with complicated mechanism.

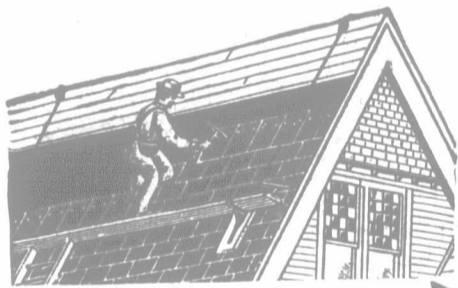
TIRES, RIMS, SADDLE.—Tell us where you live, and we will tell you where you can see first-grade tires, rims, and saddles.

BEARINGS.—Dust-proof, and absolutely accurate.

MARKS OF GOOD WHEELS



Cut this out to REMIND you to write the Canada Cycle & Motor Co., Ltd., Toronto, for their illustrated Bicycle Catalogue. They will also tell you where you can get one of these Wheels.



Protect Your Home With a Roof of Slate

Have a roof of solid rock—a roof that sun, fire, water, lightning or the action of air cannot effect—that cannot rust, crack, warp or decay.

For the roof of your home, barn or out-buildings, Sea Green and Purple Slate may cost a trifle more in the beginning, than shingles, iron, felt or patent roofings—but it will save you both money and anxiety from the day it is laid and will last forever.

Sea Green and Purple Roofing Slate

will improve the appearance of your property as it improves the appearance of schools, churches, public buildings or the homes of your neighbors—and is the only roofing to use where drinking water is collected off the roof, because of all roofing, it will not absorb the carbonic or other poisonous gases of the atmosphere. Protect your home with a roof of slate and settle your roofing problems for the balance of your life.

Send for Free Booklet "Roofs" containing many practical and helpful hints on selecting a new roof. Your copy will come absolutely free. Show us where to send it and give name of your agent.

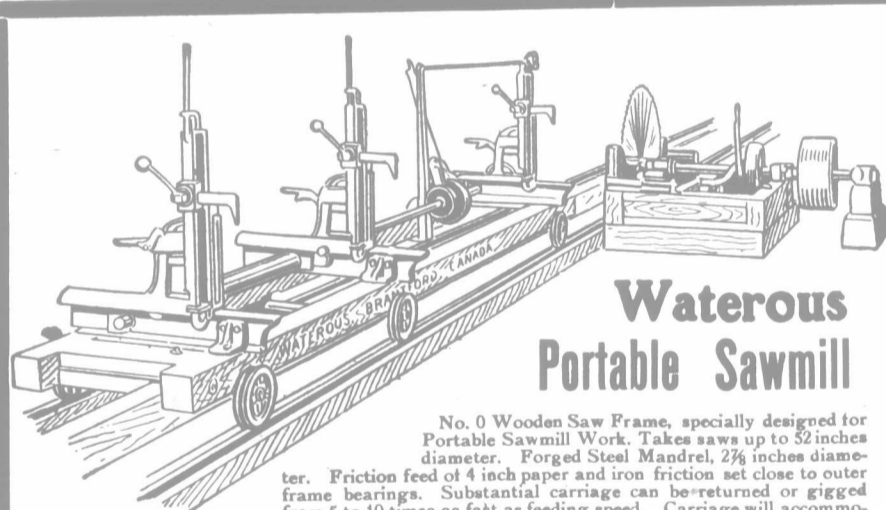
The American Sea Green Slate Co. (Roofs That Never Wear Out) 103 Clark Street, Granville, N. Y.

Dr. Stewart's Pure Condition Powders

For horses, cattle, hogs and swine, not a stock food, but a scientific blend of pure herbs and barks; makes sick animals well naturally, not artificially. Cleanses the system, and cleanses the system.

Send for booklet and sample to put your horse on a large can of Dr. Stewart's Pure Condition Powders.

Medical Co., W. Walkerville, Ontario. Booklet sent free.



Waterous Portable Sawmill

No. 0 Wooden Saw Frame, specially designed for Portable Sawmill Work. Takes saws up to 52 inches diameter. Forged Steel Mandrel, 2 3/4 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 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 1/2-16 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.



Ornament Your Home With IDEAL

Make your Lawns and Flower-beds more artistic with this snowwhite, graceful fence and give them ABSOLUTE PROTECTION "IDEAL" Lawn accessories please the eye, are most durable, easily erected, and inexpensive. Let us send you Catalogue

The McGregor Banwell Fence Co., Ltd. Walkerville Ontario

QUESTIONS AND ANSWERS. Miscellaneous.

LENGTH OF SURVEYOR'S CHAIN.

How many feet in length is a surveyor's chain, and how many inches in a link? Is there a standard measurement, or are there different chains? I refer back to about the year 1834.

W. H. C.

Ans.—A surveyor's chain is 66 feet in length, and there are 7.92 inches in a link. In railway surveying, a chain 100 feet long is often used, but that is only for convenience. The standard for the real surveyor's chain is, and always has been, 66 feet.

ANGORA CATS—FLOOR POLISH—MAPLE CREAM.

1. Where can Angora cats be purchased, and at what price (not prizewinners)?
2. What brand of floor polish is considered best for hardwood floors?
3. Please give recipe for making maple cream candy. SUBSCRIBER'S SON, Norfolk Co., Ont.

Ans.—1. Angora cats could doubtless be purchased through a small advertisement in the Wants and For Sale column of "The Farmer's Advocate."

2. Consult your local hardware dealers.
3. Break a pound of maple sugar into small pieces, and put it over the fire with a cupful of milk. Bring to a boil, add a tablespoonful of butter, and cook until a little dropped in cold water becomes brittle. Take from the fire, stir until it begins to granulate a little about the side of the pot, then pour into greased pan. When partly cold, mark into squares with a knife.

TRANSPLANTING APPLE TREES.

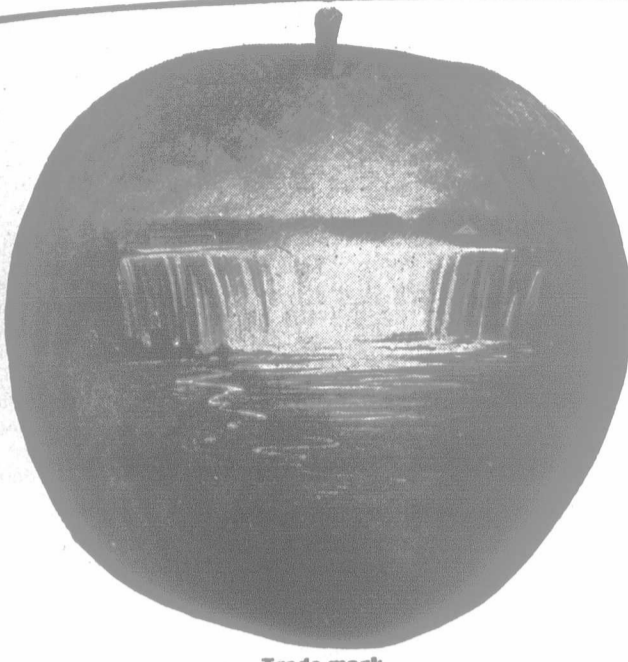
Some twelve or thirteen years ago I planted an orchard of about twenty-five trees. The fourth or fifth winter they all died but thirteen, mostly on account of ice lying on the lower land all winter, as the plot is rolling. I replanted once, but none of them grew. Will you please tell me as to the advisability of moving those trees to a more suitable location. They measure across the trunk, near the ground, from 4 1/2 to 6 inches. Give the best method and time of year for doing so. SUBSCRIBER.

Ans.—These trees are not too large to move, provided the work is properly done, but the operation would take some considerable time, and would be expensive. Begin several feet from the tree, and work towards the tree, exposing the roots with as little injury as possible. It is desirable to get out as large a proportion of the root system as possible without injury. It will, of course, be impossible to do this work without destroying a large number of roots, and to balance this loss the tops should be cut back with corresponding severity. The work should be done early in the spring, before growth has started. Tree should be set at the same depth, and soil made very firm about the roots. J. W. CROW.

VARIATIONS IN FAT CONTENT OF MILK.

I have difficulty that I would like to explain. Unless I am mistaken, I noticed in one of your back issues, in the Questions-and-Answers column, that by no method of feeding could one increase the amount of fat in a cow's milk. If this is so, does it not mean that the cow will always give milk containing the same amount of fat? If it does mean this, what is the object of testing a cow's milk more than once? Or is it a mistake of mine to think that they do test more than once? R. A. J.

Ans.—A cow's milk varies in its fat content according to many influences, chief among them being the period of lactation, though length of time between milkings, disturbance of cow before and at time of milking, and a great many other factors, come in to complicate the problem. A great deal depends upon the individual caprice of the animal. What reduces the fat content of one cow's milk, may have the opposite effect upon another. Changes of feed often cause a marked fluctuation, one way or the other, but no particular feed, by reason of its constituent quality, will permanently increase or decrease to any material extent the fat percentage of any cow's milk.



Trade-mark

NIAGARA BRAND LIME-SULPHUR

Combination Winter and Summer Spray

AS WINTER SPRAY it will control **San Jose Scale, Oyster-shell Bark Louse, Blister Mite, Peach Curl, Aphis,** and all **sucking insects.**

AS SUMMER SPRAY, combined with Arsenate of Lead, it will control **Apple Scab,** and other fungus diseases, **Codling Moth** and all **chewing insects.**

This spray is not an experiment. It was used by thousands of fruit-growers in Ontario in 1910 with excellent results.

Write for our book on "Sprays, and How to Use Them."

Every Fruit-grower Should Have an Hydrometer to Test His Spray. — We will mail to any address in Canada, on receipt of 80c., the Standard Hydrometer, Pennsylvania pattern, showing both Beume and specific gravity reading.

BEAN SPRAY PUMPS—Hand and power—Strong, durable and efficient. Built to wear and give large capacity with high pressure. Let us prove this to you. Send for illustrated catalogue.

NIAGARA BRAND FACTORIES:

NIAGARA SPRAYER CO., Middleport, N. Y.
 HOOD RIVER SPRAY MFG. CO., Hood River, Ore.
 NIAGARA SPRAY CO., of N. S., Ltd., Kentville, N. S.
 BEAN SPRAY CO., Cleveland, Ohio.
 OREGON SPRAY CO., Portland, Ore.
 MEDFORD SPRAY CO., Medford, Ore.

NIAGARA BRAND SPRAY CO., LTD., Burlington, Ont.

"ELECTRO BALM"
 CURES ECZEMA,
 Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. The 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.

RECIPROCITY AND PULPWOOD.

Please inform me to what extent, and from what lands, pulpwood is to be allowed free into the States, by the new reciprocity trade-agreement? R. C. D.

Ans.—By a provision of the trade-agreement, pulpwood was to be allowed free into the United States at such time as the Provinces remove all export restrictions upon it.

PAY FOR BUTTERMILKING.

Will you kindly tell me what proportion of butter should a woman receive for churning the cream and working up the butter, her husband being paid by me for taking care of my cows, milking, straining, and running the milk through the separator? I own all the cows, and bear the expense of feed, etc. All that she would have to do would be to churn and work up the butter? A READER.

Ans.—What proves to be reasonable and fair.

CONTINUOUS OESTRUM.

I have a young mare, four years old, which appears to be in season all the time, and this certainly is very disagreeable in working her. Could you kindly tell the cause of this, and if there is any treatment I could use for her? Would you advise breeding her; and, if so, is there any treatment I could use till time to breed her? A SUBSCRIBER.

Ans.—This indicates a diseased condition of one or both ovaries, and if these are diseased, nothing can be done. It is possible if she were bred, she would conceive, and the ovaries might recover their normal condition during pregnancy.

WEIGHT OF SILAGE—MANGELS VS. SILAGE.

1. How much silage is there in six feet in the bottom of a silo 12x14x30 feet, the silo being full in the fall?
 2. With turnips and mangels selling at 8c. a bushel, how much a ton is silage worth, it being the very best, well matured and well saved? H. R.

Ans.—1. According to tables given by Prof. F. H. King, we should judge that six feet of settled silage in a silo that had been full to the depth of 30 feet, should have an average weight of about 56.4 pounds to the cubic foot. At this rate, six feet in a silo 12x14 feet, would weigh about 28 tons.

2. It will depend upon the purpose for which the feeds are to be used. For fattening cattle, receiving a suitably-balanced ration, mangels at 8 cents a bushel, or \$2.66 a ton, should be equivalent to first-class corn silage at about \$4 or \$5 a ton. If the silage were not fed in a balanced ration, it might fail to give as good an account of itself as these figures denote. Again, it should be remembered that a few mangels might be profitably fed at a figure above what they would be worth in larger quantities.

THIS IS THE MONEY-MAKING

Harrow for Farmers

It cuts smooth, levels and covers the grain better than any other.

Perhaps slightly higher than some others in first cost, but in the end much cheaper, because the teeth can be taken out and sharpened so much oftener than any other. They are left extra long for this purpose.

The Teeth are held to the Frame by a malleable Clip and Staple with nut on each end, thus the teeth can always be kept tight and at the right distance down to properly harrow the ground.

A Harrow may seem a simple thing, but we have put **Hamilton Quality** into ours, and it will pay you to have one.

See our agent, or write to-day for Catalogue F.

The Peter Hamilton Company, Ltd.
 Peterborough, Ontario.

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 file hard gears in a dirt proof gear case. The shearing shaft has ball bearings in every joint and shearing head is ball bearing throughout. This machine turns easier and shears faster than any other machine. Each machine comes supplied with 4 sets of knives, and the price at your dealer's, all complete, is only **\$15.75**. If your dealer hasn't it, write direct to us. **Chicago Flexible Shaft Co., 110 LaSalle Ave., Chicago**

Get one this year

CALVES WITHOUT MILK

Write for Free Booklet

"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 1809.

STEELE, BRIGGS & SEED CO., LTD., TORONTO, ONT.

THE BOYS' DISSIPATION.
 J. H. Maddy, of the Erie Railroad, was born in Muncie, Indiana. He had two cousins who lived on a farm outside the city.

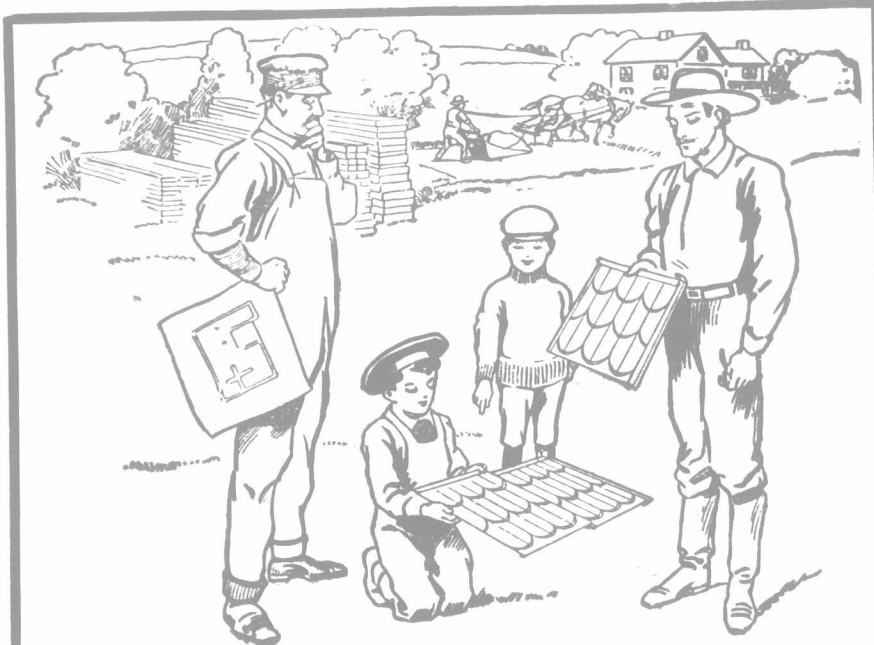
"One fall," said Maddy, "the boys had been working very hard and their father told them they might take a load of apples to town, sell them, and keep the money.

"The boys, on reaching town, stood around for a time, and finally sold the apples. Then they wandered in and out of the stores for two or three hours trying to find something to buy to take back home—finally they bought half a bushel of apples."—Saturday Evening Post.

DODD'S KIDNEY PILLS

FOR ALL KIDNEY DISEASES
 GONORRHOEA
 RHEUMATISM
 BRIGHT'S DISEASE
 DIABETES
 BACKACHE

DR. 23 THE PROPRIETOR



Have You Seen The New "Galt" Shingle ?

In justice to yourself, you should at least investigate "Galt" Steel Shingles before deciding on the roof for your new barn or the new roof for your old barn. Present wood Shingles are failures and are being discarded—to use them is a step backward. Don't put a fourth-class roof on your first-class barn. "Galt" Galvanized Steel Shingles is the roofing, now and for the future. Roof your new barn with "Galt" Steel Shingles and you won't have to apologise for it now or at any time in the future.

Listen, you won't have time two months hence to investigate this roofing question. And yet the roof of your barn is an important part of your real estate and should be selected carefully. Won't you drop us a card now for our booklet "ROOFING ECONOMY" telling all about "GALT" Shingles? If you haven't paper and ink handy, tear out this advertisement, write your name on the line at bottom and mail to us. We'll know what you mean. You'll never have a better chance than right now.

Name _____ Address _____
THE GALT ART METAL CO., Limited, - GALT, ONT.
 Watch for the advertisements with The Kids from Galt. 4

POTASH MEANS PROFIT

when employed judiciously in conjunction with the required amounts of Phosphatic and Nitrogenous Fertilizers. POTASH may be obtained in the highly-concentrated forms of

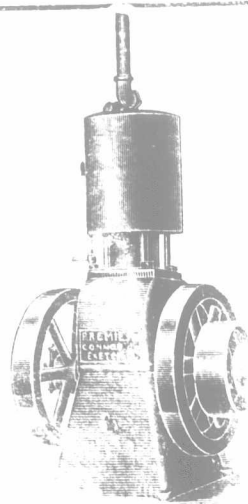
Muriate of Potash and Sulphate of Potash

from the leading fertilizer dealers and seedmen.

Before purchasing be sure to obtain copies of our Illustrated Bulletins, which will instruct you HOW TO PURCHASE AND USE FERTILIZERS ECONOMICALLY.

The following VALUABLE BOOKLETS will be mailed FREE to any reader of this paper: "Artificial Fertilizers: Their Nature and Use," "Farmer's Companion," "The Potato Crop in Canada," "Fertilizing Orchard and Garden," Etc., etc.

The Dominion Agricultural Office of the Potash Syndicate
 1102-1105 Temple Building, Toronto.



THE AIR-COOLED PREMIER

The only Gasoline Engine of Canadian design and adapted to Canadian needs. For summer or winter use. Always reliable. It won't freeze or overheat.

Manufactured by
The Premier Machine Co.

Incorporated in Ontario

Writing Advertisements for The Farmer's Advocate

QUESTIONS AND ANSWERS. Veterinary.

PUFFED WITH AIR UNDER SKIN.

Mare ran away and received a wound on the inside of near fore leg, close to the breast. In about 20 minutes, she swelled up very large. She seemed to be filled with air inside of the skin. She moves very stiffly, but her appetite is good. J. A. C.

Ans.—This is called emphysema. The air entered the wound, and filled the spaces in what is called the areolar tissue under the skin. In most cases, the air gradually becomes absorbed. In severe cases, it is necessary to cut through the skin in different places and press the air out. This operation is seldom necessary, except when the nostrils are involved and there is danger of suffocation. Treat the wound as an ordinary wound, by dressing three times daily with a four- or five-per-cent. solution of carbolic acid, and allow her to stand, as action has a tendency to pump or draw air into a wound in this region. V.

Miscellaneous.

NITRO-CULTURE.

I wish to sow a piece of ground with alfalfa this spring, and would be pleased if you would tell me, through the columns of "The Farmer's Advocate," where I could get some nitro-culture with which to inoculate the seed. C. M. Quebec.

Ans.—Probably either the Bacteriological Department, Ontario Agricultural College, Guelph, or the N. S. Agricultural College, Truro, N. S., would supply you. Write and see.

CECROPIA.

L. W. D. B., Newcastle.—The large cocoon enclosing a pupa in handsome black vest, is that of the Cecropia—*Samia cecropia*—the "giant American silkworm." This is the insect that develops into a large green larva, attaining a length of four inches, and beautifully decorated on its third and fourth segments with coral-red tubercles. It feeds on various trees and shrubs—fifty or more kinds of food-plants have been listed—but birds, and its natural insect enemies, prevent it from becoming very destructive. The moth is the handsomest insect in our latitude. J. D.

GOSSIP.

DEATH OF MACQUEEN.

The death, in the last week in March, of the noted Clydesdale stallion, Macqueen [462] (5200), completes the most remarkable career recorded of any draft horse in the history of Canada. A bay horse, with white on face and hind legs, foaled in May, 1885, bred by Peter Kerr, Castle Douglas, Scotland, imported in 1886, by Graham Bros., Claremont, Ont., sire Macgregor (1487), by Darnley (222), dam by Lothian Tam, Macqueen has made a matchless record as a prizewinner and sire of winners in America, retaining his vigor and stately appearance up to the ripe old age of 26 years. He was a remarkably sure and prepotent sire, his own type and character being with striking uniformity impressed upon his progeny, which were numerous, and superior in quality.

TRADE TOPIC.

The amount of nitrate of soda used in the world as fertilizer has reached to enormous figures. In the year 1909, there were 1,922,000 tons distributed, of which the greater portion went to the continent of Europe, while in 1910, there was an increase of 154 per cent., the total being 2,251,000 tons. The most marked increase was in the quantity sent to countries in the Tropics. Planters are increasingly realizing the advantage of using fertilizer. Last year showed a 35 per cent. increase, and it is believed by those in the trade the present year will double, possibly treble, the figures for 1910.

HOW MEN ENDURE

The Oat-Fed Man Can Outwork All the Rest.

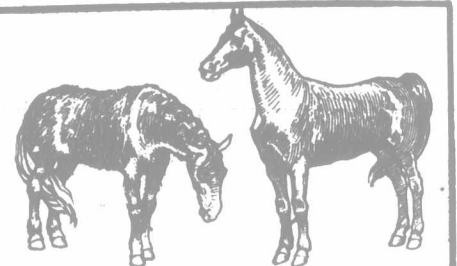
A concern which employs 2,000 woodcutters made scientific tests of food. The result has been to prove oatmeal the great endurance food. Those workers now all start the day on a diet of oats alone.

No other grain supplies the energy of oats. You know the effect on horses. It is just the same on man. Any man can increase his endurance, his vim and vitality, by eating more oats.

That is why oatmeal is so immensely important. In this food, above all foods, one should insist on the utmost. It is not a wise thing to serve common oatmeal.

The rich, plump grains used in Quaker Oats, are selected by 62 siftings. Only ten pounds can be obtained from a bushel. But those choice grains have richness and flavor, and the maximum value as food.

Quaker Oats is the cream of the oats made delicious. Yet, despite its quality, the cost to you is but one-half cent per dish. Made in Canada.



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

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

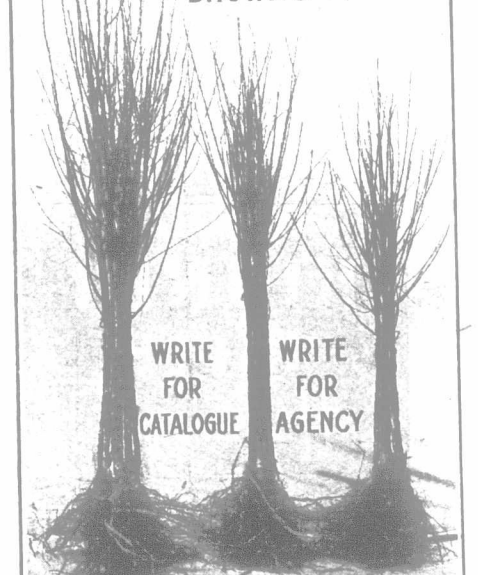
Anyone can operate it and do good work. It has the famous Stewart one-cut tenon knife—highest grade. Price of machine, all complete, as shown, at your dealer's, is only \$9.75. If your dealer hasn't it write us direct.

Beware of poorly made imitations of this machine.

Chicago Flexible Shaft Co.
 110 LaSalle Ave.,
 CHICAGO



BROWN'S



WRITE
FOR
CATALOGUE

WRITE
FOR
AGENCY

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

APRIL 13, 1911

THE FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS.
Miscellaneous.

A WOOD-BORING INSECT.

E. B.—There are many species of beetles whose larvae bore in dry timber and thereby do much damage to it. The specimen of wood sent is certainly badly riddled, although we do not find any of the offending larvae in it. Is it practicable to saturate the affected parts with coal oil, either refined as used in lamps, or crude? If you can apply the oil, we should be glad to hear of the result.
J. D.

ESTIMATING CORDWOOD IN LOG

Could you kindly advise me how to measure cordwood in the log. I am aware that 128 cubic feet make one cord, but if a log is squared, there is the slab, or the over, from the squared log. I am going to cut cordwood into 16-inch lengths with a sawing-machine.
W. McL.

Ans.—So far as we are aware, there is no rule for measuring cordwood in the log. As a general thing, when wood is split, it piles out more, it makes a bigger pile than it would if piled without being split. The air spaces in the pile form a larger percentage of the whole space occupied. A theory which some use to estimate cordwood before the logs are split, is to count the diameter of a log as if it were one side of a square. For instance, a log is one foot in diameter. This log might be expected, when split, to pile out to fill a space one foot square. Thirty-two such logs would, in that case, make a cord. Or, a log two feet in diameter would fill, when split, a space of two feet square, equal to four square feet. Eight of such logs would make a cord.

CLOVER SEEDING FOR PLOWING UNDER—FERTILIZER FOR SUGAR BEETS.

1. I have a field that was plowed out of sod last summer just after the hay was taken off, and was well worked with disk and drag harrow the balance of the season. I want to sow this field this year with mixed grain, and seed with clover. What I want to know is, if I plant that same field the following year in corn, and plow just before planting, will the clover be of enough advantage to the land, and for pasture in the fall, to make it pay? Also how much clover to the acre had I better sow?

2. We have been trying to keep pigs, and fatten pretty much on grain alone, and find it does not pay. This year I intend trying to grow some sugar beets. I have a little piece of ground that was manured last fall and plowed. In order to get a real good crop, would it pay me to apply some commercial fertilizer as well? What kind would be best to use, and how best to apply?
A. B. M.

Ans.—1. Experiments conducted at Ottawa show emphatically that it pays to sow clover seed even on land that is to be plowed the succeeding fall. If left, as you suggest, until spring, the benefits would be more marked. It is recommended to sow 10 or 12 lbs. of clover seed per acre. Mammoth is better than common red for this purpose.

2. In order to know what fertilizers are best, not only should the kind of crop be considered, but also the soil. There is as great a difference in the needs of soils as in those of the various crops. The experiments in the use of fertilizers conducted under the oversight of Prof. Zavitz, O. A. C., Guelph, go to show that in almost every case the complete fertilizers—that is, those containing the three elements of nitrogen, phosphoric acid and potash—gave the best results, cost considered. If there is a sufficiency of barnyard manure, there is no need to bother with commercial fertilizers.

Salt is a great stimulant to beets and mangels. Look up the letter of J. C. Nottingham, which appeared in "The Farmer's Advocate" of February 23rd, page 311. He sowed 400 lbs. salt and 150 lbs. nitrate of soda, in addition to manure, on one-third of an acre, and had very a wonderful crop of mangels. The nitrate was applied, as it should be, in several applications after crop is up. The other manurial constituents should be worked on the ground as soon as plowed, and worked in.

Send For My FREE Book About
Pedlar Nestable Corrugated Galvanized **Culvert**
Learn how It Saves Farmers Money

If you think you have no use for my Culvert, you may change your mind when you read this book of mine. As it is sent you entirely free you may as well write for a copy, anyway. You'll find it

This book cannot fail to interest you—so much that you'll want to show it to your neighbors. Because it points a way to better roads and lower taxes. You'll want your township reeve or road commissioner to read it, too.

Full of Most Valuable Facts and Helpful Ideas

Write Your Name and Address Here

and clip this part out and send it to me. Or simply send a postal and say you want Booklet No. 20



Costs you nothing, remember Just give me your name and address and I'll send you a copy FREE.

Tells About the Most Practical, Durable, Strongest and Easiest Laid Culvert Made

My Culvert actually costs less than the cheapest and poorest wooden culverts. No skilled labor needed to put it in place. Shipped in half-sections, nested, saving freight and making it easy to handle. Not only makes good roads possible, but has a score of uses on your farm. My book shows how. Let me send you a copy.

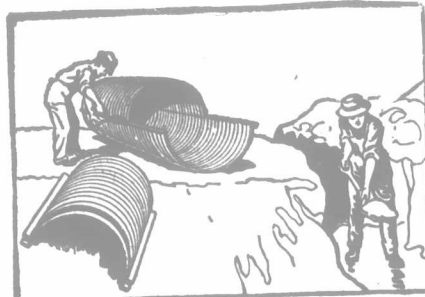
I'll also send you FREE a Sample of My Culvert

so you can see how it is made, how strong and handy it is. If you state your possible needs when you write I'll be glad to quote prices. Send for the book, now, anyway. It's free, remember.

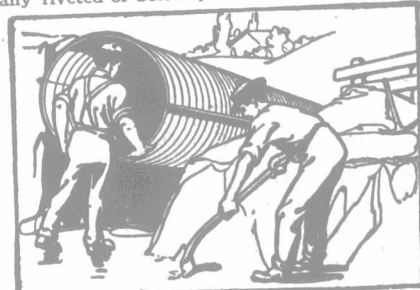
The PEDLAR PEOPLE of Oshawa



ADDRESS MY NEAREST PLACE
 HALIFAX 16 Prince St.
 OTTAWA 423 Sussex St.
 PORT ARTHUR 45 Cumberland St.
 EDMONTON 633 Fifth Ave., North of Jasper
 ST. JOHN 42-46 Prince William St.
 TORONTO 111-113 Bay St.
 WINNIPEG 76 Lombard St.
 VANCOUVER 319 Pender St.
 QUEBEC 127 Rue de Pont
 LONDON 86 King St.
 REGINA Room 7, Railway St. S.
 MONTREAL 321-3 Craig St. W.
 CHATHAM 200 King St. W.
 CALGARY
 VICTORIA 434 Kingston St.



Pedlar Culvert comes in half-sections for economy in shipping and ease in handling. Easily put together, tighter and better than any riveted or bolted-joint can be.



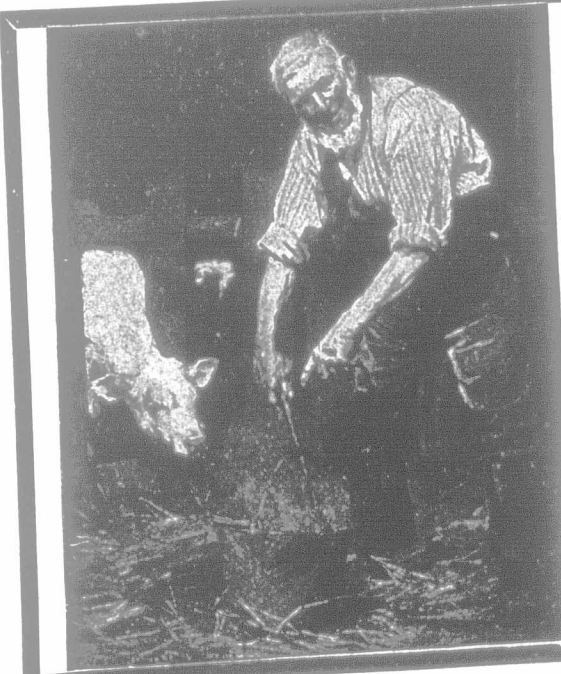
A few hours work puts this modern, permanent culvert in place, so it won't wash out or need repairs. Easily laid by anybody. All sizes—8 inches to 6 feet in diameter. Strong, durable.



It should interest you greatly to know how little it would cost you to use this better Culvert instead of a make-shift that is always giving you trouble.



Where you bridge over ditches and drains you'd find Pedlar Culvert the easiest to lay and the most economical you could use. Let my book make it all clear to you. Write NOW. 4:7



CALF MEAL

BIBBY'S CREAM EQUIVALENT

Young Calves develop and grow surprisingly well when fed "Cream Equivalent" either with or without separated milk. It is not a drug or "FAKE" meal. Made by one of the most honorable firms in England. Has the largest sale of any Calf Meal in the World. Canadian Government report shows it to contain the highest percentage of nutritive value. TRY A BAG, 50 lbs. \$2.25. Can be fed with either Hot or Cold water.

DEALERS EVERYWHERE SELL BIBBY'S CREAM EQUIVALENT

WM. RENNIE CO. LIMITED TORONTO
CANADIAN REPRESENTATIVES

The **EMPIRE** Line
 "Everything that's good in Cream Separators"
 Empire Cream Separator Company of Canada, Ltd.
 WINNIPEG TORONTO SUSSEX, N.B.

When Writing Please Mention The Advocate.

Covered With Eczema

CURED BY TWO BOTTLES D. D. D.

On March 21st, 1910, Mr. Angus McMillan, of Port Hood, N. S., wrote us: "My little boy, three years old, was covered from head to foot with eczema. I tried over twenty different kinds of salves and washes, but could not see any improvement—in fact, it seemed to be getting worse.

I was about discouraged, and had lost faith in all kinds of so-called eczema cures, when I saw an ad. telling about D. D. D. Prescription. I sent for sample bottle, and the third application convinced me that I had at last got a sure cure. Two bottles effected a complete cure."

What D. D. D. did for this little boy, it will do for any skin sufferer. A mild, soothing liquid, made up of Oil of Wintergreen, Thymol, Glycerine, and other ingredients, it penetrates to the root of the trouble, and washes the disease germs out.

Why not get relief? Simply write today to the D. D. D. Laboratories, Dept. A, 49 Colborne street, Toronto, and they will send you a free trial bottle.

(For sale by all Druggists.)



ABSORBINE

Cures Strained, Puffy, Ankles, Lymphangitis, Poll Evil, Fistula, Sores, Wire Cuts, Bruises and Swellings, Lameness, and allays Pain quickly without blistering, removing the hair, or laying the horse up. Pleasant to use. \$2.00 per bottle, delivered. Horse Book 5 E free.

Mr. Robt. Jones, Sr., Marmora, Ont., writes, April 8, 1907: "I had a valuable horse with a big leg, and used one bottle of ABSORBINE, and it cured him completely." W. F. Young, P. D. F., 258 Temple St., Springfield, Mass. Lyman's Limited, Montreal, Canadian Agents.

MESSRS. HICKMAN & SCRUBY

Court Lodge, Egerton, Kent, Eng.

Exporters of Pedigree Live Stock of all Descriptions.

From now on we shall be shipping large numbers of horses of all breeds, and buyers should write us for particulars before buying elsewhere. If you want imported stock and have not yet dealt with us, we advise you to order half your requirements from us, and obtain the other half any way you choose; we feel confident of the result, we shall do all your business in the future. Illustrated catalogues on application.

Percheron, Belgian, Shire and Hackney Stallions and Mares.

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.

Lew W. Cochran, Crawfordville, Ind. Office 109 1/2 South Washington St.

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.

For Sale: Reg. Clydesdale Stallion rising three years; a good one; will sell cheap. Apply: G. TRELEAVEN, Cambray P.O. Ont. Ten miles from Lindav.

The glory of our life below
Comes not from what we do or what we know,
But dwells for evermore in what we are.

HAD HEART TROUBLE

NERVES WERE ALL UNSTRUNG.

Wherever there is any weakness of the heart or nerves, flagging energy or physical breakdown, the use of Milburn's Heart and Nerve Pills will soon produce a healthy, strong system.

Miss Bessie Kinsley, Arkona, Ont., writes:—"It is with the greatest of pleasure I write you stating the benefit I have received by using your Milburn's Heart and Nerve Pills. This spring I was all run down and could hardly do any work. I went to a doctor and he told me I had heart trouble and that my nerves were all unstrung. I took his medicine, as he ordered me to do, but it did me no good. I was working in a printing office at the time, and my doctor said it was the type setting caused the trouble, but I thought not. My father advised me to buy a box of your pills as he had derived so much benefit from them. Before I had finished one box I noticed a great difference, and could work from morning to night without any smothering feeling or hot flushes. I can recommend them highly to all nervous and run down people.

Price 50 cents per box, or 3 for \$1.25, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

GOSSIP.

Jas. Kean & Son, Orillia, Ont., announce in this issue that they have some pure-bred Angus bulls for sale, and that they are willing to exchange one for another bull of the same breed.

SALE DATES CLAIMED.

April 13th.—At Dundalk, Ont., T. D. Elliot, Bolton, Ont.; Clydesdales.
April 27th.—In Toronto, T. H. Hassard, Markham, Ont.; imported ponies.
May 24th.—Dr. D. McEachran, Ormstown, Que.; Clydesdales.

L. A. Wakely, Bolton, Ont., whose advertisement of dairy Shorthorns runs in these columns, having disposed of all his bulls, except the stock sire, Prince Rosebud, makes a change in his advertisement in which he offers some choice females of milking strains at tempting prices. The farm is within half mile of Bolton Station, C. P. R., 26 miles from Toronto.

At the recent Penrith Shorthorn Show and Sale of Shorthorn bulls, the roan senior yearling, Village Beau, first in class and champion, sold for 400 guineas, to F. Miller, for Argentina. The next highest price, 180 guineas, was paid by Geo. Campbell, Harthill, for Lord Cavendish's Holker Earl Burlington 22nd, the first-prize junior yearling. The second-prize winner in the same class, sold for the same price to D. MacLennan, for the Argentina.

GLENGORE ABERDEEN-ANGUS.


The splendid Glengore herd of over 40 head of Aberdeen-Angus cattle, the property of Geo. Davis & Son, of Alton, Ont., a station on the Streetsville-Owen Sound branch of the C. P. R., are coming through the winter in good flesh. The black "Doddies" are rapidly gaining popularity in Canada, their sterling qualities as beef producers, coupled with their extreme hardiness, makes them the ideal beef cattle for this northern country. The most decided increase in the demand for these cattle from all parts of the country, shows that their superior qualities are being recognized. The Messrs. Davis are now in a position to supply females of all ages, bred on the most popular lines of the breed, namely: The Mayflower and Fair Lady tribes, the young things being the get of their massive, heavy-fleshed bull, Cochrane of Tweedhill 1905, a bull that is doing a world of good for the herd. An exceptionally choice young son of his that will make them all go a bit next fall, is a six-months-old son of Queen Esther of Glengore, a Mayflower. This cow, last fall, at Erin Show, which is the biggest Aberdeen-Angus show in Ontario, in a class of eleven, was placed first. She is a right nice, smooth type, and this young son of hers does her credit, as well as his sire. Another young bull for sale is a yearling, sired by Elm Park Ringleader 7th, dam Mayflower of Tweedhill, by King Kyma. This young bull is exceptionally well-bred, and should do a power of good to some breeder. Another is Fair Boy 5th of Glengore, nine months old, by the stock bull, and out of Fair Lady 5th. These, together with females of all ages, are for sale, at very reasonable prices. Among recent sales are one bull to each of the following: N. H. Hope, of Tilbury, Ont.; A. G. Wilson, Marshville; D. E. Campbell, St. Thomas; W. Eckney, Epsom, and C. H. Moffat, Edge Hill. Practically all of these were mail-order sales, and every man wrote that he was well satisfied, and the animals were honestly represented.

TRADE TOPIC.

Every farmer should weigh his stock and grain before going to market, and should have a scale of the best quality. C. Wilson & Son, 79 Esplanade street east, Toronto, in their advertisement, are offering special inducements, and will sell direct to the farmer. Write for prices.

WHEN GEORGE MADE A HIT.

"Darling," he breathed, rapturously, "I swear by this great tree whose spreading branches bear witness to my sincerity—I swear that I have never loved before." "You are sure," she said faintly, and observed: "You always say such appropriate things, and this is a chestnut tree."



Lime Sulphur Solution

Means Big Fruit And Big Prices

You have got to spray the fruit trees to get any kind of a crop. The most effective spray means the biggest crop and the biggest profits. VANCO LIME SULPHUR SOLUTION is a thoroughly reliable fungicide.

It is a clear liquid—no sediment—free from small particles—sprays easily and does not clog the nozzle. You could not possible get a greater amount of Sulphur in Solution than you get in the "Vanco" Barrel. This is the Spray to use for San Jose Scale, Aphid, Scab, Blight, Mildew and many other parasites and fungi that ruin trees and fruit.


VANCO LIME SULPHUR SOLUTION is better than any home-made spray, because always of the same strength and uniform quality. Specific Gravity stencilled on every barrel. One barrel makes 12 barrels for spring or 40 for summer spraying.

Kills All Chewing Insects

VANCO Lead Arsenate

Safest and surest spray for Apple Worms, Codling Moths, Potato Bugs, Asparagus Beetle and other leaf-eating, fruit-destroying insects. More effective and more lasting than Paris Green—safer to handle—easier to spray—sticks longer—strength guaranteed—NEVER BURNS. Made in Canada. This insures standard quality at lowest prices, because there is no duty to pay on it.


Write for prices and free copy of our new book on sprays.



VANCO
CHEMICAL LABORATORIES LIMITED

FERTILISERS—We also sell Nitrate of Soda, Muriate of Potash, Sulphate of Potash and Acid Phosphate.

Chemical Laboratories Limited
126-136 Van Horne Street,
TORONTO.



VANCO
CHEMICAL LABORATORIES LIMITED

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 & Tisdale

Simcoe Lodge, Beaverton, Ont.

Long-distance 'phone. G. T. R. C. N. R.

JUST 35 MILES EAST OF TORONTO TO Smith & Richardson's, Columbus, Ont.

There you are always welcome, and can always see first-class **CLYDESDALE STALLIONS AND MARES** of all ages, and moderate prices.

MYRTLE, C. P. R. Long-distance 'phone. BROOKLIN, G. T. R.

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.**

A FEW CLYDESDALE SELECTS LEFT. 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, drafty, character colts, and bred the best; 3 Percherons rising 3. There is no better selection in Canada, nor no better prices for a buyer. **T. D. ELLIOTT, BOLTON, ONT.**

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. **T. B. MACAULAY, Prop.** Hudson Heights, Que. **ED. WATSON, Manager.**

Get this Book FREE and a can of Paint

The Modern Farmer is a user of paint. He knows that paint preserves — that it brightens up the farm.

But, does he know just how much—in dollars and cents—paint will save him in ten years, if he uses it properly? Railroads make it a rule to paint their property—cars, stations, freight houses, bridges, etc.—at regular intervals.

They don't wait until the paint wears off and decay sets in — **not much** — because they know it will take twice as much paint to cover up the marks of time's destroying hand and stop his mischief. They have found out—in dollars and cents—just how much they save by using paint at the right time.


Just as soon as the farmer learns that same lesson—just that quick he will know how to make paint pay him a profit. Cut out the coupon, present it to a Martin-Senour Agent, and he will give you a half-pint can of Red School House Paint **free**—if no dealer near you send to us and we will see that you receive the can and our Farmers' Book free.

Write today.

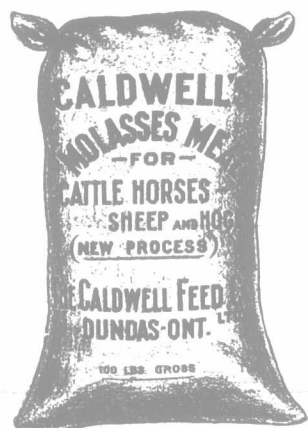
THE MARTIN-SENOUR CO. LIMITED
MONTREAL

How Paint Helps
THE FARMER GETS MORE PROFIT

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



CALDWELL'S



Molasses Meal

For Horses, Cattle, Sheep and Hogs

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:

The Caldwell Feed Company, Dundas, Ontario



Union Horse Exchange

UNION STOCK YARDS,
TORONTO, CANADA.
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.
J. HERBERT SMITH, Manager

Clydesdale Stallions and Mares

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.

Dalgety Bros., London, Ont.

7 Imported Clydesdale Stallions 2, 3, 4 and 5 years of age. We are showing a choice selection, with type, quality, breeding and character unexcelled. Our prices are right and our terms are made to suit. **Phone connection.** **Crawford & McLachlan, Widder P. O., Ont.** **THE DORFORD 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.**

Salem Stock Farm offers for a quick sale the grand four-year-old **SHOW STALLION, LORD BANCHORY, IMP.** [B441] (14478). He is one of the very best Clydesdales in Canada. Could take in part payment a few Scotch Shorthorns or good work horses. **J. A. WATT, SALEM, ONT.; ELORA STATION, G. T. R. AND C. P. R.**

Auction Sale of Fifteen Imported Clydesdale Fillies AT ORMSBY GRANGE STOCK FARM, ORMSTOWN, P. Q., on the 2nd day of Ormsby's Great Spring Show, 24th May, 1911. They are by Baron's Best, Lord Derwent, Pride of the Lothians, Sir Geoffrey and Silver Cup. A rare opportunity to buy the best at lowest prices. **D. McEACHRAN.**

GOSSIP.

SASKATCHEWAN WINTER FAIR.
The annual Saskatchewan Winter Fair, held at Regina the last week in March, was, in most particulars, the equal of former spring shows in that Province. Larger shows of Clydesdales and of light horses have been seen at Regina, but Percherons and Belgians were away over the highest previous record in both numbers and quality. Percherons were a very representative class, and competition was well divided.

The awards for aged Clydesdale stallions foaled previous to 1907 were: 1, W. H. Bryce's Perpetual Motion; 2 and 4, R. Sinton's Dignity, and Baron Gartly; 3, E. B. Andros' Ding Dong. Stallions foaled previous to 1908—1, Bryce's Revelanta's Heir; 2 and 3, Sinton's Regina Countryman, and Ormiston. Stallions foaled in 1908—1, Hugh Gilmour's King's Best; 2, Bryce's Prince Robert; 3, Sinton's Baron Attractive. Stallions foaled in 1909—1, Peter Horn's Lord Currie; 2, H. C. Watson's Doune Lodge Arcola; 3, R. H. Taber's Royal Jubilee. Champion stallion—Bryce's Revelanta's Heir; reserve, Gilmour's Baron's Best. Female champion—Taber's Queen of the Waves, first in aged class; reserve, R. H. Miller's three-year-old, Sturdy Rose.

Percheron stallions, aged, foaled previous to 1908—1, 2 and 3, Colquhoun & Beattie's Gaiton, Blondin and Harpeneur. Stallions foaled in 1908—1, 3 and 4, J. H. Stout's Illumine, Arnuff and Cleaf. Stallions foaled in 1909—1, 2 and 3, W. E. & R. C. Upper, on Romeo, Castolette and Tyrel. Champion stallion—Stout's Illumine; reserve, Colquhoun & Beattie's Gaiton.

In the aged Shire stallion class, Colquhoun & Beattie won with Crestoi's Legatee. In Belgian aged stallions, W. E. Eichel, of Condie, won with the seven-year-old Avenant. E. Pootmans & Sons, Regina, took the remaining prizes.

Professor Grisdale judged the cattle classes. Space forbids publication of the prize list. The champion Shorthorn was Brett & Sons' pure-bred two-year-old heifer, Meadow Girl, which was also the grand champion winner, the reserve being J. D. McGregor's two-year-old pure-bred Aberdeen-Angus steer, Glencarnock, which was grand champion at Brandon the previous week.

The grand championship in the sheep classes went to a grade Leicester, shown by A. J. McKay, of Macdonald, Man. The champion hog was a Yorkshire, shown by F. T. Skinner, Indian Head.

BOOK REVIEW.

FRUIT-GROWING PICTURED.

To illustrate books on horticulture with engravings is no new thing, but in the 150-page work under review, Walter P. Wright, editor of "The Gardener," and Horticultural Superintendent under the Kent (Eng.) County Council, uses over 100 illustrations, making this the outstanding feature of the manual, "Pictorial Practical Fruit-growing." Mr. Wright has made admirable use of the idea of teaching by pictures, with enough crisp, explanatory matter to make the successive chapters on planting, pruning, grafting, budding, tools, insects, varieties, potting, labelling, greenhouse work, etc., quite clear to the learner, and embodying the gist of the best English practice with all the leading fruits in cultivation. The typography is effective, and this work, as a whole, creditable to the old publishing house of Cassell & Co., Limited (London, Eng.), whose imprint on a book is an assurance of merit. At this season of the year, it will be appreciated by Canadian fruit-growers, and cloth-bound, post-paid, it may be ordered through "The Farmer's Advocate," at 50 cents. Cassell & Co. now have offices and warehouse in Toronto.

TRADE TOPIC.

For the "Banner" Cold-blast Lantern, advertised by the Ontario Lantern and Lamp Co., Hamilton, Ont., is claimed many improvements over others for strength, convenience, safety, service and appearance. It is sold at a moderate price, and guaranteed wind-proof. See the advertisement, and write for particulars.

Boog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

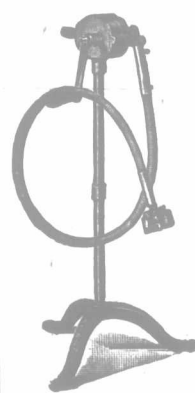
Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Boog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be limited. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

THE BURMAN

No. 17 Horse Clipper



Clips your horse in 30 minutes.

Will take the thickest coat and leave a finish like silk.

BRITISH MADE THROUGHOUT

Cut gears. Inter-changeable parts. Packed ready for use.

Can't get wrong in adjustment.

From all the leading stores.

Manufactured by

Burman & Sons, Ltd., Birmingham.

CANADIAN AGENTS:

B. & S. H. Thompson & Co., Limited Montreal.

DUNHAMS' PERCHERONS

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.

W. S., J. B. & B. DUNHAM WAYNE, ILL.

FOR SALE

Brogie's Stamp [8865]

Sire Prince Cairnbrogie (Imp.) 4785
Dam Gracie Anderson (Imp.) 9389

Four years old. Absolutely sound and quiet, and without a fault. He is a show horse. He will be priced right to a quick buyer, as we don't wish to keep an entire horse. Come and see him. Trains met at Hamilton.

D. C. Flatt & Son, Hamilton, Ont.
R. R. NO. 2.

3 Clydesdale Stallions

For sale, rising 3 years old. Large draft fellows, with the best of legs and feet. Will be sold at prices to defy competition. Apply:

O. SORBY, QUELPH, ONTARIO
UNKO 2.11 1/2 TROTTING. Winning race record.

\$25.00 to insure. Owned by:

URI PIERCE, FALCONBRIDGE, ONTARIO

PLEASE MENTION THE ADVOCATE.

Gombault's Caustic Balsam

**The Worlds Greatest and Surest
Veterinary Remedy**
HAS IMITATORS BUT NO COMPETITORS!

SAFE, SPEEDY AND POSITIVE.
Supersedes All Caustery or Firing. Invaluable as a CURE for

**FOUNDER,
WIND PUFFS,
THRUSH,
DIPHTHERIA,
SKIN DISEASES,
RINGBONE,
PINK EYE,
SWEENEY,
BONY TUMORS,
LAMENESS FROM
SPAVIN,
QUARTER CRACKS,
SCRATCHES,
POLL EVIL,
PARASITES.**

REMOVES
BUNCHES or
BLEMISHES,
SPLINTS,
CAPPED HOCK,
STRAINED TENDONS.

SAFE FOR ANYONE TO USE.

We guarantee that one tablespoonful of Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what the most prominent horsemen say of it. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use.

**The Accepted Standard
VETERINARY REMEDY**
**Always Reliable.
Sure In Results.**



*None genuine without the signature of
The Lawrence-Williams Co.*
Sole Importers & Proprietors for the U.S. & CANADA. } CLEVELAND, O.

THE BEST FOR BLISTERING.
I have used GOMBULT'S CAUSTIC BALSAM quite a good deal, and for a blister it's the best I ever used. I wish your remedy every success.
CHAS. HOTT, Manager,
Mayfield Stud Farm, Leesburg, Va.

CURED CURB WITH TWO APPLICATIONS.
Have used your GOMBULT'S CAUSTIC BALSAM to cure curb. I blistered it twice, and there is no sign of it any more. The horse is as good as ever.—DAN SCHWEB, Evergreen, Ill.

**Sole Agents for the United States and Canada.
The Lawrence-Williams Co.**
TORONTO, ONT. CLEVELAND, OHIO.

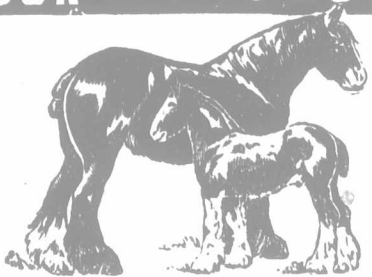
GOSSIP.

A. Edward Meyer, of Guelph, Ont., reports the following recent sales from his Shorthorn herd: To W. G. Robertson, Auburn, Ont., the ten-months-old red bull calf, Auburn Hero, by Scottish Hero (imp.), and out of Snow Girl C. 2nd, by the Duthie-bred Missie bull, Lord Mistletoe (imp.). To John Senn & Son, of York, Ont., the imported cow, Averene =75478=, with a very promising bull calf at foot, by Scottish Hero (imp.) =55042=. To G. & W. Parkinson, Guelph, the two-year-old heifer, White Beam, by Scottish Hero (imp.), and out of Roan Bessie 2nd, by Chief of Stars (imp.). She had a very fine bull calf at foot, by the stock bull, Janitor, a half-brother to the \$3,600 heifer at the late Toronto sales, and which is developing into a grand good bull. To Alex. Marshall, of Cass City, Mich., the ten-months Marr Missie bull, Missie Lad, by the Marr Roan Lady bull, Woodfield Champion, and out of Missie of Clover Lea 7th. To R. G. Reid, of Frelton, Ont., the richly-bred Missie cow, Broadhooks' Missie 2nd =75132=, by Butterfly King (imp.) =50019=, dam Broadhooks' Missie, by Broadhooks' Golden Fame (imp.), sold for \$900 at auction. Mr Reid also gets the very promising Bruce Augusta bull calf, August Lad 2nd, by Scottish Hero (imp.), and out of the imported Deane Willis-bred cow, Trout Creek Augusta. Mr Meyer has no bulls for sale, but will sell females of all ages, many with calves at foot, or well gone in calf, which will be priced very reasonably.

THE MANOR SHORTHORNS.

Marked improvement in the type, early-development and heavy-fleshing qualities, is characteristic of the get of the present stock bull at the head of the renowned herd of Scotch Shorthorns, the property of J. T. Gibson, of Denfield, Ont. He is Baron's Pride =72491=, bred by W. C. Edwards, Rockland, sired by the famous Missie's Champion, a son of the \$6,000 cow, Missie 153rd, dam Pine Grove Clipper 5th, a Cruickshank Clipper, by British Knight, a son of the great show cow, Bessie of Rockland. This bull has developed into an immensely thick, even, mellow animal, and is proving the best sire that was ever at the head of this excellent herd, though many Toronto and other prizewinners have been bred here. A couple of young bulls, got by him, one a red seven-months-old, the other a red 6-months-old, are surely a great pair. The former out of Proud Julia 2nd, a Cruickshank Jealousy, is one of the best we have seen at the age, and should be fitted for show purposes; the other, very nearly as good, is out of a C. J. cow of the same tribe, imported in dam. He is breeding just as good in heifers, and present indications are that the get of Baron's Pride will, in the near future, be among the best of the leading Canadian sires. His predecessor in service, many of whose daughters are showing exceptionally choice in type, was the right nice, mellow-fleshed bull, Star Prince, a Bruce Mayflower, sired by Imp. Lavender Star, dam Imp. Sunny Princess. Other sires that have been at the head of the herd, and whose daughters make up most of the breeding matrons, were: The Lustre-bred bull, Imp. Governor-General; the C. Lovely bull, Imp. Prime Minister, and the Pride bull, Imp. Proud Gift. On blood lines, the herd is made up of Minas, Jealousys, Lustres, Marthas, Clippers, Wimples, Rosemarys and Undines. Big, thick cows, carrying a wealth of flesh, is characteristic of the herd. In heifers, for sale, are such choice show propositions as the white September Wimple, by the stock bull, which should be a nut to crack next fall, if carried along well. Another right good one is a roan yearling Jealousy, by the stock bull, dam by Imp. Proud Gift. Parties looking for choice heifers should visit this herd. In young bulls, for sale, old enough for service, there is only one left, a red yearling, by the stock bull, and out of Nonpareil Undine, a daughter of Imp. Nonpareil Duke, grandam Imp. Lady Fanny, an Undine, by the Broadhooks bull, Baron Buttercup. No fancy prices are asked, and the quality is the best. Mr. Gibson has also for sale about 20 shearing Lincoln rams, a big, growthy lot.

INSURE YOUR HORSES



A small premium will secure a policy in our Company, by which you will be fully insured against any loss resulting from the death of your mare or its foal or both. Policies issued covering all risks on animals, also transit insurance, at all times, in all cases. Prospectus free on demand.

**General Animals Insurance Co.
of Canada,**
Dept. D, Quebec Bank Building Montreal.

OTTAWA BRANCH:
No. 106 York Street, Ottawa

"SAVE-THE-HORSE" SPAVIN CURE.

REG. TRADE MARK




THE urgency of speedy success means all in all to every owner of an unsound horse to use a remedy that will not fail. Investigate, abandon vicious and uncertain methods and turn to "Save-The-Horse." "Save-The-Horse" is sold with a signed, legally binding contract, which positively protects purchaser. For 15 years it has been the foundation on which nearly every man based his confidence in making his first purchase, and it has never been violated.

R. F. D. No. 2, Marshalltown, Ia., Dec. 10, 1910.
Troy Chemical Co., Binghamton, N. Y.: My contract No. was 63735. I used your remedy on a mule that was kicked on the hock, the whole joint enlarged. It was the size of a child's head. He would not put his foot on the ground. His hip was shrunken to skin and bone. One of the state veterinaries and others said he would not be worth a sou. I gave a pig and 50c for him and used the bottle of "Save-The-Horse" as directed, and now he is sound. It is wonderful stuff. W. S. HAYNES.

\$5.00 a Bottle With Signed CONTRACT.

This is a binding CONTRACT and protects purchaser absolutely in treating and curing any case of Bone and Bag Spavin, Thoroughpin, Ring-bone (except low), Curb, Splint, Capped Hock, Wind-puff, Sheehol, Injured Tendons and all Lamenesses. No scar or loss of hair. Horse works as usual. Send for copy of contract, booklet on all lameness and letters from prominent business men, bankers, farmers and horse owners the world over on every kind of case. At all druggists and dealers, or express paid.

**Troy Chemical Co., 148 Van Horn St.
Toronto, Ont., and Binghamton, N. Y.**



J. B. HOGATE, Weston, Ont.

Weston, Ont., and Brandon, Man.

IMPORTING BARNS

J. B. HOGATE, Proprietor,
IMPORTER OF
**Clydesdale and Percheron
STALLIONS**

Clydesdales sired by such noted sires as Hiawatha, Baron of Buchlyvie, Baron Winsome and others. Dams equally as good. Percherons of the best blood of France.

I can sell you a ton stallion for less money than any man in the business. Don't buy undersized stallions and think you will breed draft geldings and mares from them. Come and see my ton horses and get prices. I will surprise you and save you plenty of money. Weston is reached by the G. T. R. and C.P.R. For further particulars write:

J. B. Hogate, Weston, Ont.

GREAT SALE OF IMPORTED PONIES

At the Repository, Corner Nelson and Simcoe Sts., Toronto
COMMENCING AT 10 A. M., ON
Thursday, April 27, 1911

DR. F. H. HASSARD, MARKHAM, ONT., will sell, without reserve, 40 head of ponies, recently imported. Six pure-bred Shetlands, the balance H. and W. cross. All are young. All well broken to ride or drive. 16 of them are of teams. High-class show ponies. The best lot ever sold.

NEW IMPORTATION COMING
with the money in order
of connection.
MILLSVILLE, ONT.

Collector of postage stamps, possessing 12,544 specimens, desires to contract a marriage with a young lady, also a collector, who has the blue Mauritius of 1847. No other need apply.—Advertisement in the Figaro.

SUFFERED SINCE HER CHILDHOOD

**But Dodd's Kidney Pills made
Mrs. Laprairie a new Woman.**

**Nipissing Lady gives an experience
that should prove of immense
value to the suffering women of
Canada.**

Laprairieville, Nipissing District, Ont., April 10.—(Special).—After suffering from various forms of kidney ills since she was a child, Mrs. O. Laprairie is a well woman, and once more it has been proved that no case of Kidney Trouble is too severe or of too long standing for Dodd's Kidney Pills to cure.

Interviewed regarding her cure, Mrs. Laprairie said:

"Since I was twelve years of age I have suffered from Kidney Disease. I was always tired. My back would ache and I always had a sharp pain in the top part of my head. My heart also troubled me.

"Hearing of Dodd's Kidney Pills, I gave them a trial, and now I feel like a new woman."

Thousands of Canadian men and women are feeling just as Mrs. Laprairie does—as if life had started all over for them—just because they have cured their kidneys with Dodd's Kidney Pills. For the kidneys are the mainspring of life. If they are clogged or out of order, the whole body is wrong. Dodd's Kidney Pills always put the kidneys in good working order.

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment with years of successful use known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or how the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser.

Most complete veterinary book ever printed to be given away. Durable, bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists,
78 Church St., Toronto, Ontario

STAMMERERS

The methods employed at the Arnott Institute are the only logical methods for the cure of stammering. They treat the CAUSE, not merely the habit, and insure NATURAL Speech. If you have the slightest impediment in your speech don't hesitate to write us. Cure! pupils everywhere. Pamphlet, particulars and references sent on request.

The Arnott Institute, - Berlin, Ont., Can.

ABERDEEN - ANGUS

Will sell both sexes; fair prices. Come and see them before buying.

WALTER HALL,
Drumbo station, Washington, Ont.

Angus Bulls for Sale

Pure-bred Aberdeen-Angus bulls, one year old and under. We will exchange one for one of the same breed. Our prices are reasonable.


Jas. Kean & Son, Orillia, Ont.

Shorthorns, Cotswolds, Berkshires.

In Shorthorns: 40 females, comprising 9 calves, 6 yearlings, 6 two-year-olds, and the balance cows from 3 years up. In Cotswolds, a few breeding ewes. No Berkshires to offer at present.

CHAS. E. BONNYCASTLE,
Station and P. O., Campbellford, Ont.

Maple Grange Shorthorns



Royal Bruce, imp., a Bruce Mayflower, is the sire of all my young things. Nonpareils, Clarets, Myrtles and Lavinias. Heifers up to 2 years of age, of showing type. Several young bulls, thick, even and mellow.

R. J. DOYLE, Owen Sound, Ont

JOHN GARDHOUSE & SONS

Still have for sale a right good lot of young Shorthorns; a few No. 1 Shire stallions and fillies just imported in Angus; also a choice lot of ram lambs.

Weston Station, G. T. R. and C. P. R. Long-distance 'phone.

HIGHFIELD, ONTARIO.

OAK LAKE FARM

Clydesdales, Shorthorns and Cotswolds

Heifers and cows with calf or calves at foot, also one two-year-old Clyde stallion—a neat one.

GOODFELLOW BROS., MACVILLE P. O., ONT.
Bolton Station, C. P. R.; Caledon East, G. T. R. Local and Long-distance telephone.

4 Shorthorn Bulls

FOR SALE. 3 red and one roan; age from 12 to 16 months; sired by Imp. Lord Gordon (99434) = 70135, bred by A. Watson, Elgin, Scotland. **J. & W. RUSSELL,** Richmond Hill, Ontario.

Oakland Shorthorns for Sale

Here is a herd of breeders, feeders and milkers. About 50 to select from. 7 bulls from 8 months up to 2 yrs. Prices from \$90 to \$130. Scotch Grey 72692 at head of herd. G. T. R.

Jno. Elder & Son, Hensall, Ont.



CLOVER DELL SHORTHORNS
Some choice females at tempting prices. Red and roan, of milking strain. **L. A. Wakely, Bolton, Ont.** Bolton Sta., C. P. R., one-half mile from barns. 'Phone.

Shorthorns, Clydesdales, Oxford Downs

A number of red and roan bulls, 6 to 16 months, by Blossom's Joy = 73741 =; some with imp. dams. Heifers 1 and 2 years. Clydesdales of both sexes. Oxford Down ewes. All at reasonable prices. 'Phone connection.

McFarlane & Ford, Dutton, Ont.

CEDARDALE SHORTHORNS

Imported and home-bred. Imp. Lord Fyvie heads the herd. For sale are choice young bulls, and a few 1 and 2 yr. old heifers of superior breeding and type. Dr. T. S. Soronle, M. P., Markdale, Ont.

2 SHORTHORN BULLS

for sale, 1 red and 1 white, age 10 and 12 months; sired by Springhill. Write for pedigree and prices.

Joh. McLean & Son, Aldboro P. O., Ont.

Sitka, Wensley and Oxford Down Sheep
Wonder at head of herd. Young bulls and ewes of best Scotch breeding. 'Phone connection.

Brown & Sons, Iona, Ontario.

QUESTIONS AND ANSWERS. Miscellaneous.

CONVEYANCING.

A farmer wants to take his son into partnership with him, and to transfer the whole management of farm to the son; the business to be conducted in father's name, and the son to have authority to use the father's name in doing business; and, also, he wants to transfer farm to the son at his decease, subject to certain bequests to other members of the family. To make a contract for the above legal, would it be necessary to have the papers drawn up by a conveyancer, or would it be perfectly legal for one of the parties to draw up the papers, providing same were duly signed, sealed and witnessed.

Ontario.
Ans.—To have the papers prepared as proposed would not be illegal; but it is really a matter to be attended to by an experienced and skillful solicitor.

THUMPS.

Have a bunch of pigs six weeks old. At two weeks old, one (the fattest of bunch) got wheezy. I forced the sow and pigs to take exercise; also lessened her rations. Pig got better for a week, then got wheezy again, but soon got better. Ever since it has not thrived, and a few days ago staggered, and now has lost the use of hind legs.

T. P.
Ans.—Wheezing in young pigs is due to too liberal feeding of grain, or of their mother's milk, without sufficient exercise. The trouble is technically known as thumps. The heart and lungs become clogged with fat, and the blood fails to circulate freely. The only hope for pigs thus affected, is to provide exercise in the sunshine, if possible, and feed laxative food, as bran and oats. The digestive organs of your pig seem to have been altogether thrown out of gear by having had repeated attacks.

HEIFER FAILING TO CONCEIVE

I have a fine registered Jersey heifer, twenty months old, that has been served three times, on the following dates: February 4th, March 12th, and April 2nd. She gets no grain, except what is in the silage she gets once a day, but is in quite high condition. If she comes in heat again, what can I do to make conception surer?

SUBSCRIBER.
Ans.—The most common removable cause of cows or heifers failing to conceive, is closure of the opening through the neck of the womb. When the cow shows oestrus, have the neck of the womb examined. The operator oils his hand and arm, inserts hand through vulva and vagina until the fingers meet the neck of the womb. If it be closed, he dilates it with a finger, or, if necessary, uses a pointed piece of perfectly-smooth hardwood, about 1/4-inch in diameter. In some cases, considerable force is required to accomplish the end. Breed the cow in about an hour after the operation.

GOSSIP.

W. G. Pettit & Sons, Freeman, Ont., send the following notes with a change of advertisement: "The past few months with us have been very encouraging to the business of breeding Shorthorns. The inquiry has been exceptionally good, and we have sold over twenty head, besides our contribution to the Toronto sale. Inquiries have been from a very wide section of country, and we have shipped cattle as far west as Alberta, and also to points in Quebec. The young bulls we are offering are a very desirable lot, both for breeding and individuality, and the prices are not out of the way. In females, we can show intending purchasers a choice lot of heifers, several of which are strong enough to show against the best of the breed. The Clyde stallion which we advertised in 'The Farmer's Advocate' has been sold and shipped to Almon Boswall, of Pownal, P.E.I. The filly we exhibited, winning first at Toronto last fall, has also been sold to P. M. Brett, Live-stock Commissioner for Saskatchewan.

Poultry Fencing that is Stronger than Seems Necessary

We make our poultry fencing close enough to turn small fowl—then we make it extra strong, so it will last for years and keep the cattle out. The heavy, hard steel top and bottom wires hold it taut and prevent it from sagging.

PEERLESS POULTRY FENCE SAVES EXPENSE

It is well galvanized so as to protect it from rust. It makes such a firm, upstanding fence that it requires less than half the posts needed for the ordinary poultry fence, and that means a big saving to you. Write for particulars. We make farm and ornamental fences and gates of exceptional quality. Agents wanted where not now represented.

The Banwell Hoxie Wire Fence Co., Ltd.
Dept. B Winnipeg, Man. Hamilton, Ont.

MURESCO



For Walls and Ceilings

The first step in making a home beautiful is to coat the walls with Muresco. It gives just the restful, quiet background for pictures and furniture. Dingy walls and ceilings make it impossible to beautify any room.

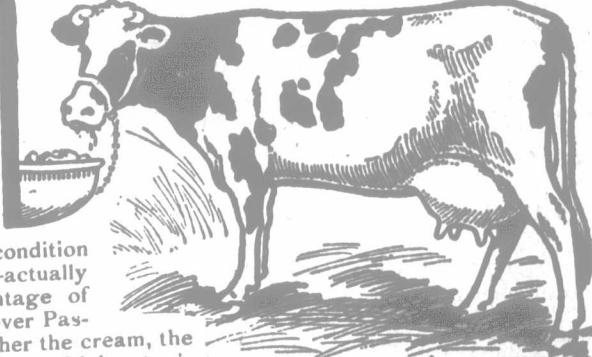
Muresco is a powder. It comes in five-pound packages—any tint—and in applying is mixed with boiling water. It is easy to use and economical. Ask your dealer for Muresco. Our descriptive literature about Muresco will be sent on request.

Twenty-five Million Pounds of Muresco Were Sold in the U. S. Last Year.

Moore's Paints We are also the makers of Moore's House Colors, a line of paints that have no equal for durability and economy.

BENJAMIN MOORE & CO.
Brooklyn, N. Y. Chicago, Ill. Carteret, N. J. Toronto, Can. Cleveland, O.

Livingston's Dairy Oil Cake



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.

Write for free sample and prices:
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Elm Park Aberdeen-Angus

The young bulls we have for sale are sired by Mag-nificent, Imp., 2856, champion of Canada, 1910; Prince of Benton, Imp., 828, champion Toronto and Winnipeg, 1903; Lord Val. 2nd 868, champion Calgary, Halifax, Sherbrooke Dominion Exhibitions. **Jas. Bowman, Elm Park, Guelph, Ont.** 'Phone 708.

WILLOWDALE STOCK FARM HAS NOW FOR SALE

a choice lot of young stock of each of the following breeds:

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Some extra good young bulls, descendants of Joy of Morning and Broad Scotch.

Write for prices and catalogue to: **J. H. M. PARKER, Prop., LENNOXVILLE, QUE.**

Irvine Side Shorthorns



ELORA STATION, G. T. R. & C. P. R.
J. WATT & SON, SALEM, ONTARIO.

2 extra good young bulls ready for service; both from an imp. bull, and one of them from an imp. cow. Also 1 good two-year-old registered Clydesdale mare from imp. sire, and out of imp. mare.

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.**

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I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you.

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CAPT. W. A. COLLINGS,
Box 663 Watertown, N. Y.
Dear Sir:—Please send me free of all cost your New Discovery for the Cure of Rupture.

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SENT ON TRIAL FULLY GUARANTEED. A new, well made, easy running separator for \$15.95. Skims hot or cold milk; heavy or light cream. Different from this picture which illustrates our large capacity machines. The bowl is a sanitary marvel, easily cleaned. Whether dairy is large or small, obtain our handsome free catalog. Address



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No Duty on Cream Separators.

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Have on hand four young bulls from 10 to 13 months old; also a number of choice heifers. For particulars write:

Wm. Smith, Columbus, Ont.

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 modern in type and quality. Scotch breeding, two-year-old heifers, several young bulls, thick-fleshed, low-down and mellow.

G. M. FORSYTH, Claremont, Ont.
100 yards from station. Phone connection.

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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 Shorthorn bull, we have them. Canadian-bred and imported. Females all ages. Also a few good YORKSHIRES—boars and sows. Prices right.

Phone connection. Kyle Bros., Ayr, Ont.

FLETCHER'S SHORTHORNS

Imported Shorthorn bull for sale. Just turned 4 years old. Bendable (in p.) 69831, 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.

Shorthorns

Present offering of 12 bulls from 2 to 30 months, all of high class. At prices to suit everyone. Come and see them, or write: Robert Nichol & Sons, Hagersville, Ont.

Scotch Shorthorns

FOR SALE: Choice young bulls fit for service; two roans and one black from imp. stock, also females of all ages. Bred by A. C. Pettit, Freeman P. O., Ontario.

QUESTIONS AND ANSWERS. Miscellaneous.

CREAM DOES NOT RISE — OIL CAKE FOR COWS — QUARTS OF MILK TO CREAM.

1. What is the cause of cream not rising on the milk when it tests 3.80 (cows being fresh)?
2. Would you consider 3.80 a very good test for a grade Holstein heifer, coming three years old, calving for the first time on February 28th, and her milk being tested on March 13th?
3. Is oil cake good to make pigs thrive, and will it make cows give more and richer milk?
4. How many quarts of milk should it take to make a quart of 30-per-cent. separator cream, from a herd of cows testing from 3 per cent. to 4 per cent.?
5. To decide an argument, A says that the cow's milk looks terribly blue after the cream is taken off; B says that it should be naturally so if the cream is all taken off. Which is right, A or B; and if A is right, what is the cause?

F. A. S.

Ans.—1. Sometimes this is due to the small size of the milk-fat globules, or a viscous (sticky) condition of the milk, or both. Cows giving milk with large-sized fat globules, are best for gravity, or setting methods of creaming milk. There is no way of increasing the size of the fat globules to any material extent, as this is inherent, or natural to the cows. Such milk ought to be creamed (skimmed) by the use of a centrifuge or cream separator. In the case of abnormal viscosity in fresh cows' milk, this can be reduced to some extent by feeding more succulent foods, such as corn silage and roots in winter. This trouble is seldom met with in summer when cows are on grass. Some advise the addition of water to such milk when set in cans or pans for the cream to rise, but this practice is of doubtful value. Better use cream separator.

2. Milk testing 3.8 per cent. fat is certainly "a very good test," as it is from .2 to .3 above the fat content of average milk. For a grade Holstein heifer, this would be considered a good test, if it represents her average, and if she is giving 40 lbs. or over, of milk daily, as this is equal to 1.5 lbs. fat daily, which will make about 1 1/4 lbs. butter.

3. Oil cake is an excellent feed for cows giving milk, although it is not likely to make the milk "richer." The richness, or percentage of fat in the milk, is largely governed by the cow. Only in exceptional cases can it be said that feed influences the percentage of fat in the milk, and then in a way directly opposite to what farmers generally consider to be the case. If a cow be in high flesh at the time of freshening, and the usual feed, or a part of it, be withheld, the tendency is for the cow to absorb or assimilate body fat, in the form of milk-fat. This is not true of all cows, and is probably true only for a limited period of time.

4. Assuming that 30-per-cent. cream weighs 2.5 lbs. to the quart; that milk weighs 10 lbs. to the gallon; that the loss of milk-fat in separating may be neglected, and that the milk tests an average of 3.5 per cent. fat, the answer would be 8.5 (8 1/2) quarts.

5. As stated in the "argument," there is little or nothing to decide. If A says, "the cow's milk looks terribly blue," and it is "blue," that settles the "argument." But if A says "the cow's milk looks terribly blue after the cream is removed, and that this ought not to be the case," and B says, "that a cow's milk should be naturally blue after the cream is removed," we then have a case for "argument."

The color of milk, as of any substance, is dependent upon light. Without light there can be no color, in the ordinary meaning of that term. Milk appears to be "yellow," because the coloring matter (chromophores) of milk reflects the yellow rays of light. It is "blue" because the blue rays of light are reflected.

As to whether or not milk with the cream removed, should look "blue naturally," this depends on the nature and percentage of the solids-not-fat remaining in the milk after skimming, or removal of the cream. In the case of milks

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Your crops cannot make use of nitrogen in any form except the nitrate.

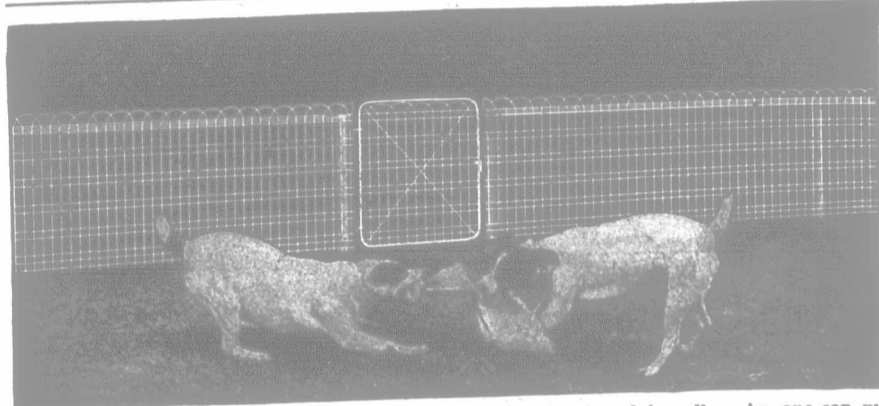
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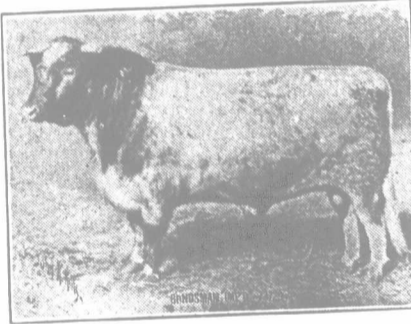
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100 HEAD IN HERD.

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 Nonpareil 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 1/2 Mile from Burlington Jct. Sta.
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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.

SHORTHORNS AND CLYDESDALES

THE FOLLOWING CHOICE BRED YOUNG BULLS ARE FOR SALE:

Name	Color	Age	Sire	Dam
1 Broadhooks Ruler	=81058=	White	April 27, 1910	Bullrush (imp.)
2 Ramsd n Recuit	=77495=	Red	Nov. 9, 1909	Bullrush (imp.)
3 Royal Bud	=81056=	Red roan	Jan. 4, 1910	Royal Winner (imp.)
4 Royal Emblem	=81090=	Red	Jan. 26, 1910	Royal Winner (imp.)
5 Royalty	=81059=	Red	Apr. 22, 1910	Royal Winner (imp.)

Heifers and cows of various ages and choicest breeding. Also Clydesdale mares and fillies.

Burlington Jct. Sta., G.T.R. Long-distance phone.

W. G. Pettit & Sons, Freeman, Ontario.
Can supply young bulls and heifers of the very best quality, 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. 11 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.

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.
Porter Bros., Appleby, Ont., Burlington Sta. Phone.

Brampton Jerseys
Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 row being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.
B. H. BULL & SON, BRAMPTON, ONT.

A WIFE'S MESSAGE

Cured Her Husband of Drinking.

Write Her Today and She Will Gladly Tell You How She Did It.

For over 20 years her husband was a hard drinker. He had tried in every way to stop but could not do so. At last she cured him by a simple home remedy which anyone can give even secretly. She has drunkness in their home to know of this, and if they are sincere in their desire to cure this disease and will write to her she will tell them just what the remedy is. She is sincere in this offer. She has sent this valuable information to thousands and will gladly send it to you if you will write her today. As she has nothing to sell, do not send her any money. Simply write your name and full address plainly in the coupon below and send it to her.

MRS. MARGARET ANDERSON,
104 Home Avenue, Hillburn, N. Y.

Please tell me about the remedy you used to cure your husband, as I am personally interested in one who drinks.

Name.....
Address.....

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,
Eimdale Farms, Thorold, Ontario

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 Henderveldt 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, Grace Fayne 2nd's Sir Colantha. Only choice, thrifty bull calves for sale at present. M. L. HALEY and M. H. HALEY, SPRINGFORD, ONTARIO

Fairmount HOLSTEINS BULL CALVES FOR SALE. Herd headed by Aaggie Grace Cornucopia Lad, whose dam for four generations averaged 21.30 lbs. butter in 7 days. Owing to lack of milk, I will sell my coming crop of bull calves for half value.
C. R. Gies, Heidelberg, Ontario

Holstein Cattle—The most profitable dairy breed. Illustrated descriptive booklets free. **Holstein-Friesian Ass'n of America, F. L. HOUGHTON, Secy, Box 127, Brattleboro, Vt.**

DON'T Buy a HOLSTEIN BULL till you get my prices on choice goods from eleven months down, from best producing strain. "Fairview Stock Farm." **FRED ABBOTT, Harrietsville, Ont.**

Holstein-Friesians At Ridgedale Farm for Sale: A few choice bull calves from large-producing dams. Also two aged cows in calf. Sound and bright. Shipping stations: Myrtle, C.P.R., and Port Perry, G.T.W., Ontario Co. Long-distance phone. **R. W. WALKER, Utica P. O., Ontario.**

Evergreen Stock Farm offers bulls 2 to 12 months, from high-testing stock, giving 12 lb. at 2 years to 22.8 lbs. for mature cows. Sired by Sir Mercena Favorite. Dam and gr. dam have average record of 24.60 lbs. butter in 7 days. **F. E. PETTIT, Burgessville, Ont.**

Holstein Calves Choice heifer and bull calves from heavy-milking, high-testing dams. Only \$12.00. Pure-bred Berkshires 8 weeks old; choicest breeding, bacon type; \$6.00 each. **Glenora Stock Farm, Rodney, Ont.**

GLENWOOD STOCK FARM Have two yearling Holsteins in Holsteins and Yorkshires bulls fit for service, both of the milking strains. Will sell cheap to make room. **Thos. B. Carlaw & Son, Warkworth P. O., Ont. Campbellford Station.**

Springbank Two choice-bred bull calves for HOLSTEINS sale. One is 10 months, the other 12 months. From high-class milkers. Prices right. For particulars and breeding write to **Wm. Barnett & Sons, Living Springs, Ont. P. O. C. P. R. and G. T. R.**

QUESTIONS AND ANSWERS. Miscellaneous.

(Continued from page 680.)

having a comparatively low percentage of solids other than fat, the tendency is to "blueness" after creaming; while milk containing a relatively high percentage of solids not fat will not look so blue.

However, generally speaking, we may say that milk tends to look blue after removal of the cream, but the degree of blueness will depend upon how completely the fat is removed by creaming, and upon the nature and proportion of the other solids remaining in the skim milk.

H. H. D.

CREAM-TESTING.

What should cream test, by Babcock test, when it takes 41 lbs. cream to make 13 lbs. of butter? **M. E. K.**

Ans.—It will depend upon the overrun, which is a varying quantity. Assuming an average overrun of one-sixth, the cream should have tested about 27 per cent.

FEED FOR SOW AND YOUNG PIGS.

What feed would you advise to make pigs thrive, and also what is good to feed a brood sow with a young litter of pigs, to make her furnish plenty of milk for them? **A SUBSCRIBER.**

Ans.—For young pigs, there is nothing better than shorts scalded and skim milk poured over, and all stirred well, and fed while warm. To induce milk production in a brood sow, she must be fed liberally. A very good ration is made by mixing two parts fine-ground oats with one part bran and one part wheat middlings, and allowing the food to soak between meals. A few roots are beneficial, and sweet skim milk is very good.

STUNTED PIGS.

I saw an advertisement for Duroc-Jersey swine and Leicester sheep. I wrote the advertiser for prices for a brood sow. He told me he had no sows, but he had some nice three-months-old pigs that he would sell for \$12 apiece, cash with order. I sent for the pigs, and they only weighed 82 lbs., or about 41 lbs. apiece. I wanted those pigs for breeding purpose, and they have been stunted. I claim that he has misrepresented those pigs to me. I wrote him to send my money back as soon as I got them. He has not answered my letter yet. What steps would I take to recover damages.

Ans.—We think you should have refused to accept the pigs, or at least have tendered them back promptly after having received and weighed them. It may be, however, that you are entitled to damages for misrepresentation, and your proper course in proceeding for same would be to write the party first, making demand of the amount you consider you are entitled to, and then, in the event of his failing to settle with you, sue him in the Division Court.

UNNATURAL MOTHER

I have a grade Yorkshire sow, one year old, due to farrow on May 19th, which made every appearance of being on time, and was occasionally looked after for three days and nights. Saw no sign of her having, or having had, any pigs. She was very quiet; always ready to come to the feed trough, but on the 25th found she was drying, and has since quite dried up. What became of the pigs? Did she eat them as fast as dropped, or what? Did not see any signs of her having had any pigs. I never heard of such a thing before, and have raised hogs for 50 years. Sows were fed during the winter on sugar beets, and cracked buckwheat and boiled feed turnips, and middlings, with milk occasionally—a mixed ration.

AN OLD SUBSCRIBER.

Ans.—From a number of causes, not all of them the fault of the sow, but some not very well understood, a sow will attack and eat her newborn pigs. In the case of the sow mentioned by our correspondent, there is scarcely any doubt that she had given birth to pigs when unnoticed, and had devoured the whole of them. This incident emphasizes the wisdom of close, rather than occasional, looking after.

Make a big profit from every cow \$400

Do you know what your cows are doing? Do you know which ones are profitable—which ones are eating their heads off? It will pay you to get rid of the robber cows.

The Automatic Milk Scale and The Facile Jr. Babcock Tester

will show you in a short time which cows in your herd are paying a profit.

The Automatic Scale is made especially for weighing milk in the pail. There is a loose indicator on the dial that can be set at by a thumb screw when the pail is on the hook. Then when the pail of milk is placed on the hook this indicator gives the exact net weight of the milk. It has another indicator that records the same as any spring balance; it can be used for weighing anything up to 30 pounds—larger sizes weigh up to 120 pounds.

The Facile Jr. Babcock Tester is designed especially for use in the dairy and on the farm. It is extremely simple in construction and operation. The working parts consist of but two cut gears and they are enclosed in a cast iron case to keep them free from dirt and to prevent their catching clothing, towels, etc. It turns easily without vibration or jar. It is sent complete with glassware, bottle brush, acid and full directions for use. It will pay you to have this scale and tester whether you milk three or thirty cows.

Our free catalog shows everything for milk dealers and dairymen at lowest prices.

W. A. Drummond & Co., 175 King St. East, Toronto, Ont.

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 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

Lakeview Holsteins!

Having sold all bulls old enough for service, now offer two bull calves, born August 19th and September 20th, 1910. Both are sired by Count Hengerveldt Payne De Kol, and their dams have A. R. O. records of 11.55 and 16 lbs. butter in 7 days as two-year-olds. Telephone.

E. F. Osler, Bronte, Ontario

Woodbine Holsteins! Offers for sale the great stock bull, Sir Creamelle, who is four years old. Kind and gentle, and has proven his ability and price. Also young bulls sired by the above bull for sale. Phone connection. **A. KENNEDY, AYR, ONT.**

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 young 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**

MAPLE HILL HOLSTEIN-FRIESIANS. Home of Evergreen March, champion milk and butter cow of Canada. Her four-year-old son for sale. Fifteen young cows and heifers for sale, bred to Prince Posch Pieterje C. and Choicest Canary. Come and see them. Prices moderate. Bell telephone. **G. W. Clemons, St. George, Ont.**

Burnside Ayrshires America's champion herd; over 100 head to select from; practically all imported and bred from imp. sire and dam; 20 with O. R. O. P. records; 25 daughters of R. O. P. dams. We won the late dairy test at Ottawa over all breeds. **R. R. NESS, HOWICK, QUE.** We can supply car lots.

Ayrshires & 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.**

CRAIGALEA AYRSHIRES! Our record: Every cow and heifer entered in Record-of-Performance, and retained in herd until test was completed, has qualified. Heifers and young bulls for sale of show-ring form. **H. C. HAMILL, BOX GROVE P. O., ONT. Markham, G. T. R.; Locust Hill, C.P.R.** Bell phone connection from Markham

STONEHOUSE Ayrshires The champion Canadian herd for 1910 at the leading shows. 32 h ad 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.**

HILLVIEW AYRSHIRES.—Imp. Hobland Hero at head of herd. Imp. and Canadian-bred females. Young bulls true to type and bred in the purple for sale, also a few heifers. **R. M. Howden, St. Louis Station, Que.**

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. Elgin, Ontario.**

SPRINGBANK AYRSHIRES The world's leading herd of Record-of-Performance Ayrshires. Contains more champion milk- and butter-producers than any other herd. Also big cattle, big udders and big teats a specialty. A few bull calves, true to color and type, from R. O. P. dams, for sale at reasonable prices. **A. S. TURNER & SON, Ryckman's Corners, Ont.** Three miles south of Hamilton. Visitors welcome. Trains met by appointment.

Ayrshires Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 63 pounds per day. **N. Dymont, R. R. No. 2, Hamilton, Ont.**

Stockwood Ayrshires Imported and Canadian-bred. High producers and high testers. Females of all ages for sale; also several young bulls, from 8 to 13 months old. Imp. sires and out of imp. dams. Right good ones, and bred from winners. **D. M. Watt, St. Louis Station, Quebec.**

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.**

SHE HAD CONSUMPTION.

**Dr. Wood's
Norway Pine Syrup
Cured Her.**

**Weighted 135 Pounds—
Now Weighs 172.**

Mrs. Charles McDermott, Bathurst, N.B., writes:—"I thought I would write and let you know the benefit I have received through the use of Dr. Wood's Norway Pine Syrup. Three years ago I had consumption. I had three doctors attending me and they were very much alarmed about my condition. I was so weak and miserable I could not do my housework. While looking through your B.B.B. almanac I saw that Dr. Wood's Norway Pine Syrup was good for weak lungs, so I got a bottle at the drug store, and after taking ten bottles I was completely cured. At that time I weighed 135 pounds and now weigh 172, a gain of 37 pounds in three years. I now keep it in the house all the time and would not be without it for anything, as I owe my life to it."

Dr. Wood's Norway Pine Syrup contains the lung healing virtues of the Norway pine tree, which, combined with other absorbent, expectorant and soothing medicines, makes it without a doubt the best remedy for coughs, colds, bronchitis and all throat and lung troubles.

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Please Send Us Now your name and address, so that we can keep in touch with you.

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STRIDE & SON will sell by auction, at **Chichester, Sussex, England**, on **August 16th and 17th** next, about 10,000 REGISTERED SOUTHDOWN EWES, 1,000 SOUTHDOWN RAM AND RAM LAMBS. Commissions carefully executed.

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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. McEWEN, BYRON, ONT.

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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.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons, Buena Vista Farm, Harriston, Ont.**

QUESTIONS AND ANSWERS.
Miscellaneous.

ROLLED OATS FOR COWS.

Are rolled oats a good feed for new-milk cows? If not, what kind of grain do you recommend to increase the flow of milk? C. S. F.

Ans.—Rolled oats are certainly good for cows, being in themselves well-nigh a balanced ration. Of course, this does not mean that they will necessarily make a balanced ration when fed with corn silage or timothy hay. In this case, a little oil cake, cotton-seed meal, gluten meal or wheat bran should be added, to secure the best results.

"MORE OR LESS."

What is the limit of "less or more" on land deeds—does it mean one acre or two, or a fraction of an acre? A SUBSCRIBER.

Ontario.
Ans.—There is no arbitrary rule. Each case is governed by its own circumstances. In the particular case, the words in question (which are usually rendered "more or less") might cover even more than two acres of difference, or it might easily be that a difference of even a small fraction of an acre would be judicially held to be too great to be adequately provided for by the phrase mentioned.

SCRATCHES.

We have a valuable mare in foal, and her hind legs are sore from hocks to next joint. Some call it scratches, and others call it cracked heels. I don't know which you call it, or whether there is any difference. They have been sore for about a year. I have put on some applications, but they seem to do no good. She is never lame. What do you advise? F. G. S.

Ans.—Scratches and cracked heels are but different names for the same trouble. When the limb is affected to a greater or less height, it is called "mud fever." Many cases of scratches are aggravated by washing with soap and water. Do not wash. If the legs get wet, rub them dry. As the mare is pregnant, purgatives should be avoided. Give 1½ ounces Fowler's Solution of Arsenic twice daily for a week. For local application, you may choose between a lotion and an ointment. Sometimes they are used alternately. In warm, dusty weather, a lotion is best, but if weather is cold, an ointment tends to soften the skin which might be hardened and made to crack open again if lotion were applied. A good lotion is made of sulphate of zinc 1 ounce, acetate of lead 1 ounce, carbolic acid ½ ounce, and a pint of water. Probably the best ointment is the oxide-of-zinc ointment, to which is added 20 drops carbolic acid to the ounce. Use either freely, three or four times a day.

WILD CHICORY—RAPE FOR COWS.

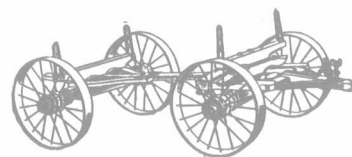
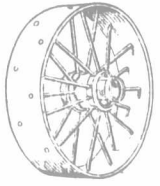
1. I have a ten-acre field which is infested in some parts with what is called by some, chicory, and others, blue weed. I find it pretty hard to get rid of, and would ask your opinion on the following method, which I intend trying. Land is fairly stiff clay all through, with black soil mixed in; what one would call good, strong soil. Was plowed last fall pretty early, good and dry, and turned up pretty lumpy. Now, I thought of sowing a mixture of peas, oats and vetches, and curing them green for fodder, plowing the land right away after harvesting, and working it up to get a fine tilth, and then sowing rape on it, to feed to the cows in the fall.

2. Would rape have any undesirable effect on the milk? We sell our milk. QUEBEC.

Ans.—1. While wild chicory is a perennial with a long, thick, deep root, and quite troublesome in pastures and on roadsides, it is not often seen in good farming districts, except as a wayside weed. "Farm Woods" says that a short rotation of crops will soon suppress it. The treatment you have outlined should be of an exterminating nature. The feeding of rape to milking cows, especially the same undesirable flavor which is caused by the feeding of Swede chard, is not a desirable thing to try.

DON'T DEPEND ON WOODEN WHEELS AND ORDINARY WAGONS

If you ever see a farmer coming down the road on a wagon and whistling a tune, you can make up your mind the wagon is a T.-K. Handy Farm Wagon with Wide-Tire Steel Wheels. The reason is that his wagon was loaded in half the time usually necessary with ordinary wagons, the load is greater by far, and the wheels take the ground (rocky or muddy) smoothly and without the least resistance.



**Wide-Tire Steel
Wheels and
Handy Farm
Wagons**



This is the kind of equipment you want to haul your loads. T.-K. wagons with Indestructible Wheels will outlast two ordinary wagons. The steel wheels are best construction possible. They are made with staggered spokes, so the tires won't bend between spoke-heads, while the hubs never wear out. Letters from thousands of farmers testify to their superiority. Write for booklet and special prices.

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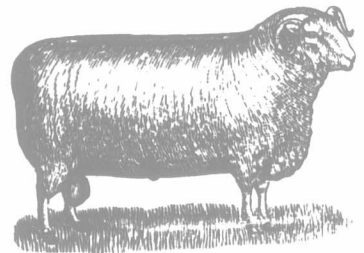
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Are now increasing rapidly in number. Shearlings and lambs. Choice. Getting ready for the anticipated brisk trade. Write for circular and prices to: **Woodville, Ontario.**

J. & D. J. CAMPBELL, Fairview Farm.

Maple Leaf Berkshires

For sale: Young sows bred and ready to breed; boars fit for service; also young pigs eight to ten weeks old. Imp. aires and dams. Pairs not akin. C. P. R. and G. T. R. Bell phone.

Joshua Lawrence Oxford Centre, Ont.

FAIRVIEW BERKSHIRES

Ontario's banner herd. Prizewinners galore. For sale are: Young sows bred and others ready to breed, and younger ones. A number of young boars coming on. **JOHN S. COWAN, Donegal, Ont.**

PLEASE MENTION THE ADVOCATE.

Pine Grove Yorkshires

orders for young pigs, not akin, for spring delivery. Descendants of imported stock. Property of **Joseph Featherston & Son, Streetsville, Ont.**

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.

LARGE WHITE YORKSHIRES

Am offering during the month of Feb. a choice lot of bred sows, young boars ready for service, and young pigs of different ages. Orders booked for spring pigs. Pairs supplied not akin. All at reasonable prices. Write, or call on:

H. J. Davis, Woodstock, Ont.

Long-distance Bell phone.

White Hampshire Hogs

Largest herd in 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

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.

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: **W. CURRIE, MORRISTON, ONTARIO.**

Swine OF ALL BREEDS FOR SALE.

1. bred Yorkshires, Tamworths, Berkshires, Hampshires, Chester Whites, Poland-Chinas and Duroc-Jerseys. I have constantly on hand both sexes of all ages. Show stock a specialty. **John Harvey, Frelighsburg, Que.**

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30 ewe lambs, 30 piglets fit for service. Some splendid sows to farrow to first-class boars. Long-distance phone Central Beeton.

Joseph of Beeton Sta. J. A. CERSWELL, Bond Head, Ont.

Shorthorn Yorkshires

Present offering: 30 choice sows, 30 choice boars, all registered. Write, or call on: **B. B. MUMFORD, Ayr, Ont.**

For Sale—Ohio Improved Chester Hogs.

Sired by first-prize hog at Toronto and London. Also reg'd **Jersey Bulls**, from 8 to 10 months, from highest-testing stock. Write: **CHAS. E. ROGERS, Ingersoll, Ont.**

GOSSIP.

On April 27th, as advertised in this issue, the annual amalgamated sale of pedigree Lincoln Red Shorthorn bulls, at Lincoln, will be held.

T. H. Hassard, Markham, Ont., has received an importation of twenty ponies, which will be sold by auction in Toronto, April 27th.

MORE IMPORTED CLYDESDALE FILLIES AND PONIES.

Dr. T. H. Hassard, of Markham, Ont., is still maintaining his reputation as the most extensive importer of horses in Canada. His latest importation, which landed a few days ago, consisted of twenty-one Clyde fillies and forty ponies. The fillies, in age, are: Nineteen rising two years, and two rising three years, of a type, character and quality quite in keeping with Mr. Hassard's reputation as an importer of Scotland's best, while their breeding is of just as high a standard, the get of such renowned sires as the H. & A. S. champion, Perfect Motion. Royal Fashion, one of the best breeding sons of Sir Everard; Diadem, a son of the great Hiawatha; the Cawdor Cup champion, Memento; the Glasgow winner, Chattan Again; the H. & A. S. winner, Baron's Voucher, etc. The ponies are an exceptionally choice lot, six of them pure-bred Shetland, the balance Hackney-Welsh cross. Several well-matched teams are among the lot. Practically every one is a high-class show pony. All are young, well-broken, and quiet to ride or drive. The ponies will be sold by auction, at the Repository, corner Nelson and Simcoe streets, Toronto, on Thursday, April 27th, sale commencing at 10 a. m., which will present the best opportunity ever offered in Canada to get high-class imported ponies at auction prices.

GEO. D. FLETCHER'S SHORTHORNS AND CLYDESDALES.

There are few herds of Scotch Shorthorns in Canada that are better thought of, or that have a reputation for excellence of modern type and fleshing qualities equal to the high-class herd of imported and Canadian-bred animals that make up the herd of Geo. D. Fletcher, of Binkham, Ont., a short distance from Erin Station, C. P. R. The enviable reputation of this herd is theirs by merit, their breeding is the best the breed produces, Orange Blossoms, Cruickshank J., or Jealousy, Nonpareils, Marr Roan Ladys and Missies, C. Mysies, many of them the daughters of that great bull, Imp. Joy of Morning, and out of such big, thick, well-bred cows as Imp. Blossom 2nd, an Orange Blossom; Imp. Loretta, a C. J.; Imp. Deestide Roan Lady, a Marr Roan Lady, etc. The present stock bull is the very thick, mellow, Imp. Benachie =69954=, bred by A. T. Gordon, sired by Scottish Farmer, a grandson of the world-renowned Scottish Archer, and the sire of the unbeaten Duchess of Gordon, dam Beatrice 22nd, a C. Butterfly, who is the dam of Bandmaster, winner of first at the Royal, in a class of 30, and sold for 600 guineas, she by the famous Aberdeen winner, Lancelot, is a granddaughter of the great Star of Morning. Bred as he is on Scottish winning lines, and carrying the blood of the most notable representatives and sires the breed has known. His illustrious breeding for generations is indelibly stamped on his get, whose type and even, mellow flesh, are of so high a standard that of last year's crop of bulls not one is left. Four yearling daughters standing side by side, are surely a nice lot, immensely thick, and quality from the feet up; one is an Orange Blossom; one a Missie, one a C. Mysie, and one a Roan Lady. This bull is now just turned four. He is roan in color, safe, sure, and active, and is for sale; a bonanza for some fortunate Shorthorn breeder. One of his best bulls of last year went to Mr. Hand, of Stratford, Ont. He was a roan, out of a Missie-bred dam, of Imp. Joy of Morning. He certainly will do a power of good for Mr. Hand's herd. In Clydesdales, Mr. Fletcher is showing the splendid mares, Imp. Sally McNaught, Imp. Dunure Freeman, and Imp. Memento, by Baron Romeo. Out of the former is a two-year-old daughter, by Imp. Watson, and out of the latter is a yearling daughter, by the same sire.

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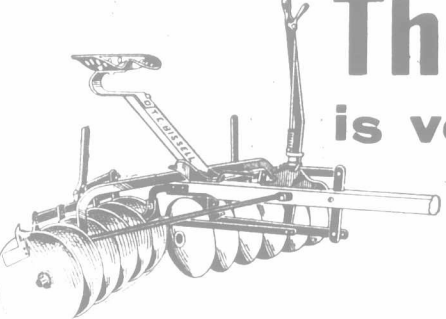
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T. E. Bissell Company, Limited, Elora, Ont.

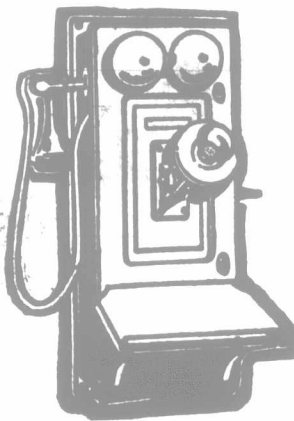


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