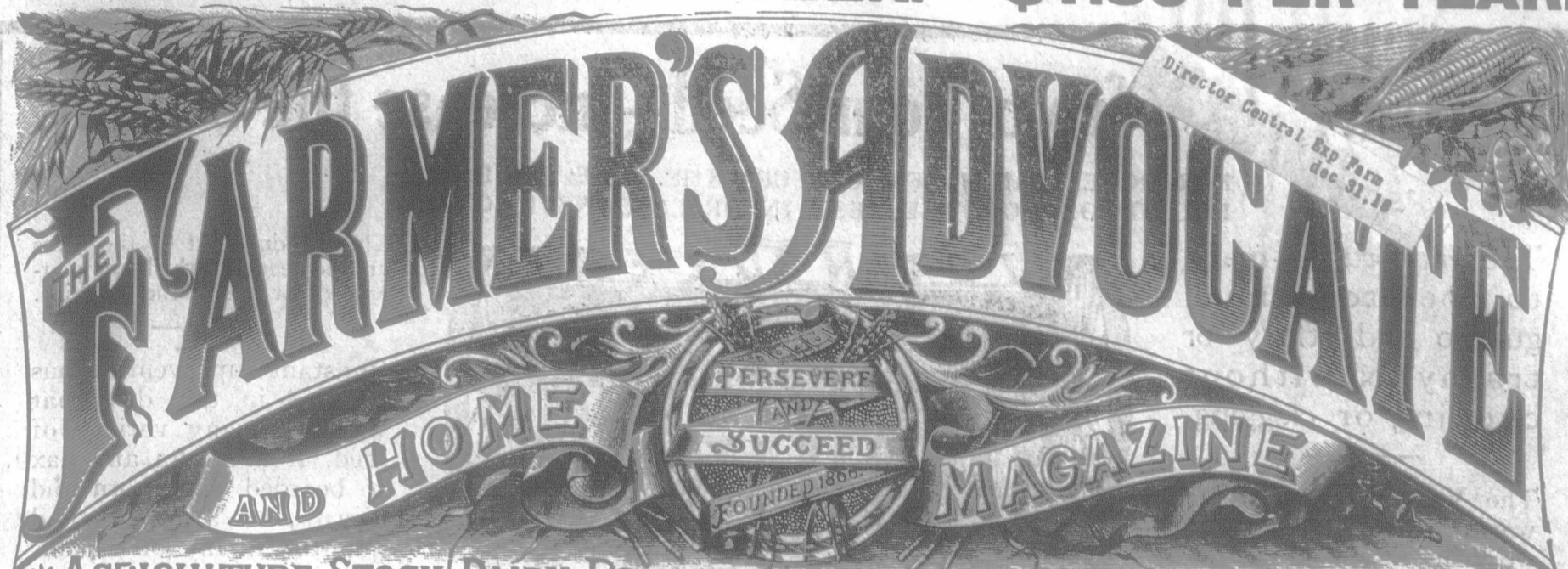


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VOL. LIII.

LONDON, ONTARIO, MARCH 7, 1918.

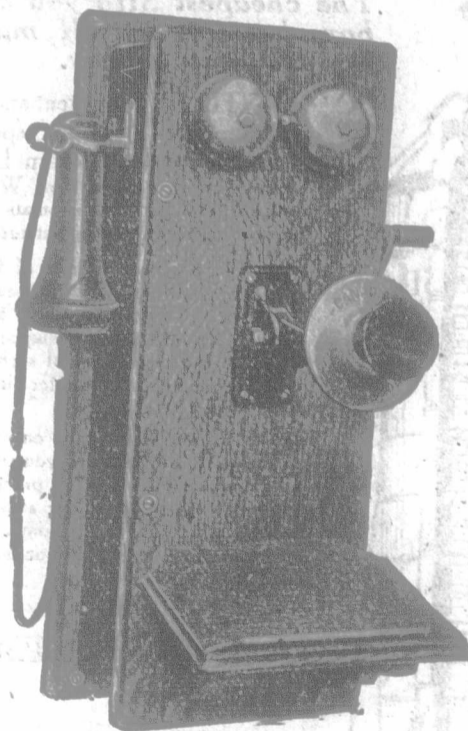
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Manufacturers, to-day, are laboring under difficulties, because of the scarcity of materials, shortage of labor and delays in transportation.

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Everything we sell is guaranteed, and we carry everything required for equipping a complete telephone system, no matter how large or how small.

We are the only INDEPENDENT company manufacturing telephones in Canada for the INDEPENDENT operators, and as such solicit the patronage of all who have the interests of the INDEPENDENT telephone movement at heart.

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Our prices are right. Let us estimate on your requirements during 1918.

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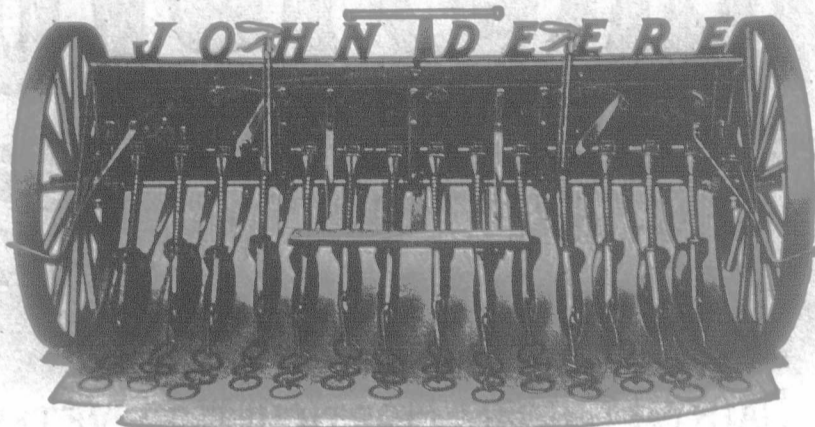
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The Van Brunt is made to operate in mud, gumbo and sticky or trashy soil without choking or clogging.

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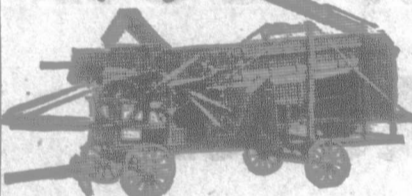
Improved Construction, Overcoming Unnecessary Weight and Strain Has Made the Van Brunt the Light Draft Drill.

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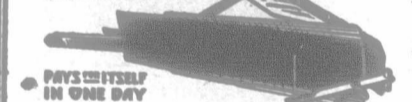
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Saves Time—Money—Labor. Be independent of the gang. Keep your farm free of weeds. Do your threshing when you please, with a 6 to 12 h.p. Engine and the Wonderful Light-Running Gilson Thresher. Fitted with or without Blower. Send for full particulars. GILSON MANUFACTURING COMPANY LTD. 489 York St., Guelph, Ont. 48

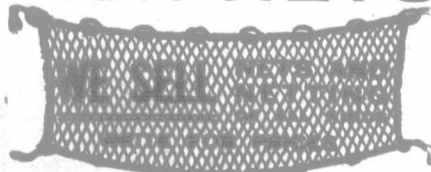
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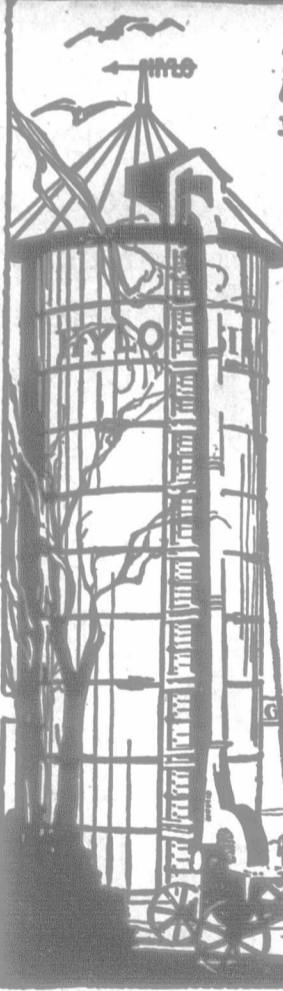
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The Safest Matches in the World, also the Cheapest, are

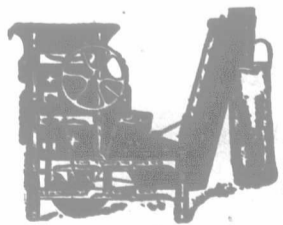
Eddy's "Silent 500's"

SAFEST because they are impregnated with a chemical solution which renders the stick "dead" immediately the match is extinguished.

CHEAPEST because there are more perfect matches to the sized box than in any other box on the market.

War-time economy and your own good sense will urge the necessity of buying none but EDDY'S MATCHES.

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which is the best yielder and most improved variety now grown in Ontario. Our supply was grown on choice land and from selected seed, so is clean and true to name. Price \$1.30 per bushel. Bags free.

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This looks like a scene in Ontario with the trees, the straight furrows and the perfect landscape. It is a photo of a field that has been cultivated for a thousand years, and shows a conservative English farmer who has hitched a

STAUDE MAK-A-TRACTOR

to an old Ford car and is pulling a double bottom English walking plow. You will notice he is making a good job of it.

Horses are necessary on the Ontario farm, and mechanical traction must supplement the work they do. The average Ontario farmer has not sufficient additional work to justify the purchase of an expensive tractor. This is where the Staude Mak-a-Tractor meets the power needs of thousands of farmers.

With improved cooling and oiling equipment the Ford engine makes a reliable little power plant, and running at half speed on high gear develops from 8 to 11 h.p. without putting the ordinary strain on the Ford engine or transmission.

The Staude Mak-a-Tractor can be hooked on to the Ford car or taken off at any time in less than 30 minutes. The farmer has a tractor available that will do the work of 4 good horses, that costs little to run and will attend to the following chores:

1. Pull his discs and cultivators and prepare the seed-bed.
2. Pull the mower.
3. Pull a load of hay and the hay-loader up any incline on which hay grows.
4. Nothing can beat it pulling the binder.
5. With power belt attachment supplies an 8 h.p. engine for filling silo and running the cutting-box.
6. Next fall will pull double bottom riding plow, and do faster, lower priced work than 4 horses will do.

These are facts. We have the signed statement of hundreds of farmers verifying them. The Staude Mak-a-Tractor costs \$240 in Ontario, and this includes special radiator, water pump and oiling system, which stay on the car. Write for booklet.

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"I'd as soon start out on a long trip without a tire pump or lifting jack as without my Dreadnaught Tire Chains. That's the one accessory that can't be safely overlooked in bad weather—makes you certain of 'getting there' when nothing else will."

Dreadnaught TIRE CHAINS

have turned many a dangerous trip into a safe journey home. Fitted with Special Long-Lever Chain Connector that enables

you to attach or detach them in a moment. Ask your supplyman or write us direct for price list and descriptive circular.

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ST. CATHARINES - - ONTARIO

Who'll Pay That Mortgage?

That mortgage—or other indebtedness—may cause you no worry. You know you can repay it if all goes well. But there's the rub. What if things go wrong? Supposing you should die—could your wife pay the mortgage without your income?

An Imperial Endowment Policy for the amount of the indebtedness will insure its repayment, whether you live or die. There is no other means of meeting the case that is quite so certain—that

leaves nothing to chance.

And the annual investment required is very moderate—moderate at least when you consider the peace of mind it will afford you.

Look at this problem squarely—don't dodge—don't wait. The advantages of life insurance are available only to those in good health. Send to-day for information about a policy to suit your particular need. To-morrow may be too late.

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A useful 76 page vest pocket memorandum book will be sent you post free if you ask for it.

Give Your Crops a Better Start

A Peter Hamilton Spring Tooth Cultivator will work your soil into a perfect seed-bed. It is designed to cut every inch of the ground and cultivate it thoroughly to an even depth.

Peter Hamilton Cultivators

have specially constructed sections that give the teeth great freedom of action. They are so flexible that a ridge and furrow can be thoroughly cultivated at the same time, and hard, rough soil seldom jerks more than two teeth out of the ground at once. The teeth are made of high-grade steel with reversible points. The frame is strong, well-braced and properly trussed.

Send for our free illustrated booklet and post yourself on the merits of this cultivator.

Dealers wanted in open territory.

The Peter Hamilton Company

Limited
PETERBOROUGH
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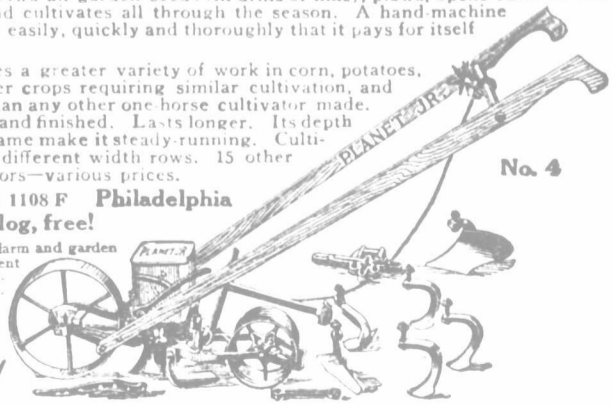
You can't meet the urgent need of cultivating increased acreage this year with old-style out-of-date tools and methods. Get Planet Jr Seeders, Wheel-Hoes and Cultivators, and double your acreage. They are strong, yet so light they can be readily used by a woman or boy. Fully guaranteed.

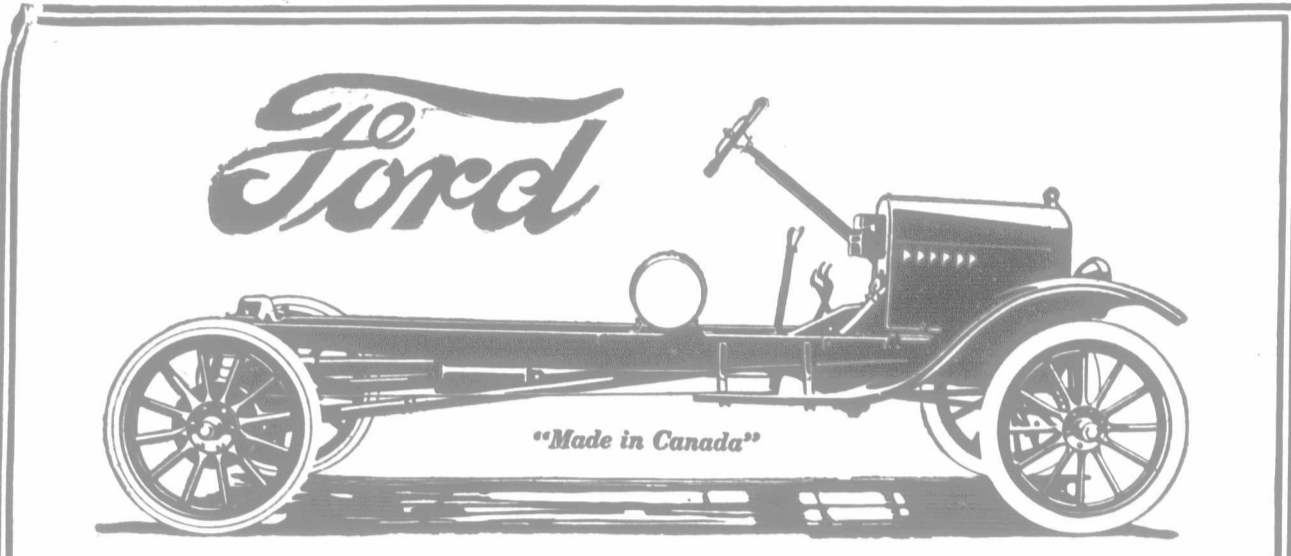
No. 4 Planet Jr Combined Hill and Drill Seeder, Wheel-Hoe, Cultivator and Plow sows all garden seeds (in drills or hills), plows, opens furrows and covers them, hoes and cultivates all through the season. A hand-machine that does the work so easily, quickly and thoroughly that it pays for itself in a single season.

No. 8 Horse Hoe does a greater variety of work in corn, potatoes, tobacco, cotton, and other crops requiring similar cultivation, and does it more thoroughly than any other one-horse cultivator made. It is stronger, better made and finished. Lasts longer. Its depth regulator and extra-long frame make it steady-running. Cultivates deep or shallow and different width rows. 15 other styles of one-horse cultivators—various prices.

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New 72-page Catalog, free!

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A Truck for the Farmer

FARM equipment which will effect a time and labor-saving, and therefore a money-saving, must be carefully considered by every good farmer now-a-days.

The farm wagon, which for years was the most useful of all farm equipment, is now being replaced on the best farms by a sturdy, dependable motor truck. The truck will haul any farm product—fruit, grain, vegetables, stock, fertilizer, or wood—around the farm, or to the town or city many miles distant, in half the time, and at a much lower cost.

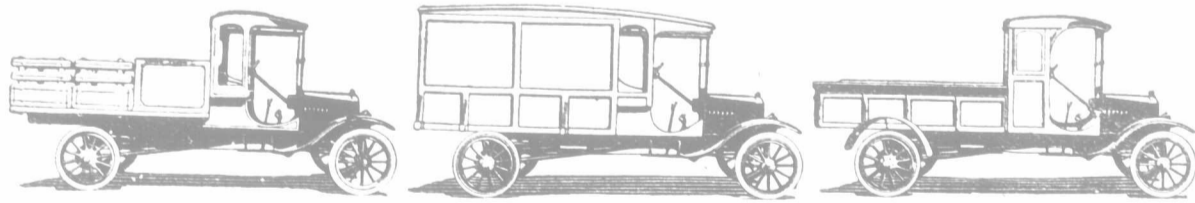
The Ford One-Ton truck is a rapid, economical and very serviceable means of transport. One of these on your farm will save you weeks of time in a single season and will enable you to pass through a crisis of labor shortage with less difficulty.

The Ford truck is supplied as a chassis only. This permits you to select any of the many body styles especially designed for the Ford truck and already on the market. Thus you can mount the one which suits your individual requirements.

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See any Ford Dealer in Canada, or write for a catalog

Ford Motor Company of Canada, Limited Ford, Ontario



Three of the many body styles that may be mounted on the Ford truck chassis

Steel Rails

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Millions of acres of virgin soil, obtainable at 50c an acre in some districts—in others, free—are calling for cultivation. Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full particulars as to terms, regulations and settlers' rates, write to:

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We have a limited quantity of baled shavings to offer at 15c per bale, f.o.b. our yard. Place your order while they are going at this price. All orders promptly cared for.
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IT STANDS ALONE

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TIMOTHY SEED
GRADE NO. 2
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If your dealer cannot supply you, write
The Albert Dickinson Co.
SEED MERCHANTS
CHICAGO, U.S.A. Established 1855

CLOVER SEEDS

(Government Standard)

	Per Bus.
No. 1 Red Clover	\$25.00
No. 2 Red Clover	24.00
No. 1 Alsike	17.00
No. 2 Alsike	16.00
No. 1 Alfalfa (Northern grown)	17.00
No. 2 Timothy (this seed grades No. 1 purity)	5.50
No. 3 Timothy	5.00
Mixed Timothy and Alsike	9.00
White Blossom Sweet Clover	18.00
O. A. C. No. 72 Oats	1.75
Marquis Spring Wheat	3.00

Terms, cash with order. Bags extra, at 45c. each. On all orders east of Manitoba of \$25.00 or over we pay the freight.
We guarantee seeds to satisfy or ship back at our expense.
Ask for samples if necessary.

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Seed Merchants
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True Vigorous & Reliable SEEDS

For 40 years we have furnished seeds of Highest Quality. Seeds that are particularly adapted for a big-yield in Canada's climate. Thousands of satisfied customers attest this fact. McDonald's seeds are all tested strains of highest germination and vigorous growth. Don't take chances this year on poor seed, but write at once for our big new 1913 Catalogue.

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Early Oats—O. A. C. No. 3 variety, the earliest and thinnest hulled oat in existence; suitable to sow with barley for feed. Price \$1.50 per bus. Bags free.
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"METALLIC" BUILDINGS ARE SAFE

WHY build with inflammable wood when you can get fire-proof, weather-proof and lightning proof "Metallic" building materials. They are far cheaper in the end. "Empire" Corrugated Iron Siding is easily and quickly laid and makes a strong, rigid wall. Its light weight makes heavy construction unnecessary.

"Eastlake" Galvanized Shingles, coupled with "Haltus" Ventilators and "Acheson" Roof Lights make a perfect roof. "Metallic" building materials defy the elements. "Eastlake" roofs laid over thirty years ago are good to-day.

"Metallic built" means fireproof, stormproof, neat and durable construction.

Before buying any building materials write us for Booklet and complete information. We can save you money.

Metallic Roofing Co., Limited
Toronto and Winnipeg



Order Farm Machine Repairs Now Delay May Mean Loss

HAVE YOU thought of the difficulty you are going to have this year in getting repairs for your machines? It is the most important thing for you to be thinking about right now. Your crops may depend upon it.

You, no doubt, realize that all manufacturers are hard put to it to get materials; and the transportation facilities, freight and express, are congested to such an extent that shipments go through very slowly.

The implement manufacturer and agent in Canada realizes this today and the utmost is being done to take care of the farmers' requirements for repairs. Unless the farmers are also foresighted, many of them are likely to realize the difficulty too when the season for field work opens. They are going to be greatly handicapped if they wait until just before they are ready to use the machines before overhauling them and finding out what parts will have to be replaced.

We cannot urge you too strongly to get busy on this at once. Overhaul every machine on your place and see just what parts you need to put them in good working order, then place your order at once. This is the only way you can be sure of having the new parts in time for use.

We are making every possible effort to get ample stocks of repair parts to convenient points where you can get quick service. International Harvester branch houses are located in all parts of Canada and they always carry large stocks of repairs. Besides there are thousands of local agents who carry a good supply of the parts usually called for. Under normal conditions, you could expect quick action on repair orders sent to us or to any of our agents, but at this time conditions are not normal and it is a personal and patriotic duty to look ahead and plan ahead and be prepared to avoid confusion and crop-wasting delays.

Remember the first orders received are the first to be served, so you can recognize the importance of overhauling your machines now and seeing what you will need and getting your order placed. Better be ready than sorry. Do it now.

International Harvester Company of Canada, Limited
BRANCH HOUSES
WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.
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The Cheapest Way To Pull Stumps

No horses needed with a **Kirstin Puller**—no extra help required. One man alone pulls biggest stumps in 4 to 10 minutes. The wonderful **Kirstin One-Man Puller** pulls little, tough or green stumps as low as 5¢ each; also brush, hedges and trees. Cuts land clearing cost way down. Costs less to buy—less to operate. Weighs less—has greater strength—more power.

Get Our Big FREE BOOK which tells how to clear your land quickly and economically. Book guides you over every point. Contains valuable information worth many dollars to every farmer. Write for it today and receive our Very Liberal Offer.

Kirstin One-Man Stump Puller

works on wonderful leverage principle—gives a man a giant's power. Patented cable take-up does away with pulling up slack cable. Six speeds—when stumps loosen increase the speed and save time. Works in any position. Clears an acre from one anchor. All-steel construction—unbreakable. Sent anywhere on promise to give puller a fair trial. If satisfied, take a half-year to pay, or return at our expense and keep your money. One-man style of **HOBBE** POWER—all steel. Three-year guarantee, law or no law. Send for Free Book and Very Special Offer made to one man in every community. Don't miss it. Write today.

A.J. Kirstin Canadian Co., 509 Dennis St., Sault Ste. Marie, Ont.



Make Sure You Get ALL of Your 1918 Corn Crop by Turning It Into Silage

About 40 per cent of the total stock food material in the corn plant is in the stalks and leaves.

When the farmer harvests only the ears he loses nearly one-half of the crop. On the other hand, when the crop is put into the silo, there is practically no loss.

Are you equipped to get all of your 1918 corn crop? You can be sure you are by installing an

IDEAL GREEN FEED SILO

Thousands of Canadian farmers are providing "winter pasture" for their cattle—getting 20 to 25% more milk at 15 to 20% less cost for feed—by using Ideal Green Feed Silos.

Why not profit by their experience? Our illustrated catalogue, which will be mailed to you on request, tells why the IDEAL is the best silo you can buy.

THE DE LAVAL COMPANY, Ltd.
LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butter-workers. Catalogues of any of our lines mailed upon request.

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Hallam's Trappers' Guide—96 pages; illustrated; English or French; tells how and where to trap; what bait and traps to use; is full of useful information.

Hallam's Trappers' Supply Catalog—36 pages; illustrated; rifles, traps, animal bait, headlamps, fish nets, and all necessary trappers' and sportsmen's supplies at low prices.

Hallam's Raw Fur News—Gives latest prices and advance information on the raw fur market. Write to-day. Address giving number as below.

when you ship your **RAW FURS** to **John Hallam Limited** 131 HALLAM BUILDING, TORONTO.



Just Put Clothes In—the Washer Does the Work

If you have a gasoline engine—if you have electric power then no longer need you even work the lever of a hand-operated power washing machine. Let "power" help your work as it does your husband's!

Of course you realize that a washing machine, even run by hand, is quicker, easier, better than washing by muscle-power. But here's a washer that does everything—all you have to do is "turn on the juice."

Maxwell

Power Bench Washer

will do the washing while you do other work! No need to watch it it can't go wrong. It will do the wringing too. Easy to operate—simple and strong in construction—perfect in mechanism. Made in one-, two-, or three-tub size; operated equally well by 1/2 h.p. electric motor, or any gasoline engine. Write us to-day for full particulars—it will be time well-spent.

38 MAXWELLS LIMITED, Dept W ST. MARYS, Ont.



Overland

TRADE MARK REG.

The Thrift Car

Light Four Model 90
Touring Car



Now is the time to get your Overland car

"Since the advent of the reaping machine, no other invention has been so beneficial to farmers as the automobile."

And when it comes to farmers' wives, what *compares* with the automobile?

The fact that farmers have bought 60 per cent of the cars we have built, we consider the greatest evidence of their value.

For farmers, above all other business men,

need and look for those qualities of performance on which Overland supremacy is founded—efficiency, dependability and economy.

Farmers particularly need the room and riding comfort of the Overland.

Farmers' wives tell us of their appreciation of the style distinction of the Overland.

These Overland qualities are of even greater importance today when

time and energy are demanded on the farm as never before.

So now while thousands of other farmers and their families are saving time, energy and money with this Overland Thrift Car—

We suggest that you let the Willys-Overland Dealer show you how this same Model 90 will earn its way for you.

In your interest, today is none too early to place your order.

*Appearance, Performance,
Comfort, Service and Price*

Willys-Overland, Limited

Willys-Knight and Overland Motor Cars and Light Commercial Wagons

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The Farmer's Advocate and Home Magazine

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LIII.

LONDON, ONTARIO, MARCH 7, 1918.

1328

EDITORIAL.

Surely a satisfactory spring will follow such a winter.

Good pigs will be of more value to the country this year than scrub calves.

The Russian situation will only increase the Allies' determination to win for the people.

Writers are enquiring about the use of old turnip and other seeds this spring. Test first and then sow if the seed proves vital.

If you have any left-over seed corn from other years, test it, and if reasonably strong in germination plant it, mixed with the available corn this year.

The live-stock breeders are going the right way about the proposed International Winter Fair. They plan to organize it and control it themselves.

Keeping the home fires burning has been some job this winter, but Canadians should be thankful. This country doesn't know what hardship is.

The horse is coming back. Men who have watched the ups and downs of the horse-breeding business are looking for the greatest demand for heavy draft horses that America has ever known.

Those who understand the situation say that it is impossible to conscript alien labor for the farm. International law will allow internment of enemy aliens, but interned men cannot be forced to work.

Canadian farms are again dependent upon the voluntary system to supply labor. We hope it does not fall down, but would suggest that the campaign to get the help be pushed immediately before it gets too late.

An excellent tribute to the spirit and valor of Toronto University men who have donned the King's uniform is the fine Varsity Magazine Supplement recently issued. University men have been true to their colors from the very beginning of the war.

It is not likely that the tractor supply will be large for the spring work in Eastern Canada, but delivery should be speeded up as much as possible, and those not on the land for seeding should be placed for summer-fallow and after-haying plowing.

We understand that Canadian farmers availed themselves of the opportunity to get loans for the purchase of seed last year to the extent of \$142,000. The same privileges are to be extended this year, and anyone in need of help to purchase seed grain should avail himself of the opportunity.

Silage growers in Eastern Canada will have to be content with southern-grown corn for seed purposes, and the varieties allowed to come across the border are only a few late-maturing, coarse-growing sorts, such as Mammoth Southern Sweet and Red Cob. Only 500,000 bushels are available and orders should be placed early.

This week we publish articles explaining the prices set for bran and shorts. There seems to be some misunderstanding in the minds of many and some complaint of overcharging. Moreover, as far as we know, the buyers of millfeeds are not compelled to take flour with them, although hints are made in some quarters that millers expect them to.

Voluntary Farm Labor.

"The Farmer's Advocate" has favored some scheme of selective draft to ensure farm labor to make possible the increased production so vitally necessary at the present time. It does seem, however, as if nothing of this nature is to be accomplished this year. Owing to difficulties in the way, the Government seems likely to follow the voluntary system again, and perhaps to push it a little more strenuously than was the case the last two or three years. The Federal authorities seem to be leaving the matter of farm labor largely in the hands of the Provincial organizations, and it is to be hoped that a start will be made immediately. Dr. Riddell, of the Trades and Labor Branch, has set as the objective for the campaign in Ontario, 15,000 boys between the ages of 15 and 19 years, inclusive. We believe the number of boys set as the Dominion objective is 25,000. Of long-term men, that is men who will go out from the cities and towns for the entire summer, Dr. Riddell hopes to get 7,500 in Ontario, and of short-term men—those who will go out for a short period in haying and harvesting—he hopes to get 12,500 men. Arrangements are now under way to secure these boys and men. If they can be had, are farmers ready to take them on as helpers? We suggest that the Department, in their advertising notices destined to reach the farmer and draw him out regarding his labor needs, state the number of boys and men they actually have available at different times, give a description of the class the labor is, and state the wages expected. Different farmers will require different grades of labor and will be ready to pay wages accordingly. Then, farmers requiring help should send in their requirements promptly. Let us bury prejudice and get down to business. Farmers are good people. So are city folks. A little more of the get-together spirit would work wonders. Neither side should expect it all. But for the sake of production and the Allied cause, let all dilly-dallying stop. Make all arrangements early. Aliens cannot be conscripted for the farm. International law permits only of internment, and internment means that the interned does not have to work. Organized labor objects to conscription of labor for the benefit of private individuals. Perhaps they are right, but at any rate it would be folly to object to anything in reason which would strengthen the armies of democracy. Food is essential. Since the voluntary system of recruiting for the farm is to be the practice again, the best possible use should be made of every existing agency that will help in any way whatever.

The Fruit Growers' Dilemma.

Fruit growers are asking what is to be done this coming season in case a large crop of apples results in British Columbia, Ontario and Nova Scotia, with the embargo still preventing exportation overseas. The situation is viewed from a different angle by the growers in the Atlantic and Pacific Provinces. British Columbia suffers from competition coming from across the line even in the face of a 90-cents-a-barrel duty. The growers in British Columbia would like to see an embargo prohibiting the importation of apples into Canada. The Nova Scotia apple growers, on the other hand, find a good market in the cities of the Eastern States for a part of their product, and prefer to have any obstacles removed that would tend to obstruct trade. Thus it is that the two wings of the country cannot act in perfect unison when it is vitally necessary so to do.

There has probably been no Canadian industry harder hit by the war than fruit growing, and legitimate investments should be protected to the fullest possible extent. However, there are two factors which seem at once to discountenance anything in the nature of an embargo against United States apples, and these are: First, the friendly and reciprocal relationship existing be-

tween the two countries, making it possible for us to obtain commodities which are absolutely necessary; and second, the fact that Canada wishes to export apples to the United States. It is doubtful if any manipulating of tariffs or embargoes would help British Columbia, for that would simply mean a greater influx of the Eastern crop into the Prairie markets and competition against a product that might otherwise go to the Eastern States. There are other points also along the boundary line of four thousand miles that enjoy the opportunity of exchanging fruits in different seasons. The whole situation is fraught with difficulties that only an all-Canadian conference of fruit men, such as was held at Grimsby in 1914, can solve.

A great effort should be made to utilize all low-grade apples and keep them off the market in the raw state. Evaporators, canning and jam factories and other such institutions should be worked to capacity in an endeavor to make the low-grade product non-perishable, and at the same time marketable, without weakening the trade. Herein lies one of the most promising opportunities which might be developed in the interests of apple growers. This is no time for pessimism; orchards have been neglected during the last three or four years, and those in touch with conditions do not expect to see a large crop of good quality. Those who remain steadfast will, no doubt, come through all right, and after the war is over they will be in a position to enjoy a period of prosperity.

Loans and Seed.

Last year the Government in the Province of Ontario made arrangements with the Bankers' Association through the Organization of Resources Committee whereby farmers needing money for the purchase of seed were enabled to get a loan up to \$200 at their nearest branch bank provided they could satisfy the banker as to their reliability and that they were going to use the entire amount borrowed for the purchase of seed. The scheme was not announced until early in May, too late for the offer to be taken the advantage of that might have been the case had the arrangements been made earlier in the season. However the same arrangements are already in existence for this year and any needing better seed and requiring a little extra cash to be used in the purchase of the same should make use of this opportunity. There is no excuse to sow inferior seed of most crops this year. Good corn will be scarce but every farmer should at least get the best seed procurable of all crops sown or planted. In this connection we might also draw attention to the supply of Marquis seed wheat which the Government is making available to Ontario farmers at \$2.74 per bushel. This is a good wheat and where land has been prepared for winter wheat and not sown, owing to difficulty last fall in getting the fall wheat seeding done, or on land that is in a high state of fertility and tilth and suitable for wheat growing it will doubtless make a very satisfactory crop for this spring. It should be remembered that the Allies require all the wheat Canada can produce. We are not advising anyone to go strongly into spring wheat growing in Ontario. A great big yield cannot be expected, but on choice, well-prepared, fairly heavy rich soil a reasonably good and paying crop could be expected in a favorable season. Suppose it yielded not more than 18 to 20 bushels per acre, it would not be a bad crop to grow with wheat at war-time prices. Think it over. Do not sow wheat on poor land. Oats would do better. But if you have a field that could be reasonably expected to produce a fair yield of wheat, why not try it? Up to 30 bushels or more per acre is possible but the average is likely in a good year to run around 18 bushels.

Proof that the best cattle are not overplentiful was evident at the recent Dryden-Miller Shorthorn auction.

The Farmer's Advocate

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

Published weekly.

THE WILLIAM WELLD COMPANY, Limited, Toronto, Ont.

JOHN WELLD, Manager.

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Live Stock the Foundation of Production.

Canada owes much to the producer of pure bred live stock. Just how much will never be estimated in dollars and cents. It is a far cry from the poor scrub to the thousand dollar pure-bred, and yet it is not for the blood of the latter the former could never be improved even into a good average farmer's cow. It takes courage and good money to make available for breeders of this country a large number of imported animals brought in troublesome times from the home of the breed. It requires faith in the future of the business. Yet men are doing it and they deserve a just reward in high prices and keen demand. The Drayton Miller sale brought out a number of cattle which will help improve the stock already in this country. We were pleased to note that over sixty of the eighty nine lots sold are staying in Canada. Also the American buyers who took away twenty seven lots are to be congratulated on securing such good stock for America. A cattle sale of nearly ninety separate lots, averaging \$7,061 each is something of a record for Canada. But good stock is seldom too dear. It is the big priced and high quality ones which have made many a good great and to these should go the live stock industry of Canada. Often the highest priced stock is the cheapest on the earth. Buyers should consider the best they can afford and very often they will find it to be the best. The quality of stock is the key to the success of the live stock industry. The quality of stock is the key to the success of the live stock industry. The quality of stock is the key to the success of the live stock industry.

A Great War Book.

...tment tells us that from three and three half million men have enlisted from the University, and that three hundred and forty six are numbered among the Honored Dead. Thirty two pages are devoted to a full and complete study of those who have passed on, and we have never seen so full a picture of the men who went on. The Supplement contains photographs of one thousand three hundred and forty four men now on active service, and these are in addition to the two thousand and seventy two illustrations appearing in previous editions. The work contains a number of excellent articles, and the whole is a great credit to the men who have so unselfishly labored in the collection of this excellent data on the activities of the University men in the Great War. All faculties are included. All have done their part in the list of illustrations. Canada has sent and is sending her best. They deserve the recognition shown in the Supplement, and the Editors of the Supplement are worthy of the congratulations of the people of Canada for the results of their great work in collecting and putting up in such excellent form this valuable war history.

Developing Thinkers.

BY SANDY FRASER.

I suppose you've heard tell about the meekster who wis puttin' the wee laddie through his catechism, an' says he, "Tell me noo what is the chief end o' man?" "Weel," replies the small chap, "I'm thinkin' it will be the end wi' the head on." The answer didn't suit the meekster very weel but I've often thought that he might ha' gone a lang way before he got a better one. They say that thinking is the real business of life, so it that's the case the head must be the main part of the machine. I was readin' a story the other day that brought these things tae my mind and gave me an impression of the importance of havin' a thinkin' machine that we can depend on in case of an emergency. It was about one of the early settlers in this country. He was a man that had got into a mucky scrape but which had always managed tae get out some way or the other without losin' his scalp. The lte he lived, he wild animals on one hand and wild Indians on the other, had made a good deal of a man out of him an' when his auld feroo lookin' cousin could get him out of a tight corner there was always some other plan in his head that would answer the purpose. One time, when he was out on one of his hunting trips, a gang of Indians got on his trail an' there was naught for him tae do but tae take tae his heels. He had a gun, a spear, a bow, an' a knife, but when he came to a sort of a marsh that was a mixture of clay an' water, an' speckled with a few minute he thought he was up against it. The spear was too thick for him tae swim in, an' the knife was too sharp for him tae walk on it. But he hadna' lang tae think what he wad do, for he could hear the Indians yellin' in the woods about half a mile back. He looked round him for a minute an' on the one side a piece he saw an auld birch tree that had been turned out by the roots by the wind a few year back. The bark on it was peely loose an' it didna' tak oner hunter very lang tae break off a couple of chunks of it an' carry them to the edge of the marsh. He threw one piece on the mud an' stepped on it. It carried him a' right. Then he reached out an' got the other piece an' threw it down about a yard or so ahead. He stepped on this an' then picked up the other one. An' by carryin' along this way, three or four feet at a time, he managed to get tae the other side of the bog an' into the woods just as the red villains of Indians came in sight of him. There wasn't one of the gang that had a thinkin' machine good enough to help him to guess how thin men had got away on them, so they had to go back the way they came, thinkin' no doubt, that it wis the devil they had been chasin' an' not a man at all.

But it's no a bad illustration of how a man in general is gettin' round a difficulty when his brain has been kept in a good healthy condition by plenty regular exercise. If our hunter hadn't had a clear mind an' the ability to make use of it on short notice, his scalp would ha' been hangin' at the belt of some red skin before the sun went down that night.

The fact that we can think is what gives us the chance to be any better than the animals in our stables. No doubt they can think too but it is not a very varied device, an' apparently only along one or two lines, an' we can make by their actions. An' it's because of this comparative inability to think that they ha' become the slaves of man. A horse will allow a man to ride over his back an' use him in any way that suits his own fancy, an' he'll know his strength an' he'll know his own corner, an' he'll know his own limits. But the mind of the animal is not so well developed as the mind of man. The mind of man is the only mind that can think of things that are not immediately before it. The mind of man is the only mind that can think of things that are not immediately before it. The mind of man is the only mind that can think of things that are not immediately before it.

...pounded by that comes with the exercise of the brain. The way I heard one man put it was that he said he: "When you refuse to think you put a bar in the way of what you might accomplish. You mak' your own worst of things for those that do think, those that don't think that unless we are willing to think we shall have no work; an' the less we think the more we shall have to do, an' the less we shall get for our work."

As farmers where wad we be to-day if we had never been those among us who went a lang way the wrong way wi' their thinkin'? We wad still be chargin' our traps wi' a sickle an' our plows wi' a crooked stock. In fact it must ha' taken a wee bit of thinkin' to ha' even got as far as that. In any way, as things are comin' the noo, it won't be lang, an' we can get in the house wi' a switch board beside us, an' run the farm at "lang distance." We'll ha' sae much machinery then that our "thinkin'" will be continued to workin' out some system of "ways an' means" to pay for it all.

And I will be wonderin' sometimes if the main purpose of machinery of all kinds is just to be sayin' us from hard work. I donna think it. I ha' the idea that it's all part of the system o' progress that mak's it possible for us to spend man o' our time in brain work instead o' being obliged to use maist o' our time an' strength in makin' a livin' by our muscle. The vera operating o' all these self-binders, grain separators, motor cars an' such like things, has a tendency to develop a man's ability to think an' I'll be wonderin', as I said, if we don't find out some day that wasn't what they were for, maistly. Gettin' our work done mair easily an' quickly may be only what we might call a sort of a side issue.

At any rate it looks noo as though the mind, or spirit, is the only part of us that is going to outlast the job that we're on at present, sae it might be as weel for us to get in all the change possible to mak' a guid start on the next round, wherever that may happen tae be. Makin' us o' our ability to think has brought us as far along as we've got, an' if we stay wi' it it will carry us on to something better yet. Maybe to something that will pay us weel for all the time an' trouble we've been to since we came here, an' tae the kicks an' scratches we've got by the way.

Nature's Diary.

BY B. KILGIB, B.A.

Canada From Ocean to Ocean. X

Another species of gopher which is very common on our prairies is the Yellow Gopher, *Citellus richardsoni*, which is also called the Yellow Ground Squirrel, Richardson Ground Squirrel, Spermophile and Flicker-tail. The Yellow Gopher is about a foot in length and is colored as a warm yellowish buff, deepening along the sides into a brownish black, and thence to a stronger yellow. On the crown and back there is a tree sprinkling of black hairs. It gives some the general impression of a pale yellow squirrel with a rather short tail, which it wags upwards every few seconds when watching an intruder and it is this habit which earned its name of Flicker-tail.

In South-west Manitoba, and in Southern Saskatchewan and Alberta this species is extremely abundant. Stoen estimates that there are 5,000 of these little animals to the square mile in South-western Manitoba, and speaking of this species along the boundary between the Western States and Canada Dr. E. C. Coues says, "It is one of the most abundant animals of our country, occurring by hundreds of thousands over as many square miles of territory, almost to the exclusion of other forms of mammalian life. Millions of acres of ground are honey-combed with its burrows. I have ridden for days and weeks where they were continuously as numerous as prairie dogs in their populous villages."

The Yellow Gopher appears above ground very regularly about the middle of April without regard to the weather, and it after this time heavy snowstorms set in it does not return to its burrows for another nap but goes scampering about over the snow.

The burrows of this species consist of ramifying galleries about three inches in diameter, with a central chamber which is lined with grass, and they have two or three exits.

These little animals mate in April and the young which number from six to eleven, are born about the middle of May. At the end of June the young are about one third grown and are big enough to come out of their burrow. They are full-grown by September, and their litter is raised in a year.

The Yellow Gopher is strictly diurnal, and is most active when the temperature is from 70 to 80 degrees. At the end of September or early in October it retires to its burrow for the following spring.

The diet of this species consists of roots, leaves and seeds of various plants in unsettled regions, but in cultivated areas a large part of its diet is made up of grain. It stores grain home in its cheek-pouches both for immediate consumption and for storage. It is able to store up a very large quantity of seeds in its cheek-pouches. Stoen records having found 2000 seeds of wheat and 1000 grams of wild blue-wheat in the cheek-pouches of a specimen and Bailey found 269 seeds of wheat in the cheek-pouches of another specimen. The Yellow Gopher appears above ground in April, after it emerges from its burrow, and there is much vegetation.

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Macdonald College Swine Breeding Policy

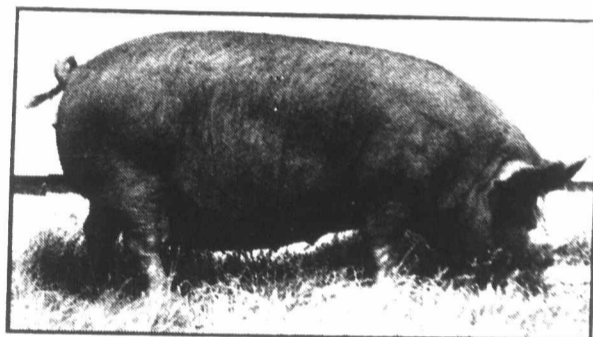
The breeding of swine permits of experimentation, perhaps, more than any other class of live stock. The period of gestation is comparatively brief, the dams will bring forth young twice a year, and the animal soon reaches breeding age and maturity. On account of these facts, results are speedily ascertained, and success or failure is registered before one spends a lifetime in chasing what may only be a "Will o' the Wisp." At Macdonald College, Que., a herd of swine are being bred with definite aims in view. Perhaps it would be more correct to say that an objective is ever held in mind, and an effort is being made to obtain it by a definite breeding policy. Every breeder has more or less of an ideal, which may be simply a good serviceable hog, but very few apply the principles of breeding in so far as they relate to the fixing of type through the concentration of blood. It is no trouble to raise live stock if the breeder isn't particular what kind he raises. In some districts, poorly fenced, all a farmer has to do is keep females, and nature will take its course and bring forth young in plenty. This will develop slowly, however, with only indifferent care. Fortunately, during the last century and a half there have been men with ideals in regard to live stock who were energetic and public spirited enough to try and bring those ideals to a realization in flesh and blood. They have given us the types we have. It is our duty to maintain them as good as they are, or, if possible, improve them.



A Pair of Macdonald Flossies at Breeding Age

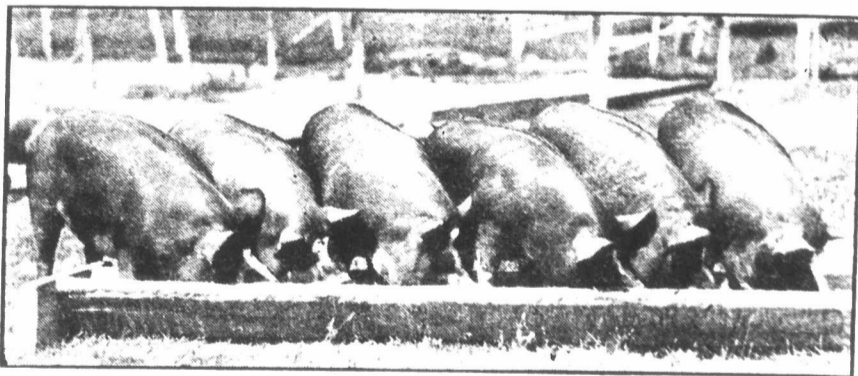
to the writer so strongly as the Flossies, chiefly in two points, these being in amount of bone and type displayed in the head and face. In all fairness, however, it must be said that among the Girls there are individuals which were hard to distinguish from the Flossies, but as a family they did not measure up quite so well.

In selecting Berkshire sires, the aim is to choose those having Flossie or Girl blood in their veins. This



College Flossie 15th

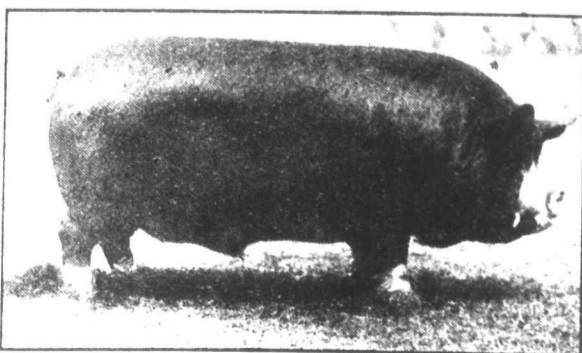
intensifies the blood and helps to determine the outcome. The best results which have yet obtained accrued from the use of a boar which reintroduced the Flossie blood after a mild outcross. A boar of Gentry breeding is being obtained for service, and the intention is to follow him with a Flossie or a Girl boar. In this way the blood will be maintained strong in the original color.



Three College Flossies and Three College Girls

Modified Yorkshires.

Two families of Yorkshires are also being developed along these lines and in the same way as with the "Berks." They originated from English importations,



Epochal's Emancipator

owned by H. W. Gossard, Esq., of the University of Toronto, Ontario.

Swine breeding in Canada has many possibilities. We have several distinct breeds but there should be only one type. Almost all authorities agree to the general and detail specifications of a bacon hog, and in the majority of cases they use the same language in describing one. Notwithstanding all this unanimity of ideas we find yet a large field where a constructive breeder may labor in establishing a type most suitable to meet this particular country's needs. As stated in the beginning, experimental swine breeding is interesting and capable of being conducted without danger of a speedy ruination to the herd, if sanely handled. If the consequence of some particular mating is not satisfactory, alterations in policy can be made, and if the outcome represents failure the stock can be quickly disposed of without serious financial loss. This latter statement should, probably be qualified to a certain extent. In case young stuff, resulting from experiments in crossing, appear satisfactory but are disappointing when they come to reproduce, a severe loss would have to be sustained if the foundation herd had, in the meantime, been disposed of. During any digression on a farm from the established breeding traditions the foundation herd should be maintained in all its purity until the final results of any experiment have been satisfactorily determined.

Berkshires "Flossies" and "Girls."

At Macdonald College the breeding herds of swine include Berkshires and Yorkshires only. Other breeds have not been eliminated on account of any prejudice against them, but owing to the limited appropriation available for carrying on such work, and the fact that larger herds of each breed afford greater possibilities so the two breeds mentioned were maintained, and with them an effort is being made to evolve and fix a type suitable for Eastern Canada conditions. The results in the Berkshire herd are readily visible, and there we find two distinct families or strains with type characteristics peculiar to each. In most litters these characteristics are sufficiently pronounced to enable one to make a pretty good guess as to which family they belong, even without knowing anything regarding their breeding. These families are called Macdonald Flossies and Macdonald Girls.

The policy in both "Berks" and "Yorks" is to limit blood lines on the female side. In other words, it means a concentration of blood without going far enough that the practice could be called inbreeding. As breeding is approached, but when the stock has become too closely related another boar is introduced, which, where possible, bears some relationship to the females.

The "Flossies" are descended from a sow bred by the late H. H. Foss, Teasdale, of Concord, Ont. She was the only one in her class, under six months, at the Canadian National Exhibition, Toronto, in 1908. She was called as Concord Flossie. The Macdonald Girls are from an English importation called Sarah, which other sows have been in the pens but they have been dropped, as well as their progeny, to make way for the Flossies and the Girls, upon which breeding is now being developed. With these two blood lines, the Berkshires are being carried toward a type which embraces good bone and feet, good constitution, ample length, smoothness, early maturity and docility. This is a program of considerable propo-

and one Canadian sow, Oaklodge Princess 271, and the two strains are the direct descendants of two sows which proved to be most desirable. A type will be fixed and with it the peculiarities which, in a herd, make breeding operations profitable. Prof. Barton, Head of the Animal Husbandry Department, said in regard to the Yorkshires: "We are guarding against extremes, and some might think we are getting close to compactness. I want depth, substance and finish along with the other requirements." Continuing, Prof. Barton expressed the opinion that Yorkshire breeders are, in some cases, getting more length in their hogs than is compatible with good constitution, early maturity and general all round thrift. Wiltshire sides could, he was sure, be manufactured from hogs showing a little more compactness than do those usually displayed as the ideal. The bacon hog was not depreciated in the least, but the intention at Macdonald College is to breed a class of Yorkshires with a trifle more substance, not quite the length, but better constitutions than generally prevail and still have a first class bacon hog.

Feeding and Breeding for Bone.

Feet and bone are primary considerations in the herds mentioned. This is kept in mind all the time, and especially when different matings are being considered. It is felt, however, that the bone can, to a certain extent, be developed and the young pigs which will later go into the breeding pens get something that the feeders do not require. Alfalfa is always fed in racks throughout the winter. If the crop is short, the pigs and calves come first, and a sufficient quantity is put away for them. Bone meal and hard wood ashes are also depended upon to do their part in bone building, and sometimes sods are stored in the fall to be doled out during the winter months. Bone in swine is something breeders are paying more attention to than formerly, and it is one of the features that are not being neglected in the Macdonald College herd.

A Breeding-Age Experiment.

An experiment is being conducted to determine the best age at which to breed young sows. One lot were bred at about eight months, and they will be expected to raise only one litter the first year. Another lot were better developed before breeding, and they will be expected to farrow when around fifteen or sixteen months of age. Concerning this, Prof. Barton said: "My observation and experience is, that the majority of sows throughout the country are undeveloped before they farrow, and are thus stunted more or less through the strain of lactation. The best sows seen are those which missed having litters either early or some time later in life." The experiment now running will consider the development of the dam, and her usefulness throughout a period of years over which a sow is usually kept in active service.

The colony house and sheds are both in favor at the College, but Prof. Barton favored the shed for brood sows. It has been found easier to make the sows comfortable in the sheds, and they make more manure there by working over the cleanings from the horse stable. By various means the sows are kept interested and working.

THE FARM.

Co-operation the Life of Trade.

EDITOR "THE FARMER'S ADVOCATE":

Farmers who are interested in developing co-operative methods should not be too sanguine as to immediate results. Economy in the distribution of commodities is something which is natural to the co-operative system; but it will not be realized until the system has grown to considerable proportions. We must have faith to look ahead, else we shall easily get discouraged and abandon the fight when, perhaps, victory is all but here.

In another respect, too, farmers should not expect too much. In so far as the purchase of car lots of various commodities, or the engaging in business in a wholesale way, cuts into the earnings of local merchants without reducing their expenses correspondingly, farmers will have to pay a larger percentage of profit on the local merchant's reduced business. It is conceivable, indeed, that the savings effected by co-operative purchases might be lost in the higher prices paid for those things still being purchased from the local retailer. The solution of the difficulty is clear; farmers should aim to go the whole way just as quickly as possible, and take over the whole business of the local merchant, who may be engaged to run the business on salary, or for a share of the profits. There will be especially notable if two or more competing merchants are replaced by a single co-operative store, for, while competition protects the public against exorbitant profits, it does not protect against economic waste. For example, competitive competition in the peddling of milk will insure that no peddler gets too much for his labor, but it will increase rather than decrease the economic waste of labor in buying a dozen boxes and vehicles covering the country.

The co-operative system protects the public against a process of overcharging, against the evils of private monopoly. And the writer would make the observation that the dangers of such private monopoly, and yet the benefits to be derived from all kinds of economic waste. Consider, for example, how much advertising is required to order two square tons of cement, or to buy a few dozen of distributed commodities, both which are sold retail under the co-operative system, far more cheaply than under the competitive system. We have often heard the saying that "competition is the life of trade." To a large extent the reverse

The Thresher Question.

EDITOR "THE FARMER'S ADVOCATE":

I noticed in the Farmer's Advocate of February 7th your article on "Gang Threshing". I feel convinced that in sections of Ontario where farms are large, roads good and labor hard to secure it would be the very best way to have threshing done. I feel sure it would have a tendency to make the thresherman keep his outfit in good repair, and keep the work going. I have been at some farms threshing when the thresherman seemed to be making the job last as long as possible. I think, however, in places where farms are not large and far apart it could not be carried on very well as it would not pay either party. It would be necessary to make a higher charge to cover the cost of moving. I think where farms are a fair size and perhaps not very close together it would always pay the farmer to have his own small threshing outfit. These machines can be successfully run with a 5-H. P. gasoline engine, and when a wet day comes the farmer can usually get some help from the neighbors and put through a good bit of the threshing without loss of time. It very often happens that weather is a great drawback to a threshing gang and causes loss of time, whereas if the farmer has his own outfit he can pick a suitable time for the work, and moreover the amount paid for threshing would, in about three or four years, buy a small machine and almost every farmer has a good gasoline engine. I think we might divide it into two classes and say the large farmer would benefit by gang threshing and the smaller one would be better served to have his own small machine.

Muskoka District, Ont.

TOM PAIN.

Miss Overalls on the Farm.

EDITOR "THE FARMER'S ADVOCATE":

Last spring our hired man left the farm after having spent three years with us. My brother was sixteen and I was seventeen so we knew right well we were in for it. But I got off light in the spring seeding only having to drive the team on the harrows one day and the horses would persist in stopping every time they got to the centre of the field to say nothing of taking five minutes off duty every time at each end into the bargain. Next came laying at which I had only one day, for we had not nearly so much land in hay as we had other years, having almost all the farm in fall wheat and spring sowing.

Berry picking came on and how I liked to pick those large, red, berries that were so plentiful last year! But I only had two forenoons at it for harvest was ready and I was told off to make the poorest half of the hired man, my brother being considered the better by a long shot. Shocking wheat with a tight skirt, a long-wristed pair of shocking gloves and an umbrella hat is not just what it cracked up to be. Overalls are better. Anyway I did not find it awfully hard only my brother would consider it his duty to give every blessed shock I set up an extra squeeze or whatever you wish to term it before I was allowed to put the "cap" sheaf on. This would not do around where I was and I told him so in a very few words with the result that I was left to do my own squeezing and setting up too. However, the wheat got out and shocked and next came barley, and with it, all that "Overall Sis" was going to do in the barley field. Don't pay any attention to the fact that I was a little uneasy myself as to just how I was going to manage Mr. Barley, but once at it I soon got used to it and did not notice it much different from the wheat, until one day we struck a field and if you ever heard of this they barley that's the kind grew there; and I do believe if it had not been for the aeroplanes which flew over every hour or so I should have said "Good-bye lake" and "beat it."

Next came the oats. Oats are the best little chaps of all. They just go up in a shock like real good ones, so you may know we were soon finished with the cutting and shocking. I was by this time beginning to think I was a pretty important part of the hired man and was doing a little at saying so too. Never squeal until you have accomplished mowing. It is a sticker. I am thinking it was a happy idea of the pater's to keep "mum" on the mowing or I am afraid Miss Overalls would have been greatly taken up on some other work just about that time had she but known. However, with the help of a brother nine years old and saying some words, I got through it and am still living, although I had some pretty strong convictions I might melt one of those hot days and be no more.

Now for the paying end of the business. For my part I was to go to High School when the fall term opened but Fate must have poked her head in the way as usual and instead I had to keep house for a few weeks. However, the pater came along with ample rewarding, financially, so I am with it for another year.

Would Like to See Gang Threshing.

EDITOR "THE FARMER'S ADVOCATE":

In your valuable paper of February 7th, I was pleased to see the question raised as to the expediency of threshing gangs. In my opinion it would be an excellent plan, as it would relieve the over-worked farmer, and assist him very much in the production of food. It would enable farmers to complete their work much earlier or more thoroughly than by present conditions.

The writer knows something of farming in the counties of Kent and Essex, where many follow the four-year rotation, which because of soil conditions seems to work well—hay, corn, oats, wheat, followed by seeding to hay and as the oat ground on most farms is put into wheat the manure hauling is delayed till the oats are harvested. Many farmers want to thresh at once, which, along with plowing and manure hauling, seeding, and sometimes corn cutting at the same time causes one or more jobs to be very much neglected. The wheat is put in too late or the corn is badly frozen, and often a part of the crop is left unhusked all winter to be wasted by crows and mice, together with frozen fodder causing much loss and waste to the farmer, with some unfinished fall work to be done in the spring. So, viewing the questions carefully, I think most farmers should favor the threshing gangs.

If the Government, or a syndicate of farmers, or even a private man, would secure a good machine and even eight or nine men and a small cabin on four wheels for the men to sleep in, and carry a little extra clothing for emergencies it would add to their comfort, and also relieve the farmer's wife very much, as she would only have to provide the board for them. I think the plan would work well in general. Last year in West Kent much of the threshing was done by men from fifty to sixty years of age, and many of them had cleared their farms at that, and when men of that age have to chore morning and night and thresh all day, it means drudgery, therefore I would like to have a few hundred men express themselves in favor of threshing gangs.

Kent Co., Ont.

OBSERVER.

Likes the Practical Advice.

EDITOR "THE FARMER'S ADVOCATE":

Enclosed is \$1.50 for my renewal for your valuable paper. We would be lost without its practical advice, and also different people's opinions on different subjects pertaining to agricultural pursuits.

Durham Co., Ont.

E. N. PASCOE.

Get Together.

EDITOR "THE FARMER'S ADVOCATE":

Evidently there is some concerted action to work up an agitation against the farmers by the city press, and thus cause antagonism at a time when we should be united. It is hard to have sufficient charity to believe that ignorance of farm conditions would account for all the fairy tales we read. One influential Toronto weekly says: "We must see that taxes are placed where they belong—that is, on the farmer." Another note reads: "The farmers are the greatest profiteers of the country." A Toronto daily with a wide circulation, in an editorial on hog production exhorts the farmer to produce pigs even if it is not financially remunerative, and has a good word for the bankers who lend money for the purpose, but I never knew a banker to take any risk. He wants gilt-edged paper and an endorser, so his money is sure, and if there is a loss the farmer stands it. It is patriotic for a financier to buy victory bonds at 5½ per cent., but treason for a farmer to ask if he will come out even. All the farmer wants is a fair deal. He does not ask that either his sons or his help be exempted because he is a farmer; if they can best serve their country in that way, he is satisfied, but he cannot send his sons and experienced help to the front and increase production at the same time.

If the farmers are making over 5½ per cent., I, for one, say that the Government should confiscate all over that amount, and I am satisfied that 99 per cent. of the farmers will agree with me.

One Farmers' Institute lecturer told us that he was making 80 per cent. when I promptly told him that the Government should take 75 per cent. of it. In proof of this, I have only to refer to the offer of the Canadian Wool Growers, who offered their wool to the Government on the basis of last year's co-operative prices.

I am meeting every day school teachers, doctors, lawyers, travellers, mechanics, and even laboring men, who own farms of from 80 to 200 acres, and who complain that they are not making interest, but though the most of these men are practical farmers and would have little or no trouble in stocking the farms—in fact, most of them are already well equipped with live stock and implements—still they stick to their work in the towns and cities instead of going farming, which, according to the city papers, is a sure get-rich scheme.

All this gratuitous advice and criticism would be amusing if it were not such a serious matter and is stirring up ill feeling when we should all work together for our country's best interests, either in the trenches or in productive industry.

Grey Co., Ont.

G. T. MARSH.

Endorses Wider Sleigh Idea.

EDITOR "THE FARMER'S ADVOCATE":

I heartily endorse the idea put forward by the subscriber from Wentworth County, Ontario, re wider sleighs. It is something that should have been made law long ago. The roads in the winter are not wide enough for horses to travel without breaking off, and soon they begin to crowd. My team was out recently on the snow plow with another team. They kept breaking off and at last they began to crowd and they had to be changed to the opposite sides before they could do anything with them, and it spoiled them for the rest of the winter. When spring comes it is bad, for some places when the buggies are running there is that much snow outside the roadbed it makes it very bad going. If the roadbed was as wide as the buggy, it would make it a great deal better for everything. I think it is the duty of every reader of "The Farmer's Advocate" to get after it.

Algoma District, Ont.

W. B. SNOWE



The Men of the First Short Course in Farm Power at the O. A. C., Guelph.

Farm Women and Outdoor Work.

EDITOR "THE FARMER'S ADVOCATE":

Having read the two articles in your issues of Feb. 7th and 14th, respectively, I am stirred to write this letter. My first thought is—"How much work is a farmer's wife expected to do?" Every farmer and his wife and family are haunted by the word production. I think that most farmers are doing all in their power along the line of production and if the Government asks them to produce more and eat less how is it to be done? We could all eat less in the line of pie and pastry, etc. but we must have the right kind of food that we can relish and not have to go away from our meals almost as hungry as we sat down if we are to be able to keep up with the daily toil that we are supposed to do twice as much of as we did before the war started. I don't think that the farmer's wife should be urged so much to work in the fields while our Government allows alien enemies to hold us up for \$50 and \$75 a month with board and a good house to sleep in. Our boys only get \$1.10 per day and why should these foreigners get so much here? I don't think anyone should insist upon farm women doing so much field labor any more than that other women should do the same. I remember speaking to some city cousins not long ago and I said to them why do not your father and mother come and live on a farm when there are so many girls and boys of you, and the answer I got was there is too much hard work on a farm. If the farmer's wife is to become a slave by working in the fields to help produce more, what will become of her health? She will be a wreck in a few years with no pleasure for herself or those around her. And, further, if by working so hard her health fails and a doctor has to be called who will come good for the expense? We will have to face that question our-elves and pay a hired girl if one is to be had.

What will the offspring be if a wife and mother has to do a man's work and what care can a mother give to her young family under such circumstances? I would like to hear the opinion of a good, sensible, medical practitioner. Why are the young women (I mean farmers' daughters, principally) not as strong as our grandmothers were? I think it is because our mothers and grandmothers had to work too hard in their pioneer life, had to do men's work. I believe that is the principal reason that there are so many weaklings in these days. If a farmer's wife does all her household duties every day and does them well she will not have much time to work in the fields unless it is to hoe her garden and keep it clean, and if she is a thrifty woman she will endeavor to go over it once a week at any rate. This will be done in the spare time after she gets her morning work done. I know of some farmers and their wives who have to be up at 4.30 and 5 o'clock a. m. to get probably 9 or 12 cows milked for the factory. Then the woman has breakfast to get for husband and four or five small children and has to wash and dress the younger members of the family before the regular day's work in the house begins. Then comes the weekly washing, ironing and baking of bread, pies and cakes as the case may be, with ironing, mending and darning to do. If she is a lover of flowers she will have them to attend to, and I think every farm home should have some choice flowers where hens, chickens and dogs will not destroy what it took time, patience and a little money to make beautiful, as there is nothing more discouraging than to go out some fine morning and see the dog stretched out on your bed of pansies or have nearby chickens or hens digging them out.

Then in the fall the garden vegetables are all to be taken in, the churning done and the fowl fattened. I would like to know when the farmer's wife will have time to go to the field and if she goes to the field there must be many things neglected in the house as she cannot do both housework and farmwork. She should be able to do most of the sewing and all the knitting for her family and that is not a small item where there are four or five kiddies to make and mend for.

Farmers wives have not the conveniences they should have in comparison with those which men have in their barns. I hope I am not leaving the impression by these few remarks that farm women should shirk work and not try to help to get along in this world, but I think a woman's place is in her house, there to do her work wisely and well and have a few minutes to herself each day to stop and look at the glory of God's handiwork all around.

Lanark Co., Ont.

HOUSEHOLDER.

Another Idea For Silo Filling.

EDITOR "THE FARMER'S ADVOCATE":

I have been thinking for some time of a plan for silo filling and was pleased to read Mr. Whitman's ideas in "The Farmer's Advocate" of a plan somewhat along the same lines as my own. My idea is to attach a cutting box behind the cutting part of a corn harvester, with the hauling part taken off, arranged so that the top of the corn when cut would fall on the rollers and the cobs be drawn into the center raised high enough to drop the silage into a half-ton or ton box having a bottom that could be opened to let the silage out when raised into the silo, the whole machine to be driven and operated with a gasoline tractor. The boxes of silage could be drawn to the silo with a couple of carts something on the principle of a milk can cart and hosed into the silo as you would a bundle of grain or a load of hay. Three or four men would do the work of fifteen or twenty without heavy manual labor and with a great saving of time and twice as fast cutting in the field and silo filling would be done at the one operation. In this section of country it takes from three to five weeks

filling silos. All the rest of the work has to stand as help is so scarce it is difficult to get enough hands to run a filling outfit properly, and this therefore is the cause of leaving thousands of acres of land not prepared for spring crop. I would be pleased to read any suggestions for or against this plan in your paper.

Lanark Co., Ont.

R. G. BOURNE.

Balanced Rations and Spareribs.

EDITOR "THE FARMER'S ADVOCATE":

One thing I like about the "yellow-backed visitor, old but always new, that reaches us once a week, that it is not all what is called "practical." From a superficial point of view, that might seem a doubtful commendation. But it is just possible for us to override the "practical" horse. Readers of Dickens will remember the extremely practical man in "Hard Times," Mr. Thomas Gradgrind, retired hardware king, whose head was a warehouse of facts. He figured as the patron and director of a model school for young hopefuls where the one thing needful was—Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else. Root out everything else. Nothing else will be of any service to them. This is the principle upon which I bring up my own children. Stick to Facts, sir. Thomas Gradgrind who proceeds upon the principle that two and two are four and nothing over and who is not to be talked into allowing for anything over. Thomas Gradgrind, sir, with a rule and a pair of scales and a multiplication table always in his pocket, ready to weigh and measure any parcel of human nature and tell you exactly what it comes to. No fancy! No flowers on the wall. Nothing but invincible Facts! Remember that, Mr. McChoakumchild. People know what came of Mr. Gradgrind's theories. So we folks on the farm take it as a compliment when "The Farmer's Advocate" assumes that we think of some other things beside the price of hogs, the elusive hired man, the fall of Mrs. McFadden chasing a cat out of the pantry, and balanced rations for cattle, or other stable boarders who are swiftly eating their heads off at Ottawa, or about the stock yards does not let us out. With nearly everything doubled in price and heavy buying to be done, as is the case for the farm, we are in no risk of forgetting stern realities like the purchase and preparation of seed, the visit of the tax collector, and elevating our feet very far above mother earth on the snow banks. We therefore welcome a few smiles, and Sandy Fraser's pawky philosophy to lighten up the gloom over the prospect of floating a renewal of our Victory Note at the branch bank or effecting an alliance with an exemption man in whose head tales of four dollars per day in a munition plant are buzzing. It is a lucky thing for us that man does not live by bread alone and right here the Home Magazine also fits in to illuminate aspects of life, literature and education in a most practicable way. We are grateful to "The Farmer's Advocate" on our meatless days for a balanced ration which is just as good by the evening fireside as in the cow stable or in the henhouse. Variety helps to preserve one from going "dippy" over the newspaper accounts of Sir Bakem Spareribslaughterhouse declaring eighty per cent. dividends in war time and also reconciles us to our lot which the authorized version of the head of the Canadian Manufacturers' Association officially assures us is not so bad after all, as it is seldom, at all events, that we fail to make a living. We may also be sure that the government will not be taxing our "extraordinary profits" and would certainly not do it in a manner to "destroy" our "incentive to effort nor deprive" our "business of those surplus profits with which alone legitimate and necessary expansion can be taken care of." If the average farmer is just making a living or even a modest profit, a little toning down of those eighty per cent. dividends, or the huge accumulations of a giant railway corporation might assist him to expand when nearly every item in his means of production has gone kiting and he is in duty bound not to mortgage hopelessly his own future and that of those dependent upon him. In defence of Sir Bakem Sparerib's ingatherings, it was lately set forth in one of the newspapers that he was a liberal and helpful dispenser to beneficent objects. Granted, and assuming also the sincerity of his motives and that no tangible statute of the land has been contravened, is it not about time that the consummate abilities that effected those and other acquisitions should be directed to securing in this country what the President of the Manufacturers' Association describes as those "proper adjustments so that mutual helpfulness might prevail among all classes of this country, injustices be removed and every man should get a square deal as far as is possible"? Right there, is a large field awaiting tillage by the enterprise and genius of Captains of Industry and other leaders which if not undertaken will tend to grow a crop of those very disruptive, socialistic tendencies which the head of the manufacturers' organization describes and deplors. Farm folk are now advised to think along broad and unselfish lines. Some of us imagine that we are almost ready now for our diplomas. Country life provides us with such a fine opportunity to reflect that the clouds and the landscape are left to us to admire free of charge and that we are not in the midst of a town whirl with everything on tap, day and night, except food and fuel. In my observation, the farmer and the rural minister are doing about as much as could be thought nowadays as anybody in the land and a deal of it is taking concrete shape as witness the spread of farm-directed organizations West and East and the unmistakable determination to break away from traditional rules of doing things or having them done. Strange strings are due in the next decade among the

dry bones of the past and it is up to the people of the farm to take a hand with Captains of Industry and politicians in the reconstructive business of making Canada a better country in a better world. Give the balanced ration principle a proper trial in public and personal affairs. If the opportunity of this day passes it may never come our way again and who will count the cost?

Middlesex Co., Ont.

ALPHA.

Experience with Town Help.

EDITOR "THE FARMER'S ADVOCATE":

Having read and heard so much about farmers getting help from the cities, I thought I would give my experience with town help last summer. I had ninety-eight loads of hay to take off, which had to be pitched on by hand as my hay-loader was worn out. As I was alone I started haying early, thinking perhaps I could get a certain man to help me a few days before he had to go to help another farmer, but I did not get along very fast as it was raining nearly every day. He just helped me half a day when he had to go to help the other farmer, so then I was alone with no help in sight. The weather began to look more like hay weather, so I cut down a small piece expecting I would get a small boy from my neighbor to load and drive the horse on the hay-fork, but when the hay was fit to draw in my neighbor's oldest son was sick and he wanted the little boy himself (he was just letting him come for accommodation any way), so I resolved to do what I could alone. I hitched up the team and went to the field for a load of hay. I would pitch some on, then get up and tramp it. By getting on the load and tramping four times I could put on a good-sized load, and in this way I managed to get thirty loads of hay in the barn by having my wife drive the horse on the hay-fork.

When I had drawn in about fifteen or twenty loads alone I was getting pretty tired and would have given pretty nearly anything for a good man to help me out with the rest of it. There were a couple of town men coming to do some repairing to the house, so I tried to get one of them to help me but he refused. I kept coaxing until finally one of them took out his watch to see the time of day (it was about ten o'clock), so he said he would help me the rest of the day if I would pitch the hay on and pay him two dollars and fifty cents, so I told him to "come on." I started for the field with my man. While on the way to the field I offered him a dollar and seventy-five cents for the afternoons to help me with the hay while they would be working at the house. He said it was a bargain. I felt then as if a ton of weight had been taken off my shoulders. I pitched the load on very carefully as I would for a boy. When we came to the barn he drove the horse on the hay-fork while I was handling the fork. Then we got in the mow to level it. When we had a little over half of it moved away I asked him to finish it while I would "bunch up" some for the next load with the rake, and he just looked at me and said, "Mr., I can't," and climbed down out of the mow and lay down until I had finished mowing it away and bunching the hay. Then we took in two loads after that, but he did not get in the mow any more. He just loaded and drove the horse on the fork. Then as I had a little help I thought I would cut a larger piece of hay so that we would be kept busy. When the hay was ready I asked him to come and help me to draw it in, and he said he guessed he would not help me as he could not stand it. I coaxed him but got no results. There was nothing for me to do but go at it alone. As the weather was good the hay did not spoil very badly, except a little at the last having gotten a little too dry before I got it in. While I was working away alone another town fellow came along and agreed to help me a few days the next week. The following week I started haying on a farm that another man and I had rented. When the hay was ready we started to draw in after dinner, the other man and his son with their team and the town man and I with my team. I pitched on and went in the mow while he was to load and pitch off, as we were starting to fill a mow that had no hay-fork track. He loaded about half of the first load and I helped him pitch off part of it, then we went out and put on another load and I had to help him pitch it off. We had a small boy raking, so I had him change places with the boy while we put the next load on, then I had him come to the barn and pitch it off, and I had to help him pitch off the last of that load so that we would not keep the other man and his son waiting. He loaded the next load and when we came to the barn he went out of the barn and lay down while I put the load off as best I could. Then he loaded the last load for that day. (You will note that it was all low pitching as the mow was empty.) The next morning I asked him if he could cut hay, and he said "Yes, he had cut hundreds of acres," so I oiled the mower and started him at cutting hay while I went to help draw in. It is a safe bet that I would cut more hay in two hours than he did in five. After dinner he and another man and a boy went out for a load while we were putting one off. He was helping to pitch on but before they got the load on he came to the barn. Then we let him drive the team on the hay-fork rope the rest of the day, and that night he wanted his money.

A few farmers were through having by this time and I got a farmer's son to help me take off the rest of the hay. He would pitch more hay in a day than the other fellows would in a week. This is nothing but my true experience with town help, and by what I have heard from other farmers this is a fair sample of the help we can expect from the cities.

I have even heard talk of women coming from the city to the farms to help with the harvest, but after the experience I have had with men the women would just

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help to keep bread from moulding. In conclusion, I would say if the Government wants what they are crying for (greater production) they have got to leave the experienced farm help on the farms.

Elgin Co., Ont. J. D. G.
 [NOTE.—This year it is doubly important that all help possible be supplied for the farm. It must be remembered, however, that farm work requires strength and ability, and we agree with our correspondent that in so far as possible experienced farm help should be left on the farms. It is possible that others of our readers got good results from town help last year. We know some who did. Let all give their experience.—Editor.]

The Wide Sleigh Favored.

EDITOR "THE FARMER'S ADVOCATE":
 Just a word of commendation on what your Wentworth subscriber writes in your issue of Feb. 7th re wider sleighs.

I think there should be a standard of not less than 4 feet, and a penalty for any made narrower. It seems to me unreasonable to expect to balance a high load, or drive a draft team on about a 3-foot space, as I believe that is about the width of the ordinary sleigh.

I would like to see interest enough taken in this important matter to make wider sleighs law. It wouldn't affect the cutters now in use, as they would run just as well on the wider road as they do at present, and I believe it would pay the farmers and other users of sleighs in one year the expense of having them widened, as it is quite a common thing to see a man in trouble with an upset load, or to see one horse pulling the sleigh while the other one is led behind after a heated crowding contest.
 Simcoe Co., Ont. SUBSCRIBER.

Automobiles, Farm Machinery and Farm Motors.

Things Technical.

The purpose of a great deal of automobile literature can hardly be construed by the average person because the language used is of necessity somewhat technical. Manufacturers do not adopt popular forms of expression and so fail to indicate clearly each idea behind their product. To get an accurate conception of any car the reader must be equipped with at least a modicum of knowledge regarding names and expressions utilized every day in motordom. Catalogues are being distributed in thousands at the present time and it seems only right that some light should be given the layman at points where descriptions are clouded. Each catalogue or pamphlet contains what are known as specifications and when you read these let us ask that you bear the following explanations in mind.

"Wheel base" means the distance between the dead centres of the axles,—it is not the length over all. There are two types of cooling systems,—the "thermosyphon" which operates naturally by the water heating, rising, dropping through the radiator, cooling, heating again and so on, and the pump method which circulates the water by means of a centrifugal pump. The "accelerator" is as its name would suggest, a pedal by which additional gas can be fed to the engine with a resulting increase of speed. The expression "center control" puzzles some people. It is nothing more nor less than a trade name for the system by which the lever that changes the gears is set in front of the center of the driving seat. Cars with side control have the lever close to one of the doors. Oiling devices have various names. "Full force feed" means forcing the oil by pressure direct to the crank shaft bearings and through drilled holes in the crank webs to the crank pins, then through oil pipes attached to the connecting rods or through hollow connecting rods to the piston pins. With "force feed" the oil is driven by pump pressure, direct to the crank shaft bearings, then through drilled holes in the crank webs to the crank pins. The lower ends of the connecting rods throw oil over the piston pins, pistons and cylinders. In a "splash system" the connecting rods dip into and splash oil from a reservoir of the lubricant to all parts of the engine. With "splash circulating" the oil is driven from a reservoir by means of a pump or by the revolving fly-wheel to splash troughs. When the word "service" is applied to a brake it means one used for ordinary occasions and by the foot. An "emergency" brake, as you can readily surmise, is for extreme occasions and generally worked by hand. An "I-beam" axle is one shaped like an I.

Wheels that are described as of "artillery" type are simply those having wooden spokes. It is hard to understand why the word "artillery" has been used. The "side members" of a chassis are the two long pieces of steel constituting the sides of the frame. There are four types of springs, the "cantilever" which runs from a point above the rear axle to a place one-third to one-half the distance up the frame. "Full elliptic" springs are made by connecting one long spring to another of equal length. With the "three-quarter elliptic" the top spring is only one-half the length used in the "full elliptic". The "semi-elliptic" type means nothing more

nor less than that one spring is used but the curve is upwards while in the case of the cantilever it is downwards. The "one-man" top is the style that is connected only at the top of the windshield and at the back of the car, there being no bows in between for supporting purposes. One man can loosen this top and throw it back. Where there are bows in the middle of the car it takes two people to handle the top. "Gypsy" curtains are those which not only cover the back of the car but all that space between the back and the first angular supporting bow. The "rain vision ventilating windshield" is one that splits in the centre allowing both pieces to revolve. When it rains the upper and lower half can be made horizontal instead of perpendicular and a clear view of the road provided. One piece windshields are not safe in a storm because the water runs down them in a continuous film. The different types of rear axles were described so recently by us that comment is unnecessary here.

There are a number of arbitrary names for body styles but still a few have been used so continuously that their meaning is now established. Generally speaking, we refer to "touring" and "roadster" cars. Of the former there is the "open" style which has a top made of mohair, burbank or other light material. These are closed cars. The "coupe" seats three or four people and a "coupelet" or smaller "coupe" seats three people. A "sedan" will accommodate from five to seven. It has only one door on each side. "Limousines" and town cars contain separate compartments for the drivers. In roadster bodies there is the "clover-leaf" in which entrance to the back seat is secured from the same door as the front seat. The "fleur-de-lis" type is along the same line. Sometimes both of these makes are called "chummy".

AUTO.

Storage Battery.

Where can I get refill for wet storage battery, and about how much would it cost? Is this a satisfactory kind of a battery for a twelve-horse power engine for use on a farm? I have not had any experience with battery or engine yet.

J. B.

Ans.—A storage battery is not a satisfactory battery for a farm engine, unless there is a generator on the engine to charge the battery. When storage batteries run down you do not buy a refill but take the battery to some place where there is an electric plant and have the current run through the battery backward for about 48 hours. This charges the battery. When it runs down again the process is repeated. You don't want to be without your engine two or three days every time the battery wants recharging. I surmise that the battery you have in mind is not a storage battery at all, but one composed of wet cells, which is an entirely different proposition. Some forms of wet cells are suitable for use with make-and-break ignition, and you can buy new plates and salt for the solution as required, but the kind to buy and where to buy them depends entirely on the kind of battery. If you buy an engine with this form of battery ask the makers where the refills may be procured.

W. H. D.

To Operate Hay-Fork and Slings With Engine.

I have a two H. P. gasoline engine. By attaching a spool to a large belt wheel run by engine I propose to use engine on draw rope for hay-fork and slings by taking two or three wraps around spool as required to keep it from slipping, pulling the rope by hand, thereby doing away with extra team or changing from wagon to rope. Engine has four-inch pulley with 375 revolutions per minute.

1. What size spool and what size belt wheel would I need to pull the rope as fast as a steady walking team?
2. Would this method be satisfactory or would it drive too slow in order to get power or purchase?
3. Has this method ever been tried?

A. P.

Ans.—I fear your plan is not a very feasible one. You say the engine is going to pull about as fast as horses walk. In hoisting hay by fork or slings the horses usually walk pretty smartly, probably about 3 to 4 miles per hour. At 4 miles per hour you would have to pull almost 6 feet of rope per second and in the average barn the amount the horses would travel would probably be about 150 feet. It would take some hustling to pull 6 feet of rope per second for 25 seconds and keep enough tension on the rope to keep it from slipping on the spool, and this is true whether you pull hand over hand or walk out like the horses, pulling the rope after you.

In order that the spool may be as short as possible it must be made as large in diameter as feasible. The pulley is larger than the spool, hence it is the former which limits the size. Perhaps a 3-foot pulley would be as large as practicable with a 4-inch on the engine. If this size were chosen the diameter of the spool should be 21 inches in order to give the same rate of travel as a horse going 4 miles per hour, or 16 inches for 3 miles per hour. And what length? Perhaps an average travel would be about 150 feet. This would mean 27 turns on a 21-inch spool, and allowing 3 turns for friction the number would be 30. For 1 1/4 inch rope that would require the spool to be 37 1/2 inches long, or say 40 inches to allow for the rope not running as close together as possible. Inch rope would require a spool 32 inches long.

For a 16-inch spool the length would be one-third greater than stated above.

If you want to drive as fast as horses going 2 miles per hour the spool should be 10 1/2 inches in diameter and 80 inches long for a 1 1/4 inch rope and 64 for an inch rope.

It is doubtful if a 2-h. p. engine would handle a slingful at 3 to 4 miles per hour. I should not expect it to handle it faster than 2 miles per hour at the very fastest.

Another detail you would have to work out would be a clutch for releasing the spool so it would roll freely when the rope was being pulled back, and I am inclined to think the pulling back might be somewhat heavy, and if the rope had been pulled hand over hand in the first place there might be danger of its kinking while being pulled back. We do not know of this plan having been tried.

W. H. D.

Canada's Young Farmers and Future Leaders.

Doing Chores.

Chores are among the most important tasks on the farm. They must be attended to Sunday and Monday, night and morning, in fact, it is doubtful if they are ever done. On how they are done depends to a large degree the success of the man, woman, boy or girl. No one has a monopoly on chores, although the boys and girls consider that an undue share falls to their lot. Chores do not necessarily mean feeding the stock, carrying in wood, washing dishes, etc., they embody ridding up around the buildings, keeping things in order and repair, consequently chores are listed the year round. But, what have they to do with the character of the man or woman? Just this, "as a twig is bent the tree is inclined," and the youth who does his small chores in a slipshod manner will unconsciously do the bigger chores, which fall to his lot in later life, in much the same way. A habit once formed is very difficult to break; it becomes second nature for a man to continue doing things the way he learned to do them when a boy. Boys, be sure that you get started right.

About the first chore a small boy is called upon to do is filling the wood box and carrying in water for mother before and after school. These are not always

agreeable to the young mind, especially if a chum is calling from across the field or the Collie dog is coaxing for a romp, or you know that the fish in the nearby brook are just waiting for you to hook them out.

If it were not for these calls to neglect your work chores would not be the character builders that they are. Attending to duties first, makes pleasure afterwards all the more enjoyable. The boy who watches that the wood box and water pail are never empty when he is around will grow up to be on the lookout for things that require doing, and will do them at the right time, and this will tend towards his success.

Let us follow the career of one boy. There may be many similar cases, who never saw the empty wood box. He always had to be told to get his chores done, and then he would oftentimes only bring in a few sticks of wood and away he would go to his play. He never could see just why he was called upon to do certain work. He grew to be a husky lad as healthy farm boys will, and was entrusted with feeding the calves. The new duties were willingly accepted, but in less than a month the calves began to look rough and unthrifty. They were not getting their feed regularly, nor were they properly cared for. When this boy left public school and commenced taking a man's place on the

farm the careless habit followed him. If there was anything doing at the nearby village in the evening, his team would not be cleaned, and the feed would be thrown at the horses and cattle regardless of whether or not the mangers were clean. An animal off its feed was seldom noticed until it went off its feet, and then it was oftentimes too late for treatment to effect a cure. This boy passed into manhood, he commenced farming on his own account, but results were such that he frequently said "Luck is against me." In reality it was his own careless ways and failure to see and do things at the right time and in the right way that was his worst enemy.

The men of to-day who attend to their duties and are considered successful attended to their duties as boys. Their habit of looking for things that required doing in boyhood and seeing that they were done before they went off on pleasure bent, has grown on them and it will generally be noticed that they had about as much real fun as the other fellow. The boy who kept the wood box filled without being told to do it every day will see that the calves are fed properly and regularly. Their pens will be kept clean and they will be trained to lead, with the result that it is a pleasure to have visitors see them. The boy has system in his work.

When the mature stock comes under his care they are well looked after. Things do well for him. When he commences farming for himself the entire herd is kept thrifty, whether composed of pure-breds or grades; the fences are always in repair, and nothing is out of place around the buildings. A place for everything and everything in its place is the policy. This and doing things at the right time have been factors which made for his success. But, who will deny that the foundation of his success was in attending to duties and giving full measure when a boy? The man cannot readily change the habits of youth.

Now there are many young men who are careless about doing the chores. To get them done appears to be the chief aim. Mangers are left dirty, cattle are rushed in and out of the stable, and are beaten if they do not immediately do as they are expected to. There are no regular hours for feeding, and the stock do not look as thrifty as they should. Care and attention are important factors in stock raising. If the careless one would make a determined effort he could yet overcome some of his slipshod habits. It will take time, but it can be done if sufficient will power is exercised. If one would be careful and diligent in the bigger things of life he must commence by doing the chores right, and the habit will grow. No task about the farm, that is worth doing at all, should be slighted. Your best work should be done on the smallest job if you would become successful in your business.

A Square Deal For Every Man.

EDITOR "THE FARMER'S ADVOCATE":

When reading a recent issue of "The Farmer's Advocate," I noticed under the topic "Food for Thought," a sentence: "Give Every Man a Square Deal." It appealed to me very forcibly, and I have thought about it a great deal. Many cases came to mind of where the hired man had not been given a square deal by his employer; there were, of course, more cases where a square deal had been given. A man is shortsighted who does not give his hired help a square deal. No matter how faithful a man is, he will do better work if his employer encourages him a little, and when a mistake is made it should be pointed out to the man and an effort made to rectify it, rather than finding too much fault. These words of Sir Walter Scott frequently come to mind: "The man whom I call worthy of the name, whose thoughts and exertions are for others rather than for himself, whose high purpose is adopted on just principles and is never abandoned while heaven or earth affords means of accomplishing it. He is one who will neither seek an indirect advantage, nor take an evil path to secure a really good purpose." It is not what a man has, nor even what he does which directly expresses his worth so much as what he is himself. If hired help is given a square deal it makes them more considerate of their employer. I am an old farmer and have had a good deal to do with hired help. I have travelled very little, as I have stayed with the old farm all my life and still have faith in it. One must remember "If little labor, little are our gains; Men's fortunes are according to their pains." This may be good advice for Canada's young farmers and future leaders. I don't think there is anything better than the old farm. York Co., Ont. PIONEER.

Making Friends of the Birds.

EDITOR "THE FARMER'S ADVOCATE":

At this time of year we begin to think of, and long for the spring, and thinking of spring reminds us of the earliest returning birds that always get caught by a late cold snap. In these days there is no excuse for ignorance of the value of the birds to farmer and fruit grower alike. Every paper and magazine is full of information, and people who were, in earlier days, called sentimentalists, because they protected birds, are now proved to have had a lot of wisdom mixed with their sentiment.

For several years I have been in the habit of providing for those birds that come early, only to be caught in a snow-storm that hides all seeds from sight. I can't keep the birds from freezing, but I can feed them and so help them to withstand the cold. When we are cleaning up seed wheat I put the screenings in a sack, and I do the same when cleaning any other grain for market. It takes only a few minutes and my bird-feeding is ready. When it is needed I put a pile under a shrub near the house, the birds soon find it, and our whole family has amusement and pleasure while the cold spell lasts.

I think last spring we had more feathered visitors than ever before—blackbirds, robins, juncos and sparrows of all kinds, and one bird I thought was a lark but I wasn't sure of him. There were about forty or fifty of those blackbirds feeding every day, and with them came a beauty of a redwing. A flicker came and perched on a stick one day but didn't come again that we saw. He may not have seen a chance to eat with so many blackbirds about. The birds we all fell in love with were the white-crowned sparrows. There were thirty or more of them and they stayed for about three weeks, then all disappeared in one night and we certainly missed them. They were so fearless, feeding on weed and grass seeds and crumbs scattered a few feet from the window, where we got a close view of their white velvety caps with black edges.

This year we have our seeds all ready and hope those sparrows and the redwing will reappear on our yard if they happen along too early in the spring.

In talking of feeding the birds it may not be amiss to speak of how I provide water for them in the summer, or rather a means of getting at the water. I had

always kept a piece of plank floating in the cattle's tank near the barn, but when several hens were drowned I saw it was time to get a better float of some sort, one that would keep the hens and turkeys from slipping in and still allow plenty of room for a cow's nose. I nailed heavy boards together for a float. It moves freely and a heavy turkey can't tilt it enough to slip into the water, and fowl and birds can stand on it to get a drink.

I hope that those who read this will be influenced to try my plan for coaxing and feeding the birds this coming spring. It will mean both pleasure and profit. Middlesex Co., Ont. C. B.

Judging Dairy Cattle.

EDITOR "THE FARMER'S ADVOCATE":

Three main items are considered when judging dairy cattle, namely, constitution, capacity and the mammary system. The constitution is an indication of the animal's ability to breathe in sufficient fresh air to keep a healthy body, and heart room to force plenty of blood through the system. Capacity is required to enable the animal to consume the greatest possible quantity of feed, and the mammary system is the indication of a cow's ability to produce. When judging stock, I always like to get a general view of the whole class at the beginning, because I usually get my placings from this observation. There are a number of important points which the judge must observe, and the head is one of these. I like to see a large muzzle, open nostrils, the forehead wide and eyes far apart, prominent and alert. I prefer a shoulder that is pointed at the top with no slackness between the blades, and extending down so as to be far apart at the bottom, giving plenty of chest room. A cow should not be tucked up at the foreflank. Well-sprung ribs, good width between hook and pin bones, and long hind quarters are usually looked for. I like



R. Maxwell.

Winner of first place in judging dairy cattle at the Toronto and Guelph competitions in 1917.

to see the udder attached high up behind and extending well forward; I do not like a pendulous udder. It should be soft and pliable, showing no meanness so that when the cow is milked out the udder will be quite soft. The milk veins should receive due consideration, as should also the handling qualities of the animal.

When judging, I do not believe in putting too much dependence on the score card. I remember when in the Competition at Guelph, I was walking along behind the class of cows and noticed one with a fairly good udder, well-placed teats, and desirable hind quarters. Naturally, I formed a good opinion of her, but when I went around to the front I noticed that her eyes were dull and her head and neck were covered with coarse hair. From this viewpoint, I did not consider that she should win in the class, so I placed her last. If I had been working on a score card, undoubtedly this cow would have been placed higher up. At the Toronto Exhibition there was a marked example of a drooping hind quarter and an unbalanced udder. The judge preferred a good top line, and by good fortune I had laid stress on this point when making my placings and giving reasons. In another competition there was almost a perfect heifer in the class, but as it was her first period of lactation she showed very little veining. On this account some of the boys in the competition placed her down low, owing to her form and other good qualities, the lack of veining was not sufficient to discredit her. The idea is to look for the outstanding points. Our District Representative used to say, "Never write an ode on a go, quickly, so pick out the points that will count for merit. Always be in the ring in good time." I have endeavored to follow these principles, and try to be

on hand from twenty minutes to half an hour before the class is called. I have found that it does not pay to gaze around the ring, looking for friends, but the mind should be concentrated on the work in hand. When it comes to giving oral reasons, a person must endeavor to keep his nerves under control and not get excited when the judge asks questions about the animals.

When in the competition I do not like to crowd around the animals too much, but prefer to stand back a little so as to get a general view of the class. When everybody is crowding around the animals, no one has a chance to compare the different points. Consider the other fellow, and remember that he has equal rights with you. When your first placing comes into mind, I find it a pretty good plan to remain by it, for nine times out of ten the first impression is the nearest to being correct, and to go changing around, unless you have well-founded reasons, simply gets one muddled. Peel Co., Ont. R. MAXWELL.

THE DAIRY.

If cows are not paying, who is to blame?

Good heifers seldom happen by chance. G. H. Barr.

Standard size cheese boxes may have to be used in the near future.

Why should prices of dairy products remain stationary and feed prices go up?

There is no cheaper food than milk at 12 to 15 cents a quart. Prof. H. H. Dean.

In the past fourteen years the milk yield in Canada has been increased by about 30 per cent.

If the war ends now we can't get away from the risk of famine until 1919-20. J. W. Robertson.

From a food standpoint, cheese is too low in price as compared with other food products.—Prof. H. H. Dean.

A. A. Ayer, a produce merchant of Montreal, believes that we will have to discontinue a lot of jealousy, selfishness and undue profiting before the war will be won.

When prices of dairy products are set by Governments, dairymen believe that their views should be heard and considered. Who has any better idea of what it costs to produce milk and fat than the man feeding and milking the cows?

When milk is marketed through the cheese factory or creamery there is a by-product which has a comparatively high value as hog feed. This should be taken into consideration when comparing the price paid per hundredweight of milk by the whole-milk trade with that paid by the cheese factories. The value of whey and skim-milk for feeding stock is regulated largely by the price of grains.

There is considerable expense in getting cheese from factory to ocean port. The following will give some idea—freight, three-sixteenths to three-eighths cent per pound; storage and insurance, one-eighth cent; interest, one-eighth cent; cost of buying, invoicing, inspecting, etc., one-sixteenth cent; a total of from one-half to eleven-sixteenths cent per pound, in addition to labor of receiving, cooperage, cartage, and port charges, nor does this include office expenses and taxes.

The United Kingdom is the chief market for Canadian cheese, but condensed milk products are in demand in several countries which partially accounts for manufacturers of such being able to pay high prices for milk. It is a matter of supply and demand. There is another reason; all the solids in milk go into condensed products, about one-half into cheese, and around a third into butter. Why shouldn't there be a difference in the price paid by manufacturers of the different products for raw material?

Buttermilk as a Tonic.

Buttermilk is a beverage which is highly prized by some folk. In towns and cities there is a good demand for it, but on many farms where the material is plentiful it is considered more of a hog feed than as a food or tonic for man. Experiments have shown that it has practically the same value as skim-milk for pigs. It has been fed to calves but care must be taken to gradually accustom them to this kind of drink. For certain ailments of man "buttermilk" is prescribed by medical men. It appears that the lactic acid in it has a beneficial effect on the system. Wm. F. Droge of Colorado Agricultural College, writes as follows regarding buttermilk:

"It is a dairy by-product the food value of which is often underestimated. Buttermilk produced by the manufacture of good butter from a good quality of well-ripened cream is one of the most healthful foods obtainable. Its healthfulness is derived from the lactic acid present. This is formed when a certain type

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of bacteria, called the "bacterium lactic acid", converts the milk sugar into lactic acid. These bacteria are always present in normal milk and cream, and this process of forming lactic acid is the natural souring of milk, and is known as cream ripening.

Buttermilk is an excellent hog feed, and probably most of it is being used for this purpose; but it should be more universally used as a human food, especially since it is a cheap article; and during these times when we must all keep ourselves in the best possible condition, buttermilk should be used as a spring tonic."

Dairy Record Competitions.

The dairy breed associations for the past year or two have offered liberal prizes to owners of cows and heifers making the largest records in the Record of Performance test. Dairymen realize that a good record is a strong advertisement for the herd. The competition induces the various breeders to feed and care for their cows so as to get the most out of them. A year ago the Holstein-Friesian Association voted the sum of \$560 for prizes. This was divided over four classes with seven prizes in each. At their annual meeting held recently, a similar sum was again set aside for this competition. Following are the names of the winners in each class in 1917, together with their records and the name of owner:

Mature Class.

Name of Cow.	Lbs. Butter 80% Fat.
Desta	1,048.75
Baroness Madoline	1,043.75
Posch Queen Wayne	941.25
Grace Mantel	922.50
Olive Starlight Pietertje	922.50
Canary Queen De Kol	921.25
Ena Netherland De Kol 2nd	900.00

Four-year Class.

Plus Pontiac Artis	1,020.00
Johanna Korndyke De Kol	851.25
Bonheur Queen Mercena	838.75
Lady Sybil of Appledale	808.75
De Kol Korndyke	783.75
Midnight Comet De Kol	767.50
Gracie Mercedes Springbank	743.75

Three-year Class.

Mildred Pietertje Abbeker	876.25
Epworth Barbara	742.50
Colantha Beauty	707.50
Desta 2nd	671.25
Korndyke Wayne Daisy	640.00
Lucy Posch	627.50
Hillside Korndyke Lady	590.00

Two-year Class.

Hill-Crest May Echo Pietertje	727.50
Calamity Snow Wayne	718.75
Agassiz Pietje Korndyke	670.00
Hill-Crest Verbele Echo	652.50
Dusky Mercedes Baroness	637.50
Jewel Butter Girl	597.50
Lady Lyons Favorit	585.00

The Ayrshire Breeders' Association offered cups in the different classes, in place of cash prizes, and this created considerable interest among Ayrshire breeders. The winners this year were all Ontario breeders. No phenomenal records were made, and no records were broken. In the mature class, Dairymaid 2nd, owned by T. C. Treverton, Latta, Ont., secured the cup. Her record was 15,365 pounds of milk and 617 pounds of fat in 334 days. Grace of Fernbrook was first in the four-year-old class for E. Burpee Palmer, Norwich. Her milk yield was 12,940 pounds, yielding 530 pounds of fat in 365 days. Leonre 2nd was the winner of the cup offered in the three-year-old class. She was the silver cup winner in the two-year-old class last year. Her milk record for 1917 was 11,302 pounds of milk and 496 pounds of fat. This heifer is owned by Harmon McPherson, Copetown, Ont. In the two-year-old class, Springbank White Rose, owned by A. S. Turner & Son, Ryckman's Corners, Ont., was the winner of the cup. She gave 12,209 pounds of milk and 546 pounds of fat in 365 days.

It is the quantity and quality of milk that a cow gives that largely determines her value as well as the value of her progeny. Of course, dairymen should not lose sight of type and conformation in their endeavor to make big records. If forcing a heavy milk flow renders a cow less robust and unable to continue as a profitable producer and breeder, an irreparable harm has been done. There is a limit to a cow's power of production. However, the average dairyman might increase his herd average a considerable number of pounds of milk and fat without running any danger of injuring the animals in any way. The standard in many stables is altogether too low to enable a reasonable profit being made. When making big records the quality of offspring must not be lost sight of. The type cow which gives a large flow of milk of good quality, is a regular breeder and a transmitter of her qualities to her progeny is a valuable animal. There is need for greater care in selection of the breeding stock. The mediocre cow or heifer does not get to the front ranks in competitions. It is the cows and heifers that are descended from heavy-producing stock and are themselves good, typey individuals that win the silver cups and cash prizes for

their owners. The herd can be greatly improved in a few years by using a sire with desirable conformation and backing. Such bulls are usually held at a high figure, but purchasing one that carries the blood of high-producers and has individuality is generally a good investment. No one breeder has an option on these cups or prizes, they are awarded on merit. Why not try to win in one of these competitions this year?

Jerseys Make High Records.

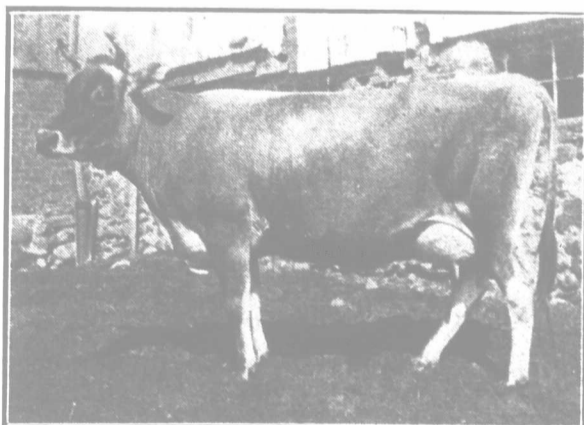
For over twenty years there has been a Jersey Breeders' Association in Canada, but the present Canadian Jersey Cattle Club was organized in 1901 and incorporated in 1905. In 1906 the registrations totalled only 450, and the transfers 33; while in 1917 the registrations were 1,703, and the transfers 1,151, which gives some idea of the growth of the Association. B. A. Bull, Secretary of the Association, recently referred to the record work with Jerseys as follows: "In the report of the Canadian Record of Performance in 1908, no Jersey breeder's name appeared; in 1910 the records of three Jerseys were given, but since that date Jersey breeders have realized the value of the R. O. P. test and certificates have now been issued for 255 qualified Jerseys, and there are a large number under test at the present time." "Sunbeam of Edgeley," the cow which won the dairy test at Guelph, in 1915, has brought renown to the

Lbs. Milk	Owner.
27,128	Jas. Knapp, Merrickville, Ont.
21,770	Wm. Stock, Tavistock, Ont.
20,863	P. Russell, Alox, Alta.
23,009	J. F. Gibbons, Renfrew, Ont.
20,046	Peter B. Fick, Port Rowan, Ont.
19,867	J. M. Steves, Steveston, B. C.
19,959	Colony Farm, Essondale, B. C.
20,911	S. Lemon, Lynden, Ont.
18,770	Manitoba Agricultural College, Winnipeg, Man.
17,587	Hospital for Insane, Selkirk, Man.
19,072	John Anderson, Oxford Mills, Ont.
17,577	A. A. Ireland, Easton's Corners, Ont.
14,578	Jas. G. Currie, Ingersoll, Ont.
13,698	T. H. Dent & Son, Woodstock, Ont.

21,135	W. L. Shaw, Newmarket, Ont.
16,044	G. A. McCullough, Navan, Ont.
16,299	W. C. Shearer, Bright, Ont.
16,231	J. F. Gibbons, Renfrew, Ont.
13,673	Richard Clarke, Atwood, Ont.
12,921	Richard Clarke, Atwood, Ont.
13,590	W. A. McElroy, Chesterville, Ont.

16,313	Geo. A. Peever, Renfrew, Ont.
15,951	Walburn Rivers, Ingersoll, Ont.
14,644	Dir. Exper. Farms, Agassiz, B. C.
15,491	Geo. A. Peever, Renfrew, Ont.
13,666	Elsworth Plant, Burford, Ont.
15,415	John A. Plaunt, Renfrew, Ont.
14,520	Dir. Exper. Farms, Agassiz, B. C.

breed she represents by yielding 18,744 pounds of milk, and 926 pounds of fat in one year. Her sire is the imported bull, Br. King Edward, and her dam traced to Corrine of Don. "Beauty Maid," sired by St. Patrick Dentonia, has made a wonderful record as a four-year-old, having given 14,852 pounds of milk, and 872 pounds



Beauty Maid.

Four-year-old record of 14,852 lbs. milk, and 872 lbs. fat. Owned by D. A. Boyle, Woodstock, Ont.

of fat. These fat records stand out prominently when compared with records made by representatives of other breeds. Testing definitely picks out the high producers and shows what each cow is worth in dollars and cents each year, and also enhances the value of her progeny. The record work is becoming popular with owners of the different dairy breeds.

Are you satisfied with the production of your herd? Geo. H. Barr claims that a man has to become dissatisfied with what his cows are doing before he makes a very strenuous effort to increase the milk yield.

The Number of Pure-bred Dairy Cattle is Increasing.

At the annual meetings of the various dairy breed associations, a resume of the preceding year's work is always given and the members have an opportunity of discussing problems of vital interest to them, and to outline a policy for the ensuing year. While the prices of dairy products were high in 1917, as compared with pre-war days, there was a proportionately greater increase in the price of labor, feeds and dairy utensils. Consequently, the high prices which the dairyman received for his milk or cream did not prove to be such a bonanza to him as would appear on the surface. On most dairy farms there is a supply of roughage, but concentrates were difficult to secure even at a very high price. The man with a high-producing herd was best off, as labor, maintenance and overhead charges are little higher with a herd averaging 8,000 pounds of milk per year than with the herd averaging 5,000 pounds. The high prices of feed and labor should be a strong factor towards inducing dairymen to pay more attention to the quality of the animals in their herds. There are still too many mediocre cows requiring labor and attention three hundred and sixty-five days in the year. These animals cannot be gotten rid of all at once, but a policy of selection and elimination should be adopted on every farm so that in time every individual kept in the herd would be up to a certain standard of production. The labor shortage at the present time is very acute and has led to a large number of sales being held this spring. While some dairymen are practically going out of the business, others are going into the business more strongly, so that the number of dairy cows in the country will not be reduced. Reports show that there is a gradual increase in the milk yield per cow over the Province, but it is not as great as it should be. There is still a tendency for the average dairyman to curtail on the amount of money he will spend for a herd sire or for breeding females. A poor sire not only prevents improvement but sets the average production for the herd, three or four years hence, back a good deal. On the other hand, a sire of the right blood lines and with recognized dairy conformation will produce heifers that will give several hundred pounds of milk more in a lactation than what their dams yielded. Every dairyman should have a constructive breeding policy. The standard should be set high and an effort made to have every female in the herd come up to that standard.

The reports of the different breed associations show that the number of members has increased during the year and that there has been a substantial increase in registrations and transfers. The transfers are, to a large extent, an indication of the business which has been transacted by the breeders during the year. The official and semi-official tests are being encouraged by all the dairy breed associations, and liberal prizes are being offered to the individuals making highest records. In at least two of the associations, competitions are held, and this has a tendency to encourage the breeders to feed and care for their stock in order to get the best results. The competition is an incentive for a man to do his best. Very creditable records have been made by representatives of the different breeds. The number of cows giving over 20,000 pounds of milk in a lactation has materially increased, and new records in butter-fat production have been made.

There was considerable controversy among members of the three leading dairy breeds in regard to the proposed changes in the length of time for the semi-official test. Some favored leaving the time as it now is, namely 365 days, with the cow freshening within fifteen months; others wanted a second class in which the test would be for 300 days, and the cow freshen again within twelve or thirteen months. This was considered to be the most practical test as offspring is wanted as well as high milk records. While no change was made, representatives from the different associations were appointed to confer on the matter. The grants or prizes for cows on test were subsequently increased so as to encourage new breeders to enter their stock in the contests. The demand for breeding stock has been fairly good during the year.

Ayrshire Registrations and Transfers by Provinces.

Province.	Registra-tions.	Trans-fers.
Ontario	1,353	1,042
Manitoba	70	48
Saskatchewan	70	66
Alberta	120	107
British Columbia	65	47
Quebec	2,241	1,617
New Brunswick	136	89
Nova Scotia	144	120
Prince Edward Island	89	69
United States	13	
Ancestors	67	
Total	4,368	3,205

This is an increase of 368 registrations over 1916, and over a thousand more transfers. The membership in 1917 was 1,531, which was an increase of 166 over the previous year. The pedigrees recorded to December 31, 1917, were 63,928. L. J. Larte of Montreal is President and W. F. Stephen, Huntingdon, Quebec, is Secretary-Treasurer.

The Canadian Jersey Cattle Club also had a very good year. Its membership has increased from 385 in 1916, to 447 in 1917. To December 31, 1917, the pedigrees

recorded were 9,655. During the year, 1,703 animals were registered and 1,151 transfers issued. The greatest number of registrations and transfers were in the Province of Ontario; Quebec was second, and British Columbia third. D. O. Bull is President and B. A. Bull, Secretary-Treasurer for the ensuing year.

Jersey Registrations and Transfers by Provinces.

Province.	Registrations.	Transfers.
Ontario.....	844	635
Manitoba.....	60	39
Saskatchewan.....	15	20
Alberta.....	85	56
British Columbia.....	213	113
Quebec.....	331	207
New Brunswick.....	68	23
Nova Scotia.....	66	45
Prince Edward Island.....	17	6
United States.....	4	7
Total.....	1,703	1,151

The Canadian Guernsey Breeders' Association was organized in 1905 and incorporated in 1906. Their head office is at Cheggoggin, N. S. It has a membership of 72, and up to December 31, 1917, 1,470 pedigrees had been recorded; 183 registrations were made in 1917. This breed of cattle is not very well known in Canada as yet, although across the line they are esteemed very highly as a dairy breed. Under test they have made high records in both milk and butter-fat. Nova Scotia leads in the number of registrations and transfers, with British Columbia second. The President of this Association for 1917 was T. D. Bates, Brookfield, N. S.

Guernsey Registrations and Transfers by Provinces

Province.	Registrations.	Transfers.
Ontario.....	15	4
British Columbia.....	45	7
Quebec.....	19	10
Nova Scotia.....	72	33
Prince Edward Island.....	16	1
United States.....	16	
Total.....	183	55

The registrations and transfers by Provinces are not available for the Holstein breed, but for the entire Dominion there were 12,019 animals registered in 1917, and 10,656 transfers were issued. There were 22 import certificates for bulls and 13 for cows. During the year, twenty-two farm names were registered. The membership of the Association is rapidly increasing, there being 382 new names added last year. Holstein breeders enter a number of their animals in the Record of Merit test. Certificates were issued for 760 tests made under the R. O. M. rules. In the seven-day test, mature animals made as high as forty-one pounds of butter; senior four-year-olds, over thirty-eight pounds, and junior two-year-olds over thirty pounds. Twenty-one bulls have been admitted to the Record of Merit during the year, which brings the total up to 250 bulls and 3,888 cows. Not so many breeders took advantage of the R. O. P. work, as only 206 cows and 12 bulls qualified. Under this test, the highest butter record was 1,057.50. Dr. Tolmie of Victoria, B. C., is the new Pre-ident. W. A. Clemons was re-elected Secretary-Treasurer.

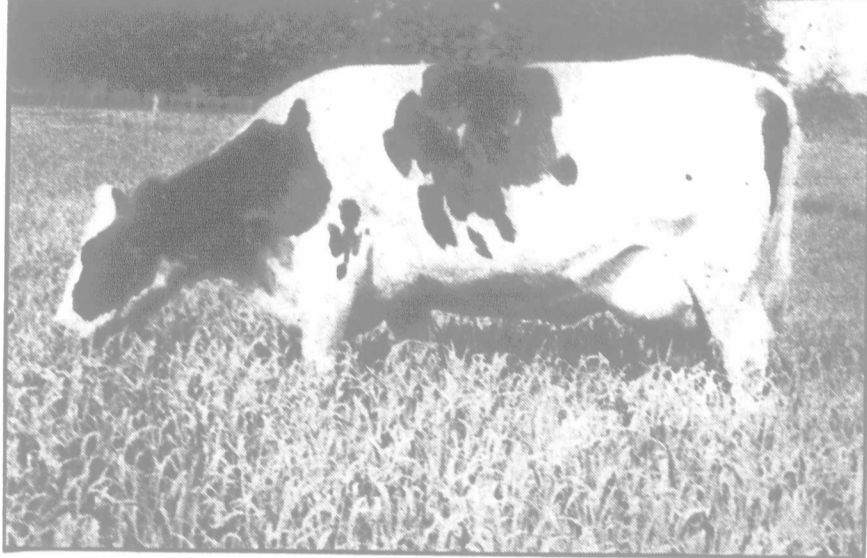
From the above figures, it will be noticed that the four dairy breed associations have had a prosperous year. Not only has the membership been substantially increased, which shows that more stockmen are becoming interested in pure-bred cattle, but there has been a big increase in the number of animals registered. The number of transfers also shows that there has been a demand for dairy stock. The different associations have strong executives for the coming year, and no doubt every effort will be made to further increase the membership of the associations and the popularity and efficiency of the various breeds.

Be a Reader and a Thinker.

In an address at the Holstein Breeders' Banquet, recently held in Toronto, Prof. Dean, of the O.A.C., expressed his regret that more agricultural books were not found in country homes. Few realize the great value of having the latest and best books available for study. Reading books is not pleasant to some folk, but the speaker emphasized the importance of cultivating the habit of reading, as it is the reader and thinker who is progressive. Every dairyman should be a reader and a thinker. One of the greatest farm problems at the present time, in the opinion of the Professor, was how to make farming more profitable, and the lack of money on the farm was characterized as the "root of all evil." Not only must a man be reimbursed for his work, but he must be paid for the anxiety which comes to all men who depend on the soil and live stock for a living. The dairy farm was spoken of as a food factory, and capital, labor and raw material were essential for the manufacture of goods. "Grow your own feed on your own farm" was the advice given by the speaker. The best machinery available, conveniences and efficient cows were also spoken of as factors tending to make for success. Prof. Dean contended that "dairyman could not have too many tests. The oftener a cow is tested and the longer the test the more valuable she becomes." Salesman-

ship was mentioned as a factor to which too few stockmen gave sufficient attention. Many are able to feed stock but are unable to make sales to the best advantage. A study of this phase of the business was advised.

Agriculture is becoming more and more recognized as a profession, and to be successful in it a study of the work is essential. A dairyman has varied interests. Not only must he understand how to make best use of his land, but he must be a judge of stock and know how to feed to advantage. Then, there is the care of milk and marketing to look after. The more a man knows about his work the greater the success he will make in his profession. With the many sources of information at hand a dairyman is able to put into practice what his forefathers found was advisable and practicable in the stern school of experience. Books relating to crops, live-stock, feeds and feeding, care of milk, etc., should be in every dairyman's library. To have them on hand is not enough, they should be read and studied.



Helbon De Kol 5th.

R. O. M. at 4 years and 1 month, butter 24.11 lbs. A daughter has R. O. M. butter in 7 days 31.54 lbs., in 30 days 128.57 lbs. R. O. P. at 3 years, milk 16,346 lbs., butter 711 lbs. A son and daughter of this cow to be sold at Laulaw Bros. sale March 13.

POULTRY.

Eggs and Live Fowl Find Ready Sale.

Egg prices have kept at a high level all winter, which is an indication that there has been a shortage of this product. The severe weather conditions which prevailed from the first of December, lack of certain poultry feeds, high price of feed, and lateness of the hatch last spring, have combined to keep the egg production this winter at a low level. There is probably no farm product where the effect of supply and demand on price is so noticeable. A few days of mild weather in late January or early February starts many members of the flock laying, and the effect is quickly noticed on the market. For instance, in a certain produce store on February 23 there was great difficulty in securing sufficient new-laid eggs to supply the regular customers, consequently, the price was raised several cents a dozen. One week later, a poultryman who had received the benefit of this shortage in supply again appeared with a full crate of eggs, but was quite indignant when he found that the price was four or five cents a dozen less than what he had received just the week previous. The produce man explained that eggs were coming in quite freely and that he had more than enough on hand to meet the demand this week; thus the reason for the lowering of the price. This condition prevails practically the year around—one week a large supply, and the next week the supply not equal to the demand. Shortage of corn and wheat has also been responsible for the low egg yield in many flocks. These two grains are particularly valuable for poultry in the winter. Another factor which tended towards fewer eggs this winter was the lack of development in many of the pullets when cold weather set in last fall. This can be overcome for next year by getting the pullets hatched early. It has generally been found that it is the pullets hatched in April that produce the winter eggs.

The egg and poultry markets report of the Live Stock Branch, Dominion Department of Agriculture, for the week ending February 26, indicates that the supply of Canadian fresh-gathered eggs was still very small at that date and altogether insufficient to meet the demand. On Saturday, the 23rd, the Toronto trade were able to buy from Detroit at 51 cents per dozen delivered. The following Monday eggs were quoted in Chicago at 41½ cents, f.o.b. It was noticed that the cold wave at the beginning of the week curtailed the supply, but when it turned milder towards the end of the week there was a noticeable increase again. The same report states that "the poultry market continues to gain in strength under very light receipts of both live and fresh-killed birds, and the very much smaller quantity in storage as compared with the past two years. Live fowl are in keen demand by the Jewish trade. The result is that in many instances live birds will bring more than dressed. This is particularly the case with

respect to good fat hens. One sale was reported at Toronto during the week at 39 cents, and the dealer who made this sale said he could have sold more at the price if he had had the stock."

Feeding Poultry For Strong Fertility.

EDITOR "THE FARMER'S ADVOCATE":

It may seem rather early for farmers to think about hatching for another year, but after all it is about time to be making some preparation, for these things cannot be accomplished in a few days. If you start now to feed for results along the line of fertility, you should not have so many complaints to make at the hatching season. Many people do not secure the results they hope for, and are often heard to say "wait till another season and I will have better luck, as I will feed a lot of food that

makes for fertile eggs." If we are to get eggs that are strong in fertility there are certain conditions that must be met and these conditions should be as near spring-like as we can possibly make them.

Now is a good time to begin to feed plenty of green feed. If you have mangels they make excellent feed. A good plan is to have some spikes driven into the wall in some handy places, high enough from the floor so the birds have to exert themselves a little in order to reach them, and on these hang one-half of a large mangel which is split in two pieces. This gives them some exercise, which is necessary to get good fertility. The fat, lazy hen will be found to be the one that will lay a few eggs but which are generally lacking in fertility. Then we have clover and alfalfa. The clover should be steamed to get the best results. If you feed a hot mash you can

steam some of the clover and mix the mash with it. The birds do well on this mixture, will lay well in the winter, and in the spring the eggs should be very fertile. If the dry mash is used, get some meal alfalfa and mix about one-sixth part of it with the ground grains. We must not forget the sprouted oats which I think is the best of all green feeds, but it is not every farmer who has an oat-sprouter or the time to sprout them.

If you want fertile eggs, don't feed one kind of grain all winter but rather feed as great a variety of grain as possible, making the birds work as hard as possible for their feed in the morning by having about six inches of dry straw on their floor. For the evening feed, it is a good idea to feed them plenty of corn as they can find it easier and so fill up for the long winter night. It is also a more heating food than the other grains. It pays to go around after the birds are on the roost at night and feel the crops of some of them to see if they are full, and if not you may feed more the next night. It is a good plan to feed a lighter mixture of grains in the morning, such as barley, oats and wheat in equal parts, and at night a heavier mixture such as equal parts of wheat and corn.

Of course the male bird has much to do with fertility and should have extra good treatment. Once in a while, particularly during the breeding season, he might be put by himself in a small coop and fed some raw beef and given milk to drink. The male should always be in the best of condition, for a male bird that is out of condition is of little value in a breeding pen.

If the male bird should take sick during the winter and this be of such a nature as to make him unfit for breeding work, it is better to take him right out of the pen than to wait, hoping that he may come along all right. He might appear all right but still not be in proper condition for the best results. A sick bird of either sex should never be allowed in a breeding pen as it is hard enough to raise chicks that come from good, hardy stock, without trying to raise them from sickly birds. Take good care of your birds now and the results in fertility will in all probability be good in the spring. Middlesex Co., Ont. W. A. S.

Ormond Egg Circle.

In some sections of the country, egg circles are in operation and the members are able to secure a higher price for their eggs and poultry than if the product were marketed at the local store. One reason for this is that the quality is guaranteed. The members stamp the eggs, and if a few eggs turn out to be bad, they can be traced back to the man who shipped them. The eggs are bought strictly on quality basis. True, some circles which were organized a few years ago have gone out of existence, but others have flourished. The Ormond Egg Circle, of which J. A. Campbell is manager, did good business in 1917, according to a statement recently issued. The total number of dozens of eggs handled was 18,694, and the average price was 37.46 cents. The highest price received was 60 cents per dozen, and the lowest, 25 cents. In 1916, the Circle

handle only 25.50 handled in for dressed geese, 18, was paid for

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EDITOR "T

It looks possible to present some valuable a years have but better

If a gro some scale should cert sulphur, I this will d application bark lice, spray, lime scale has orchard at this scale,

Then t two more the "pink balls. As and sulph lead to 40 worms). A 90 per cent I galloa lin arsenate of latter part kind of wea pay to put lime and s it will be Snow and to scab. I Caesar's S Fruit Bran They are a tree throu been dippe years plan eight gallon

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handled 19,600, but the average price per dozen was only 25.56 cents. Both dressed and live poultry was handled in large quantities. The highest price received for dressed poultry was: fowl, 18; chicks, 26; ducks, 22; geese, 18, and turkeys, 30 cents. As high as 23 cents was paid for live fowl, and 22 cents for chickens.

HORTICULTURE.

Care of Bearing Orchards.

EDITOR "THE FARMER'S ADVOCATE":

It looks like asking the farmer for next to the impossible to suggest work in his apple orchard, with the present scarcity of labor, but the bearing orchard is too valuable an asset to neglect altogether. The past two years have been very disappointing to the apple grower, but better times will surely come again.

If a grower is in the San José scale district and he has some scales on his trees, or his neighbor has some, he should certainly put on the dormant spray of lime and sulphur, 1 gallon to six of water. If thoroughly done, this will destroy over 90 per cent. of the scales with one application. If the trees are infested with oyster shell bark lice, they should certainly have the dormant spray, lime and sulphur, 1 gallon to nine of water. This scale has killed many trees in Ontario. One large orchard at Grafton being all dead, no doubt due to this scale, the trees never having been sprayed.

Then to control scab and worms, there should be two more sprays, the second or what is generally called the "pink spray", when the blossoms are small pink balls. As material for this spray use one gallon lime and sulphur to 34 of water, also 2 lbs. of arsenate of lead to 40 gallons, (this poison is mostly for bud moth worms). After the blossoms have fallen or at least 90 per cent. of them, the third spray should be put on, 1 gallon lime and sulphur to 39 gallons water and 2 lbs. arsenate of lead to 40 gallons. If the weather in the latter part of August is more than usually moist, the kind of weather to produce scab, it will more than likely pay to put on a fourth spray, without poison, 1 gallon lime and sulphur to 39 of water. Generally speaking it will be very profitable to put this application on Snow and McIntosh, these varieties being most likely to scab. Before the spraying season get one of Prof. Caesar's Spray Calendars which may be had at the Fruit Branch, or at the District Representative's office. They are also published annually by the Farm Press. A tree thoroughly sprayed must be all as wet as if it had been dipped. An average sized tree, about thirty years planted, will require in the neighborhood of eight gallons of diluted material for each application.

To make a success of this spraying, particularly for trees infested with scale insects, the trees should be cut back to about 20 feet in height. They are also more economical for pruning and picking. There are many trees in Ontario more than twenty-five feet high, with long bare poles (or limbs) and a little bearing wood at the extreme ends. It would be imprudent and more than likely destroy the tree to lower it to twenty feet at one pruning. The lowering must be done gradually by cutting off about two feet, this will check the upward growth and in almost every case force out sprouts on the bare limbs lower down. A sprout should be left every twenty inches and cut back to four inches, so it will form a stocky short branch. In four years some varieties will produce apples on those sprouts. When sufficient new wood has been grown, the top may be lowered to the desired height. Always cut back to a lateral (or side branch); if the cut is made between two branches, there will be a long stub left that is nearly sure to die. Fungus is more than likely to get into the bark, black rot canker will perhaps follow and the disease may go down the branch even into the trunk. Cut out all cross branches or those likely to rub. In many orchards the old trees are covered with very rough bark, under which is a favorite place for scales. These are next to impossible to reach with spray and should be scraped off. A hoe does the work well. Do not scrape deep enough to injure the sound bark. The scraping is much easier done after a heavy rain as there is no dust to injure the eyes.

If an orchard is in an old, tough sod, and many of them are, it will doubtless be more vigorous and productive if the land were cultivated. In most cases it will be necessary to plow it. Unless for appearance, it seems unnecessary to cultivate within 3 or 4 feet of the tree (that is the most troublesome and expensive part to work) as there are few if any feeding roots there. Plow as shallow as possible, deep plowing would be a great shock to the tree, cutting off so many feeding roots near the surface. Cultivate thoroughly until middle or end of June according to locality. In Southern Ontario the end of June in a dry season would not be too late; but in more Northern sections, middle of June would be later. Late cultivation is one of the greatest causes of winter injury.

As soon as cultivation ceases, sow a crop, generally called a "cover crop." There is a three-fold purpose in this crop. First, it takes nourishment from the tree, which has a tendency to mature the wood for winter and will improve the color on the fruit. Second, it holds the snow in winter, protecting the roots. Third it produces some vegetable matter to plow under in the spring. The Fruit Branch has found hairy-vetch and rye one of the best cover crops, 1 peck of vetch to one bushel of rye. It requires a rolling coultter on the plow to turn this crop over as it gathers and clogs on a standing coultter.

If the foliage is of poor color and there is little wood growth, these are sure indications the trees need manure. Barnyard manure can be got at a reasonable price, there is nothing better or surer to give results. Put no

manure within 4 feet of the trunk as there are no feeders there.

The apple orchard is a profitable part of the farm if well managed. The old apple orchards are going fast, many trees will soon be dead. It will not be long before apples are scarcer than they have been for years (that is Ontario-grown). An intelligent young man with a natural liking for growing and handling apples, might be doing a very wise thing, by renting a number of orchards near each other from which he could make a good living. The Fruit Branch of the Ontario Department of Agriculture, is always ready to advise such a man and help him to make a success of an industry of this kind.

Ontario Fruit Branch,

W. F. KYDD.

Apples in Store.

The following table forwarded by the Dominion Fruit Commission, is an approximate estimate of the apples in store at the following points on February 28, 1918, and on the same date in 1917:

Place	1918		1917	
	bbbls.	boxes	bbbls.	boxes
Nova Scotia	103,000		55,000	
St. John, N. B.	7,370	300	(no figures)	
Quebec, P. Q.	3,500	1,300	3,500	
Montreal	22,140	13,671	7,500	5,500
Ottawa	9,500	1,800	2,875	475
Toronto	22,745	11,700	1,500	3,000
Hamilton	2,800	1,400	1,700	
Georgian Bay District	1,500		3,150	
Lake Ontario District	7,100		8,750	
Winnipeg	31,500	5,400	3,400	12,000
Regina		3,800	(no figures)	
Calgary		11,300		6,000

FARM BULLETIN.

Farm Land Values and Wages.

The Census and Statistics Office has published its annual estimates of farm values in 1917 as compiled from the reports of correspondents at the end of January 1918. The estimates comprise (1) the average values of farm land, (2) the average wages paid for farm help and (3) the average values of farm live stock and of wool.

According to the returns received, the average value of farm land for the whole of Canada, including land improved and unimproved, together with dwelling houses, barns, stables and other farm buildings, is approximately \$44 per acre as compared with \$41 in 1916. The average values by provinces are as follows: Prince Edward Island \$43.7; Nova Scotia, \$33.6; New Brunswick, \$28.8; Quebec, \$53; Ontario, \$55.3; Manitoba, \$31; Saskatchewan, \$26; Alberta, \$26.7; British Columbia, \$149. In the last named province the higher average is due to orcharding and fruit growing.

The average wages paid for farm help during the year 1917 have increased substantially since 1916 and have again reached the highest level on record. In many cases they are double what they were before the war. For the whole of Canada the wages per month of farm help during the summer, including board, average \$63.63 for male and \$34.31 for female help, as compared with \$43.23 and \$22.46 in 1916. For the year 1917, including board, the wages averaged \$610.60 for males and \$364 for females as compared with \$397 and \$228 in 1916. The average value of board per month is returned as \$19.44 for males and \$14.79 for females as compared with \$17 for males and \$13 for females in 1916. By provinces, the average wages per month for males and females respectively, in the summer season, including board, were as follows: Prince Edward Island \$39.74 and \$22.63; Nova Scotia \$53.75 and \$26.43; New Brunswick \$57.19 and \$28.14; Quebec \$59.09 and \$28.98; Ontario \$59 and \$31.96; Manitoba \$67.97 and \$40.28; Saskatchewan \$73.21 and \$41.09; Alberta \$76.09 and \$44.44; British Columbia \$78.12 and \$48.30.

On the whole there is but little change reported in the value per head of horses; in some of the provinces the value has remained stationary or has even declined. For cattle, sheep and swine, however, values are substantially higher than last year and are higher than in any previous year for which records have been collected. For Canada, the average value of horses, three years old and over is \$167 as compared with \$160 in 1916, milk cows are \$84 as against \$70; cattle between one year old and three years average \$52 against \$43; sheep are \$14.93 against \$10.48 last year and swine are \$17.33 against \$11.98 per cwt. The average value of wool was 59c. per lb. unwashed and 75 cents per lb. washed. Correspondents were requested to ascertain as nearly as possible the average value per head of each description of farm animal and for calculation of total values the averages have been applied to the total number of farm animals as returned in June last. The results are as follows: Horses \$429,124,000 as compared with \$418,686,000 in 1916; milk cows \$271,981,000 as against \$198,896,000, other cattle \$270,595,000 as against \$291,477,000 sheep \$35,576,000 as against \$29,927,000 and swine \$92,886,000 as against \$69,700,000. The total value of farm live stock in Canada is estimated to be \$1,102,261,000, as compared with \$903,686,000, the estimate for 1916 as finally revised by the Census returns for the Prairie Provinces. In 1917, for the first time the total value of farm live stock exceeds one billion dollars.

Ontario Good Roads Association in Annual Convention.

Speaking at the annual Ontario Good Roads Convention last week, in Toronto, C. R. Wheelock, Orangeville, reviewed the wonderful increase in motor traffic over the Ontario roads during the past fourteen years. Mr. Wheelock said that in 1903 only 220 motor vehicles ran on these roads. The motor traffic in 1917 was 84,353 vehicles, which yielded a revenue of \$940,000 from licenses. The President emphasized the great importance of good highways and railroads, and referred to the recent congestion of railroads, both in the United States and Canada, as an example of what lack of equipment means to the country. Speaking on road organization, F. A. Senecal, Clerk of the Counties of Prescott and Russell, favored a complete county control of the various highways throughout the townships, and advocated an amendment to the Act so that county authorities should be recognized by the townships. By adopting such measures, he said, there would be no attempt on the part of the townships to withhold all expenditures for highway improvement within their own boundaries. Under the present system he believed that much unnecessary money was spent upon roads in good condition simply because the road was within a particular township, while other roads which were in urgent need of repair suffered in consequence because they were beyond the township line. Mr. Senecal pointed out that the good roads in the county were for the benefit of the county and nation in general and were used by travellers from all over the country. It was, therefore, he said, only fair that all townships within the county should contribute equally to the upkeep of county roads.

Major Kennedy, Cooksville, a former President of the Association, dwelt upon the necessity of good roads both as an economic and colonization necessity. If the country is to develop into a large and prosperous nation, it is necessary that good roads, as the main arteries of the agricultural, industrial, and social life of the country, should not be neglected. W. A. McLean, Deputy Minister of Highways, delivered an address in which he went into the details of the building and upkeep of roads. J. F. Vance, Clerk of the County of Wentworth, read a paper on "Road Organization" which was considered one of the best contributed to the convention. Hon. E. G. McDiarmid, Minister of Public Works, addressed the convention. He referred to the recent Acts of the Government in making increased grants towards the construction of certain county roads as a piece of sensible legislation, and said that it was really intended for after the war. He believed that at present the high rate of interest and the shortage of labor would make any program of extensive road construction unwise.

Western Ontario Clay Workers Meet.

The Western Ontario Clay Workers' Association met in annual convention in London, on February 26 to 28. This was the twenty-first annual convention and one of the best ever held by the Association. Amongst the subjects discussed were "The Compensation Act and Safety League," "Economy in the Power Plant," "Erection of Tile Plants," "Prospects after the War," "Co-operation between Tile Makers and the Farmer for a Greater Production," "The use of the Pryometer." Considerable interest was taken in the subject discussed by W. H. Scott, in charge of Drainage Department, Ontario Agricultural College, namely, "Co-operation between Tile Makers and the Farmer for Greater Production." Mr. Scott condemned the practice of selling cracked tile to farmers, in that the policy was bad both for agriculture and the industry which the delegates represented. The speaker also advocated winter production of tile where possible, in order that the farmers might haul the tile at that season and have it on the land ready early in the spring. The suggestion was also made that tile manufacturers have their product tested at the Ontario Agricultural College where full equipment is maintained for that purpose. In regard to the Provincial Government Act, respecting the lending of money to farmers for drainage purposes, Mr. Scott told the convention that \$1,000,000 was now set aside for this purpose.

Considerable discussion took place at the convention in regard to the fuel and labor question. Those in Western Ontario who have kilns equipped for burning gas were prevented from operating this winter on account of the order which withheld gas from industries. H. H. Hallett, when discussing this matter, made the statement that one domestic consumer uses enough gas to burn sufficient tile for fifty acres, and that the Government should consider the importance of the tile supply. He claimed that some rating should be made and tile manufacturers should be informed as to their proper class in regard to the use of gas. It was pointed out that in the Counties of Essex and Kent tiling operations were being suspended simply because tile were not available.

Considerable discussion throughout the convention centred around the labor and fuel supply. A committee consisting of the President, Secretary, Wm. McCready of Lyons, Ont., and R. T. McDonald, of Bridgen, were appointed to confer with committees from the Canadian National Clay Workers' Association and The United Farmers of Ontario. This joint committee will take the matter up with the Government and attempt to have their industry classified. The officers for the ensuing year are: President, C. S. Parker, London; First Vice-President, James Holmes, Alvinston; Second Vice-President, Gilbert Armstrong, Fletcher; Secretary-Treasurer, Alfred Weblann, Cairo, Wm. McCready with the other officers named will constitute the Executive Committee.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending February 28.

Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

CATTLE							CALVES						
Receipts		Top Price Good Steers (1,000-1,200)					Receipts		Top Price Good Calves				
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending		
Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21		
Toronto (Union Stock Yards)	5,069	4,042	5,101	\$12.00	\$11.25	\$12.25	568	820	679	\$17.00	\$15.00	\$17.00	
Montreal (Pt. St. Charles)	456	565	555	12.00	11.00	12.25	327	345	529	16.50	13.00	16.00	
Montreal (East End)	616	540	348	12.00	11.00	12.25	285	385	378	16.50	13.00	16.00	
Winnipeg	1,249	1,908	1,335	11.25	9.75	11.25	22	99	28	10.50	10.00	12.00	
Calgary	1,041	920	943	11.50	8.75	11.50				9.50			

HOGS							SHEEP						
Receipts		Top Price Selects					Receipts		Top Price Good Lambs				
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending		
Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21	Feb. 28	1917	Feb. 21		
Toronto (Union Stock Yards)	8,635	12,971	8,175	\$19.75	\$15.25	\$19.10	424	381	565	\$19.00	\$15.25	\$19.00	
Montreal (Pt. St. Charles)	1,121	1,089	1,991	20.25	15.50	19.75	40	16	121	17.50	14.25	17.00	
Montreal (East End)	636	719	1,348	20.25	15.50	19.75	60	55	85	17.50	14.25	17.00	
Winnipeg	5,763	7,722	7,533	19.50	14.25	18.75	4	13	6	13.50			
Calgary	3,374	3,646	2,575	19.25	13.75	19.25	74	298					

Market Comments.

Toronto (Union Stock Yards.)

Receipts of live stock about equalled those of the previous week, five thousand cattle being on sale, two thousand seven hundred of which were on the Monday market and the balance being about equally distributed through the remaining three days. Cattle prices on the whole could scarcely be classed as being as good as those of the previous week, for while in a few instances higher prices were paid for a few extra choice cattle, sales on the whole were more uneven; medium and common cattle selling from 10 to 25 cents below the previous week's quotations. On Tuesday, trading was dull, but more activity prevailed on Wednesday on which day receipts did not come up to expectations, while on Thursday trading was barely steady and a number of cattle were held over for the next market, steers numbered about one hundred head, most of them being on the Monday market. The top price of the week was paid on Wednesday when two head averaging thirteen hundred pounds sold at \$13. Six head of fourteen hundred pounds sold on Monday, realized \$12.85, a straight load averaging thirteen hundred and fifty pounds sold at \$12.80, while other good sales were made from \$11.75 to \$12.50. For steers of ten hundred to twelve hundred pounds most of the best sales of the week were made between \$11 and \$11.75, although there were a few notable exceptions, two steers of eleven hundred pounds selling on Tuesday at \$13, eight head at \$12.60 and thirteen of eleven hundred and thirty pounds at \$12. On Wednesday, for the best animals in this class trade was about steady, but for those of medium quality prices were lower. Steers and heifers under one thousand pounds were moving in sympathy with other grades. One baby beef of eight hundred pounds sold on Monday at \$13, while a load of twenty-one head, weighing nine hundred and eighty pounds, sold on Tuesday at \$11.80; most of the offerings, however, moved from \$10.75 to \$11.50, although a few loads reached \$11.75. Cows were in steady demand with choice animals selling from \$9.75 to \$10.50, and a few extra choice cows from \$10.75 to \$11, and \$12.50 the latter price being paid for two exceptionally choice animals. Good quality cows sold from \$9 to \$9.75, and medium and common from \$6.50 to \$8.75. Bulls were steady with choice animals selling from \$9.75 to \$11, medium from \$8.75 to \$9.50, and common bulls from \$7.75 to \$8.50. A few loads of stockers and feeders went back to country points at steady prices. A good demand existed for grass cows and two or three loads were shipped out, selling from \$7 to \$7.75 per hundred; only those of very poor quality could be bought at the lower figure. Calves were steady with last week, extra choice veal realizing \$17 and the majority selling from \$14 to \$16.50.

With four hundred sheep and lambs on sale prices were steady at last week's close. A few choice lambs sold at \$19 per hundred, and most of the offerings sold from \$18 to \$18.75.

Hog receipts totalled slightly over ten thousand head. On Monday and Tuesday \$19.25 was paid for selects, fed and watered. An advance followed on Wednesday, \$19.50 being the prevailing

TORONTO (Union Stock Yards)					MONTREAL (Pt. St. Charles)				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS heavy finished	103	\$12.04	\$11.75-\$12.50	\$12.85					
STEERS good 1,000-1,200	414	11.54	11.00-11.75	12.00	38	12.15	12.00-12.25	12.25	
STEERS good 700-1,000	1,553	11.12	10.75-11.50	11.75	55	11.25	10.75-11.50	12.00	
HEIFERS good	357	11.27	11.00-11.75	13.00	18	11.25	11.00-11.50	11.50	
HEIFERS fair	629	10.18	9.50-10.50	10.50	35	10.00	9.50-10.25	10.50	
HEIFERS common	43	9.12	8.75-9.50	9.50	35	8.75	8.50-9.25	9.25	
COWS good	259	9.75	9.00-10.25	10.50	17	9.75	9.50-10.25	10.25	
COWS common	632	7.75	7.50-8.50	8.75	63	8.75	8.50-9.00	9.25	
BULLS good	81	9.75	9.00-10.25	10.75	6	10.35		11.00	
BULLS common	55	7.81	7.50-8.50	9.75	25	9.25	8.50-10.00	10.00	
CANNERS & CUTTERS	203	6.25	6.00-6.50	6.50	43	6.50	5.50-6.75	6.75	
OXEN									
CALVES veal	551	15.00	14.00-16.00	17.00	321	15.50	14.00-16.50	16.50	
CALVES grass	17	8.00	7.00-9.00	9.00	6				
STOCKERS good 450-800	34	8.80	8.00-9.25	9.25					
STOCKERS fair	57	7.82	7.50-8.50	8.50					
FEEDERS good 800-1,000	120	10.20	9.75-10.50	10.50					
FEEDERS fair	74	9.50	9.00-9.75	9.75					
Hogs selects	8,061	19.47	19.25-19.75	19.75	1,025	20.00	20.00-	20.25	
Hogs heavies	4	19.75	19.75-	19.75					
Hogs (Fed and watered) lights	390	17.92	17.25-18.50	18.75	83	19.25	19.00-19.50	19.50	
Hogs (Fed and watered) sows	174	18.41	17.25-18.50	18.75	12	17.50	17.25-17.75	17.75	
Hogs (Fed and watered) stags	6	15.58		15.75	1				
LAMBS good	324	18.50	18.00-19.00	19.00	33	16.50	16.50-	17.50	
LAMBS common	10	16.00	15.00-17.00	17.00					
SHEEP heavy	46	12.00	11.00-13.00	13.00	6	13.00	13.00-	13.00	
SHEEP light	33	13.13	12.00-14.00	14.50	1				
SHEEP common	11	8.90	7.00-10.00	10.00					

figure and one load selling at \$19.60. A further advance to \$19.75 followed on Thursday, the market closing with a steady undertone at this level.

Of the disposition from the Yards for the week ending February 21st, Canadian packing houses bought 317 calves, 54 bulls, 4,294 butcher cattle, 10,601 hogs, and 592 sheep and lambs. Local butchers purchased 228 calves, 410 butcher cattle, 198 hogs and 118 sheep and lambs. Canadian shipments consisted of 48 calves, 115 milch cows, 1 bull, 46 butcher cattle, 46 stockers, 19 feeders, 715 hogs and 11 sheep. There were no shipments made to United States points during the week.

The total receipts at the Yards from January 1st to February 21st, inclusive were 32,363 cattle, 3,583 calves, 58,711 hogs, and 8,458 sheep, compared to 35,608 cattle, 5,966 calves, 71,191 hogs, and 8,823 sheep, received during the corresponding period of 1917.

Montreal.

Receipts of cattle at the Yards during the week totalled ten hundred and seventy head compared to twelve hundred and three the previous week and 779 two weeks ago. Trading was brisk at prices from 15 to 25 cents higher than those prevailing at the closing market of the previous week. Not enough cattle were received to supply the needs of the trade and the objects of the offerings

consisted of light weight young cattle, weighing from seven hundred and fifty to ten hundred pounds; this latter condition was noticeable on both markets. Of the total number of cattle on hand approximately one hundred and fifty head were milch cows for which class there exists a good demand when quality is present. Of the sales of butcher cattle during the week, eight head weighing ten hundred and ninety pounds average, realized \$12 per hundred on Friday, while on the following Monday twenty-seven head averaging around ten hundred and fifty pounds were weighted up at \$12.25; these were the prices paid only for odd lots of the best steers on the market. One load of twenty-two head weighing about ten hundred and twenty-five pounds each sold at \$10.75, while another lot of twenty-seven head averaging a little less than ten hundred pounds sold at \$11; this lot was made up of various weights ranging from eight hundred and fifty pounds to eleven hundred pounds. A considerable number of light weight heifers rising two years were on sale. One representative lot of eleven head in this class averaging about six hundred and ninety-five pounds sold at \$10.25. Of the heifers of good quality, two weighing nine hundred and ninety-four pounds each sold at \$11.50; the majority in this class were weighed up in mixed lots for which a range of price

from \$10.75 to \$11.50 ruled. Butcher cows were of a wide range of quality but no choice animals were on the market; sales were made from \$7 to \$10.25, in keeping with the wide range in grading. Bulls were light in numbers and sold from \$7.50 to \$11 per hundred; few sold at the latter price. Cannery and cutters sold from \$5.50 to \$6.75 per hundred. Receipts and calves were slightly lower than those of the previous week, and the majority of the sales were made at higher prices than for some time. Prices ranged from \$12 to \$16.50.

Receipts of sheep were light and the market featureless. Lambs sold from \$15 to \$16.50, and sheep at \$13 per hundred.

The market for hogs opened strong at \$19.75 for selects, fed and watered, advanced to \$20 for short runs and \$20.25 for long runs on Monday, and remained steady and unchanged during the remainder of the week, closing firm with probabilities of light receipts for the following market.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending Feb. 21st, Canadian packing houses and local butchers purchased 528 calves, 81 cannery and cutters, 48 bulls, 396 butcher cattle, 1,899 hogs and 121 sheep and lambs. Canadian shipments were made up of 30 milch cows. There were no shipments

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made to U week.

The total of February cattle, 1,748,227 sheep, 2,127 calves, sheep received period of 1917. EAST END the Yards 21st, Canada butchers bought cattle, 1,348. There were shipments to the week. The total to Feb. 21st 536 calves, compared to 9,169 hogs during the

Mo

Horses.—Carting continues but very few supplies are available. Heavy draft to 1,700 lbs. draft, 1,400 each; small to \$75 to \$100 carriage horse. Poultry.—Poultry was of the trade enquiry through poultry for trade appears reduced has been dressed for hens. Dressed H good demand were firm at abattoir, fresh dressed were prices.

Potatoes.—held steady. Mountains white stock being \$1.90 to easy in tone.

Honey and is still deep season is applicable are being made was \$2 per nominally 20 being 21c, to clover comb, Brown clover was also white.

Eggs.—New quoted at 5 at 60c, to 63 the year has prices will be summation is fact.

Butter.—TI continued firm a point of the to 51c, for fine make, and al Current receipt and dairies were Grain.—Pri firm No. 3 C No. 1 feed w bushel, ex-stor

Every farmer who desires to do business with
The Molsons Bank
is always assured of a courteous reception by local managers. And their object is to assist the farmer in a legitimate way, to make his land and stock more productive.

made to United States' points during the week.

The total receipts from January 1st to February 21st, inclusive, were: 4,809 cattle, 1,777 calves, 8,900 hogs, and 4,827 sheep; compared to 6,792 cattle, 2,127 calves, 10,519 hogs, and 4,360 sheep received during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending February 21st, Canadian packing houses and local butchers bought 376 calves, 648 butcher cattle, 1,348 hogs, and 85 sheep and lambs. There were no Canadian shipments or shipments to United States' points during the week.

The total receipts of cattle from Jan. 1st to Feb. 21st, inclusive, were: 5,741 cattle, 536 calves, 6,466 hogs, and 4,463 sheep; compared to 7,727 cattle, 2,446 calves, 9,169 hogs, and 5,570 sheep, received during the corresponding period of 1917.

Montreal Produce.

Horses.—There is some enquiry from carting companies and similar concerns but very little business has resulted. Supplies are light and prices are steady. Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$225 to \$275 each; light draft, 1,400 to 1,500 lbs., \$175 to \$225 each; small horses, \$100 to \$175, and culls, \$75 to \$100 each. Choice saddle and carriage horses sell at \$175 to \$225 each.

Poultry.—The market for dressed poultry was fairly active but the feature of the trade appears to be the active enquiry throughout the country for live poultry for the Jewish trade. This trade appears ready to pay as high for live as dressed has been selling at, more especially for hens. Dressed turkeys sold at 35c. to 36c. per lb., while geese were 26c. to 28c., ducks and choice fowl brought from 27c. to 30c. and choice chickens at about the same price as turkeys.

Dressed Hogs.—There continued to be a good demand for dressed hogs and prices were firm at 27½c. to 28c. per lb. for abattoir, fresh-killed stock, while country-dressed were about 2c. less than these prices.

Potatoes.—Receipts were fair and prices held steady, at \$2.10 to \$2.15 for Green Mountains per 80 lbs., ex-store, Ontario white stock being \$2 to \$2.05 and reds being \$1.90 to \$2. The market is generally easy in tone.

Honey and Maple Syrup.—The snow is still deep in the woods but the syrup season is approaching and preparations are being made. The nominal quotation was \$2 per 13-lb. gal. tin. Sugar was nominally 20c. per lb. Honey was steady, being 21c. to 22c. per lb. for No. 1 white clover comb, and 19c. to 20c. for No. 2. Brown clover comb was 19c. to 20c. as was also white extracted.

Eggs.—New-laid American eggs were quoted at 58c. while Canadians sold at 60c. to 63c. per doz. The season of the year has arrived when the trend of prices will be constantly lower. Consumption is fairly large.

Butter.—The market for creamery continued firm and prices were at the high point of the year, being 50½c. per lb. to 51c. for finest September and October make, and about one cent less for fine. Current receipts were 47½c. to 48½c. and dairies were 41½c. to 43c.

Grains.—Prices of oats continued quiet. No. 3 Canadian western and extra No. 1 feed were quoted at \$1.11½ per bushel, ex-store; No. 1 feed were \$1.08½;

No. 2 feed, \$1.07½; Ontario No. 2 white, \$1.10; No. 3, \$1.09; No. 4 \$1.08; Manitoba feed barley was \$1.43½, ex-track, Fort William.

Flour.—Manitoba spring wheat standard flour was steady at \$11.10 per bbl. in bags, Montreal, on cars, and \$11.20 delivered to bakers, with 10c. additional for broken lots. Ontario winter wheat flour was steady at \$11.10 to \$11.50 per bbl. in bags.

Millfeed.—Supplies were limited and prices firm. Bran sold at \$35 per ton, shorts at \$40, middlings at \$48, mixed mouille, at \$60 to \$62 and pure mouille at \$66 to \$68 per ton, in bags.

Hay.—The market for baled hay showed very little change. No. 2 baled was steady at \$17 per ton; No. 3 was \$15.50 and clover mixture was \$12 per ton, ex-track.

Seeds.—Dealers were still paying the following prices at country points, according to quotations: Alsike, 18c. to 21c. per lb.; red clover, 27c. to 30c.; timothy, 7c. to 10c.

Hides.—Lambskins declined 30c. each, at \$4.60 each, owing to the embargo placed against their exportation from Canada. Otherwise prices were steady at 18c. per lb. for beef hides, 15c. for cow and 20c. for steers, flat, and 17c., 18c. and 19c., Montreal inspection. Calfskins were 18c. to 20c. per lb. for grassers, and 28c. to 30c. for veals. Horsehides were \$5 to \$6 each. Tallow, 3½c. per lb. for scrap fat and 8c. for abattoir fat. Rendered tallow was 16c. to 17c. per lb.

Toronto Produce.

Receipts of live stock at the Union Yards, Monday, March 4, were 174 cars: 3,296 cattle, 223 calves, 1,335 hogs, 218 sheep and lambs. Market very slow. Butcher cattle about 25 cents lower. Cows, steady to 25 cents lower. Bulls, steady. Stockers, feeders, milkers and springers without change. Sheep, lambs and calves steady. Hogs 19.75 per cwt. fed.

Breadstuffs.

Wheat.—Ontario (basis in store Montreal) No. 2 winter, per car lot, \$2.22. Manitoba wheat (in store, Fort William, including 2½c. tax)—No. 1 northern, \$2.23½; No. 2 northern, \$2.20½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.10½.

Oats.—Manitoba (in store, Fort William)—No. 2 C. W., 97½c.; No. 3 C. W., 94½c.; extra No. 1 feed, 92½c.; No. 1 feed, 89½c.

Oats.—Ontario, No. 2 white, 97c. to 98c.; No. 3 white, 96c. to 97c., (according to freights outside.)

Peas (according to freights outside)—No. 2, \$3.70 to \$3.80.

Barley (according to freights outside)—malting, \$1.68 to \$1.70.

Buckwheat (according to freights outside)—\$1.78 to \$1.80.

Rye (according to freights outside)—No. 2, \$2.08 to \$2.10.

American corn (track Toronto)—No. 3 yellow, kiln-dried, \$2.05.

Flour.—Ontario (in bags, prompt shipment)—War quality, \$10.70, Montreal and Toronto, new bags. Manitoba flour (Toronto)—War quality, \$11.10.

Hay and Millfeed.

Hay.—No. 1, per ton, car lots, \$17 to \$18; mixed, \$14 to \$16.

Straw.—Car lots, per ton, \$8.50 to \$9.

Bran.—Per ton, \$35; shorts, per ton, \$40; middlings, per ton, \$45 to \$46; good feed flour, per bag, \$3.40.

Country Produce.

Butter.—There was not any change in butter prices during the past week, which is selling as follows on the wholesales: Creamery, fresh-made pound squares, 50c. to 51c. per lb.; creamery solids, 47c. to 48c. per lb.; dairy, 35c. to 40c. per lb. Oleomargarine, 30c. to 32c. per lb.

Eggs.—The market broke on new-laid egg prices during the week, when a decline of 8c. per dozen took place—There are only a few of the cold-storage variety now being offered, but they too were slightly easier—Cold-storage No. 1's selling at 50c. per dozen; selects at 52c. per dozen, new lays at 56c. per dozen.

Cheese.—Old, 30c. per lb.; new, 24c. per lb.; new twins, 21½c. per lb.

Honey.—Honey is off the market; none being obtainable on the Toronto wholesales.

Poultry.—Poultry of all classes continued to be shipped in only very lightly during the past week.—The feature of the market being the heavy demand for fat live hens by the Jewish trade, causing

the price for this class to advance to 30c. per lb. (the price now being paid to the producer): Chickens, milk-fed, 26c. per lb.; chickens, ordinary fed, 21c. per lb.; fowl, 3½ lbs. and under, 22c. per lb.; fowl, 3½ lbs. to 5 lbs., 30c. per lb.; ducklings, 25c. per lb.; geese, 18c. per lb.; turkeys, young, 25c. per lb.; turkeys, old, 22c. per lb.

Hides and Wool.

Prices delivered, Toronto:
City Hides.—City butcher hides, green, flat, 15c.; calf skins, green, flat, 20c.; veal kip, 20c.; horse hides, city take off, \$5 to \$6; sheep, \$2.50 to \$5.50.

Country Markets.—Beef hides, flat, cured, 16c. to 17c.; deacon or bob calf, \$1.50 to \$2.25; horse hides, country take off, No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$3.50. Horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 13c. to 14c.; country solid, in barrels, No. 1, 12c. to 13c.; cakes, No. 1, 14c. to 16c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c.; coarse, 58c.; washed wool, fine, 70c.; coarse, 65c.

Wholesale Fruits and Vegetables.

Apples.—There has been a fairly heavy demand for box apples lately, which now range in price from \$2.50 to \$3.25 per box, according to variety and quality. The good quality barreled apples have also been selling fairly well at \$4.50 to \$7.50 per bbl. according to variety and grade, but there is a great quantity of very low grade which it is almost impossible to get rid of.

Onions.—Onions also continue to beg for buyers; the 75-lb. bags selling at \$2.25, and 1.00 lb. bags at \$2.50 to \$3 according to quality.

Potatoes.—The market at last eased up on potatoes as the milder weather allowed greatly increased supplies to come in: New Brunswick Delawares selling at \$2.35 per bag and Ontarios at \$2.25 per bag—and it now looks as if they would go still lower.

Turnips.—Turnips have not been quite so plentiful and sold fairly well at 60 c. to 65c. per bag.

Buffalo.

Cattle.—Light cattle receipts at Buffalo last week had the effect of advancing prices from a quarter to half a dollar, mostly the extreme advance. It was the best market Buffalo has witnessed in many weeks past, quite in contrast to several preceding weeks, when the trade was about as bad as could be imagined, especially on steers and anything in the higher-priced line. With these bad markets shippers eased up on consignments, as a result of which the situation changed materially as killers were as eager to get supplies last week, as they were as indifferent on preceding weeks. Shipping steers sold up to \$13 to \$13.40, a few Canadian steers were included but of not a very good kind, best here running from \$11.50 to \$11.65. Best handy steers reached \$11.75 to \$12, yearlings on the fair order, \$11.75 with the light, feeder fleshed kind of steers, that have been hard to place of late, running from \$10 to \$10.50. Very few heifers and higher-priced cows were included but these sold at the general advance, canner and cutter stuff ruling about steady, while bulls sold at about former prices. Milk cows and springers generally were firm sale. There were not enough cattle received the past week to meet full demands. Offerings were 2,700 head, as against 2,875 head for the preceding week, and as against 4,300 head for the corresponding week a year ago. Quotations:

Shipping Natives.—Choice to prime, \$13 to \$13.40; fair to good, \$12 to \$12.75 plain, \$10.50 to \$11.50; very coarse and common, \$10 to \$10.25.

Shipping Steers.—Canadians, best, \$11.25 to \$11.65; fair to good, \$10.75 to \$11; common and plain, \$9.50 to \$10.

Butchering Steers.—Choice heavy, \$11.75 to \$12.25; fair to good, \$11.25 to \$11.50; best handy, \$11.25 to \$12; fair to good, \$10 to \$11; light and common, \$9 to \$9.75; yearlings, choice to prime, \$12.50 to \$13; fair to good, \$11.75 to \$12.

Cows and Heifers.—Best heavy heifers, \$10.75 to \$11.25; good butchering heifers, \$10.25 to \$10.50; fair butchering heifers, \$9 to \$9.75; common, \$7 to \$8; very fancy fat cows, \$10 to \$10.50; best heavy fat cows, \$9.50 to \$9.75; good butchering cows, \$8.50 to \$9; medium to fair, \$7 to \$7.50; cutters, \$6 to \$6.75; canners, \$4.50 to \$5.75.

Bulls.—Best heavy, \$10 to \$11.50; good butchering, \$9 to \$9.50.

Stockers and Feeders.—Best feeders, \$8.50 to \$9; common to fair, \$7.25 to \$8; best stockers, \$7.50 to \$8; fair to good, \$6 to \$7; common, \$5 to \$5.75.

Milchers and Springers.—Good to best, small lots, \$90 to \$120; in carloads, \$80 to \$100.

Hogs.—Last week opened with prices ruling steady to a dime higher than the previous week's close. Top for Monday was \$18.25, but the great bulk of the crop sold on a basis of \$18.25, and pigs, which showed a gain of 75 cents to \$1, landed mostly at \$18. Tuesday heavies sold at \$18.25 to \$18.35, and the lighter weight grades, including pigs, ranged from \$18.25 to \$18.50. Wednesday prices were declined ten to thirty cents on the best grades, range on these being from \$18.20 to \$18.30, and pigs sold 75 cents under Wednesday's level, bulk going at \$17.75. Thursday the market on pigs was steady and good hogs were lower, Yorkers and mixed grades selling from \$18 to \$18.10, and Friday a further decline of a dime was noted on better weight grades, when the range was from \$17.90 to \$18. The fifth day of the week showed pigs selling in the same notch as the better grades. Roughs the fore part of the week brought up to \$16.75, and Friday they ranged from \$16 to \$16.25, with stags selling from \$14 down. Last week receipts were 19,600 head, as compared with 21,025 head for the week before, and 14,400 head for the same week a year ago.

Sheep and Lambs.—The first two days of last week top handy lambs sold mostly at \$17, cull lambs went from \$15.50 down, heavy lambs, kinds weighing around 100 pounds, sold from \$15 to \$15.50, best yearlings went at \$14.50, top for wether sheep was \$13.25, and ewes went from \$12.50. The next three days prices were higher. Wednesday best lambs brought \$17.40, Thursday's top was \$17.75 and Friday choice lots reached \$17.85, with culls selling from \$16.25 down. The fifth day of the week showed yearlings up to \$15.25, wether sheep made \$13.75, and top for ewes was \$13. Last week's receipts were 15,800 head, being against 17,529 head for the week previous, and 16,400 head for the same week a year ago.

Calves.—On the opening day of the week choice veals sold mostly at \$17.50, and the next two days the market was unchanged. Thursday and Friday prices were a quarter higher, bulk going at \$17.75. Fed desirable culls reached up to \$15, but the general range on these was from \$14.50 down, and common to good fed calves were quoted from \$6.50 to \$8.50. Receipts for the week totaled 3,500 head, as compared with 2,024 head for the week before, and 2,650 head for the corresponding week a year ago.

Chicago.

Cattle.—Beeves, \$8.80 to \$14.50; stockers and feeders, \$7.60 to \$10.85; cows and heifers, \$6.70 to \$11.90; calves, \$9 to \$14.25.

Hogs.—Light, \$16.40 to \$17; mixed, \$16.25 to \$17; heavy, \$15.80 to \$16.75; rough, \$15.80 to \$16.05; pigs, \$12.75 to \$16.50.

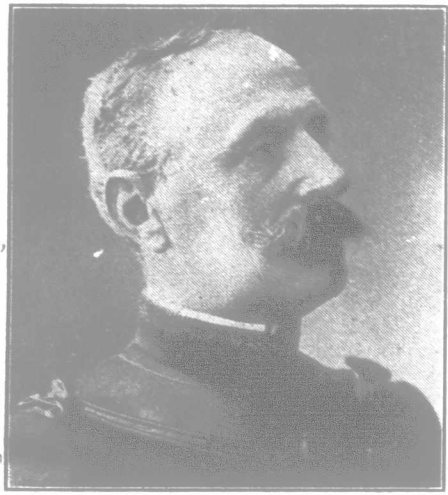
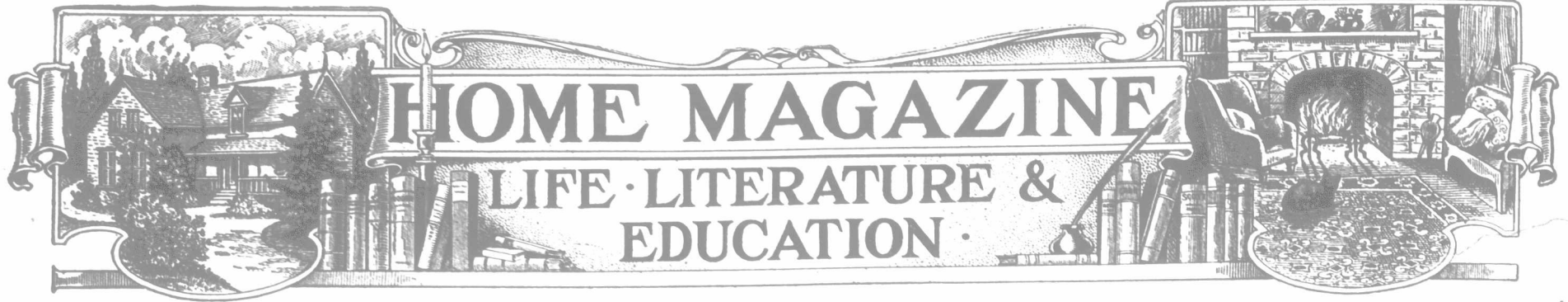
Sheep.—Native, \$10.25 to \$13.40; lambs, native, \$14 to \$17.50.

Cheese Markets.

New York, specials, 25½c. to 26½c.; Montreal, finest westerns, 21¼c.; finest easterns, 21¼c.

Perth District Holstein Sale.

The Perth District Holstein Breeders' Consignment sale will be held at the Mansion House stables, in the City of Stratford, on March 13. Forty-five individuals of high quality are being offered. The progeny of such sires as King Segis Alcartra Calamity, Dutchland Pontiac Colantha, Fineview King Segis Colanthus, and Sir Colantha Canada, are in the sale. Among the consignors are Arbogast Bros., P. Smith, Chas. Baird, J. E. Turner, Walter Jickling, Wm. Steinacker, R. Thompson, A. C. Park, G. Gill, H. Thistle, P. J. Finegan, McNamara Bros., T. Wood, J. Looker, Wm. Stock and W. S. Shearer. These breeders are offering some of their best stock of males and females. Many of the cows have been tested and have made creditable records. Stratford has excellent train service which permits purchasers to arrive the morning of the sale and depart the same day, if they so desire.



Gen. Foch.

The eminent French General who has recently been made Associate War Minister, and has much to do with the technical and administrative work of the war.

Old Gray Squirrel.

BY ALFRED NOYES.

A great while ago, there was a schoolboy.
He lived in a cottage by the sea.
And the very first thing he could remember

Was the rigging of the schooners by the quay.

He could watch them, when he woke, from his window,
With the tall cranes hoisting out the freight.

And he used to think of shipping as a sea-cook,
And sailing to the Golden Gate.

For he used to buy the yellow penny dreadfuls,
And read them where he fished for conger-eels,
And listened to the lapping of the water,
The green and oily water round the keels.

There were trawlers with their shark-mouthed flat-fish,
And red nets hanging out to dry,
And the skate the skipper kept because he liked 'em,
And land-men never knew the fish to fry.

There were brigantines with timber out of Norway,
Oozing with the sirups of the pine.
There were rusty schooners out of Sunderland,
And ships of the Blue Cross line.

And to tumble down a hatch into the cabin
Was better than the best of broken rules;
For the smell of 'em was like a Christmas dinner,
And the feel of 'em was like a box of tools.

And, before he went to sleep in the evening,
The very last thing that he could see
Was the sailor-men a-dancing in the moon-light
By the capstan that stood upon the quay.

He is perched upon a high stool in London,
The Golden Gate is very far away.
They caught him, and they cured him,
Like a squirrel.
He is totting up accounts, and going gray.

He will never, never, never sail to 'Tisoy,
But the very last thing that he will see
Will be sailor-men a-dancing in the sun-breeze
By the capstan that stands upon the quay.

To the tune of an old concertina
By the capstan that stands upon the quay.

Among the Books.

"Rural Planning and Development."

[*Rural Planning and Development*, by Thomas Adams, of the Commission of Conservation, Ottawa.]

SOME time ago a branch of the Commission of Conservation at Ottawa was deputed to give its attention to town planning. It was observed that such towns as have simply grown up of themselves—practically all of the towns and cities of Canada—had grown in such a way as to conserve neither space nor convenience, and that in their haphazard development natural beauty-features had been ruthlessly slaughtered, so that such places as in their maturity wished to regain attractiveness of appearance were obliged to do so at an utterly uncalled-for expenditure of labor and money. By appointing a town-planning adviser it was hoped to remove this unhappy possibility from the towns to be built in the future.

In connection with the planning of towns, as in connection with all problems of town life, it has been realized by the Commission that a sound system of development of urban life was impossible unless there were equally sound conditions in the rural areas. Planning and development of both urban and rural territory must be carried on at the same time and with proper regard to the interdependence of town and country. Because this was realized the first comprehensive report on the subject of what is called "Town Planning in Canada" is a report on the rural problem.

This involved an extended and difficult undertaking, viz., making a survey of the rural districts of Canada with the object of ascertaining whether mistakes had been made there, and, if so, how these might be remedied or prevented in future.

As a result of the investigations which followed, an exhaustive report has been prepared by Mr. Thomas Adams (of the Commission of Conservation) and is now available in book form, illustrated from photographs and drawings made to emphasize the most salient of the points taken.

IN time past, speaking broadly, to mention the "development" of a country carried with it nothing more than the idea of pushing its resources in a material way, putting its agriculture, its mines, fisheries, forests and manufactures in the way of securing the greatest returns in money—money, it must be confessed, too often diverted, to an unfair extent, into the pockets of capitalists and exploiters.

Perhaps the war is beginning to extend the common vision beyond all that. At all events it is evident that to men of real vision everywhere, the call is coming more insistently than ever before, to prepare the way for a future that shall be better, and less selfishly material, than the past. Perhaps one has thought of our Commission of Conservation as a body of men busied only with economic things, yet that the higher call has been heard very clearly among them is very evident from the report just mentioned. Within the first two pages Mr. Adams makes clear the foundation upon which he would base all effort, viz., that national growth depends most of all on the character of its people. In the past, he notes, "we have placed the sanctity of property on a higher level than human life and civic welfare," failing to recognize that only as we really go forward when we aim at "equal opportunity for all." And then he quotes one of those fine pronouncements which have so revealed Premier Lloyd-George in the

forefront of living orators and statesmen: "There is nothing more fatal to a people than that it should narrow its vision to the material needs of the hour. National ideals without imagination are but as the thistles of the wilderness, fit neither for food nor fuel. A nation that depends upon them must perish. We shall need, at the end of the war better workshops, but we shall also need more than ever every institution that will exalt the vision of the people above and beyond the workshop and the counting-house. We shall need every national tradition that will remind them that men cannot live by bread alone."

For lack of such ideals and such vision, Mr. Adams contends, the self-styled practical man who has prided himself upon the lack, has been, perhaps, "the most potent factor in building up the organization and system in peace which has in part caused this war and been discredited by the war."—But a new era is coming and we must help it to come quickly.

THE remainder of the report deals chiefly with the practical, but it is a practicality that looks to the supplying to all the people of the conditions that make for the best living. When people are ground down with poverty, living in unsanitary houses, beset by inconvenience and hardship at every turn, obliged to drudge so hard for the mere necessities of life that there is no time to cultivate the finer things, and without opportunity for the latter even if there were time, it is a hard matter for them to make the best of themselves, or even to keep from degenerating. These are the conditions that the writer would see removed from our land.

Many things, he sees, have militated against the best conditions in Canada. Injurious speculation—the holding up of land for the sake of future gain by men who could afford to wait—has done much harm, retarding development in places where it should have gone ahead unchecked. Our system of rectangular surveys, too, has been illogical and wasteful. Land has been blocked out in a uniform way disregarding entirely the natural features of the country; hence river routes and natural roadways have not been taken advantage of as they might, farms have been surveyed to give one man more than his share of marsh or rocky land, or perhaps his land has been cut by an unfordable river,—and so on. Much land, too, absolutely unsuited for agriculture, has been let to settlers, to the injury of the settlers themselves and, more or less, to the detriment of the country as a whole. Such land should have been retained in perpetuity for timber, and the supply kept up by judicious management.

Other lines along which improvement should be made are the securing generally of better educational advantages, a better organization for co-operation in work and marketing, the drawing together more closely of producer and consumer, the establishment of a system of rural credits by which farmers could procure necessary capital on easier terms, better facilities for social intercourse, etc.

IT is not too late, however, to secure many of these improvements in the settled districts, while in the unsettled districts (there are still "millions of acres of good land unsettled or unimproved in Ontario" alone) there is still a chance for Government supervision and the work of experts who have made a study of rural planning. If in the past we have sacrificed wisdom to "haste" it is not necessary to keep on doing so.

Especially should care be taken to provide the best possible conditions whenever returned soldiers are going on the land. They have suffered much, and

for them every advantage within reach should be secured.

After all, *everyone* should have adequate reward for his labors. A farm should yield interest on the capital invested, with a satisfactory wage to the farmer. Often a farmer fails simply for want of sufficient capital and the constant irritation of the lack of ready money and a fair reward for hard work. A better system of rural credit and for the distribution of products would help to do away with this.

A suggestion which, perhaps, may work out in some places, but is not likely to be taken up in the more prosperous districts where extensive farming is under way, is that the making of small wares, weaving etc., might be made a feature in farm homes in Canada, as in the peasant homes of Europe.

More practicable in many districts, where the farms are so extensive and the farm-work so strenuous as to leave practically no time for extras, is the suggestion of decentralization of industries, in other words, the establishment of manufacturing plants in the villages and small towns rather than in the cities, a step that would at once help to relieve congestion in cities, provide better living conditions for employees, and benefit the agricultural districts by providing nearer markets and so bringing producer and consumer into closer touch.

THE writer does not, however, overlook the steps that have been taken, and he appreciates the fact that such successful co-operative associations as, e. g., the "Western Grain Growers," are already in existence; also that Bills are now before some of the provincial legislatures for the purpose of legalizing the formation of rural credit societies and the co-operation of the provincial and municipal governing bodies in giving aid to such societies. A warning, however, is issued against the possibility of letting money thus loaned find its way to men who do not intend to be bona fide producers, but only speculators.

Other progressive measures in the various provinces are mentioned, e. g., the creation of a Farm Settlement Board in New Brunswick, and the Quebec system of granting substantial subsidies for good roads.

Consolidated schools are strongly recommended, and it is hoped that they will increase in number. It is necessary that a more comprehensive system of rural education be founded in order that the majority of farmers and their children may get the necessary advantages.

WITHIN the scope of a review it is impossible to touch upon all the subjects dealt with by Mr. Adams. Mining, lumbering and fishing are classified as rural industries; water-powers and their possibilities are discussed, also the laying out of roads and highways; the making of sanitary laws; fire prevention; and taxation of the land. Considerable space is devoted to that very popular subject "The High Cost of Living," with suggestions for a better equilibrium in the future.

Interesting references are made in the Report to what is called Garden City form of development. It is an essential part of a Garden City that an agricultural belt should be retained around the town and that no buildings should be permitted to encroach upon this agricultural belt. This means that when the city covers the area assigned for a particular town, any further building development must jump over the agricultural belt and take place outside of it. Thus a considerable part of the garden city would be permanently reserved for agricultural purposes right in the city area. A town of this kind is being developed in England and has met with considerable success. This success has been sufficient to justify a

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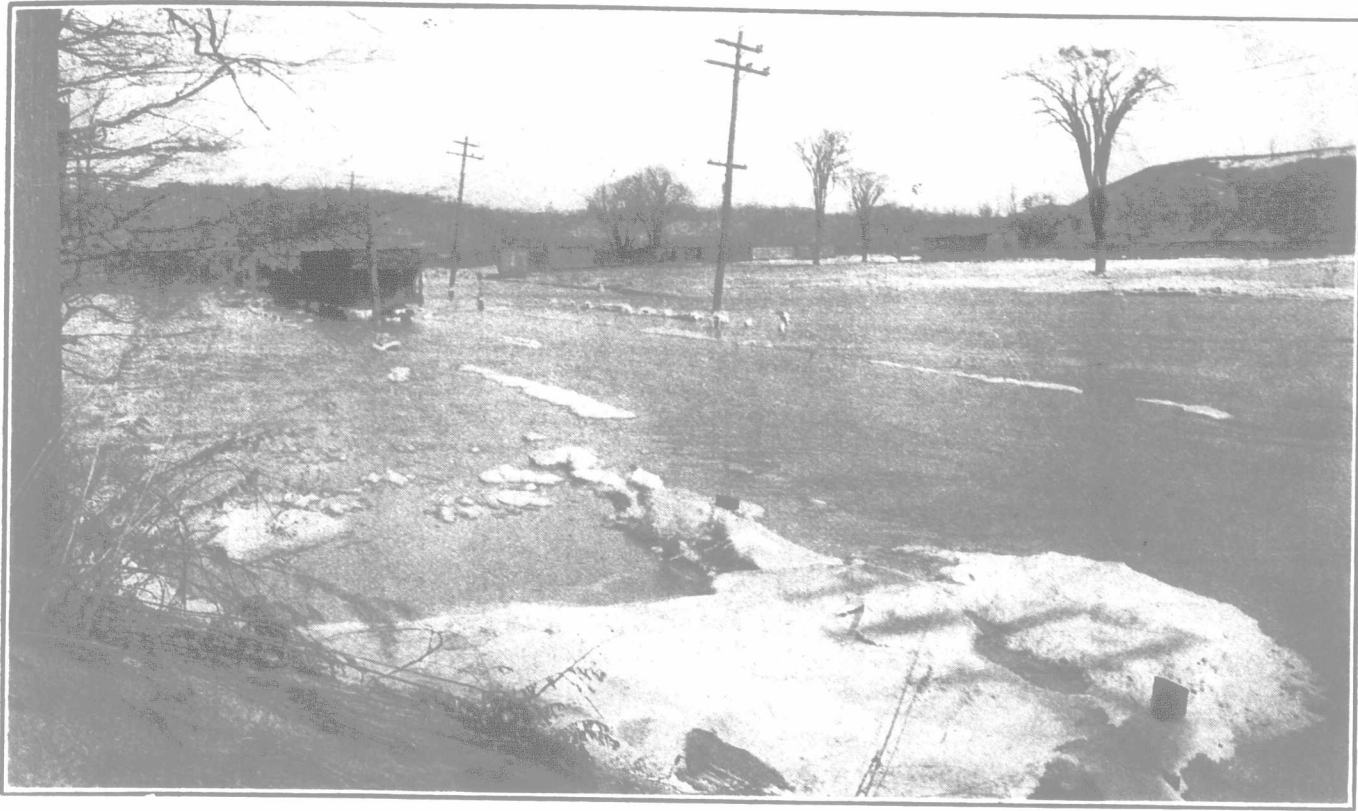
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The Flooded Don Valley.

The photo, taken Feb. 26th, looking north from foot of Bloor street viaduct, Toronto. The tie-up of railway traffic on this route was complete.

suggestion which is now being publicly discussed in England that a hundred new towns of a similar character should be created in the Old Country after the war. One of the difficulties in Canada in farming within, and near, cities is the heavy taxation due to the fact that all land is taxed on its potential building value. Mr. Adams points out the importance of relieving agricultural land, as much as possible, of taxes. In England, for instance, he says that the farmer has a rebate of equal to 50 per cent. of his taxes as compared with the building owner; moreover, the assessment is based on the agricultural value of land only, even when it has a building value, so long as it is used for agricultural purposes.

It is impossible here to give a synopsis of all this. The book, however, can be secured by writing to the Commission of Conservation, Ottawa.

TRUE, the report is especially addressed to the Government, but often a thorough understanding of conditions by the people themselves assists—or forces—the action of Government itself. The more widely such reports are distributed—and read—the better. And, as Mr. Adams says, when the people of the rural districts themselves unite to secure greater advantages, much will be accomplished.

May we close with a quotation: "The pursuit of material gain as a sole object is dangerous and futile, whether the aim be accretion of wealth or of military power. When the object of development in a state is to secure the greatest freedom and equality of opportunity for the greatest number of its citizens to enjoy the results of human labor, then the accumulation of wealth follows as a result of that freedom, and history shows that it is only on such a foundation that national prosperity can be maintained."

Hope's Quiet Hour.

The Satisfying Vision.

Philip saith unto Him, Lord, shew us the Father, and it sufficeth us.—S. John 14:8.

Thine eyes shall see the King in His beauty; they shall behold a land of far distances.—Isa. 33:17, (R. V. margin).

"To stretch my hand and touch Him
Though He be far away;
For I will see Him
Through darkness as through day;
To cry my voice and call Him—
"Thou art to pray!"

Yesterday I heard two sweet-voiced street-vendors of the "Advocate" singing in a hospital ward. They sang of one who

met the Son of God in a dew-drenched garden of roses. They told of the unutterable joy of a soul in mysterious fellowship with the Divine Friend. "He walked and talked with me" was the refrain of the song; and the faces of the eager listeners showed that the words went to their hearts. Then we moved into the next ward for our usual Sunday song-service, and immediately one of the patients exclaimed: "Won't you sing that song to us, about 'He walked with me and talked to me?'" Then we carried our little organ into a third ward, and again that song went straight to the heart of the hearers.

Last night I heard a very earnest sermon on the text: "I saw also the Lord,"—Isa. 6:1. The crowded church was so silent that one might have heard the proverbial pin drop, when the speaker paused for a minute or two, after telling of the joy which came to him about thirty years ago when he first "saw the Lord". Evidently human nature—in a hospital or out of it—is much the same everywhere. It is nearly two thousand years since a young man voiced the desires of his comrades: "Lord, shew us the Father, and it sufficeth us."

It is more than three thousand years since the Psalmist declared that he was "athirst for God", and that nothing in heaven or earth but God Himself could satisfy his desires. Look through your hymn book and you will find the same

surging desire, the same longing for the consciousness of God's Presence, echoed by many voices. Death has been called "Life's adventure", but there is no doubt at all of the fact that the finding of the Living, Loving God is Life's greatest Discovery.

A soldier in the trenches—having made the Great Discovery in Flanders—looked back to his careless life in England, and said:

"You walked among us, and we did not see

How did we miss Your Footprints on our pavements?—

Can there be other folk as blind as we?"

Those who have not found the "hid treasure" think that they will begin to serve Christ when they have had a few years of enjoyment. They think that Christianity means sacrifice, giving up the pleasant things of life. Does a man feel that he has sacrificed happiness, when he drops the toys which pleased him in childhood and enters on a new era of eager existence? We are all like the merchant who was seeking goodly pearls—we want to live a full and joyous life. Do we all recognize the "pearl of great price" when it is offered to us?

Plenty of lesser jewels are handled by us. Perhaps we have paid heavy prices for pleasure, fame or wealth. Did you ever know any soul really satisfied with any

of these? Our souls are athirst for God, though we may not be willing to acknowledge it; and nothing earthly can satisfy a man's highest self.

Are you hesitating to choose Christ as your Master, because you are afraid His service will mean giving up so much that is pleasant, and undertaking new and difficult duties? Think of the man "born blind" whom our Lord healed. He had an easy life, as regards work. He was not expected to do a man's share of the world's work. No one would blame him if he begged, instead of earning, his daily bread.

But, when his eyes were opened, a new life of duty opened before him. Instead of being a helpless burden on the community he would be expected to support himself and try to lift the burdens of less privileged people. Was he depressed over the prospect? There is a note of exultation in his exclamation: "One thing I know, that, whereas I was blind, now I see!"

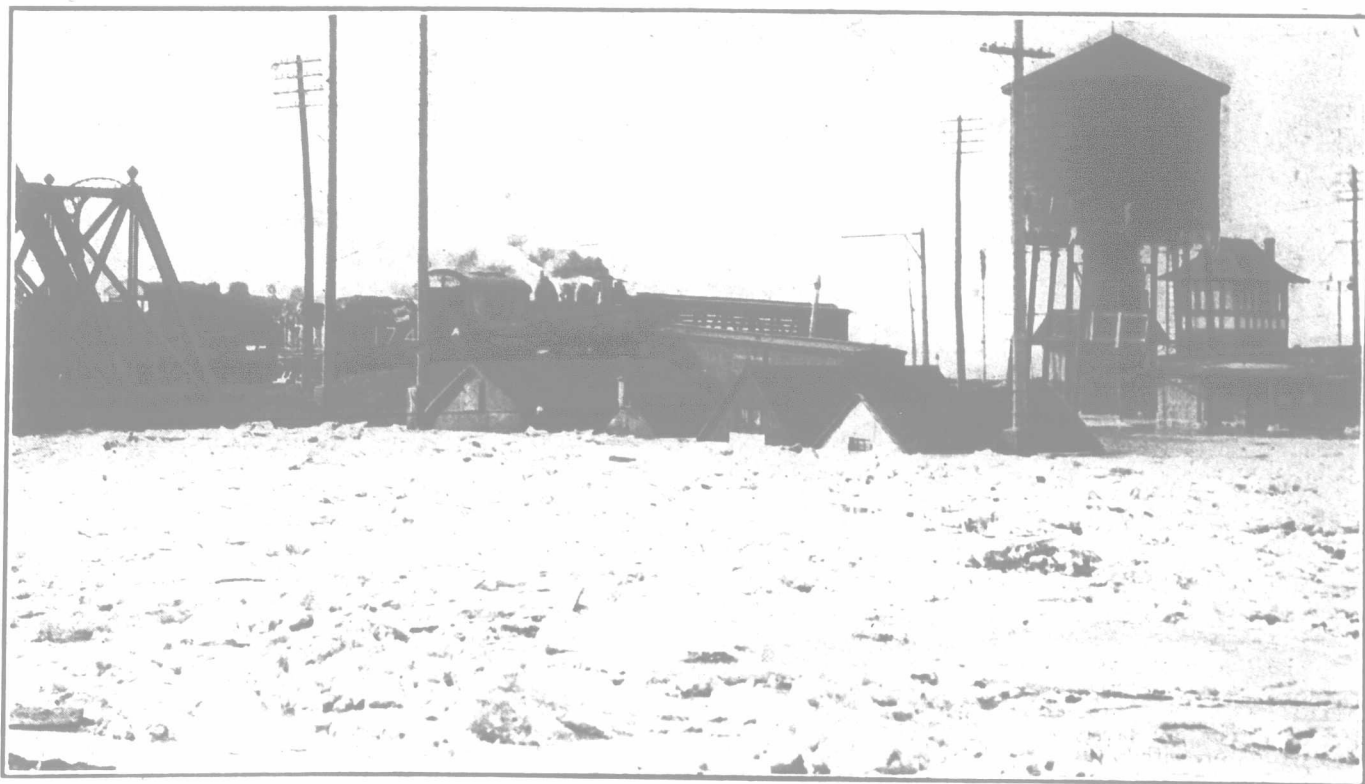
Do you think that work—service—is a thing to be dreaded? I am sure you don't.

Yesterday I was visiting a sick woman who is the mother of nine children. One son was killed at the front, another is in a military hospital, and another expects soon to go overseas. The mother is enduring her enforced holiday with brave cheerfulness, but she looks forward eagerly to the time when she shall again be able to work. She thinks the opportunity of service is a privilege. One who has no work to do finds life very dull.

A person who has too heavy a burden of work, crushing him down, is too "driven" to enjoy work as it should be enjoyed. But one who chooses Christ as his Master finds that "work" has changed its name, and become "service". The change is clear gain. Saul of Tarsus was like an unruly ox, "kicking against the goad", and so making himself unhappy; but, when he said to his new Master, "Lord what wilt Thou have me to do?" the restless discontent melted away like snow before the sunshine. Read his letters, and see how constantly the joy in his heart is revealed. The word "joy" recurs about twenty times, and the word "rejoice" is also repeated about twenty times in those epistles of his. It is not a "pose", either, for a transparent sincerity marks the Apostle's writings. It is very evident that in finding Christ he found deep and satisfying happiness, as millions of others have done. "For the same cause", he wrote to his friends in Philippi, "do ye joy, and rejoice with me." He went eagerly on his missionary journeys because he wanted everybody to know the good tidings of God's love. He wanted everyone to share in his overflowing gladness.

"Shew us the Father, and it sufficeth us," pleaded St. Philip. Listen to the quiet answer of Christ: "Have I been so long time with you, and yet hast thou not known Me, Philip? he that hath seen Me hath seen the Father."

We need not stumble along in darkness



Recent Don River Floods at Toronto.

The buildings nearly covered by ice and water are stables belonging to the City Works' Department. Many horses were rescued with difficulty after they had been hours in the water.

is drudgery or pleasure according to the attitude of mind we bring to it.

Making a garden, for instance, may be to one woman a piece of hard, dirty labor; she hates every minute she spends at it, hates to have her hands mussed up, wishes all the time she is at it that she were dressed up and sitting on the verandah doing embroidery, "like Mrs. D— in town". To her neighbor, on the other hand the whole process may be a delight. She loves to be out of doors, and to smell the warming brown earth. She takes interest in observing the differences in seed, and regards the up-springing green baby-plants with a sort of mother-love. She catches glimpses of the scientific wonder in all work with growing things, and often she stands up, leaning on her hoe, to look about, and listen to bird-songs and the murmur of the wind in the trees.—How blue the sky is, and how fleecy the cloud drifts sailing above the hill! What infinite variety in the shades of the woods—green, bronze, even rose pink—the maple blossoms probably.—And, yes there in the swamp the willow catkins are giving way to the green leaves, almost as though a smoke of emerald were spreading above the red and yellow of the osiers!

And so the one woman is happy and the other is wretched.

It is so with most tasks. But the trouble is that the great majority of people have never got over the impressions forced on them in childhood by people without half the sense possessed by the little mother of whom I have told you, and the wise women at the Earls Court home,—people who consistently, and above all by suggestion, represented work of any kind as a trial.—"If you don't go over to Aunt Mary's for me you'll have to wash the dishes."—"If you don't be good I'll make you sweep the floor."—Who has not heard such stupid, unreasoning threats?—Useful work, the very salvation of a world that would run amuck without it, held up as a punishment! Verily, "What fools these mortals often be."

Isn't it about time that we all began to see that work (not "overwork") with its rightful balance of rest and play, is one of the very best things in all the world, and that training children in that idea is



Economy Keeps the Wolf From the Door!

There are certain nations to-day that are employing their most eminent scientists to discover new foods that may be obtained from minerals, barks and vegetables—all for the sake of economy.

Drink More Cocoa!

It is the most economical food drink, having a highly nourishing character. The cocoa that contains the finest and most expensive cocoa beans, blended to perfection, is the great health-builder.

COWAN'S COCOA
"Perfection Brand"

When writing please mention Farmer's Advocate

one of the best pieces of world-work that anyone can do? As the child is so will the man or woman be.

It's a great thing to see humanity, little by little, getting away from the childhood of the race. For every race, just as every individual, has come up, or is coming up, from its time of childhood. There are races to-day that are the merest children—the Eskimos for instance, the Patagonians, and some of the Red Indian and African tribes. We ourselves, even the best of us, have not yet attained to race-maturity. It is because of a certain childishness that the world is at war to-day; if men everywhere had arrived at race-maturity they would see that battering one another's heads off is no way to settle a dispute, and that wanting to grab the earth for oneself betokens, after all, a very low stage of development. With all her wonderful advancement in science and other things, Prussian militarism—or militarism anywhere for that matter—reveals a mental condition in some respects very little beyond that of the cave man.

But the big War is, perhaps, teaching us a few things. When it is over we western races may have taken one more step away from race-childhood. The other day, when reading Coningsby Dawson's "Carry On" I noticed that he spoke repeatedly of the fact that there is no glitter and tinsel in this struggle, no "flash of swords or splendor of uniforms". It is a grim, gloomy struggle. If war breaks out again men will know just what it means. They will not be attracted to it, as once upon a time, by color, and music and waving pennons—things that appeal most of all to children and savages. Yes, the world is growing up.

It is the principle in the hearts of tired, muddy, stoop-shouldered men that is "carrying on" in Europe to-day. In the words of an American soldier, Sherwood Eddy: "These men are fighting for a new world. Not only German militarism and Russian autocracy and Turkish cruelty must be done away, but American materialism. . . . Organized selfishness must be purged in the fiery furnace of of this war." And, to quote from Coningsby Dawson again: "We've been carried up to the Calvary of the world where it is expedient that a few

Save Human Energy For Greater Production

There is too much to do on the farm to waste any precious human energy on work that a machine can do as well.

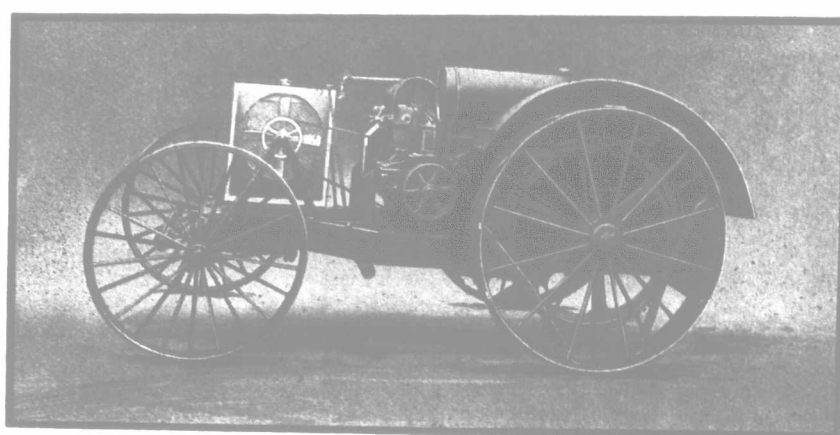
The Combination
SEAFOAM
Power Washer and Wringer



may be operated by gasoline, steam, electric or windmill power. It is sturdily built, carefully fitted and very simple in operation. All gears are covered with metal shields. No rust, no trouble. No accidents.

See the SEAFOAM at your dealers, or write for particulars.

Dowswell, Lees & Co., Ltd.
Hamilton, Ontario



E. LEONARD & SONS, LIMITED
London, Canada

Agents for the
HUBER
Light-Four Tractor

It took nearly twenty years' experience in the manufacture of Gas Tractors to reach the conclusion that the three bottom type is the Ideal Unit.

80% of the tractors sold in the United States are three plow tractors.

Less Gears, Less Bearings than any other make of Tractor. Roller Bearings are of the Hyatt make.

Buy a tractor like the Huber Light Four Thoroughly tried and tested. Many exclusive features in design and construction. No froaks or fads.

Easily pulls three 14 inch bottoms, set 8 inches deep. Plows an acre an hour. Runs all farm machinery. 12 h.p. at the draw bar, 24 h.p. at the belt.

Burns gasoline, kerosene or distillate.

Our Folder "Doing the Impossible"

is a record achievement. It proves the excellence of the Huber. Write for it and our proposition.

men should suffer that all the generations to come may be better."

These men have caught a vision of what grown-up humanity may be. It is ours also to catch it.—surely such men must help us to—and to work in our own small way to help all the rest of humanity to grow up too. We cannot all do great things that will startle the world, but there is work for each of us in our own small circle were it only through the words we say and the ideals we hold. After all it is the agglomeration of the thought and doings of all the people that brings about world-changes. A few may lead, but their leadership would amount to little without the following of the human atoms who make up the rest, the nations. JUNIA.

An Economical Hint.

Mrs. Peter McArthur (yes, "Peter's" wife) has very kindly sent to me the following "hint," evidently to be passed on to you. I am sure it must be of very great use when the weather is cold and the hens go on strike (don't blame them!).

"I wanted to tell you," she says, about whole wheat muffins and cakes that I have been making with snow (no shortage of that!) instead of eggs. They are really fine. I just follow any recipe, and then at the last beat in a cup of fluffy snow instead of the eggs. They are just as light as when made the other way."

While we are on the subject of economy I may as well give to you another suggestion, issued by the British Food-Ministry. It is for making "Potato Butter,"—not as nutritious as real butter, of course, but useful for making real butter stretch out a bit if it chances to be scarce.

"Peel some potatoes and boil until they fall to pieces and become floury. Then rub through a fine sieve into a warmed basin 14 ounces of the potatoes, adding 12 ounces of butter and 1 teaspoon salt. Stir until smooth and then mould into rolls and keep in a cool place. To make a better color use butter coloring." JUNIA.

Needle Points of Thought.

"Words do ten times more to irritate people than the strongest acts." —Cardinal Manning.

"Mr. Santayana speaks somewhere of 'the unconquerable mind of the East.' Well, my guess is that this unconquerable mind will some day be conquered by the Man of Nazareth, just as I think He will eventually—some centuries ahead—conquer even us."—William Lyon Phelps, in "The Advance of English Poetry in the Twentieth Century."

"In spite of the stare of the wise and the world's derision, Dare follow the star-blazed road, dare follow the vision." —Edwin Markham.

"Nero fiddling while Rome burned was a far less odious figure than the man of to-day who, while the whole civilized world is threatened with destruction, looks on with internal delight that this great world-conflagration is helping to swell his fortune."—Christian Guardian.

Cleaning Feather Bed.

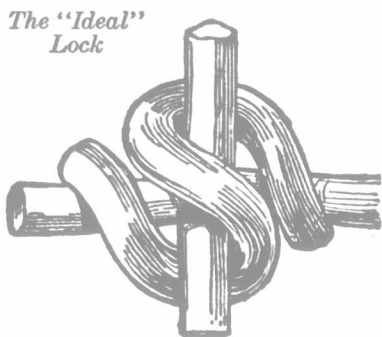
We have taken the Advocate for a number of years and are always interested in this department. I will consider it a favor if you could tell me, through your magazine how to clean the feathers of a feather bed, at home, or where I could send them to be cleaned.

Perth Co., Ont. Mrs. W. B.

The great difficulty in cleaning bed and pillow feathers is their tendency to fly. The following process, given by Scientific American, was awarded the prize offered by the Society of Arts.

Prepare a quantity of lime water in the following manner: Mix well 1 lb. quick lime in each gallon of water required, and let it stand until all the undissolved lime is precipitated as a fine powder to the bottom of the tin, then pour off the clear liquor for use. Put the feathers into a clean tub, pour over them water on top and stir until they all go to the bottom. There should be one gallon of lime water to cover them to a depth of 2 inches. Let them stand in this for 3 or 4 days, then take out, drain, then wash well and rinse in clear water. Dry in nets, and when dry beat well."

Scientific American does not say so, but



"Ideal" Fence Prices

Freight Paid to Your Station

Below we give the freight-paid prices to any station in Old Ontario (except electric) on only a few of the many styles of "Ideal" Fence. The "Ideal" Catalogue and Freight Paid Price List—sent free on request, a postal will bring it to you—shows and describes fully, and gives prices, freight paid to your station on—

25 Styles Heavy "Ideal" Fence

Made throughout of full gauge No. 9, evenly galvanized Hard Steel Wire, from a 4-wire fence 33 inches high to a 15-wire, 57-inch fence. A style for every purpose.

12 Styles Medium Heavy "Ideal" Fence

Made with No. 9 gauge wire for top and bottom, all other wires No. 12 gauge.

2 Styles "Ideal" Poultry Fence—Made with No. 9 gauge wire for top and bottom, all other wires No. 13 gauge. **All Size Farm and Stock Gates**—with improved features found on "Ideal" gates only. **6 Styles "Ideal" Lawn Fence and Gates.** **Brace Wire, Barb Wire Coiled Wire, Stretchers, Steel Posts, Diggers, etc.**

Send today for "Ideal" catalog with Freight-Paid Prices

No. 7400 HORSE AND CATTLE FENCE
7-line wires, 40 inches high, stays 22 inches apart. Spacing 5. 6. 6. 7. 7½. 8½. Made throughout of full gauge No. 9, evenly galvanized hard steel wire. Price, per rod..... **50c**

No. 7480 HORSE AND CATTLE FENCE
7-line wires, 48 inches high, stays 22 inches apart. Spacing 5. 6½. 7½. 9. 10. 10. Made throughout of full gauge No. 9 evenly galvanized hard steel wire. Price, per rod..... **51c**

No. 831 HOG FENCE
8-line wires, 31 inches high, stays 16½ inches apart. Spacing 3. 3. 3. 4. 5. 6. 7. Made throughout of full gauge No. 9, evenly galvanized hard steel wire. Price, per rod..... **60c**

No. 1048 GENERAL STOCK FENCE
10-line wires, 48 inches high, stays 16½ inches apart. Spacing 3. 3. 3½. 4. 5. 6. 7. 8. 8½. Made throughout of full gauge No. 9, evenly galvanized hard steel wire. Price, per rod..... **75c**

No. 1150 GENERAL STOCK FENCE
11-line wires, 50 inches high, stays 13 inches apart. Made with top and bottom wires No. 9 gauge, all other wires No. 12. Price per rod..... **55c**

25-lb. bundle No. 9 galvanized brace wire \$1.60
25-lb. box (any size) galvanized fence staples 1.85

4-point galvanized barb wire per 80-rod spool 5.50

"Ideal" stock gate, 14 feet long x 51 inches high. Each 6.50

"Ideal" farm gate, (close mesh) 12 feet x 48 inches. Each 7.00

Send today for complete prices on "Ideal" fence, gates, lawn fence and all fence supplies freight paid to any station in either Old or New Ontario.

Quebec and Maritime Provinces

We have opened a warehouse and office in Montreal to handle Eastern shipments and correspondence. Ask our Branch, 14 Place Royale, Montreal, Quebec, for "Ideal" prices, freight paid to any station in Canada east of Montreal.

OUR GUARANTEE

"Ideal" fence is guaranteed to be made exactly as represented, to be made as the best fence should be made and to give you THAT VALUE you expected to receive when ordering.

We have a large stock of all styles of "Ideal" fence on hand and will ship all orders the same day as received, while stock lasts.

The McGregor Banwell Fence Co., Limited Walkerville, Ont.

EIGHTY HOLSTEINS

Will be sold by Auction at the ALLISON STOCK FARM, Chesterville, Ont., on Thursday, March 21, 1918

The offering will consist of 30 mature cows, 17 two-year-old heifers, 18 yearling heifers and 9 bulls. Many head of the females have been bred to Riverside Lyons Echo Posch, whose dam, Lawncrest No. 1, has a record of 3378 lbs. butter in 7 days. In the offering there will be 35 daughters of Sir Lyons Segis, 10 daughters of King Seas Alberta Potter, and 10 daughters of the late Earl of Lyons. The offering will also include two 100 lb. cows, one 30 lb. cow record holder, one 28 lb. cow, and one 28 lb. cow. Eleven other females are above 20 lbs. of milk per day, and the average over 20 lbs. per day. The reason for selling and 22 calves of the lot to be offered for sale. TERMS: Six months or 12 weeks in advance, or three per cent. on the cash. WRITE FOR CATALOGUE.

ALLISON STOCK FARM, CHESTERVILLE, ONTARIO

IRON AGE

Farm, Garden and Orchard Tools
Answer the farmers' big questions. How can I grow crops with less expense? How can I save in planting potatoes? How make high priced seed go farthest? The **IRON AGE Potato Planter** solves the labor problem and makes the best use of high priced seed. Means \$5 to \$50 extra profit per acre. Every seed piece in its place and only one. Saves 1 to 2 bushels seed per acre. Uniform depth, even spacing. We make a full line of potato machinery. Send for booklet today.

No Misses
No Doubles

THE BATEMAN-WILKINSON CO., Ltd.
41 Symington Avenue, Toronto, Canada.

When writing please mention this paper.

Has Pipes Like an Organ



Model "Organola"
\$250

Built into the cabinet of our "Organola" Model of the "Phonola" are tone control pipes which include every note in the scale. Like an organ they separate the different sounds and give clearness and volume to the music.

The sweet low notes and overtones of an orchestra that you miss on the ordinary machine are rendered distinctly on the "Phonola Organola." The high notes of the soprano are heard without a tingle. The violin sounds like a real violin. Every instrument, every voice, is true to life.

If you are looking for the utmost in phonographs, you will find it in the "Organola" model of the



Other models of the "Phonola" from \$18 to \$250. They play all makes of disc records.

DEALERS. The "Phonola" line offers exceptional opportunities. If your town is unrepresented, write us

The Pollock Manufacturing Co., Limited
Kitchener, Canada 38




Club Feet

Little Robert Taylor was born with deformed feet. Plaster paris casts were used without success—so he was brought to the McLain Sanitarium. His parents' letter tells the story:

"We are more than thankful for what you did in straightening Robert's feet. Of course, his feet are terribly scarred from the plaster casts, but there are no scars from your work on him. His feet are so straight; and he runs, jumps and does anything any other boy can do. MR. AND MRS. JOHN W. TAYLOR, 201 Coulter Bldg., Los Angeles, Cal."

This is not a selected case—neither is the result unusual. In correcting this deformity no plaster paris or general anaesthesia was used.

For Crippled Children

The McLain Sanitarium is a thoroughly equipped private institution devoted exclusively to the treatment of children and young adults afflicted with Club Feet, Infantile Paralysis, Spinal Disease and Curvature, Hip Disease, Wry Neck, etc. Our book, "Deformities and Paralysis," also "Book of References", free on request. Write for them.

The McLain Orthopedic Sanitarium 861 Aubert Ave. St. Louis, Mo.

Advice From the Food Controller

Office of the Food Controller,
Ottawa, February 8, 1918

Re Maple Sugar:

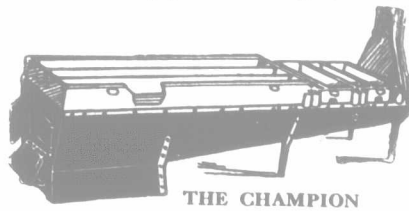
Dear Sir,—I would respectfully suggest that in your advertising to maple sugar and syrup producers you emphasize the opportunity for Canadian maple products, and call attention to the cane and beet sugar shortage. You have authority for using any influence with the approval of this office for the campaign for increased maple syrup production, so our advice to each maple grove owner is—

Tap More Trees — Tap Every Tree You Can

Maple sugar is more than ever a food, a national necessity. Make preparations now to save this valuable crop, and double or treble the production. Every pound of sugar, every gallon of syrup helps food conservation.

With a GRIMM CHAMPION OUTFIT you can make more syrup with less help, and in less time, and at less cost, than any other way.

Put your maple bush in working order, and get in touch with us on the question of outfit.



The Grimm Manufacturing Co., Ltd.
60 Wellington St., Montreal

When writing advertisers will you kindly mention The Farmer's Advocate.

one could imagine that the best way to get the feathers into the tub in the first place would be to saturate tick and all with water, then open one end and rake out the wet feathers. The tick could then be washed and dried. It would seem, also, that the drying "nets" referred to would need to be bags, for convenience sake.

Washing Waist—Keeping Furs.

DEAR MADAM:
Will you kindly answer through your valuable paper the following questions.

1. How to wash a silk crepe-de-chine waist?

2. How to pack sable furs for summer months to prevent buffalo-moths from destroying them?

Thanking you for same.

"FARMER'S DAUGHTER".
Lambton Co., Ont.

You can wash a silk crepe-de-chine waist nicely by using "Lux", following directions. It can also be cleaned with gasoline if the work is done in a room absolutely free from lights or fire, to prevent danger of explosion. Afterwards the windows should be open to allow the fumes to escape.

I never have any trouble with moths getting into my furs, and the way I keep them is this: I get a big paper flour bag, then put the furs in after they have been shaken and beaten lightly out of doors. Next I tie a string around the top of the bag so tight that a moth simply cannot get in. Some people put moth balls in the bag, or buy special moth-proof bags for storing furs, but I have never found this necessary.

Marmalade Without Bitterness.

W. H. L., Simcoe Co., Ont., wishes a recipe for orange marmalade with "no bitterness" in it.

I do not know of any orange marmalade

Westclox

Westclox is Big Ben's family name. Westclox is a name an alarm clock is proud to bear. Westclox is a mark of quality.

All Westclox must earn the right to wear it. Like Big Ben, they must be as good all through as they look outside.

The Western Clock Co. makes each

one in the patented Westclox way—a better method of clock making. Needle-fine pivots of polished steel greatly reduce friction. Westclox run on time and ring on time.

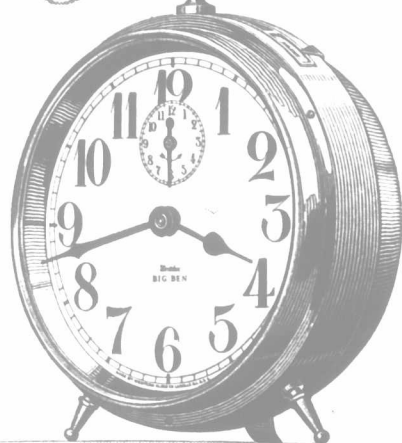
That's why Westclox make good in the home; that's why these clocks have so many friends.

Your dealer has them. Big Ben is \$4.00. Or, sent prepaid, the same price, if your dealer doesn't stock him.

Western Clock Co.—makers of Westclox

Big Ben—Baby Ben—Pocket Ben—America—Lambton—Invaluable—Sleep—Miser—Dope
La Salle, Illinois, U. S. A.

Big Ben



A Westclox Alarm

that is absolutely without bitterness. Even the sweet oranges develop it with the cooking and do not jelly so well as the bitter ones. A delicious marmalade may, however, be made of lemons alone. It is not bitter, and just tart enough to be right. It is made as follows.—To 1 lb. fruit sliced very thin allow 2½ pints water. Let stand over night, then boil slowly 1½ hours. Let stand over night again, and add 1¼ lbs. sugar to every pint of boiled fruit. Boil until it is clear enough.

The Scrap Bag.

Instead of Eggs.

Grated carrots can be used in place of eggs in meat loaf. Use any loaf recipe and substitute 2 or 3 grated carrots for the eggs. Grated carrots may also be used instead of eggs in pancakes.

When Sewing on Snap Fasteners.

When sewing on snap-fasteners, sew on each half bearing the little knob first. Then chalk these little knobs with ordinary chalk; press down firmly just as you wish the garment closed. A little line of white chalk dots will mark the exact centers where the other half of the snaps should be placed. Colored chalk may be used for white garments.—Mrs. I. R. F., Salem, Oregon.

Raising Dahlias From Seed.

A writer in Suburban Life says: "I have had splendid success raising fine dahlias from seed, and having them bloom early, by planting them in the following manner:

When cooking eggs I save the shells, make a tiny hole in the end of each half, fill with rich dirt and plant two seeds. I set them in a shallow box of soil to keep them upright. When they are about three inches high, I plant them in the garden, shell and all. In this way their roots are not disturbed, and their growth is not checked by transplanting."

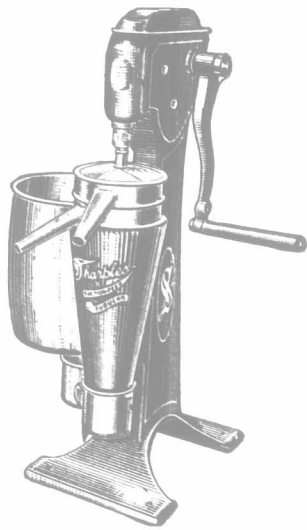
The "Guardian" of Your Cream Profits

It is not a bell; nor a speedometer; nor muscle—it's the suction-feed principle of the Sharples Separator. Other separators do not have this basic advantage—that is why all sorts of make-shifts are adopted. These merely remind you that cream is being wasted—they don't remedy it. To get maximum cream profits you must skim clean at any speed—and there's only one way to do it—use a

SHARPLES SUCTION-FEED CREAM SEPARATOR

Tests prove conclusively that 95% of all separators are turned under speed. As applied to the Sharples it does not matter—at 35 revolutions or at 55 revolutions clean skimming is certain. With any other separator (no exceptions) there is a constant waste of cream when turning under speed. This cream waste averages about 10 lbs. per cow per year, or the staggering total nationally of over 80,000,000 lbs.

Another big Sharples feature is the one piece bowl, no discs to clean. You get done quicker and feel in a better humor. Write for catalog. Address nearest office, Dept. 78



TORONTO, ONT. **The Sharples Separator Co.** REGINA, SASK.
Sharples Milkers—used on half a million cows daily
 THE MITCHELL & MCGREGOR HARDWARE CO., Brandon, Man.
Distributors for Manitoba

CLOVER SEEDS

(Government Standard)

No. 1 Alsike	\$16.00
No. 2 Alsike	15.00
No. 1 Red Clover	25.00
No. 1 Alfalfa (Northern)	16.50
No. 2 Timothy (No. 1 Purity)	5.50
O.A.C. 72 Oats	1.25
Silver Mine Oats	1.25

Terms:—Cash with order. Bags extra 50c. each, Jute bags for Oats, 20c. We will pay freight on Clover Seed.

We guarantee our seeds to satisfy you or you may ship back at our expense.

Ask for samples if necessary.

Caledonia Milling Co. LIMITED
 Caledonia, Ontario

War Time Cookery.

Fruit Pudding.—Take some slices of stale bread or cake, some cooked fruit of any kind, half a cup of sugar to be used if fruit is not very sweet, 1 cup water if it is not very juicy. Line a buttered pudding dish with the bread or cake. If bread is used spread with butter. Butter, by the way, is valuable not merely as flavoring; it is a most excellent food. Cover the bread or cake with the fruit, sprinkle with sugar if needed, and keep on putting similar layers until the dish is full. Pour on the cupful of water, or fruit juice, if needed. Cover and bake slowly for an hour. Eat hot with cream or sauce.

Oatmeal Hurry-Ups.—Take ½ cup flour, 1 cup rolled oats, 1 tablespoon fat, ½ cup milk, ¼ teaspoon salt, 2 teaspoons baking powder. Mix oats, flour and salt. Cut in the fat. Add the milk and mix, forming a soft dough. Drop into greased muffin tins or deep patty pans, and bake in a quick oven.

Baked Apple With Rolled Oats.—Six apples, ½ cup sugar, ¼ cup cooked oatmeal, ½ cup corn syrup. Pare the apples keeping them whole, and remove cores, then simmer in a little water, covered, until almost tender. Fill the centres with oatmeal, make a syrup of the sugar, corn syrup and water in which the apples were cooked. Cover the apples with this and bake in a moderate oven.

Vegetable Scallops.—All scallops are made by putting something in layers with crumbled bread, cake, or even cooked porridge between, then baking. Usually crumbs mixed with melted butter are put on top. Invariably scallops are served in the dishes in which they are baked. One large dish may be used, or small individual baking cups. Of course, the very nicest dishes for the purpose are pyrex or earthenware, but a granite dish may be used, with a napkin or white crinkle paper put around it before placing on the table. The following suggestions for scallops may be found useful: (1) Cake crumbs or brown breadcrumbs with layers of leftover fruit, the whole moistened with fruit-juice. Serve as pudding. (2) Canned tomatoes, boiled onions, brown breadcrumbs and seasoning. (3) Left over creamed cabbage, brown breadcrumbs, grated cheese or sliced hard-boiled eggs or minced meat. (4) Flaked fish, boiled rice or hominy, a little chopped onion and milk sauce to cover. Most of these dishes are nice for supper, or they may be served at dinner, with meat.

Potato Souffle.—Two cups hot (boiled) potato, 1½ cups hot milk, 1 table spoon fat, 2 table spoons grated cheese, 1 table spoon salt. Put in hot pot on a baking dish. Pour over it from the hot milk in which the potatoes were cooked. Sprinkle the top with salt and pepper and bake in a moderate oven. Bake until the top

Made in Canada

Tarvia

Preserves Roads Prevents Dust-

Frost-proof Roads in the "Frozen North"

Winter temperatures in the Algoma District in Northern Ontario are so severe that few road-making materials can withstand them.

Tarvia does!

Under the severest tests, Tarvia has proved itself frost-proof, mud-proof and traffic-proof, regardless of long-continued zero weather or equally rigorous climatic conditions.

The Coppercliff street pictured below carries a very heavy wagon-traffic. It has a Tarvia surface, making it impervious to the wear of traffic, the effects of the severe northern winter, and to the equally trying spring thaw, when ordinary roads soon become impassable.

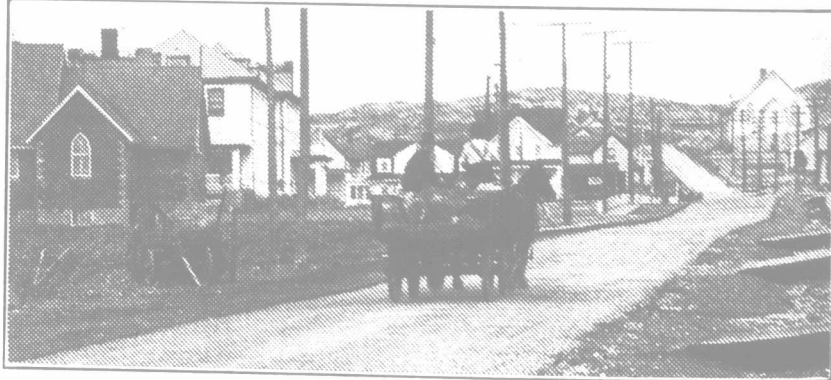
Experience proves that on main highways Tarvia roads are the most economical ones to build in the Dominion. Other types are so susceptible to frost-damage as well as to automobile-traffic, that they run a big bill every year for maintenance and repairs; thus money that ought to go into extension of the highway system has to be spent in keeping up the old roads.

Any macadam road can be converted into a Tarvia road at slight expense, and then it becomes easy to take care of at small expense.

Let us send you a Tarvia booklet showing you how you can get better roads for less money.

The Barrett Company LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER
 ST. JOHN, N. B. HALIFAX, N. S. SYDNEY, N. S.



One of the many streets in Coppercliff, Ontario, treated with "Tarvia-B," 1917

Choice O.A.C. No. 72 Oats

for sale, price, \$1.25, f.o.b. Aylmer, Ont. Sacks free
LEWIS ADAMS, AYLMER, ONT.

Rose Comb Rhode Island Reds

Two cocks, and a number of cockerels, good laying strain, at \$3.00 each while they last.
ALEX. MCKINNEY, ERIN, ONTARIO.



MAKE UP YOUR LIST NOW!

There is no time to be lost now in getting in your seed order. Those who delay are likely to go short. Besides prompt action, two other things are essential—get the best seeds money can buy, and pay no more than you should. If your selections are made NOW from Keith's 1918 catalogue and the list below you have taken every precaution.

Government Standard	
No. 1 Red Clover	\$26.00
No. 1 Alsike	17.00
Alfalfa, Ontario Variegated No. 2, almost No. 1 for purity	21.00
No. 1 Timothy, extra No. 1 for purity	6.25
No. 2 Timothy, extra No. 1 for purity	5.75
No. 2 Timothy, No. 1 for purity	5.25
We pay rail-way freight to all parts in Ontario and Quebec on orders of \$25.00 or more.	
Get our quotations on Mangel and Turnip seeds.	
We are in the market for 6-rowed and 2-rowed barley, Marquis Wheat, Emerald Barley, Sweet Clover.	

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Turnip cut in half- Cook in 1 minutes, th add the fol spoons but teaspoon le add ½ teas and, if you chopped pa

Entire W scalded mil raisins, ¼ c solved in ¼ salt, entire molasses to until tepid, beat in flour raisins and double in l loaves, put Bake for 50

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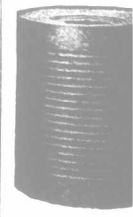
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Soluble Sulp



GOO YEAR



B. H. HEA

Turnip Cubes.—Wash and pare turnips, cut in half-inch slices, then cut into cubes. Cook in boiling salted water for 20 minutes, then drain. To 2 cups of cubes add the following sauce: Work 3 tablespoons butter until creamy, and add 1 teaspoon lemon juice very slowly, then add 1/2 teaspoon salt, 1/8 teaspoon pepper, and, if you have it, 1/2 teaspoon finely chopped parsley.

Entire Wheat Raisin Bread.—One cup scalded milk, 1 cup boiling water, 1 cup raisins, 1/2 cup molasses, 1 yeast cake dissolved in 1/2 cup tepid water, 1 teaspoon salt, entire wheat flour. Add salt and molasses to the water and milk. Cool until tepid, then turn in the yeast, and beat in flour to make a stiff batter. Add raisins and flour to knead, let rise until double in bulk, cut down, shape into loaves, put in pans, and let rise again. Bake for 50 minutes in a moderate oven.

The Dollar Chain

A fund maintained by readers of The Farmer's Advocate and Home Magazine for the soldiers and all who are suffering because of the war.

Contributions from Feb. 22 to Feb. 28: John Adair, Holstein, Ont., \$3.50; "D. C. F.," Melbourne, Ont., \$5.00; W. B. Snow, New London, P. E. I., \$5.00; "Scotia", London, Ont., \$1.00; Hugh K. Saunders, Jarvis, Ont., \$2.50; Mrs. Robt. Wright, Camlachie, Ont., \$1.00.

Previously acknowledged.....\$5,240.90

Total to Feb. 28.....\$5,258.90

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Current Events

The Government intends to take over the whole of the Grand Trunk railway. Later the C. P. R. may be included.

By the wrecking of the "Florizel" in a storm off the coast of Newfoundland, 44 people were saved and 92 lost.

Returned soldiers who intend to take up farming will get 100 instead of 80 acres of land from the Provincial Government.

Serial Story.

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY

By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont. Chapter XVII.

The day after the sewing society Ellen Dix went up to her room, after hurriedly washing the dinner dishes. It was still hot, but a vague haze had crept across the brazen sky since morning. Ellen's room looked out into cool green depths of trees, so that on a cloudy day it was almost too dark to examine the contents of the closet opposite its two east windows.

It was a pretty room, freshly papered and painted, as were many rooms in Brookville since the sale of the old Bolton properties. Nearly every one had scrimped and saved and gone without so long that the sudden influx of money into empty pockets had acted like wine in a hungry stomach. Henry Daggett had thrice replenished his stock of wall papers; window shades and curtaining by the

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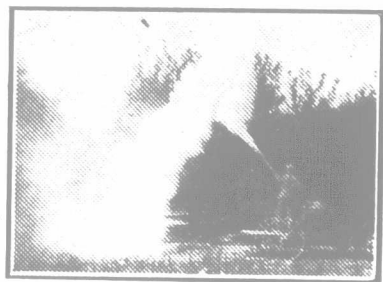
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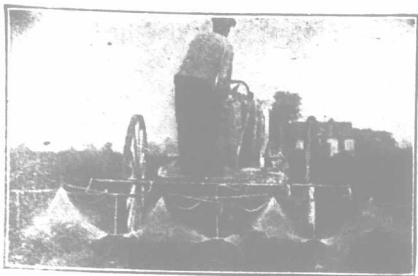
"It now seems settled that a mixture of an insecticide and fungicide can be applied in powdered form, using air as a carrier, with better commercial results in the control of preventable apple diseases, and of apple insects that can be obtained by spraying. At the same time, the dust method makes it possible for the owner of a large acreage to protect his orchard at critical times—a thing that he has not been able to do with the slow liquid process."

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yard had been in constant demand for weeks; bright colored chintzes and gay flowered cretonnes were apparently a prime necessity in many households. As for paper hangers and painters, few awaited their unhurried movements. It was easy for anybody with energy and common sense to wield a paintbrush; and old paper could be scraped off and fresh strips applied by a simple application of flour paste and the fundamental laws of physics. One improvement clamors loudly for another, and money was still coming in from the most unexpected sources, so new furniture was bought to take the place of unprized chairs and tables long ago salvaged from the Bolton wreck. And since Mrs. Deacon Whittle's dream parlor, with its marbled tops and plush-upholstered furniture, had become a solid reality, other parlors burgeoned forth in multi-colored magnificence. Scraggy old shrubs were trimmed, grass was cut in unkempt dooryards; flowers were planted—and all because of the lavish display of such improvements at Bolton House, as "that queer Orr girl" persisted in calling it; thereby flying in the face of public opinion and local prejudice in a way which soured the milk of human kindness before the cream of gratitude could rise.

Everybody agreed that there was something mysterious, if not entirely unnatural in the conduct of the young woman. Nobody likes unsolved riddles for long. The moment or century of suspense may prove interesting—even exciting; but human intelligence resents the Sphinx.

Ellen Dix was intensely human. She was, moreover, jealous—or supposed she was, which often amounts to the same thing. And because of this she was looking over the dresses, hanging on pegs along her closet wall, with a demurely puckered brow. The pink muslin was becoming, but old-fashioned; the pale yellow trimmed with black velvet might get soiled with the dust, and she wasn't sure it would wash. She finally selected a white dress of a new and becoming style, attired in which she presently stood before her mirror adjusting a plain Panama hat, trimmed simply with a black ribbon. Not for nothing had Ellen used her handsome dark eyes. She set the hat over her black hair at exactly the right angle, skewering it securely in place with two silver pins, also severely simple in

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their style and quite unlike the glittering rhinestone variety offered for sale in Henry Daggett's general store.

"I going out for a while, mother," she said, as she passed the room where Mrs. Dix was placidly sewing carpet rags out of materials prodigiously increased of late, since both women had been able to afford several new dresses.

"Going to Fanny's?" inquired Mrs. Dix. . . . Seems to me you're starting out pretty early, dear, in all this heat. If you'll wait till sundown, I'll go with you. I haven't seen their parlor since they got the new curtains up."

"I'm not going to Fanny's, right off," said Ellen evasively. "Maybe I'll stop on the way back, though. 'Tisn't very hot; it's clouded up some."

"Better taken an umbrella," her mother sent after her. "We might get a thunder storm along towards four o'clock. My shoulder's been paining me all the morning."

But Ellen had already passed out of hearing, her fresh skirts held well away from the dusty way-side weeds.

She was going, with intentions undefined, to see Lydia Orr. Perhaps (she was thinking) she might see Jim Dodge. Anyway, she wanted to go to Bolton House. She would find out for herself wherein lay the curious fascination of which Fanny had spoken. She was surprised at Fanny for so easily giving in about the furniture. Secretly, she considered herself to be possibly a bit shrewder than Fanny. In reality she was not as easily influenced, and slower at forming conclusions. She possessed a mind of more scope.

Ellen walked along, setting her pointed feet down very carefully so as not to raise the dust and soil her nice skirts. She was a dainty creature. When she reached the hedge which marked the beginning of the Bolton estate, she started, not violently, that was not her way, but anybody is more startled at the sudden glimpse of a figure at complete rest, almost rigidity, than of a figure in motion. Had the old man whom Ellen saw been walking along toward her, she would not have started at all. She might have glanced at him with passing curiosity, since he was a stranger in Brookville, then that would have been the end of it. But this old man,



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standing as firmly fixed as a statue against the hedge, startled the girl. He was rather a handsome old man, but there was something peculiar about him. For one thing he was better dressed than old men in Brookville generally were. He wore a light Palm Beach cloth suit, possibly too young for him, also a Panama hat. He did not look altogether tidy. He did not wear his up-to-date clothes very well. He had a rumpled appearance. He was very pale almost with the paleness of wax. He did not stand strongly, but rested his weight first on one foot then on the other. Ellen recovered her composure, but as she was passing, he spoke suddenly. His tone was eager and pitiful. "Why, Ann Eliza Dix," he said. "How do you do? You are not going to pass without speaking to me?"

"My name is Dix, but not Ann Eliza," said Ellen politely; "my name is Ellen."

"You are Cephas Dix's sister, Ann Eliza," insisted the old man. His eyes looked suddenly tearful. "I know I am right," he said. "You are Ann Eliza Dix."

The girl felt a sudden pity. Her Aunt Ann Eliza Dix had been lying in her grave for ten years, but she could not contradict the poor man. "Of course," she said. "How do you do?"

The old man's face lit up. "I knew I was right" he said. "I forget, you see, sometimes, but this time I was sure. How are you, Ann Eliza?"

"Very well, thank you."

"How is Cephas?"

"He is well, too."

"And your father?"

Ellen shivered a little. It was rather bewildering. This strange old man must mean her grandfather, who died before her Aunt Ann Eliza. She replied faintly that he was well, and hoped, with a qualm of ghastly mirth, that she was speaking the truth. Ellen's grandfather had not been exactly a godly man, and the family seldom mentioned him.

"He means well, Ann Eliza, if sometimes you don't exactly like the way he does," said the living old man, excusing the dead one for the faults of his life.

"I know he does," said Ellen. The desire to laugh grew upon her.

She was relieved when the stranger changed the subject. She felt that she would become hysterical if this forcible resurrection of her dead relatives continued.

"Do you like an automobile?" asked the old man.

"I don't know, I never had one."

The stranger looked at her confidingly. "My daughter has one," he said, "and I know she bought it for me, and she has me taken out in it, but I am afraid. It goes too fast. I can't get over being afraid. But you won't tell her, will you, Ann Eliza?"

"Of course I won't."

Ellen continued to gaze at him, but she did not speak.

"Let me see, what is your name, my dear?" the man went on. He was leaning on his stick, and Ellen noticed that he trembled slightly, as though with weakness. He breathed hard. The veinous hands folded on top of the stick were almost as white as his ears.

"My name is Ellen Dix," she said.

"Dix—Dix?" repeated the man. "Why, I know that name, certainly, of course! You must be the daughter of Cephas Dix. Odd name, Cephas, eh?"

Ellen nodded, her eyes still busy with the details of the stranger's appearance. She was sure she had never seen him before, yet he knew her father's name.

"My father has been dead a long time," she said; "ever since I was a little girl."

The man appeared singularly disquieted by this intelligence. "I hadn't heard that," he said. "Dead—a long time? Well!"

He scowled, flourishing his stick as if to pass on; then settled to his former posture, his pale hands folded on its handsome gold top.

"Cephas Dix wasn't an old man," he muttered, as if talking to himself. "Not old. He should be hale and hearty, living in this good country air. Wonderful air this, my dear."

And he drew a deep breath, his wandering gaze returning swiftly to the girl's face.

"I was just walking out," he said, nodding briskly. "Great treat to be able to walk out. I shall walk out when—"

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ever I like. Don't care for automobiles—get you over the road too fast. No, no; I won't go out in the automobile, unless I feel like it! No, I won't; and there's an end of it!"

He brought his stick down heavily in the dust, as if emphasizing this statement.

"Guess your father left you pretty well off, eh, my dear?" he went on presently. "Glad to see you looking so fresh and neat. Always like to see a pretty girl well dressed."

The man's eyes, extraordinarily bright and keen, roved nimbly over her face and figure.

"No, he did not," replied Ellen. "My father used to be rich," she went on. "I've heard mother tell about it hundreds of times. We had horses and a carriage and plenty of money; but when the bank went to pieces my father lost everything. Then he died."

The man was peering at her from under his shaggy gray brows.

"But not because the bank failed? Surely not because he lost his money? That sort of thing doesn't kill a man, my dear. No, no!"

"It did," declared Ellen firmly.

The man at once seemed to grow smaller; to huddle together in his clothes. He muttered something unintelligible, then turned squarely about, so that Ellen could see only his hunched back and the glistening white hair cut close behind his waxen ears.

The girl walked thoughtfully on, but when she paused to look back she saw that he had resumed his slow walk in the opposite direction, his stick describing odd flourishes in the air, as before.

When she reached Bolton House she was ushered into a beautiful parlor by a prim maid in a frilled cap and apron. The maid presented to her attention a small silver tray, and Ellen, blushing uncomfortably because she had no card, asked for Miss Orr.

Soon the frilled maid reappeared. "I'm sorry, Miss," she said, "I thought Miss Lydia was at home, but I can't find her anywheres about."

She eyed Ellen's trim figure doubtfully.

"If there was any message—"

"No," said Ellen, "I only came to call."

"I'm real sorry, Miss," repeated the maid. "Miss Lydia'll be sorry, too. Who shall I say, please?"

"Miss Dix," replied Ellen. She walked past the maid, who held the door wide for her exit. Then she paused. A surprising sigh met her eyes. Lydia Orr, hatless, flushed as if by rapid flight, was just reaching the steps, conveying the strange man Ellen had met on the road a short time before.

The maid at her back gave a little cry. Ellen stood staring. So this was the person Jim Dodge had gone to fetch from somewhere!

"But it isn't too warm for me to be walking out to take the air," she heard, in the heavy mumble of the man's voice. "I don't like being watched, Lydia; and I won't stand it, either. I might as well be—"

Lydia interrupted him with a sharp exclamation. She had caught sight of Ellen Dix standing under the deep portico, the scared face of the maid looking over her shoulder.

Ellen's face crimsoned slowly. All at once she felt unaccountably sorry and ashamed. She wished she had not come. She felt that she wanted nothing so much as to hurry swiftly away.

But Lydia Orr, still holding the strange old man by the arm, was already coming up the steps.

"I'll not go in the automobile, child," he repeated, with an obstinate flourish of his stick. "I don't like to ride so fast I want to see things. I want—"

He stopped short, his mouth gaping, his eyes staring at Ellen.

"That girl!" he almost shouted. "She told me—I don't want her here. . . . Go away, girl, you make my heart hurt!"

Lydia flashed a beseeching look at Ellen, as she led the old man past.

"Please come in," she said; "I shall be at liberty in just a moment. . . . Come father!"

Ellen hesitated.

"Perhaps I'd better not, to-day," she murmured, and slowly descended the steps.

The discreet maid closed the door behind her.

(To be continued.)

Cash Prize Bulletin

HERE IS THE FIRST PRIZE

The Farmer's Advocate and Home Magazine

No. 27384950

London, Ont. April 2nd, 1918

To **The Molsons Bank**

Pay to Winner of Cash Prize Competition or Bearer

FIVE

Dollars

\$ 5.00

THE WILLIAM WELD COMPANY, LIMITED

The Second Prize is \$3.00 The Third Prize is \$2.00

These prizes will be given to the three readers of this paper who send in the largest lists of names of new subscribers to THE FARMER'S ADVOCATE AND HOME MAGAZINE before the end of March.

THIS IS HOW THEY STAND THIS WEEK

- 1 THOS. S. MILLER
W. J. TREBELCO Both tied for first place.
- 2 MICHAEL UNVERZAGT
D. J. COLEMAN Tied for second place.
- 3 F.A. WEYLIE
HAROLD ADRIAN Tied for third place.
- 4 LEONARD ANNETT
MERRITT HUNTER Tied for fourth place.
- 5 VERA COSTELLO
OSCAR H. LEE Tied for fifth place.

This is a great competition. Every place down to the fifth is tied, and there is only a difference of six names between the leaders and those in fifth place.

Don't You Want To Join in This Competition?

Remember that those who don't win prizes get a liberal commission on each name sent in and a special bonus each time a list of ten new names is completed.

You Will Make Some Money Anyway!

Don't delay, as the competition closes at the end of March, but you still have plenty of time to finish among the first three.

Cut out the coupon at the bottom of this advertisement, and we will send you supplies and instructions at once.

C O U P O N

The Farmer's Advocate and Home Magazine
London, Ont.

Gentlemen:—I want to win a prize in your Cash Prize Competition. Please send me instructions and supplies at once.

NAME AGE

ADDRESS Do You Subscribe?.....

The an Bank of Ca the shareh recently he banner year ment was a the Bank's \$73,990,000 \$14,100,000 available as the total l public. TH in deposits. increased du at \$3,453,2 \$4,453,290. dividend ou has contrib Pension Fu funds, and possible dep was carried and Loss Ac ment shoul holders, and Standard B and greater ing the pas year.

Oxford Br

Practically stock realize County as a the excellen herds of whic County lin Holstein-Fri March 20, selected from the reputat established, the quality The Club h sometime an prospective doubts but v solutely on season of the cows or heif for they soon advertisement in this issue, about the h but still fur tained from t son, Woodsto on request, have selected and have l on individua of heifers, sp There is an e dams' record and in some average 30 lb will be held in and all will l the adverti catalogue, me

Hon. I. B. Ontario, anno that steps a venereal disea in the Provinc

Representa of Canada m confer with th Cabinet.

Pa Su

GIVE are proof leat are light, leather so laced, hav ideal sho They trackmen ing extra The s high. As "Moose H and sizes JOHN

Gossip.

The annual statement of the Standard Bank of Canada, which was submitted to the shareholders at their annual meeting recently held, shows 1917 to have been a banner year. One feature of the statement was a very substantial increase in the Bank's assets which now amount to \$73,990,000. The cash assets are over \$14,100,000. This, added to other readily available assets, equals fifty per cent. of the total liabilities of the Bank to the public. There has been a marked increase in deposits. The capital stock has been increased during the year and now stands at \$3,453,290, and the reserve fund at \$4,453,290. Besides paying the usual dividend out of the earnings, the Bank has contributed \$20,000 to the Officers' Pension Fund, and \$31,250 to patriotic funds, and also made provision for any possible depreciation in securities. There was carried forward to the credit of Profit and Loss Account, \$175,215. The statement should be gratifying to the shareholders, and reassuring to the public. The Standard Bank was established in 1873 and greater progress has been made during the past year than in any previous year.

Oxford Breeders will Sell Holsteins.

Practically everyone interested in live stock realizes the high standing of Oxford County as a dairy district, and appreciates the excellence of the pure-bred Holstein herds of which there are many within the County limits. The Oxford County Holstein-Friesian Breeders' Club, on March 20, will sell 70 head of cattle selected from the members' herds, and the reputation of this Club, already established, is sufficient guarantee that the quality of the offering will be right. The Club has been doing business for sometime and intends to continue, so no prospective purchaser need have any doubts but what he will be treated absolutely on the square. This is the season of the year when farmers can buy cows or heifers and do well with them, for they soon go out on grass. From the advertisement which appears elsewhere in this issue, readers can learn something about the high quality of the offering, but still further particulars can be obtained from the Secretary, W. E. Thompson, Woodstock, who will mail a catalogue on request. The managers of this sale have selected a great deal of 30-lb. blood, and have laid considerable emphasis on individuality. The offering consists of heifers, springers and cows in milk. There is an extra good lot of bulls, whose dams' records run up to 33 lbs. butter, and in some cases the four nearest dams average 30 lbs. in seven days. The sale will be held in the Dr. Rudd's Sale Stables and all will be made comfortable. See the advertisement and write for a catalogue, mentioning this paper.

Hon. I. B. Lucas, Attorney General of Ontario, announced in the Legislature that steps are to be taken to combat venereal diseases and feeble-mindedness in the Province.

Representative women from all parts of Canada met at Ottawa last week to confer with the War Committee of the Cabinet.

THE STANDARD BANK OF CANADA

The 43rd Annual Meeting of the shareholders of the Standard Bank of Canada was held at the Head Office of the Bank, 15 King Street West, Toronto, on Wednesday, the 27th February, 1918, at 12 o'clock noon.

A large number of shareholders were present. The chair was occupied by the President, Mr. W. F. Cowan, and Mr. E. A. Bog, Chief Inspector, acted as Secretary for the meeting, and read the following report:

The Directors beg to present to the shareholders the 43rd Annual Report and Statement of the affairs of the Bank for the year ending the 31st of January, 1918.

The Net Profits, after making provision for bad and doubtful debts, rebate of interest on unmatured bills under discount, exchange, cost of management, etc., amount to \$649,546.44. This amount, together with the balance forward from last year and \$120,047.86 for premium on new stock issued, makes the sum of \$923,187.93.

This has been appropriated as follows:—

Four quarterly dividends at the rate of 13% per annum.....	\$442,782.77
Contributed to Officers' Pension Fund.....	20,000.00
Contributed to Patriotic Funds.....	31,250.00
War Tax on Bank Note Circulation to 31st of December, 1917.....	33,891.48
Transferred to Reserve Fund from Premium on New Stock.....	120,047.86
Reserved for estimated depreciation in securities.....	100,000.00
Balance of Profit and Loss Account carried forward.....	175,215.82

Your Directors deeply regret to record the sudden death, in March last, of our late general manager, Mr. George P. Scholfield, who entered the service of the Bank as a junior clerk in 1883; becoming general manager in 1905, and a director in 1912, under whose management the Bank made marked progress. Your Directors appointed as his successor, Mr. Charles H. Easson, formerly of the Bank of Nova Scotia.

We also regret having to record the death of Mr. T. H. McMillan, who became a director of this Bank in 1909, when the Western Bank of Canada, of which he had been general manager, was amalgamated with this Bank. The vacancies in the Board have been filled by the appointment of Mr. T. B. Greening and Mr. James Hardy, F.C.A.

During the year, Branches and Sub-Branches of the Bank have been opened at Lethbridge, Alta.; Orion, Alta.; Richlea, Sask. (sub. to Eston); and Westerham, Sask. (sub. to Estuary). The Sub-Branch at Cherry Valley and the Branch at Schumacher, Ontario, were closed.

The usual inspection of the Head Office and Branches has been made, and the duties of the staff have been faithfully and efficiently discharged.

The regular audit of the Bank's affairs has also been made by Mr. G. T. Clarkson, F.C.A., whose report is appended herewith. Mr. Clarkson's name will be again submitted at the Annual Meeting for reappointment as Auditor for the ensuing year.

**GENERAL STATEMENT
LIABILITIES**

Notes of the Bank in circulation.....	\$ 5,484,383.00
Deposits bearing interest (including interest accrued to date).....	\$40,301,688.95
Deposits not bearing interest.....	17,779,014.95

Dividend No. 109, payable 1st February, 1918.....	58,080,703.90
Balances due to other Banks in Canada.....	112,094.17
Balances due to Banks and Banking Correspondents elsewhere than in Canada.....	1,160,942.63
Acceptances under Letters of Credit.....	1,000,951.10
Capital paid up.....	70,036.80
Reserve Fund.....	3,453,290.00
Balance of Profit and Loss Account carried forward.....	4,453,290.00
	175,215.82

ASSETS

Current coin held by the Bank.....	\$ 1,557,333.80
Dominion Notes held.....	10,065,781.00
Deposit in the Central Gold Reserves.....	2,500,000.00

Notes of other Banks.....	\$14,123,114.80
Cheques on other Banks.....	265,096.00
Balances due by Banks and Banking Correspondents elsewhere than in Canada.....	2,822,442.85
Dominion and Provincial Government Securities not exceeding market value.....	1,051,210.57
Canadian Municipal Securities and British, foreign and colonial public securities other than Canadian.....	3,963,591.66
Railway and other bonds, debentures and stocks not exceeding market value.....	7,192,950.65
Call and Short (not exceeding thirty days) Loans in Canada on bonds, debentures and stocks.....	892,843.09
	2,037,525.70

18,225,000.52

\$32,348,775.32

Other Current Loans and Discounts in Canada (less rebate of interest).....	\$39,853,677.77
Liabilities of Customers under Letters of Credit as per contra.....	70,036.80
Real Estate other than Bank Premises.....	16,000.00
Overdue debts, estimated loss provided for.....	111,067.11
Bank Premises, at not more than cost, less amounts written off.....	1,324,298.44
Deposit with the Minister for the purposes of the Circulation Fund.....	175,000.00
Other Assets not included in the foregoing.....	92,051.98

\$73,990,907.42

W. F. COWAN, President. AUDITOR'S REPORT TO THE SHAREHOLDERS. C. H. EASSON, General Manager.

I have compared the above Balance Sheet with the books and accounts at the chief office of the Standard Bank of Canada, and the certified returns received from its branches, and after checking the cash and verifying the securities at the chief office and certain of the principal branches on January 31st, 1918, I certify that in my opinion such Balance Sheet exhibits a true and correct view of the Bank's affairs according to the best of my information, the explanations given to me, and as shown by the books of the Bank.

In addition to the examination mentioned, the cash and securities at the chief office and certain of the principal branches were checked and verified by me at another time during the year, and found to be in accord with the books of the Bank.

All information and explanations required have been given to me, and all transactions of the Bank which have come under my notice have, in my opinion, been within the powers of the Bank.

TORONTO, February 18th, 1918. G. T. CLARKSON, F.C.A., Auditor.

The President referred to the satisfactory progress made during the year, and the Vice-President, Mr. Wellington Francis, K.C., and the General Manager, Mr. C. H. Easson, also addressed the meeting.

The usual motions were passed and the following Directors were elected for the ensuing year:— W. F. Cowan, W. Francis, K.C., H. Langlois, W. F. Allen, F. W. Cowan, T. H. Wood, T. B. Greening and James Hardy, F.C.A.

At a subsequent meeting of the directors, W. F. Cowan was elected President and W. Francis, K.C., Vice-President. C. H. EASSON, General Manager.

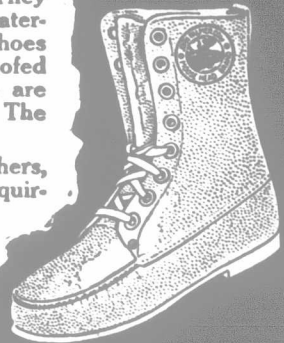
**Palmer's
Summer Packs**



GIVE real foot comfort to tired, aching feet. They are made from oil-tanned Skowhegan water-proof leather. These summer packs or plow shoes are light, strong, durable—made with water-proofed leather sole and heel and solid leather insoles are laced, have large eyelets and bellows tongues. The ideal shoe for working on the land.

They are also specially suitable for ranchers, trackmen, laborers, sportsmen and all others requiring extra strong yet comfortable footwear.

The style shown—No. 109, is nine inches high. Ask your dealer for Palmer's famous "Moose Head Brand" footwear—many styles and sizes to choose from.



JOHN PALMER CO., Limited
Fredericton, N. B., Canada.

**Dunrobin Farms Dispersion Sale of
Registered Holsteins**

The property of COL. JOHN A. GUNN, will be held

Friday, April 5th, 1918

At Union Stock Yards, Toronto, Ontario

43 HEAD 43

Inadequate railway service and scarcity of efficient help compel us to go out of dairying.

The herd is being sold in Toronto, as train connections for Beaverton are not good for buyers from a distance.

Some 30 of the herd are bred to Echo Segis Champion, whose sire is a full brother to May Echo Sylvia. For catalogues (ready March 15th) apply to:

DUNROBIN FARMS BEAVERTON, ONT.

When writing Advertisers please mention Advocate

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at 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 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 50 cents.

BARRON'S FAMOUS S.-C. W. LEGHORNS—world's greatest laying strain, stock imported direct. Eggs, \$3.00 and \$2.00 per 15; \$9.00 per hundred. Mating list free. J. Hollingsworth, Milton Heights, Ont.

BIG, HUSKY, WHITE WYANDOTTE COCKERELS from heavy laying, exhibition stock, at bargain prices; eggs for hatching. J. McCarty, Newmarket, Ont.

BARRED ROCKS—GREAT LAYING STRAIN. Cockrels, three dollars; pullets, two dollars. Central Poultry Yards, Colborne, Ontario.

BLACK MINORCA COCKERELS, THREE DOLLARS, large birds and good laying strain. Fred Reekie, Camperdown, Grey, Ont.

CLARK'S ORPINGTONS AND O.A.C. ROCKS; 50 Buff and White Orpington Cockerels, vigorous, good color and type, \$3 to \$5 each, 50 females, good laying strains; 15 O. A. C. Laying Strain Rock Cockerels, \$2.50 and \$3.00. Settime, eggs in season. Order from an old and reliable breeder; satisfaction guaranteed. J. W. Clark, Cedar Row Farm, Cainsville, Ont.

CHOICE BREEDING PEN OF CRYSTAL WHITE ROCKS—9 hens and cock. Barred Rock eggs for hatching in season, from heavy-laying strain. L. J. Gibbons, Iroquois, Ont.

EGGS FOR HATCHING FROM OUR NOTED WINTER LAYERS, O.A.C. Bred-to-Lay Single-comb White Leghorns, \$2.50 per 15; \$4 per 30; \$6 per 50; \$10 per 100. Roseheath Poultry Farm, Richmond Hill, F. R. Oliver, proprietor.

EGGS—PER HUNDRED OR SETTING—nearly all varieties—exhibition, utility poultry, ducks, Bantams, geese, turkeys, baby chicks; reasonable prices. Twenty years breeders, exhibitors. Luxton & Sons, Mt. Forest, Ont.

FOR SALE—SINGLE-COMB WHITE LEGHORN eggs, \$2.00 per fifteen, from the celebrated Tom Barron strain. W. W. Clark, 150 Kent St., London, Ont.

FOR SALE—A FEW CHOICE UTILITY SILVER WYANDOTTE COCKERELS from my exhibition stock, at \$4.00; hens, \$3.00. 2-year-old. Eggs from my best stock at \$3.00 per 15. Guarantee hatch of 9 or replaced at half price. Look up my winning at Dunnville Poultry Show. Member, Silver Wyandotte Club. J. C. Moore, Grassie, Ont.

FOR SALE—PURE-BRED WHITE HOLLAND TURKEYS—grand birds; also two extra large Toulouse ganders. Apply E. S. Baker, Springfield Farm, R.R. No. 6, Guelph.

FOR SALE—PURE-BRED, LARGE, ROSE-COMB Brown Leghorn cockerels, bred from our best pens, at most reasonable prices. Satisfaction guaranteed. Galloway & English, Ingersoll, Ont.

FOR SALE, MAMMOTH BRONZE TURKEYS. Angus Beattie, R. 1, Wilton Grove.

INDIAN RUNNER DUCKS, PARTRIDGE WYANDOTTES, Barred Rock, Rhode Island Red, Silver Campine, Black Spanish, cockerels. Bred right, priced right. John Annesser, Tilbury, Ont.

O. A. C. BRED-TO-LAY SINGLE-COMB WHITE Leghorns, 200 Single-comb White Leghorn pullets, \$2.50 each, 10 to 20 at \$2.25 each, larger number at \$2 each. These birds are May hatch, been laying some time and will make good breeders; 35 Single-comb White Leghorn cockerels from O. A. C. high-egg record-makers. One of these birds will improve your flock, \$4 each. Roseheath Poultry Farm, F. R. Oliver, Prop., Richmond Hill, Ont.

PEERLESS WHITE WYANDOTTES, WINNERS at recent Waterdown Poultry Show; a few choice cockerels priced right. W. S. Bennett, R.R. No. 1, Freeman, Ont.

ROSE-COMB REGAL WHITE WYANDOTTE COCKERELS, \$2.50 and \$3. 15 eggs, \$3. Percy Clapp, Tecumseh, Ont.

ROSE-COMB RHODE ISLAND REDS, MAR- TINE White Wyandottes, 220-egg strains, fifteen eggs \$1.50. Special pen Reds \$3 fifteen eggs. Orders taken till March 20th. Wesley Shanklin, Ilderton, Ont.

RINGLET BARRED ROCKS; TRAPNESTED heavy winter laying strain. Eggs, \$3.00 setting, guaranteed. F. Coldham, Box 12, Kingston, Ont.

S. C. WHITE LEGHORN COCKERELS—two-hundred-sixty-egg strain—three dollars. C. Dickinson, Route 3, Port Hope, Ontario.

TRIO EMBDEN GESE (UNRELATED) \$15. Rooster drake and ducks \$3 each. C. Maier & Son, Delaware, Ont.

WHITE WYANDOTTES, BUFF ORPINGTONS, from imported stock. All winter laying stock from International Laying Contest strains. Eggs, \$4 per thirty and up. Express paid. A few cockerels and pullets for sale. "Inchside Farm," Ancaster, Ont.

WHITE WYANDOTTES—EXCLUSIVELY Regal strain; eggs, utility pen, \$1.50; special mating, \$3 per setting. Order now. R. J. Gracey, 120 Thompson Ave., London, Ont.

32 cents 30 cents
For chickens For large hens
(dressed) ALIVE
Above price paid by

WALLERS, 702 Spadina Ave., Toronto
Write for price list.

Dual-Purpose Shorthorn Cattle

Bred by "Golden Duke" (Imp) Cattle, Duke of Cranford II. Dam has a record of over 12,000 lbs. for sale. "Butterfly Duke" by "Pine" (Imp) (Imp); two years old, bred by Hon. W. C. Edwards, Rockland, Ontario.

J. B. PEARSON, MANAGER
Credit Garage Farm, Meadowdale, Ontario

Gossip.

Dual-Purpose Shorthorns.

A typographical error occurs in the advertisement in this issue of dual-purpose Shorthorns, the property of D. Z. Gibson, Caledonia. The word "Holstein" appears instead of "Shorthorn." Mr. Gibson is advertising two young bulls from cows with good records.

Allison Stock Farm Holstein Sale.

Elsewhere in this issue is an advertisement describing in brief the offering of 80 Holsteins to be sold by the Allison Stock Farm, Chesterville, Ontario, on Thursday, March 21. The majority of the sires mentioned are known to all followers of the breed and the records describe pretty fully the quality of the cows and heifers from the viewpoint of production. On account of the scarcity of help the Allison Stock Farm has been obliged to disperse the herd, which has required many years and considerable capital to develop. Holstein breeders and farmers in general, therefore, have this opportunity of obtaining some richly bred cattle at their own price. The terms are easy and the stock good so they cannot afford to overlook this auction sale at Chesterville, on March 21. Write for catalogues and mention this paper.

Sale Dates.

March 7, 1918.—L. K. Weber, Hawkesville, Ont.—Shorthorns.

March 7, 1918.—Bruce County Stock Breeders' Club, Walkerton, Ont.—Shorthorns.

March 7, 1918.—Sherrick Bros.—Bethesda.—Holsteins.

March 7, 1918.—W. J. Cowan, Cannington, Ont.—Clydesdales, Aberdeen-Angus and grade cattle.

March 8, 1918.—W. J. Wray and W. O. Coon, Tottenham, Ont.—Scotch Shorthorns.

March 8, 1918.—Wm. A. Rife, Hespeler, Ont.—Holsteins.

March 11, 1918.—D. A. Boyle, Woodstock, Ont.—Jerseys.

March 12, 1918.—J. M. Van Patter & Sons, R. 1, Aylmer, Ont.—Holsteins.

March 13, 1918.—Perth District Breeders' Club, Stratford, Ont.

March 13, 1918.—Laidlaw Bros., Aylmer, Ont.—Holsteins.

March 13, 1918.—Lambton County Pure-bred Stock Association, Petrolia, Ont.

March 14, 1918.—London District Holstein Breeders' Club, London, Ont.—Holsteins.

March 15, 1918.—Weil & Lyfield, Jarvis, Ont.—Shorthorns.

March 15, 1918.—H. Clark Hammer, Norwich, Ont.—Holsteins.

March 19, 1918.—Noah S. Bender, Tavistock.—Holsteins.

March 20, 1918.—Thos. McNea, R. 6, Owen Sound, Ont.—Holsteins.

March 20, 1918.—Oxford District Holstein Breeders' Club Consignment Sale, Woodstock, Ont.—Holsteins.

March 21, 1918.—Henry Arkell & Son, R. 2, Guelph, Ont.—Oxford Ewes and Ewe Lambs, Horses, Implements, etc.

March 21, 1918.—Allison Stock Farm, Chesterville, Ont.—Holsteins.

March 26, 1918.—Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.—Ayrshires, Holsteins, Clydesdales.

March 27, 1918.—Chas. E. Rogers, Ingersoll, Ont.—Jerseys.

March 27, 1918.—Southern Counties Ayrshire Breeders, Woodstock—Ayrshires.

March 27, 1918.—Ira B. Vannatter, R. 1, Georgetown, Ont.—Shorthorns, implements, etc.

March 28, 1918.—G. A. Brethen, Norwood, Ont.—Holsteins.

April 2, 1918.—N. S. Washington, Solina, Ont.—Holsteins.

April 2, 1918.—Brant District Holstein Breeders' Club Consignment Sale, Brantford, Ont.—Holsteins.

April 2 and 3, 1918.—Ontario Consignment Sale Company, London, Shorthorns.

April 3, 1918.—Belleville District Holstein Breeders' Club Consignment Sale, Belleville, Ont.—Holsteins.

April 5, 1918.—Dunrobin Farms, Beaverton, Ont.—Holsteins.

April 10, 1918.—T. G. Gregg, R. 5, Hazelton, Ont.—Holsteins.

June 11, 1918.—Dr. A. A. Farewell, Oshawa, Ont.—Holsteins.

PRESTON Farmer's Garage



Build Your Own Garage
Low Cost—Little Labor

THIS fine Preston Garage for farmers gives you the satisfaction of building your own garage, yet saves all the time-killing and back-breaking work of sawing lumber. The material is shipped to you flat—every piece, cut and fitted. The doors and windows come ready-built. Included is all necessary hardware, together with high-grade composition roof.

Any handy man can nail together the whole job and put it up on your place in quick order.

Besides this big saving of labor and time, you get the material at low cost—due to our big factory equipment and resources.

Figured in terms of produce, the prices of all buildings are much lower than before the war. The garage illustrated, for example, will be shipped as above for \$65. That is, 30 bushels of wheat will pay for it. In 1914 it was worth 55 bushels.

And this low price buys a good-looking, sturdy, serviceable building—10 feet wide and 16 feet long—8 feet to the eaves.

There are PRESTON garages in many other sizes and styles, including all-metal covered. Catalog shows pictures, prices and all details. Write for it—today!

The Metal Shingle & Siding Co., Ltd., Preston, Ont.
Makers of Preston Barns, Storage Buildings, Garages and Implement Sheds

ROYAL PURPLE POULTRY SPECIFIC

Big Egg Yield

Royal Purple Poultry Specific is a great egg producer and poultry conditioner. It makes hens lay in the winter almost as well as they do in summer. This is because our Poultry Specific supplies the missing food elements that fowl need in their winter ration and without which they cannot lay.

Royal Purple Poultry Specific tones up the digestive system, and keeps the fowl active and healthy. It should be fed daily in a hot or cold mash.

Royal Purple Poultry Specific

has pleased thousands of farmers and poultrymen. It has enabled them to get winter eggs without trouble. Read the views of the following users:

Fred E. Bond, Kincardine, Ont., writes:
"I have been feeding Royal Purple Poultry Specific to my hens this winter and I find it beats anything I have ever used as an egg producer. They started to lay right away and kept on gaining. I will never feed anything else as long as I can get it."

T. W. Hale, Toronto Annex, writes:
"I have fed your Specific to poultry, and it is a valuable tonic; increases the production of eggs. Would not be without it; keeps them in good health and I recommend it highly. Any person trying it once will not be without it."

If you want more eggs and healthier fowl, feed Royal Purple Poultry Specific. It is sold in large and small packages. Ask our dealer in your town for it.

Made only by
W. A. Jenkins Mfg. Co., Limited
London, Canada

FREE BOOK
This 80-page book describes the common diseases of poultry and stock. It tells how to build and remodel poultry houses, etc., etc. Send for a copy.

Hatch Chicks with a Cycle Hatcher \$7.50

The Most Wonderful Incubator Yet Invented. Price.....

Free catalogue on request, illustrating Incubators, Brooders, Hoppers, Farms, etc. Make your hens keep you.

C. W. COLLINS, of the Collins Manufacturing Co.
415 Symington Ave., TORONTO

MARCH 21

Do

Three money-crop plants by the cannot 3rd:

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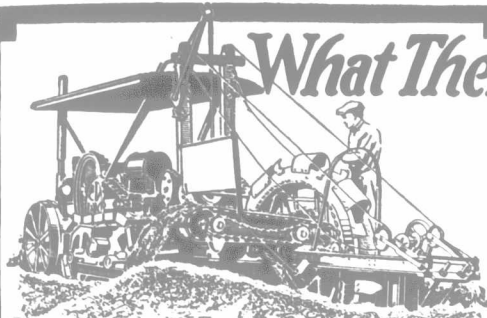
Since 19

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has adv farm by house.

MIL

Head Off



What These Men Are Doing You Can Do.

Dollars in Ditches

Three facts that point to an unusual money-making opportunity:

1st: The urgent need for increased crop production is creating a great demand for tile drainage.

2nd: So many men are being taken by the army that the needed ditching cannot be done by hand.

3rd: A man with one helper can take a

"A Perfect Trench at One Cut" BUCKEYE Traction Ditcher

and dig more ditches each day than fifteen men by hand.

This man is entitled to earn large profits—and does it. At the same time he performs an important patriotic service by aiding food production.

If you consider the opportunity to be worth investigating send for complete descriptive literature. You will learn how the Buckeye cuts 100 to 150 rods of high class ditch a day—works winter and summer through frost, hardpan or swampy land.

Our Service Department can show you how to get the right start at this highly profitable business.

Write today—no cost or obligation.

The Buckeye Traction Ditcher Co.
202 Crystal Ave. Findlay, Ohio

"The Ditcher I bought of you last fall has given good satisfaction. I put in 4,700 rods in 50 days at an average depth of 3½ feet, with an average of 94 rods per day at 30 cents per rod. Fuel expense 2½ cents per rod. The farmers are well pleased with the work and I have more than I can do." Martin Wallerich.

"For sixty-eight (68) days work I have made eleven hundred dollars (\$1100.00) clear above expenses, soil all in the worst possible condition for operating.

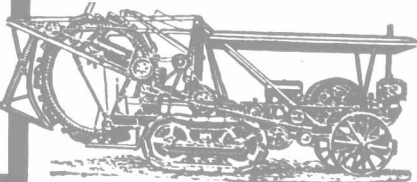
"I have been in the ditching business fifteen years. The prospects for work in southern Iowa were never better." Guy Henry.

Gentlemen: Thinking you might be interested in what Machine No. 925 has done during the year, will send the following figures:

Total rods.....	5381
Number of days.....	67
Total amount.....	\$1077.43
Operator.....	134.00
Fuel and repairs.....	252.17
Profit.....	691.26

Our first job was done May 15th. Have run this machine entirely alone; considering that don't think I have done bad. A. D. Sadler.

"I bought the Ditcher three years ago, principally to tile my farm and have tiled it completely. Have done enough outside work to more than pay back the price of the machine and all expenses. On one job I dug 80 rods in 4 hours and another 160 rods in 9 hours. Have not paid out \$10.00 for breakage." L. R. Wiles.



THE TORONTO WORLD
MONDAY MORNING
FEBRUARY 18, 1918

POTATO GROWERS AND INSECTICIDES

Caesar States Arsenite of Lime Will Prove Good Substitute.

TOMATO POLLENIZATION

Illuminating Address on Tomato Growing and Shipping, by Experts.

Some pointers of great interest to vegetable growers were given by L. Caesar, of the O. A. C., at the annual convention last week of the Ontario Vegetable Growers' Association at 22 College street, Toronto. Altho' there is a fair stock of Paris green on hand at the present time, Mr. Caesar predicted that a shortage in the supply would occur before the end of the coming season. He, therefore, discussed the possibilities of substitutes for Paris green.

The speaker stated that arsenite of lime could be used to advantage this year by potato growers for the elimination of potato bugs and other insects. He stated that it was one-fifth stronger than arsenite of lead in arsenic, the poisonous agent, tho' the price was lower.

HAROLD F. RITCHIE & CO., TORONTO
SELLING AGENTS

Acco Spray

(Arsenite of LIME)

Sure destruction to

POTATO BUGS

and all crop-destroying insects and blights.

SAVE MONEY
SAVE CROPS

Chemicals are very scarce—BUY YOUR SUPPLY EARLY.

Ask your dealer, or write direct to

Acco Chemical Co.
Toronto, Ont.

PURITY FLOUR

(Government Standard)

A Dependable Flour For All Your Baking

12 MANUFACTURED BY
Western Canada Flour Mills Co. Limited

Since 1914 the price of Hogs, of Cattle, of Wheat has more than doubled. The price of

MILTON BRICK

has advanced VERY LITTLE. NOW is the time to improve your farm by building an attractive, warm, substantial Milton Brick house.

MILTON PRESSED BRICK CO., LIMITED
Head Office: Milton, Ont. Toronto Office: 50 Adelaide St., West

RENNIE'S SEEDS For Better Gardens

"EVERY back yard should be used for the cultivation of fruits and vegetables"—says the Food Controller's Bulletin. Market Gardens must be worked to capacity. But all this effort is wasted unless the seeds sown are capable of producing sturdy, vigorous plants. Plant Rennie's War Garden Seeds and insure a full crop!

	pkt.	¼ oz.	½ oz.	oz.	¼ lb.
Cabbage					
Danish Summer Roundhead	.10	0.90	2.75
Cauliflower					
Rennie's Danish Drouth-Resisting	.15 & .25	1.00	1.85	3.50	10.00
Celery					
Paris Golden Yellow (Extra Select)	.15	.60	1.10	2.00	
Onion					
Rennie's Extra Early Red	.05	.35	1.00	3.75	
Radish —Cooper's Sparkler	.05	.20	.65	2.20	
Tomato —Market King	.10	.60	1.75		
Rennie's Improved Beefsteak	.10	.75	2.50		
Pansy —Rennie's XXX Exhibition Mixture					.25
Sweet Peas —Rennie's XXX Spencer Mixture					.15
Nasturtium —Rennie's XXX Chameleon Mixture					.10
Stocks —Rennie's XXX Large Flowering Globe Mixture					.20

★ ★ ★ LOOK FOR THE STARS ★ ★ ★
Our 1918 Catalogue should be in your hand by now. It is your patriotic duty to consult it at every opportunity. Our Government insists we must produce more. Start right, then, and be sure and sow good seed—RENNIE'S SEEDS. Look for the special star border bargains in our Catalogue—it will pay you to do so.

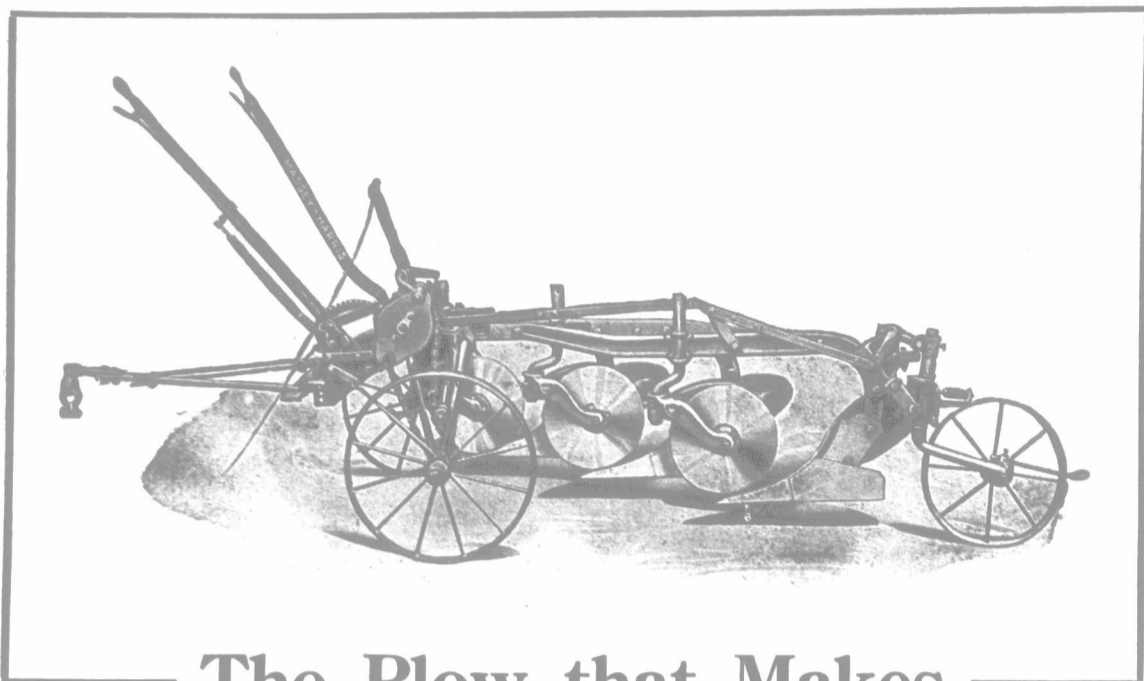
THE WILLIAM RENNIE COMPANY LIMITED.
KING & MARKET STS TORONTO
ALSO AT MONTREAL WINNIPEG VANCOUVER

SEED CORN

White Cap Dent and Bailey for sale.
P. Thomson, Muirkirk, Kent Co.

PRIVET, BARBERRY, CEDARS, SPRUCE, Pines, Oaks, Chestnut, Walnut, Mulberry, for Hedges, Windbreaks, Timber. Mailing size, prepaid, dozen, same variety, one dollar; hundred, five dollars. List free.

JOHN DOWNHAM, STRATHROY, ONTARIO
When writing please mention this paper.



The Plow that Makes Your Tractor Worth While

In Tractor Plowing, the work is judged by the results. No matter how well the Tractor may operate, if the Plow does not turn a proper furrow, the result is disappointing.

The Massey-Harris Power-Lift Tractor Plow is the Plow you can depend on for satisfactory work under the most trying conditions.

Two Levers within easy reach of the operator on the Engine regulate the depth of plowing.

By simply pulling a rope the Power Lift operates to raise or lower the Plow as desired.

The Hitch has wide range of adjustment both vertical and lateral,

and, being stiff, permits the Plow being backed.

A Hardwood Break Pin prevents breakage.

When raised, all the Bottoms are at the same level, the rear being equally as high as the front, namely 6 inches.

The Third Bottom or Plow can be detached to convert a Three-Furrow into a Two-Furrow, or vice versa, it can be attached to a Two-Furrow, thus making a Three-Furrow.

MASSEY-HARRIS CO., Limited

Head Offices: Montreal, Moncton, Winnipeg, Regina, Saskatoon, Toronto, Swift Current, Yorkton, Calgary, Edmonton, Vancouver and Kamloops. Agencies Everywhere

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.

Miscellaneous.

Fertilizer.

Tankage testing 45 per cent. protein can be purchased for \$3 per cwt. Would 45 per cent. protein be equal to 45 per cent. nitrogen when mixed with 16 per cent. phosphate, or would nitrate of soda be cheaper fertilizer to purchase in order to furnish nitrogen to the plants?

H. M.

Ans.—Protein and nitrogen are two entirely different terms. The protein will carry 16 per cent. of nitrogen. The nitrogen would apparently cost a little less than \$4.20 per unit. Nitrate of soda is now selling for a little more than \$100.00 per ton, which would make the nitrogen in it cost about \$7.00 per unit as compared with the \$4.20 in the tankage. You may mix the acid phosphate with the tankage, but it would not be good practice to mix acid phosphate with the nitrate of soda.

R. H.

Sweet Clover.

I would like to secure information regarding the family and habits of sweet clover. Is it an annual or perennial? What are the customs or practices in cultivation previous to seeding, handling it for hay, pasture, silage or seed? When is the usual time for planting? Is it advisable to sow it alone or with a nurse crop? How much seed should be sown to the acre? I have five acres of fall rye, is it advisable to sow sweet clover on this field this spring for a hay crop in 1919?

A. B. C.

Ans.—Sweet clover is a plant which had long been considered a weed, but of late years it has proven to be of considerable value as a fodder crop. There are several species, the common one being white sweet clover (*Melilotus alba*). This plant is widely distributed, and is a biennial producing its seed the second year. The plant may grow to 2 or 2½ feet high the first year, but does not produce bloom or seed. The second year, seed is produced and the plant dies. The second year the plant attains a considerable height and the stems get fibrous and woody after the bloom begins. The yellow sweet clover (*Melilotus officinalis*) is also a biennial with much the same habit of growth as the white sweet clover, but it does not grow quite so coarse or large. The plant is a native of Central Asia. It has been grown on many Canadian farms with more or less satisfactory results. It is an excellent plant to plow under to increase the fertility of the soil. We have seen cattle keep as fat as seals when pasturing on white sweet clover. As the plant grows rapidly, the stock may not be able to keep it picked short and we have seen them pasturing in a field where the plants almost hid them from view. For hay, care must be taken that the plant is cut before it gets too woody. In cutting it, the cutting-bar must be raised higher than for other crops if a second crop would be harvested that season. Cutting should not commence until the new growth is starting from the crown. If the weather is bad for curing hay, the crop may be ensiled. There is a slight difference of opinion as to the value of the crop for silage, but the stock will eat it all right. For seed production, the first crop the second year can be allowed to mature, although many find it more economical to take the first cutting for hay and allow the second cutting for seed. It should be harvested when three-quarters of the seed pods become dark and it can be cut with the binder and handled similar to grain crops. The seed bed should be thoroughly compact with just sufficient loose soil on the top to cover the seed properly. From 18 to 20 lbs. of seed per acre is the customary seeding and it may be sown with a nurse crop, similar to red clover. You might get a very good catch by sowing it on your field of fall rye. The rye would be ready to harvest before the sweet clover would be far enough advanced to interfere very much with the rye.

FIRST PRIZE O. A. C. No. 72 OATS In Field Crop Competition

The kind you need if wishing to enter in same. Also some O. A. C. No. 21 Barley; both grown from registered seeds, and are true to name. A few bushels of Pearce's Imp. Tree Bean, Small Field Beans, Alsike and Sweet Clover. Samples and prices on request.

OSCAR KLOPP, SEED GROWER
Zurich, Huron County, Ontario

Artificial limbs are admitted DUTY FREE. SOLDIERS and others should get the best



YEAR BY YEAR

the returns of THE GREAT-WEST LIFE ASSURANCE COMPANY become more and more satisfactory.

The essential figures for 1917 are as follows:

Policies issued.....	\$ 30,300,542
Business in force Dec. 31st, 1917.....	152,643,165
Increase of business in force in 1917.....	19,626,717
Total assets Dec. 31st, 1917.....	24,385,666
Interest earned on investments over.....	7 per cent.

Those needing Life Insurance will do well to investigate the Policies of

THE GREAT-WEST LIFE ASSURANCE COMPANY

Dept. "J"

Head Office: WINNIPEG

STAMMERING

or stuttering overcome positively. Our natural methods permanently restore natural speech. Graduate pupils everywhere. Free advice and literature.

THE ARNOTT INSTITUTE
KITCHENER, CANADA

ROOFING AT FACTORY PRICES

WE ARE THE LARGEST DISTRIBUTORS OF ROOFING MATERIALS IN CANADA. WE SELL DIRECT TO THE USER. WE CAN SAVE YOU MONEY. WRITE FOR FREE SAMPLES.

THE HALLIDAY COMPANY
FACTORY DISTRIBUTORS CANADA

SO

A machine and wringer cream separator Labor Pro

Buy a

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SEE THAT ENGINE

WHIT COLLIN

Order N



BE YOU BLA SM

THE HALLIDAY FACTORY

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O.A.C. N

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R. F. Klinck, YO

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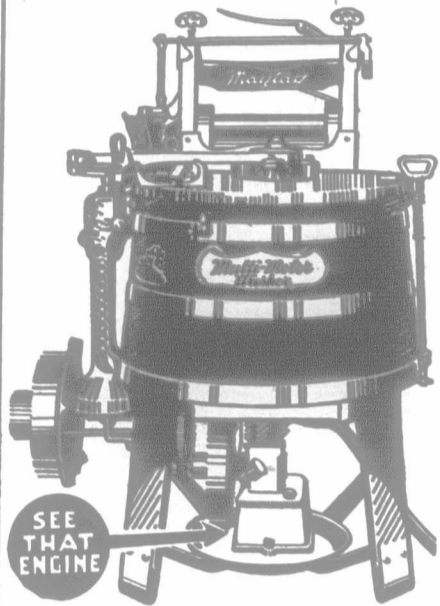
A few cars of No hay for sheep feed. to dispose of, let in letter. A. G. CRA

SOLVED!

A machine that will do your washing and wringing; drive your churn and cream separator has surely solved your Labor Problems.

Buy a Maytag Multi-Motor

A postcard will bring you full particulars and prices.



WHITES LIMITED
COLLINGWOOD, ONT.

Order Nursery Stock



direct from our nurseries and save agents' and middlemen's profits.

Write at once for our free descriptive catalogue and price list of fruit trees, small fruits, ornamental etc. Address:

J. H. McCOMBS NURSERIES
L. B. 818 Fonthill, Ont.

ARE YOU BUILDING OR REPAIRING?

OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. WRITE FOR FREE COPY.

THE HALLIDAY COMPANY, LIMITED, HAMILTON
FACTORY DISTRIBUTORS CANADA

BE YOUR OWN BLACKSMITH

FARMERS! SAVE REPAIR BILLS & VALUABLE TIME. ONE OF OUR BLACKSMITHING OUT-FITS WILL PAY FOR ITSELF. CATALOG FREE.

THE HALLIDAY COMPANY, LTD. HAMILTON
FACTORY DISTRIBUTORS CANADA

The Mutual of Canada has been investing money for nearly fifty years without the loss of one dollar. . .

Make your own Will at home. No lawyer needed. Bax Legal Will Form is binding. Has full directions and specimen will. Specify Bax at your stationers, then you are sure. Don't take any substitute, 35c.

IMPROVED O.A.C. No. 72 Seed Oats
Clean and of excellent quality. Sample and prices on request.
R. F. Klinck, R.R. No. 2, Gormley, Ont. YORK COUNTY

HAY WANTED
A few cars of No. 1 clover or heavy mixed clover hay for sheep feed. If you have one or more cars to dispose of, let me know your lowest price first letter. **A. G. CRAWFORD, EMO, ONT.**

Gossip.

Some sows are more prolific than others and some have proven to be very profitable, but few can reach the record made by one of B. Armstrong's sows. In six litters 101 pigs were farrowed, and in the seventh there were 20, thus making 121 pigs in 7 litters. We have no record of the number of pigs raised.

At the London District Holstein Breeders' Consignment sale there will be a number of choice individuals, both male and female, offered for sale. By looking over the catalogue you will notice that many of the entries have made creditable records, or are the progeny of high-producing stock. B. R. Barr, of Mossley, is offering a particularly choice young bull about ready for service, that is a full brother to his present herd sire. His two grandams have a seven-day record of 31.28 pounds, and their average per cent. of butter-fat is high. If looking for a herd sire, or a few good breeding females, it would be advisable to attend the sale.

Plaster Hill Shorthorns.

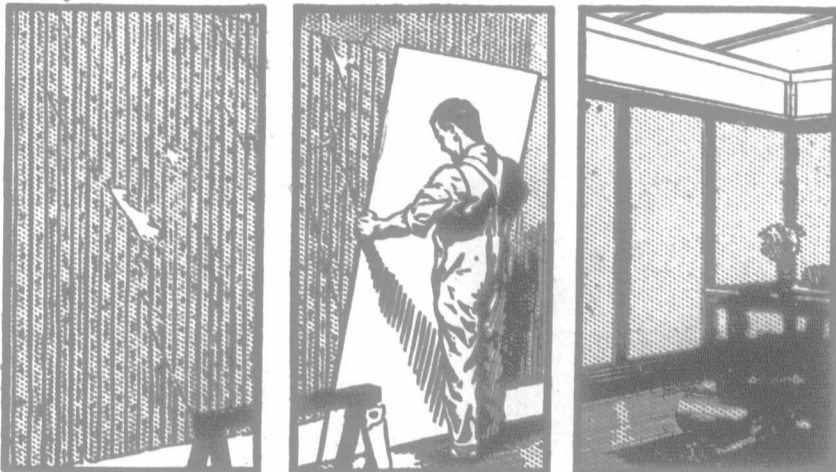
Parties wanting anything in Short-horns, either male or female, should remember the Plaster Hill herd, owned by F. Martindale & Son, Caledonia, Ont. This herd now numbers about twenty-three head of dual-purpose Shorthorns belonging to several of the leading families. At the head of the herd is the bull Commander 115964, whose dam Jean Maisie 111499 has an official record of 8,000 lbs. at three years. His sire's dam also has a record of 13,500 lbs. In this herd are a number of big, strong, useful cows of the right type with records ranging from 6,400 lbs. at two years old to 11,636 lbs. at mature age. The present offering includes about a half dozen young bulls from four to thirteen months old. Anyone wishing particulars about these animals should write Messrs. Martindale or see the herd.

Brant District Holstein Breeders' Banquet.

The Brant County District Holstein Breeders held their second annual banquet in Brantford, on Wednesday, February 20. There were about seventy-five members present and an enjoyable time was spent. At the afternoon meeting, instructive addresses were given by Prof. E. S. Archibald, of the Experimental Farm, Ottawa. He spoke on "Value of Feeds," "Economy in Co-operative Buying," "Milking Cows for Profit," etc. P. Sackville, of the Ontario Agricultural College, also gave an interesting address. Prior to the time set for the gathering, the members of the sales committee met to complete arrangements for their coming sale on April 2. They expect to have an offering of fifty choice cattle, ninety-five per cent. of which are females—the greater number being fresh or springers.

The Laidlaw Holstein Sale.

A distinctive feature of the public sale of Holsteins to be held by Laidlaw Bros., Ourville Farm, Aylmer, Ont., March 13, is that the 34 lots offered were all bred at Ourville. Seldom is it the case at an auction sale that all the animals sold are bred and reared by the vendor. Important also is the fact that all but six animals offered are daughters or grand-daughters of that noted sire, Dutchland Colantha Sir Abbekerk, with such a remarkable number of R. of M. sons and daughters. Females of this breeding will nearly all be bred to Finnerne King May Fayne, which has an enviable ancestry, from the production point of view, or to Maplecrest De Kol Champion, whose dam is the only cow in the world having two daughters with over 1,300 lbs. butter each in one year. Further information concerning these individuals mentioned is contained in the advertisement in this issue. Prospective purchasers going to Aylmer will have an opportunity of attending two sales, and it will be two days profitably spent. See the advertisement in this issue and write for catalogue.



Make a Clean Job of It

When You Repair or Remodel



See how easily you can cover up old dingy cracked walls and build-in permanently new rooms all over the house—all without muss or litter.

Quite a contrast between doing your repairing and remodeling with clean panels of Beaver Board and trying to get a permanent job with messy lath and plaster.

Now you can use Beaver Board and put it right on top of the old walls and ceilings. With Beaver Board you can make usable rooms out of useless spaces in attic and basement.

Then too it is as good for the new home as it is for remodeling the old one.

Beaver Board is a new form of lumber. It's built up from the strong clean fibre of the spruce tree into large sturdy panels of knotless, crackless manufactured lumber. It's moisture-proofed by a Sealite process that prevents warping. Beaver Board will last as long as the building.

Our Department of Design and Decoration will gladly assist you in the planning of your home decorations. Write for booklet, "Building More Comfort into the Farm Home."

THE BEAVER COMPANY, LIMITED
208 Wall Street, Beaverdale, Ottawa, Can.
Plants at Ottawa and Thorold, Ont.
Most Lumber and Building Supply Dealers carry Beaver Board.
Write us for name of your nearest dealer.

BEAVER BOARD

FOR BETTER WALLS & CEILINGS

ROYAL PURPLE

Stock Specific

This popular animal regulator and fattener is being fed to stock in thousands of stables every day during the winter. It is good for cows, steers, horses, sheep and swine. It tones up the entire system by improving digestion, and purifying the blood. Maximum nourishment is obtained from all food eaten when our Stock Specific is fed regularly.

Cows Give More Milk

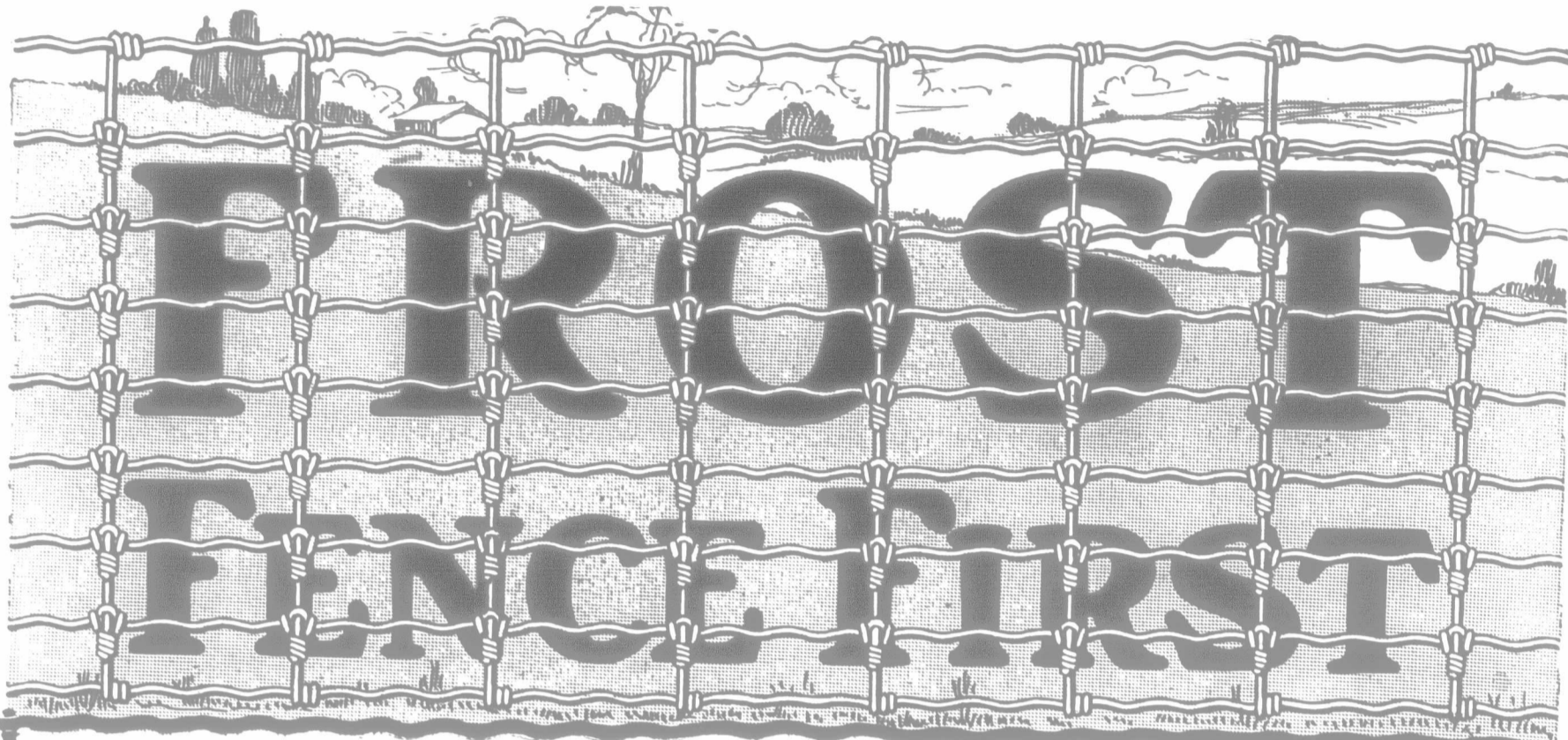
Dairymen state positively that their cows give from one-quarter to a half gallon more milk each, daily, when fed Royal Purple Stock Specific. Think how you would benefit by its use if milking only a small herd.

It rapidly improves the condition of hide-bound horses, and enables you to fatten hogs in from three to five weeks less time than you would otherwise require. Give it a trial.

Feedmen everywhere carry it in large and small packages. Ask for our 80-page booklet.

W. A. Jenkins Mfg. Co. Ltd., London, Canada

When writing advertisers will you kindly mention The Farmer's Advocate.



Buy Wire Fence That Gives Service

There has been altogether too much cheap fence distributed throughout Canada and the result is the added expense of replacing it after a few years.

Frost Fence is all made in Canada and is made right to give long service and consequently satisfaction. At the present time, when all prices are high, it is more important than ever before that you get value for your money. Get that which will give you the best service.

Do not allow the low prices on inferior goods to warp your good judgment; because you live in the country of wonderful opportunities and you'll have a great many chances to use your money to better advantage than replacing cheap fences every few years.

Get Frost Fence—It Lasts

You will notice the illustration of the FROST HOLD-TIGHT LOCK. This is the binding or lock used where stay wires cross laterals. This lock is much superior to any other woven fence lock, and holds securely without kinking the lateral or running wire, thus weakening it. There is only a slight kink in the stay wire, and the general appearance is as neat as could possibly be wished for.

Frost Fence is made as low in price as it can possibly be made and still have the material, that wears, in it.



When you deal with FROST STEEL AND WIRE CO. LTD. you deal with a concern that has developed the "Service to Customer" idea to the highest pitch. We'll continue this policy throughout and we only ask the chance of a trial order that you can test it out and see just what a difference there is between ordinary wire fence and FROST FENCE.

ALL STYLES FOR ALL PURPOSES.

Frost Steel and Wire Company

101 HAMILTON LIMITED CANADA

Questions and Answers. Miscellaneous.

Sweet Clover for Hay or Pasture.

1. Is it advisable to sow sweet clover and rape together for fall pasture?

2. Are sweet clover and timothy as good for winter feeding as timothy and alsike for sheep?

3. Is sweet clover liable to grow so rank as to make hay that is too coarse for general feeding?

4. Will sweet clover roots remain in the ground as well as red clover?

5. Will twenty acres of rape and sweet clover be sufficient to feed 200 lambs for two months?

Ans. 1. We have not seen these two crops sown together. If rape is sown late in June or early in July, it will give excellent feed that fall, but in order to get any quantity of sweet clover the seed should be sown in the spring.

2. If the sweet clover is cut early, before it becomes too rank, it should make very good hay. Alsike would be of a little finer quality, and possibly relished more by the sheep.

3. This can largely be avoided by cutting early in the season, before the stalks become too coarse.

MORE WORK FROM YOUR HORSES

The use of collar pads is humane. Again, your horses will do more work if properly protected by the right kind of pad. TAPATCO is the right kind.

A NEW AND BETTER HOOK ATTACHMENT

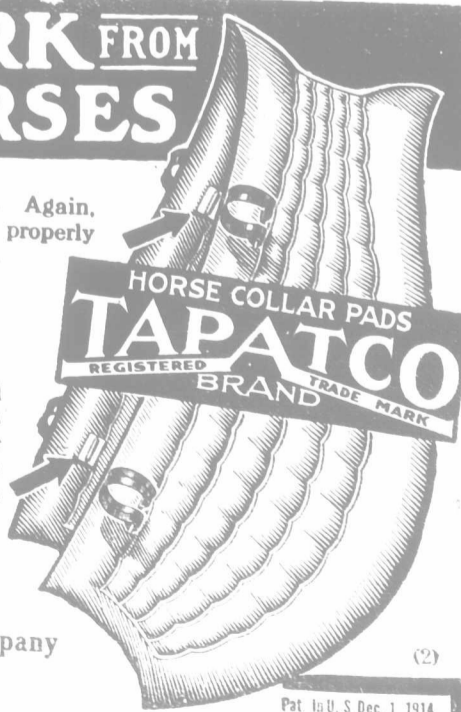
Consisting of wire staple, reinforced with felt washer (note where arrows point). This gives the hooks a better hold and prevents pulling off. The weakest point is made strong and life of pad greatly lengthened.

Look For The Felt Washer.

SOLD BY DEALERS EVERYWHERE

The American Pad & Textile Company

Chatham, Ontario, Canada



Pat. In U.S. Dec. 1, 1914.
Pat. in Can. Apr. 6, 1915.

4. Sweet clover is a biennial, the same as red clover. It grows up the first year, produces a crop the second, and then the plants die.

5. It will depend on stand of rape or sweet clover and also on the size of the lambs. If the season were favorable for rapid growth, 20 acres would produce a large bulk of feed.

Clean Seed.

Pure seed is an important factor in greater production. If weedy seed is once sown, it is impossible to foretell the damage that may be done to the growing crop, or the disappointment that may ensue when gathering or reaping time comes round. At this season of the year attention should be paid to the quality of seed for spring seeding. A good deal can be done toward making a satisfactory sample by using the proper sieves in the ordinary fanning mill. The Seed Branch of the Department of Agriculture at Ottawa have issued a pamphlet entitled "Cleaning Seed." It tells the methods which should be followed, and the size of screens used for cleaning grains and grass seed. This pamphlet may be secured from the Publications Branch, Ottawa.

Questions

A four-year-old sheep is badly when she is years old she has her sides. I have twice by a year seem to help in flesh but it is the cause of...

Ans.—Some without any at one time being in this fact. If there are no on her sides, swinging of the she has acquired naturally hard on good grass possibly a few she should not and one would be in good well, there would be a tonic. is a vice more...

Branch

What price charge for bran the price set I understand the \$24.50, and \$ William. We for bran and \$...

Ans.—The mentioned, an the freight, pr in-Council re which may be from and after 1918, shall not after set forth tributing ex-w consumers not bag of 100 lbs. (as set forth in 17th of Decem station where Where delivery from the deal per bag of 100 cost at the deal the miller sells consumer in q than ten-ton lo per bag of 100 price at which sell under Orde the purchaser b not more than added to the p bulk, as direct Order No. 5, a lows: "That which millers s after the 17th shall be...

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Questions and Answers.

Miscellaneous.

Horse Slobbers.

A four-year-old mare slobbers very badly when eating. Since she was two years old she swings her head and bites her sides. I have had her teeth dressed twice by a veterinarian but it did not seem to help her. She keeps rather thin in flesh but is a good worker. What is the cause of the trouble? P. H.

Ans.—Some horses slobber a good deal without any apparent cause. Possibly at one time her mouth was sore and eating in this fashion has become a habit. If there are no visible sores or itchy parts on her sides, we would consider that the swinging of the head is also a bad habit she has acquired. Some horses are naturally hard to keep in flesh. If fed on good grain and a little hay, with possibly a few roots or a little oil cake, she should not suffer for the want of feed, and one would naturally expect that she would be in good condition. As she eats well, there would be little gained by giving her a tonic. We believe that the trouble is a vice more than anything else.

Bran and Shorts.

What price can the millers and dealers charge for bran and shorts, according to the price set by the Food Controller? I understand that a price was set for bran at \$24.50, and shorts, \$29.50, f.o.b. Fort William. We have to pay \$40 per ton for bran and \$42 for shorts. G. F.

Ans.—The price was set at the figures mentioned, and to that must be added the freight, price of bags, etc., the Order-in-Council reads: "That the amount which may be charged for bran and shorts from and after the 19th day of January, 1918, shall not be greater than is herein-after set forth, namely, by dealers distributing ex-warehouses or premises to consumers not more than 10 cents per bag of 100 lbs. may be added to the cost, (as set forth in Order No. 5 issued on the 17th of December, 1917) at the railway station where dealer takes delivery. Where delivery is ex-car by the purchaser from the dealer, not more than 5 cents per bag of 100 lbs. may be added to the cost at the dealer's railway station. Where the miller sells at the mill direct to the consumer in quantity or quantities less than ten-ton lots, not more than 5 cents per bag of 100 lbs. shall be added to the price at which the miller is permitted to sell under Order No. 5. Where, however, the purchaser brings bags to the mill, then not more than \$2.00 per ton shall be added to the price of bran and shorts in bulk, as directed by Order No. 5." Order No. 5, above referred to is as follows: "That the maximum price at which millers shall sell bran and shorts after the 17th day of December, 1917, shall be

\$24.50 per ton of 2,000 lbs. for bran.
\$29.50 per ton of 2,000 lbs. for shorts.

"These prices shall be for bran and shorts in bulk, freight paid at Fort William and Port Arthur. To these prices may be added the cost of bags and freight from Fort William and Port Arthur to the point of destination, east of Fort William and Port Arthur. At points west of Fort William and Port Arthur, the maximum price of bran and shorts in bulk shall be, the price at Fort William and Port Arthur, less the difference between the freight charges to such points and the freight charges for delivery at Fort William and Port Arthur.

"On all invoices covering sales made east of Fort William and Port Arthur, the following information shall be given:

"(a) The maximum price at Fort William and Port Arthur.

"(b) The freight charges to point of destination.

"(c) The cost of bags.

"(d) The rebate or other deductions that may be made."

My Tuesdays are meatless,
My Wednesdays are wheatless,
I am getting more eatless each day.

My horse is heatless,
My pig is sheetless,
They're sent to the Y. M. C. A.

The boys are treatless,
My pig is sweetless,
Each day I get poorer and wiser.

My stockings are feetless,
My trousers are seatless,
Oh Boy! How I do hate the Kaiser.



Here's the Book that "Made Over" a Thousand Farms

"What the Farmer Can Do With Concrete" is a 100-page book—now in the hands of over 100,000 Canadian farmers. Fully a thousand of these have practically "made over" their farms by its help—thousands of others have started to act on its valuable instructions by making some of their much-needed improvements of

CONCRETE

One of the many useful hints it gives is on the construction of a proper Barn-Approach—like that here illustrated. Built this way—of Concrete—the "Approach" provides room for a concrete Root Cellar.

find in this free book—there are hundreds of other suggestions, some perhaps more valuable to you than this one. It shows you how to use Concrete in building a Silo—a Barn Foundation—a Water Tank—a Culvert—a Walk—or a fence post.

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Remember! Concrete Improvements are fireproof; rot-proof; vermin-proof; sanitary and indestructible.

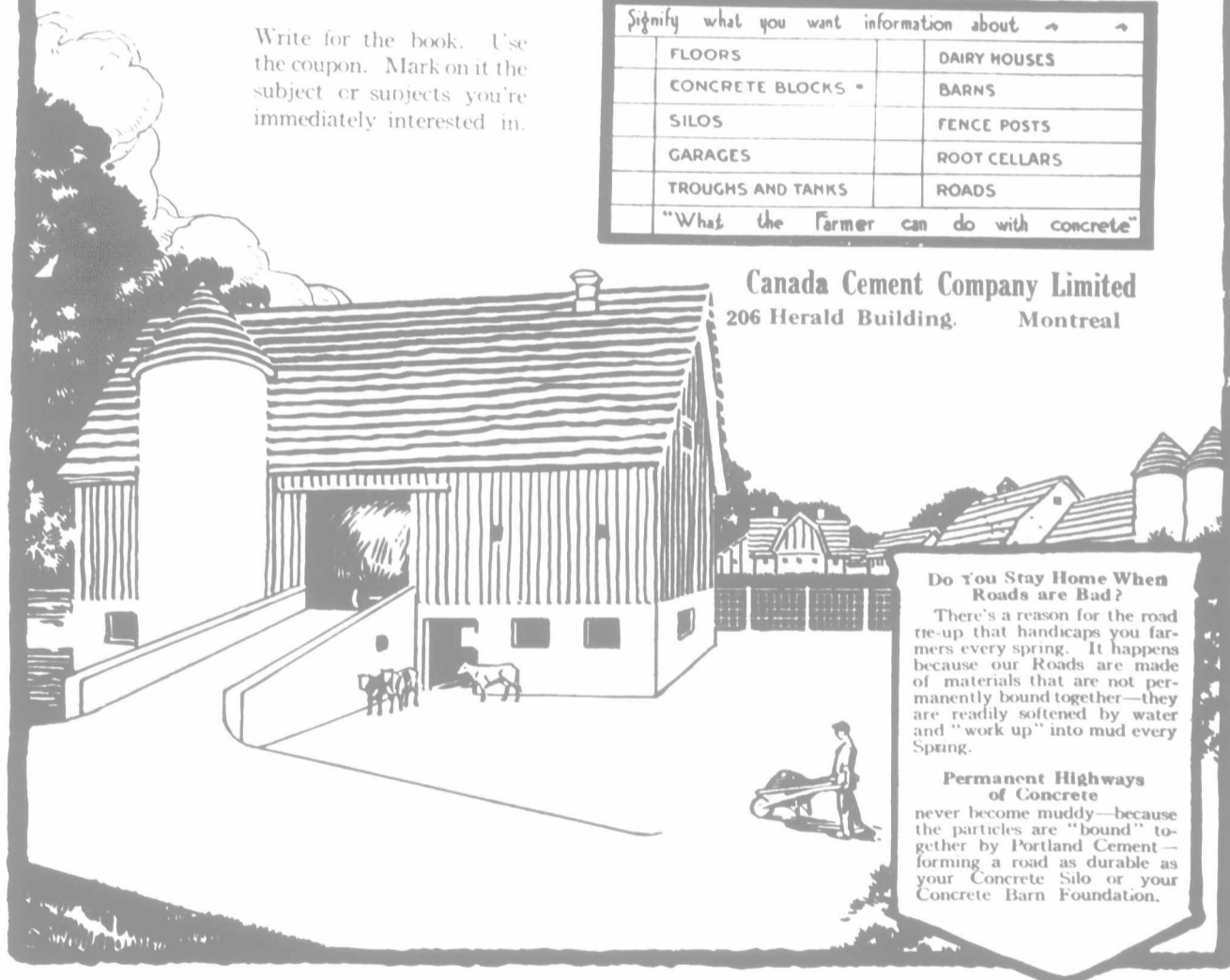
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"What the farmer can do with concrete"

Canada Cement Company Limited
206 Herald Building. Montreal



Do You Stay Home When Roads are Bad?
There's a reason for the road re-up that handicaps you farmers every spring. It happens because our Roads are made of materials that are not permanently bound together—they are readily softened by water and "work up" into mud every Spring.

Permanent Highways of Concrete never become muddy—because the particles are "bound" together by Portland Cement—forming a road as durable as your Concrete Silo or your Concrete Barn Foundation.

PERCHERONS AND CLYDESDALES

We Have for Immediate Sale the Following:

- Six imported Percheron stallions, ages four to eight years, both blacks and greys; all holding No. 1 certificates and guaranteed sure foal getters.
- Two Canadian-bred Percheron stallions, three years old, a pair of real good ones.
- Two imported Percheron mares, greys, a lovely pair of high-class mares, both supposed to be in foal.
- Four imported Clyde stallions, all proven horses, and the oldest one eight years old.
- Three imported mares, every one a winner at the big fairs, and all supposed to be in foal.

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BEAVERTON, ONTARIO

Here's a Top-notch!

Sire, King Segis Walker; dam, 30-lb. daughter of Pontiac Kornelyke, who herself has a 30-lb. daughter. He is a youngster, but he'll grow.

A. A. FAREWELL, Oshawa, Ont.

Big Money in Vicious Horses



\$125 Profit In Ten Days

Free Book



Write for it

C. H. MACKLEY of Unadilla, New York, picked up a vicious mare for \$50 and after 10 days handling by my method sold her for \$175. S. L. Arrant bought a "mean one" for \$35 and after a few hours' training sold the horse for \$135. Bill Nicholson got a biting, kick-thing mare of \$10 and by my method made her worth \$200. D. L. Smith changed a worthless, dangerous halter into a \$200 horse. Even if Mackley broke in a pony for the owner, thank it a few times and get \$20 for his few hours' work. That is how my students are making big money. See an ad!

Master Any Horse

I will teach you by mail my famous method of breaking colts and training horses. I will teach you how to overcome every bad habit a horse can have. I will teach you how to add a horse's speed without a plan. How to make big money as an expert horse man.

FREE BOOK My free book will open your eyes. It contains valuable horse training secrets. It will show you wonderful systems. Write for it today. Send a postal, NOW, before you forget.

Dept. 470 PROF. JESSE BEERY Pleasant Hill, Ohio

White Blossom Sweet Clover—Have a limited amount for sale—\$16.00 per bus. f.o.b., our station. Bags 45c. extra. GEO. McNERNEY, Ennismore, Ont.

Mating Time Is Here

Now's the time to put your hens and roosters in the pink of condition with Poultry Pan-a-ce-a.

If you want chicks that will live and develop rapidly—if you want early broilers—if you want pullets that will develop into early winter layers, then feed the parent stock Dr. Hess Poultry Pan-a-ce-a.

Remember, it's the singing, scratching, industrious hen that lays the healthy, fertile eggs that will hatch into strong, livable chicks.

**DR. HESS
POULTRY
PAN-A-CE-A**

Makes Poultry Healthy—Makes Hens Lay

Here are a few of the valuable ingredients in Pan-a-ce-a to meet the requirements of your poultry which I have just stated: *Nux Vomica*, a nerve tonic; *Carbonate of Lime*, a shell former; *Hyposulphite of Soda*, an internal antiseptic; *Quassia*, an appetizer; *Iron*, to enrich the blood, and other valuable ingredients, all well known and recommended by the highest medical and veterinary authorities.

There's a dealer in your town that will supply you with Dr. Hess Poultry Pan-a-ce-a and it's to make your poultry healthy—it's to make your hens lay—it's to make your chicks grow—if it doesn't do these things, he will return every cent you have paid him. Packages 35c, 85c and \$1.75. 25-lb. pail, \$3.50.

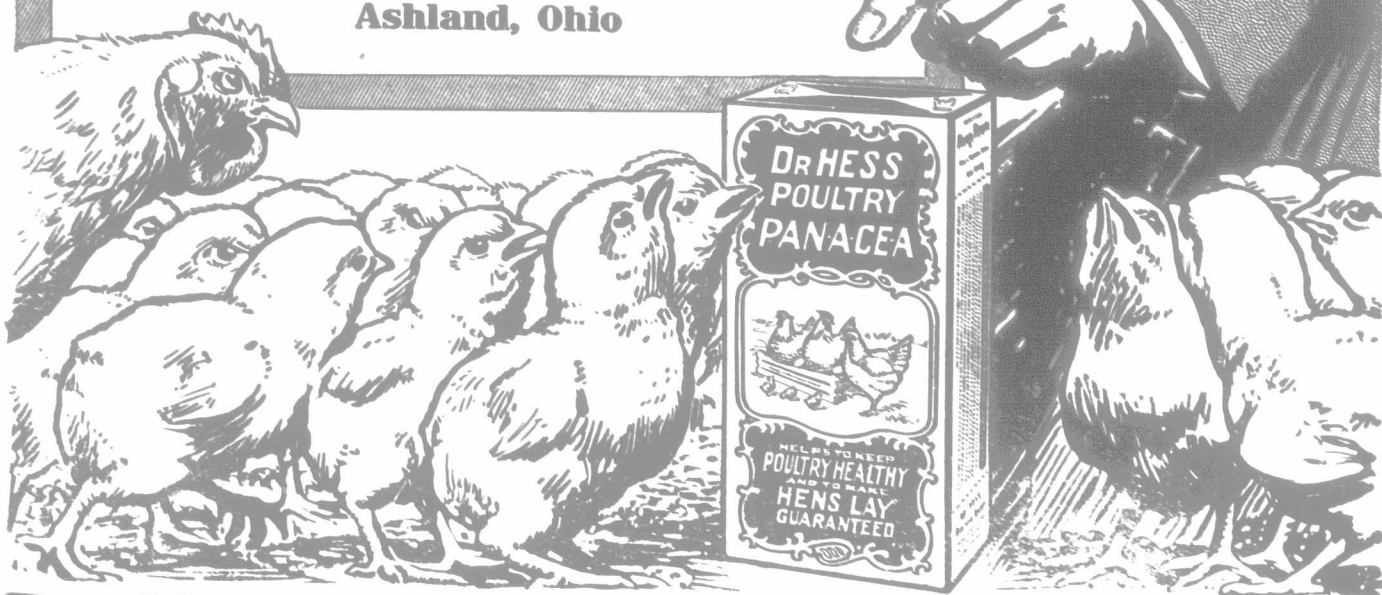
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A Conditioner for Spring Work

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Ashland, Ohio



Dr. Hess Instant Louse Killer Kills Lice

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Now is the time to place your order for a set of "COOKE" Steel Wheels! They are giving universal satisfaction in every province in the Dominion. The cost is small, and as a labor saver they are unexcelled. A set of our wheels will make a new wagon out of your old one. Write to-day for illustrated circular and price list, together with free chart, showing how to take measurements correctly, and testimonials from satisfied customers in all parts of Canada. Remember we quote price delivered to your nearest station, no matter where you live! The Cooke Metal Wheel Company, 19 West St., Orillia, Ontario

Guaranteed Genuine Everlasting Grimm Alfalfa

Most economical and profitable to sow as it produces plants which do not winterkill like other varieties; larger yield, higher feeding value. Booklet, "How I Discovered The Grimm Alfalfa", with testimonials and seed sample free.

A. B. LYMAN, Grimm Alfalfa Introducer
Alfalfadale Farm, Excelsior, Minn.

WHY

ARE HEREFORDS THE BEST BEEF CATTLE ?

Watch next issue of this paper, or if you cannot wait, write:

CANADIAN HEREFORD BREEDERS' ASSOCIATION,
Ancaster, Ontario

H. D. Smith, Secretary.

Sundrum Clydesdales

Several choice imported and Canadian-bred mares, safe in foal. Also several prize-winning fillies and stallions, and a few show geldings, 2 and 3 years of age.

W. A. McNIVEN,

R. R. No. 4, HAMILTON, ONTARIO

Questions and Answers. Miscellaneous.

Bridge Grafting.

My young orchard is badly girdled by mice. Is there anything that can be done to save the trees? They are just commencing to bear. B. M. F.

Ans.—Yes, there is a possibility of saving the trees by bridge grafting. The scions are cut wedge-shaped at both ends and by use of a sharp, narrow chisel an insertion is made in the live bark above and below the girdled portion. The ends of the scion are inserted under the bark and both unions are then waxed over. Care must be taken that the layers of bark on the scion come in contact with a similar layer on the trunk of the tree, in order that sap may be carried over the girdled portion. We have seen trees which were badly girdled saved in this way.

Potato Planter—Poison for Bugs.

1. Would you advise a man to purchase a potato planter where only one acre of potatoes is grown? Would it enable him to cultivate his ground better than if he plowed his potatoes in?

2. What are the qualities of the Hereford breed of cattle? Are they better than other breeds for beef, milk and butter?

3. When a cow loses her front teeth will she get new ones if she is properly looked after?

4. Is there anything better than Paris green as a potato bug destroyer?

T. K.

Ans.—1. When using a potato planter the land must be in proper till before the potatoes are planted. This implement is used extensively in districts where a large acreage of potatoes is grown, and is used in districts where only an acre or two are planted to the farm, but in the latter case one man usually has a planter and rents his machine to his neighbors. It would take a long time to get the money out of the machine if it were used for one acre only.

2. The Hereford breed of cattle is popular in many districts. They are a beef breed, are excellent grazers, and give good results when stable fed. They are not particularly noted for milk and butter production.

3. Once a cow loses her teeth she does not get another set.

4. Paris green is the poison commonly used for destroying potato bugs. However, there are a number of commercial preparations on the market which prove satisfactory. Arsenate of lead is a poison which is being used more and more each year.

Pruning—Grafting—Names of Early Strawberries.

1. There is a pasture farm here through which the river runs. It is part sandy loam. Cattle pasturing on it do not seem to thrive very well. Is it because the soil is cold?

2. I have some grafting to do this spring. Kindly name the quantity of beeswax, tallow and resin to make two pounds of grafting wax.

3. When is the best time to prune fruit trees, now or later on?

4. Kindly give me the names of some early strawberries. T. S. M.

Ans.—1. As a general thing river bottoms make good grazing land, and it is difficult to state why this case is an exception. A sandy loam soil might dry out considerably during a dry season; otherwise it should grow good grass. Possibly it would benefit by draining, and again, lime might be used on it to advantage.

2. Grafting wax can be made of the following proportions: Tallow, one part; beeswax, two parts; resin, four parts. Any quantity can be made as long as these proportions are used.

3. Winter is no better than spring for pruning fruit trees, that is, from the viewpoint of the trees; but as labor is scarce and there will be so much to do in the spring it is being recommended now to do all possible pruning before the season opens up.

4. Michael's Early is one of the best early strawberries. It has a perfect flower. Bedwood is another early variety which also has a perfect flower. Glen Mary ripens in mid-season. It has a perfect flower and is quite popular on account of its productiveness.

Potato S

During the of potato-sprayed at Cha Station, P. E. growers attention and late in A visited the St examined the demonstrated u in many parts season and th not sprayed s quite a bad a present. Four to each plot. were left at field for purpo before potato c pick out the disease-infected power machine 80 gallons of l the acre, at a co The plot yielded of marketable more marketa corresponding giving a net g spraying of \$ row hand ma spraying down through from th of Bordeaux a application per at the rate of 1 potatoes, which salable potatoes check plot. Th that it paid to control of late b

Vitality o

From the large number of grown in Ontario to conclude tha part of the toba that season is were handled possible during season are, in low germination the result of the experienced in l portant that th the germinative fore sowing ther a very serious seedlings.

Supt. H.

The Petrolia

On Wednesday County Pure-br will hold its sec at Petrolia. Th tributed by the County and inc and Holstein b Clydesdale mair stallion are also i determined to enterprise and l treatment.

A number of pu two-year-old heifer calves a March 15, by We Ont. The stock breeding, whose c worthy sires as F 45220, and Roan an opportunity to ing females to a serve as foundatio purchased from B, who has disposed the females ment bull calves ready and also the herd two-year-old. Th in the village of March 15, at O Write Gus Weil, c giving a descripti of each animal. March 15, and the

Potato Spraying Demonstration.

During the summer of 1917, a number of potato-spraying demonstrations were held at Charlottetown Experimental Station, P. E. I. A number of potato growers attended each demonstration and late in August around 1,300 people visited the Station, and most of them examined the plots which had been demonstrated upon. Late blight occurred in many parts of the Province early in the season and the check plots that were not sprayed showed very plainly that quite a bad attack of the disease was present. Four applications were made to each plot. The unsprayed check rows were left at intervals throughout the field for purposes of comparison. Long before potato digging time anyone could pick out the unsprayed rows by the disease-infected tops. With a horse-power machine doing four rows at once, 80 gallons of Bordeaux were applied to the acre, at a cost of \$1.65 per application. The plot yielded at the rate of 194 bushels of marketable potatoes, or 52 bushels more marketable potatoes than the corresponding unsprayed check plot, giving a net gain over the total cost of spraying of \$32.40 per acre. A four-row hand machine with one nozzle spraying down and one nozzle spraying through from the side applied 40 gallons of Bordeaux at the cost of \$1.00 per application per acre. These plots yielded at the rate of 171 bushels of marketable potatoes, which was 52 bushels more salable potatoes than the corresponding check plot. The demonstration showed that it paid to apply Bordeaux for the control of late blight.

Vitality of Tobacco Seed Low.

From the results obtained, with a large number of samples of tobacco seed grown in Ontario in 1917, we are forced to conclude that the vitality of a large part of the tobacco seed produced during that season is very low. Seeds which were handled with the greatest care possible during the growing and curing season are, in many instances, giving low germination test. This is probably the result of the very poor growing season experienced in 1917; and it is very important that tobacco growers determine the germinative power of their seeds, before sowing them, if they wish to avoid a very serious shortage of strong early seedlings.

D. D. DIGGES,
Supt. Harrow Tobacco Station.

Gossip.

The Petrolia Pure-bred Stock Sale.

On Wednesday, March 13, the Lambton County Pure-bred Stock Association will hold its second annual public sale at Petrolia. The offering is being contributed by the best breeders in the County and includes Shorthorn, Angus and Holstein bulls and heifers. Two Clydesdale mares and one Clydesdale stallion are also included. The Association is determined to make a success of the enterprise and buyers can expect fair treatment.

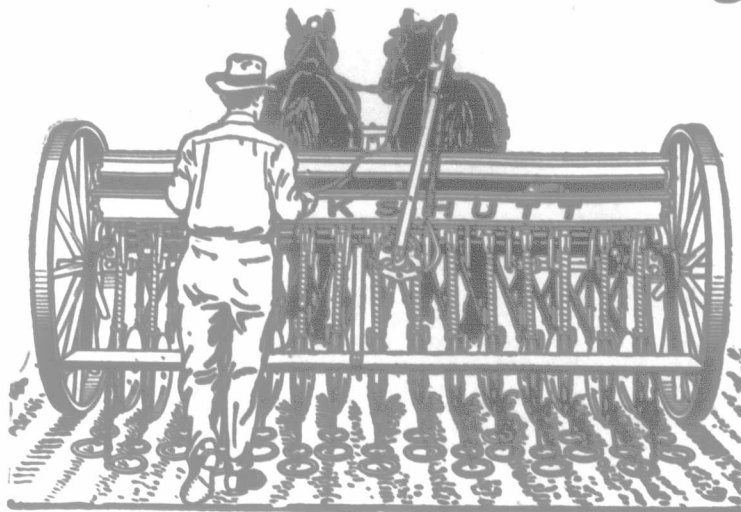
A number of pure-bred Shorthorn cows, two-year-old heifers, yearling heifers, and heifer calves are offered for sale on March 15, by Weil and Lyfield, of Jarvis, Ont. The stock is largely of Nonpareil breeding, whose dams were sired by such worthy sires as Rosicrucian of Dalmeny 45220, and Roan Chief 60865. This is an opportunity to get some choice breeding females to add to the herd, or to serve as foundation stock. This herd was purchased from B. Miller, of Port Rowan, who has disposed of his farm. Besides the females mentioned, there are three bull calves ready for service in the sale and also the herd sire, Emperor Chief, a two-year-old. The sale is to be held in the village of Caledonia, on Friday, March 15, at O'Rourke's sale stables. Write Gus Weil, of Jarvis, for a catalogue giving a description of the full breeding of each animal. Remember the date is March 15, and the sale is held at Caledonia.

You Want Rapid, Perfect Seeding

There is one way to make sure of it, and that is, use a

Cockshutt Disc Drill

With its very strong frame construction—no sagging or bending of the parts. Both wheels are drivers—you sow on corners as well as in the field



You may buy the best seed and keep your land in good shape, but if you don't PLANT your seed properly your crops will be thin, "spotty" and undersized. Cockshutt Disc Drills plant and cover all kinds of grain at any rate-per-acre you wish. They pulverize the ground, cover the seed and give it every chance for germination. Not a heavy draft machine, despite its tremendous strength. Built in five sizes, with either 6 or 7-inch spacing.

Cockshutt Grain and Fertilizer Drills are wonderfully efficient though very simple and without complicated parts. Fertilizer is drilled into the ground with the seed and covered with it, so a splendid, even crop is assured. The flow of the fertilizer is under perfect control. The whole machine is worked by easy levers, and it doesn't take long to understand it thoroughly from top to bottom.

The Cockshutt Disc Drill should be seen to be appreciated. Write for our free Cockshutt Drill Book to-day. State whether it is a plain grain Drill or a combination grain and fertilizer Drill you want information about. Our nearest agent will be glad to show you how it works.

COCKSHUTT PLOW CO. LIMITED
BRANTFORD, ONT.

Sold in Eastern Ontario, Quebec and Maritime Provinces by

The FROST & WOOD CO. LIMITED
Montreal, SMITH'S FALLS, St. John

Second Annual Pure-bred Stock Sale

MARKET SQUARE, PETROLIA, ON

Wednesday, March 13th, 1918

AT 1 P.M. SHARP

LAMBTON COUNTY
PURE-BRED STOCK ASSOCIATION

will sell by public auction

40 Head of Cattle

Consisting of Shorthorn, Angus and Holstein Bulls and Heifers, 2 Clydesdale Mares, 1 Clydesdale Stallion, 1 Standard-Bred Mare.

The offering has been contributed by the best breeders in the County.

TERMS: Cash, or eight months' credit will be allowed on approved joint notes, with interest at 6 per cent. per annum, from date of sale.

A limited number of animals not yet registered, but eligible, will be offered.

Apply to the Secretary for catalogue.

W. S. STEADMAN, President, Petrolia, Ont.

W. P. MACDONALD, Secretary, Petrolia, Ont.

Clydesdales and Shorthorns

I still have some Shorthorn bulls, twelve and thirteen months old. Two grandsons of Old Sort, and four great-grandsons of Royal Blood; these are an exceptionally fine lot; also a number of females. Inspection invited. Apply to

J. B. CALDER, Glanford Station, R.R. 3.

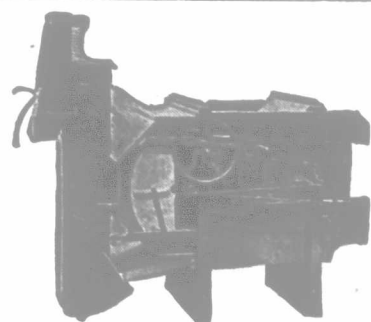
LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Freezone, and it now can be had in tiny bottles as hereshown for a few cents from any drug store.

You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin. Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!



KLINE FANNING MILLS
Will Clean Out All Wild Oats
Is the fastest and best mill on the market or money refunded. Ask the man who owns one.
Write for Pamphlet
KLINE MFG. CO., BEETON, ONTARIO

Traction Ditcher

FOR SALE

Practically as good as new. Anyone interested will do well to apply to:

A. HUTCHINSON & SON
Mt. Forest, Ont.

PEERLESS PERFECTION

The Crimped horizontal wires allow ample provision for expansion and contraction from extreme changes in temperature and shocks from unruly animals.

The Peerless Lock (shown in the circle opposite) holds the intersecting wires in a firm grip that is non-slippable. Every part is heavily galvanized.

The money you spend on a Peerless Perfection Fence is Insurance, Investment and Property

It insures the safety of your stock. Year after year you have a fence that won't sag, rust or break down. You will find it in place doing fence work for you all the time.

It costs no more to set posts for this strong and durable fence than for one cheaply made of light wire --- no more to build.

All Peerless Fencing is made from heavy open-hearth steel wire, the most perfect fencing material known for the purpose, with the impurities burned out and its strength, durability and toughness greatly intensified.

Send for Literature Today

Get our Illustrated Catalog of all styles for all purposes; then see your Local Dealer or write to us.

The Banwell-Hoxie Wire Fence Company, Ltd.
Winnipeg, Man., Hamilton, Ont.

Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

Ontario Creameries, Limited
London, Ontario

SHORTHORNS

Young bulls, red and roan, fit for service.
E. E. Luton, R.R. No. 1, St. Thomas, Ontario

Imported and Canadian Bred Clydesdales

COLUMBUS STABLES

We have on hand at present one of the strongest selections of imported and Canadian bred stallions we have had in the stables in years. A strong combination of size, quality and breeding. We also have 15 in-foal mares, all to the service of horses we are offering.

Smith & Richardson, Myrtle, C.P.R., Oshawa, C.N.R., Oshawa, G.T.R., Columbus, Ont

Aberdeen-Angus

We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire Boars and Sows.

LARKIN FARMS (MENTION FARMER'S ADVOCATE) QUEENSTON, ONTARIO

BROOKDALE FARM HEREFORDS

Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull, as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords.

W. READHEAD BROOKDALE FARM MILTON, ONT.

Gossip.

Glenwood Holsteins.
I. N. Howe, Mossley, Ontario, is offering some choice individuals at the first annual sale of the London District Holstein Breeders' Club, to be held in London on March 14. Two of the young cows are show animals and are due to freshen to Baron Colantha Fayne, the 33.18-lb. sire that has two Canadian champion sisters. One of them, Colantha Butter Girl, made a record of 2,007 pounds of milk in 30 days, as a junior two-year-old, and as a three-year-old made a high record for fat production. The young bull offered is well grown and was a winner in the show-ring last fall. He is sired by a full brother of the herd sire, Baron Colantha Fayne. Mr. Howe is offering a number of spring calves from his herd sire. If wishing to secure some young stuff that is bred right, communicate with Mr. Howe, R. R. No. 2, Mossley.

Glenboyle Jerseys.
Jersey breeders will have an opportunity of securing choice individuals at their own price, at D. A. Boyle's sale to be held in Woodstock, on Monday, March 11. It is not customary for champion cows and heifers to be offered at public auction. However, that is what is happening on March 11. Beauty Maid, a champion cow with a four-year-old record of 14,852 lbs. milk and 872 lbs. fat, is in the sale. She is the second highest butter-fat cow of the breed. This cow's dam and Flora of Glenboyle, with a three-year-old record of 11,954 lbs. of milk, will also be offered at your own price. Springbank Butter Girl is another worthy individual in this herd. She has a milk record of over 12,000 lbs. as a three-year-old and a butter-fat record of 608 lbs. Her daughter, by Imperial Beau, a son of Beauty Maid the champion cow, is also in the offering. The herd sire, Imperial Majesty, is a choice individual and has sired record stock. A number of his progeny are in the sale. The cows and heifers are bred to Imperial Majesty or to Imperial Beau. If requiring a few head of Jerseys to strengthen your herd, or if in need of a herd sire, you cannot very well afford to miss this sale. Even if you do not wish to purchase, it will be time well spent to be at the ring-side and watch this champion stock disposed of. See the advertisement and write the proprietor, D. A. Boyle, Woodstock, for fuller particulars regarding the stock he is selling.

Trees For Reforesting Waste Land.

For a number of years the Forestry Branch of the Department of Lands, Forests and Mines, of the Province of Ontario, has been distributing trees to farmers for reforesting waste land or land which is undesirable to be tilled for annual crops. Throughout the Province there is a good deal of land which is not suitable for cultivated crops, but which would give fair returns if in forest. The complete removal of the trees has really left a good deal of waste land in the Province. The shortage of fuel is making the need of forest conservation felt. The Department prefers that the plantations be made on such waste portions of the farm as sandy, rocky and gravelly spots, swamp land, portions of farms cut off by streams or otherwise. Such land could be profitably devoted to wood production if the proper species are planted. There are instances, however, where it may be found advisable to re-plant good agricultural soil. Owing to the difficulties caused by the war, the Department are unable to offer the same list of trees as in previous years, but they are trying to furnish as many as possible. The Evergreens have been cancelled, and White Pine cannot be distributed owing to an embargo, due to the White Pine Blisters Rust—a disease which is prevalent in Southern Ontario. It is possible that some Scotch pine may be available, but at present delivery is uncertain. The following are the hard woods for distribution this spring: Sugar maple, soft maple, white ash, black locust and black walnut. These trees are not sent out for roadside or ornamental planting, but are intended to make forest plantations. Applications should be sent to the Forestry Branch, Parliament Buildings, Toronto.



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Clydesd
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sure and a good foal
exchange for older s
at home stable, and
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1914, prize-winner.
mares, 2 years and
ARTHUR GORDON
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Mares, rising five ye
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\$15.00 Buys this Griffith Team Outfit
(\$16 west of Fort William)

Comprising Giant Rope Traces, Giant Yoke Ropes, Hames, Hame Straps, Pile Pads, Belly Bands and Sillots, Complete for 2 Horses.

Can you beat it? The whole business end of a team harness at a price that makes it a real economy! Actual service tests have proved beyond question that rope wears every bit as well as leather. Farmers everywhere are finding the Griffith Team Outfit a great boon, in the face of the steadily increasing price of leather. Order an Outfit to-day. Price \$15 (or \$16 west of Fort William).

Griffith's Giant Rope Traces only, per set of four, with heel chains, \$6 (or \$6.50 west of Fort William).

Griffith's Giant Yoke Ropes, to replace leather pole straps, price complete with snaps and slides, \$1.50 per pair (or \$1.75 west of Fort William). If your dealer can't supply you, order direct. Write for booklet.

G. L. GRIFFITH & SON
68 Waterloo St., Stratford, Ont.



High Grade Seed

Registered 1st Generation, O.A.C. No. 72 Oats, \$2.00 per bus., Government germination test 97%. Improved O.A.C. No. 72 Oats, grown from strains of registered seed, \$1.60 per bus., Government germination test 98%. Registered O.A.C. No. 21 Barley, \$2.50 per bus., Government germination test, 97%. Improved O.A.C. No. 21 Barley, grown from strains of registered seed, \$2.00 per bus. The above grains have been produced from carefully graded, selected seed; guaranteed true to variety. Free from smut and noxious weed seeds. Small, white field beans, extra good quality, \$10.00 per bus. All grains offered produced on our own seed farms. Samples sent on request. Sacks free. Prices F.O.B. Alliston, C.P.R. or G.T.R.

Ruthven Bros., R. R. No. 2, Alliston, Ont.

FOR SALE—THE IMPORTED
Clydesdale Stallion

Copernicus (14054), foaled in 1912, modern type, sure and a good foal-getter, Form 1. May consider exchange for older stallion of good quality to stand at home stable, and difference.

WM. DINGWALL, Cedar View Farm
Hopeville P.O., Grey County
Holstein, G.T.R.; Dundalk, C.P.R. L.-D. Phone.

FOR SALE — CLYDESDALE STALLION
Duke of Carruchan, No. 16429, foaled, May 22nd, 1914, prize-winner. Imported and Canadian-bred mares, 2 years and up, in foal to Stallion No. 16429. ARTHUR GORDON, CEATHAM, R. R. No. 1 Arkwood Station, C.P.R.

FOR SALE

PAIR OF PURE - BRED PERCHERONS.
Mares, rising five years; weigh over 35-hundred lbs.
Prize winners.
ROBERT RIDDELL, King P. O., York Co.

SUNNY ACRES ABERDEEN-ANGUS

Bulls of serviceable age and females not akin.

WM. CHANNON & SON
P. O. and 'Phone - - - Oakwood, Ont.
Stations—Lindsay, G.T.R. and C.P.R.

Alloway Lodge Stock Farm

Angus - Southdowns - Collies
SHOW FLOCKS

Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.

Robt. McEwen, R. R. 4, London, Ont.

Kennelworth Farm Aberdeen-Angus

A grand lot of calves for sale; ages in the neighborhood of 7 months. Victor of Glencairn at head of herd.

PETER A. THOMPSON HILLSBURG, ONT.

ABERDEEN-ANGUS

Alonzo Matthews, Manager, Forest, Ontario.
H. Fraleigh, Proprietor, Forest, Ontario.

Buying Bees From the South.

The purchase of bees without combs from the Southern States in spring, for making good the winter losses and increasing the returns of the apiary, has attracted considerable attention in Canada during the past two or three years, and has been tried out on a small scale in the apiary at the Central Experimental Farm, Ottawa, with the following results.

On May 8, 1916, a shipment consisting of six 1-pound packages was received by express from a dealer in Alabama. It was fourteen days on the journey, and only 17 ounces of bees found to be alive on arrival. Another shipment consisting of three 2-pound packages, each with an untested fertile queen, arrived in good condition on May 9, after only four days journey. These three lots, after having been supplied with combs and brood from other colonies, produced 433 pounds of honey and built up into five strong colonies fit for wintering.

In 1917 a shipment consisting of three 2-pound packages, each with an untested fertile queen was received from Alabama on May 9, seven days after despatch, and arrived in good condition. The three lots were each placed on four combs containing nothing but about 3 pounds of honey, and empty combs were added as needed. Producing a total of 316 pounds of honey valued at \$47.25, an average of 105.3 pounds each, they were about as profitable as the regular colonies in the apiary, which gave in 1917 an average of 108.5 pounds of honey each, spring count, and for the five years, 1913-1917, an annual average of 106.7 pounds. The cost of the three lots was \$9.75, express charges \$1.25, total \$11. In the fall each lot needed 21 pounds of sugar, costing \$2, to make it heavy enough for wintering.

Another shipment, also consisting of three 2-pound lots, each with an untested fertile queen, was received from Alabama on May 27, and arrived in good condition six days after despatch. These bees were treated in the same way as the first shipment, but, owing partly to the fact that they arrived 18 days later than the first, and partly to a worthless queen in one of them, to replace which a comb of brood was taken from one of the others, they made a much smaller profit, the one that was requested produced only 4.7 pounds, the one that supplied the brood 24.5 pounds and the third 24. Eight pounds of surplus honey, a total of 54 pounds valued at \$8.10. The cost of this shipment with express charges amounted to \$11.50.

The bees received on May 9 raised a large quantity of brood during dandelion bloom in the latter part of May. This brood produced bees in time to work on clover at the commencement of the flow in early July.

Information received from beekeepers in different parts of Canada who ordered bees from the South to be delivered in 1917, shows that some were disappointed because, expecting the bees in May, they did not receive them until June or July and in a few cases not at all. The delay was caused partly by the exceptionally unfavorable spring for raising bees in the South, and partly by an unexpectedly heavy demand. One remedy for this would be to order early, because most dealers fill their orders in rotation, if they are not very large. A few beekeepers reported a large percentage of dead bees on arrival, due to detention at some place on the journey or to faulty packing. The season for profit passes before such a loss can be replaced. In one or two of the provinces bees are liable to be held at the point of entry unless accompanied by a certificate that the apiaries from which they were sent are free from diseases and bees on combs are not permitted to enter. To avoid disappointment, intending purchasers should endeavor to select reliable and experienced dealers. Efforts are being made by the publishers of several bee journals to exclude the advertisements of dealers who are not likely to carry out their promises. The risk of introducing brood diseases is not entirely absent in buying bees without combs, but it is very much less than when colonies on combs are purchased.

F. W. L. SLADEN,
Apiarist Dominion Experimental Farms.

CLEARING SALE OF 33 PURE BRED Shorthorns

THE PROPERTY OF WEIL & LYFIELD
at O'Rourke's Sale Stables, Caledonia, Ontario

FRIDAY, MARCH 15th, 1918

In the offering are sixteen cows, a number of two-year-old heifers, yearling heifers and calves; also three bull calves, ready for service, and a two-year-old bull, "Emperor Chief" 103144.

Among the thirty-three head to be disposed of are a number of Nonpareils, whose dams were sired by "Rosicrucian of Dalmeny" 45220, and "Roan Chief" 60865.

Catalogues on application to:

GUS. WEIL, JARVIS, ONTARIO

J. DEMING, Jarvis, Auctioneer

THE MANOR STOCK FARM---SHORTHORNS

Bulls all sold. Have Winiples, Rosemarys, Minas, Roan Ladys, etc., for inspection.
JOHN T. GIBSON DENFIELD, ONTARIO.

BURNFOOT STOCK FARM

Breeders of high record, dual-purpose Shorthorns with splendid conformation for beef. Have a number of bulls calved last fall and early in winter.
S. A. MOORE, PROP. (Farm one mile north of Caledonia) CALEDONIA, ONTARIO

NICHOLSON'S SHORTHORNS

Herd headed by "Best Boy" =85552 =, and "Brownale Winner" =106217 =. Bulls and females for sale. Visitors always welcome to this herd of long-established reputation.
R. & S. NICHOLSON, PARKHILL, R. NO. 2, ONTARIO

HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hur for sale or exchange.
GEO. MORDEN & SON, OAKVILLE, ONTARIO.

FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossoms, Kiblean beauties, Matchless, Mysies, Misses, Clementina's, etc., and is headed by the Watt-Stamford bull, Victor Stamford =95050 =, a Toronto winner. Present offering, two young bulls (show animals) also several heifers and cows.
GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C.P.R., L.-D. Phone

GERRIE BROS' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladys Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer.
GERRIE BROS. ELORA, ONT.

WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

New sales list out: cows, heifers bred, young bulls, also stock bull Morrison Pride =102330 =.
Chas. Gainer, Secretary, Box 607, Welland, Ontario. A. E. Howell, President, Fenwick, Ont.

SALEM SHORTHORNS

Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times.
J. A. WATT, ELORA, ONTARIO

SHORTHORNS—T. L. Mercer, Markdale, Ont.

ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords.

Blairgowrie Shorthorns and Shropshires

20 imported cattle, cows and heifers; all have calves at foot or are in calf to British service. Bulls for breeders wanting herd headers. Also home-bred bulls and females. Prices right. Rams and ewes in any numbers. JOHN MILLER, Myrtle Station, C. P. R., G. T. R. ASHBURN, ONTARIO

PLEASANT VALLEY FARMS

Herd headed by (imp.) Newton Grand Champion and Belmont Beau. We have for sale a goodly number of real good young bulls that will suit the most exacting; also females. Inspection invited.
Geo. Amos & Sons C. P. R., 11 miles east of Guelph Moffat, Ontario.

Robert Miller, Stouffville, Ont.

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.

Write for anything in Shorthorns One hour from Toronto

MEADOW LAWN SHORTHORNS

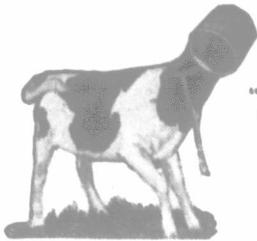
Three big, growthy bulls of serviceable age—one of the Claret, two of the Marr Roan families. Come and see them. We will refund your railway fare and pay freight on all purchases. Priced from \$175 to \$300. F. W. EWING, R. R. No. 1, ELORA, ONT.

SEVENTY-THREE HEAD OF SHORTHORNS

Ten young bulls of serviceable age, Nonpareil Ramsden =101081 =, and Royal Red Blood =77521 = at the head of the herd. The ten young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams which will bear inspection. Our cows and heifers will please, and you'll like the bulls.
JAMES McPHERSON & SONS, DUNDALK, ONTARIO.

PURE SCOTCH SHORTHORNS

of exceptional merit. The young things we are offering this year are something extra, especially the bulls. Come and see them if you want something choice. GEO. GIER & SON, WALDEMAR, ONT.



"Good to the Last Drop"

Raise Your Calves on Blatchford's Calf Meal and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk. Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use. **Write for Pamphlet** "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or **Steele, Briggs Seed Co., 64 Toronto, Ont.**



Lump Jaw

The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains to-day the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad 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. Durably bound, indexed and illustrated. Write us for a free copy. **FLEMING BROS., Chemists, 75 Church Street - Toronto, Ont.**

Dual-Purpose Shorthorns

Herd headed by Dominator No. 106224 whose grandam on his mother's side has an R. O. P. record of 13,535 lbs milk, testing 3.99, and whose dam has an R.O.P. record of 10,689 lbs. milk, testing 3.88. Cows heifers and young bulls for sale; some of the latter are out of cows in the herd which have given between 10,000 and 11,000 lbs of milk each in one lactation period.

WELWOOD FARM FARMER'S ADVOCATE, LONDON, ONTARIO

Mardella Shorthorns

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size, type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head.

Thomas Graham, Port Perry, R. 3, Ont.

Registered Shorthorn Bulls

Excellent individuals and ready for service. Sired by the famous bull that sold in Toronto, December last, for \$1,075. These choice young animals possess perfect Gloucester type and finish (their dams excellent milkers.) Priced right for quick sale.

W. S. BRAGG R.R. No. 4, Box 11, Bowmanville, Ont.

Evergreen Hill R. O. P. Shorthorns

Offering so's of St. Clare 84598 R.O.P. No. 5, who sired the 1917 champion fat steer at Toronto Exhibition. Also offering Berkshires 2 months old. **S. W. JACKSON, R.R. No. 4, Woodstock, Ont.**

Glenfoyle Dual-Purpose Shorthorns

Herd bull College Duke 4th, 95430, big, thick young cows and heifers for sale; 8 young bulls, some herd leaders. Also a yearling Clyde, stallion. **STEWART M. GRAHAM, LINDSAY, ONT.**

Spruce Lodge Shorthorns and Leicesters

Herd headed by the Butterfly-bred bull, Roan Chief Imp. #69865. Young bulls, cows, and heifers of all ages, of good breeding and quality. **W. A. DOUGLAS, CALEDONIA, ONTARIO**

The Hawthorne Shorthorns — A combination of several females bred to the herd sire "R. O. P. No. 79864," a Toronto winner. Both milk and best strains. A few Leicester rams and Yorks to be seen. Everything priced to sell. "The Hawthornes" **Allan B. Mann, R. R. 4, Peterboro, Ontario G.T.R., C.P.R.**

Plaster Hill Herd Dual-Purpose Shorthorns. Six young bulls from four to thirteen months. Size, quality and good milking strains. **F. Martindale & Son, R.R. 3, Caledonia, Ont.**

When writing please mention this paper.

Questions and Answers. Veterinary.

Luxation of the Patella.

Mare was driven 24 miles one day. Next morning she could not fetch one hind limb forward, but when forced to go forward dragged it. This condition continued for about half an hour, then suddenly she became all right. On different mornings afterwards, after she had done a day's work the preceding day, she showed similar symptoms. **S. M.**

Ans.—This was luxation or dislocation of the patella or stifle bone. The condition is commonly called "stified." If you can provide her with a comfortable, well-bedded box stall it is probable that the trouble will not recur. Under any conditions it will be wise to blister the joint. Get a blister made of 1 dram each of biniodide of mercury and cantharides mixed with 1 oz. vaseline. Clip the hair off the front and the inside of the joint. Tie so that she cannot bite the parts. Rub the blister well in. In 24 hours rub well again, and in 24 hours longer apply sweet oil. Let her head loose now, and if you can turn her into a box stall. Oil every day until the scale comes off, then tie up and blister again. It will be better if you can give her rest during treatment. **V.**

Fatality in Cow.

Cow became sick on Monday, I gave her 1 lb. Epsom salts, and gave another lb. on Tuesday. On Thursday a farmer advised 1½ lbs. Epsom salts, 1 oz. aloes, 2 oz. turpentine and 2 drams nux vomica. When one-half of this drench had been given she looked and acted queer and was dead in less than three minutes. A post mortem revealed the contents of the maniplies very dry and the lungs discolored.

1. What caused death so suddenly?
2. Can a farmer charge for treating a neighbor's cow? **N. J. M.**

Ans.—1. A portion of the fluid passed down the trachea (wind pipe) to the lungs and caused suffocation. She was not swallowing promptly, and too much fluid was poured into the mouth.

2. While this is a legal question, we are of the opinion that he would not be able to collect. At the same time if a man has sufficient confidence in the skill and knowledge of his neighbor to trust the life of his cow to his treatment, he should be man enough to pay him a reasonable price for his time and expense. **V.**

Miscellaneous.

Dangerous Church Shed.

If the trustees of a church have knowledge that the shed is dangerous and someone puts his horse in it and accident happens—the roof falls, or a stick of timber and does damage. Who would be responsible for the damage? **Ontario, E. McK.**

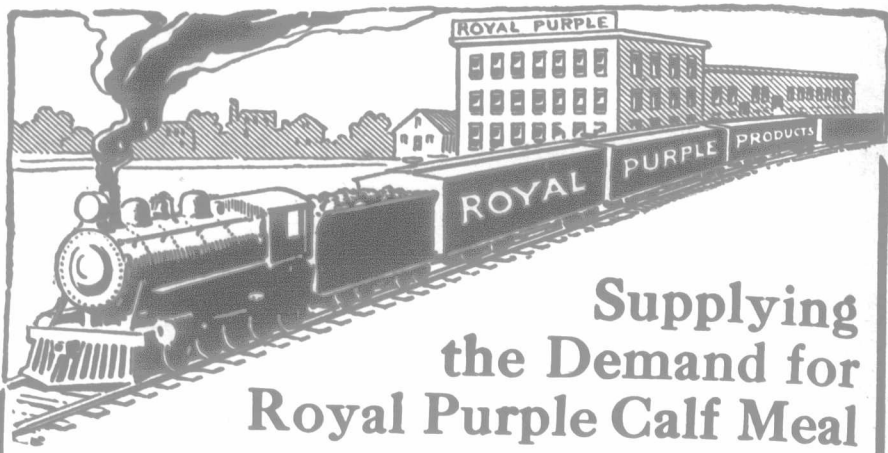
Ans.—It is probable that the trustees as such would be liable. But there might be circumstances—such as, for instance, contributory negligence on the part of the owner of the horse—which would save them from being legally responsible.

Goats.

Where can Angora goats be purchased? About how much are they worth? Is Nova Scotia's climate suitable for them? Will they browse off undergrowth in the woods? **H. D. C.**

Ans.—By writing the Live Stock Branch, at Ottawa, you would undoubtedly be able to secure the names of breeders of Angora goats. We understand that there is a Canadian Goat Breeders' Association, at Vancouver, B.C. By writing this Association an idea would be gained as to the price in that locality. As far as we are aware the climate of Nova Scotia is suitable for goats. At Windsor, N.S., G. E. O'Brien keeps a number of this class of stock. Goats browse the leaves and tender branches of shrubs, and will do a good deal towards cleaning up brush on swampy land.

H. C. Hammer of Norwich, is offering some choice stock at his sale of Holsteins on March 15. Not only are they heavy producers but are of show type and are in good condition. The cows in milk are entered in the R. O. P. and purchasers will be able to continue this test. Cows are meet trains on day of sale and milk will be served at noon to those from a distance. See advertisement and write Mr. Hammer for catalogue.



Supplying the Demand for Royal Purple Calf Meal

This baby food for young animals is partially pre-digested, and can be fed to the youngest animals with perfect safety. It WILL NOT cause stomach or bowel trouble, which are serious ailments in young animals. Royal Purple is a sure preventive for scouring.

Calves Gain Rapidly Without Milk

When the calves are 3 or 4 days old they can be fed Royal Purple Calf Meal and raised just as well without one drop of milk. What prominent breeders remark: Mr. Geo. W. Collins, Plainfield, Ont., writes:

"Gentlemen,—In regard to your 'Royal Purple' Calf Meal, I think you have the best on the market, as people who have bought it give it great praise. Some have taken their calves off sweet milk, and feed them nothing but your Calf Meal and water, and say they are doing as well on it as they did on the whole milk."

To Whom It May Concern: This is to certify that I have secured your "Royal Purple" Calf Meal from our druggist, Mr. T. C. Nicholls, of Uxbridge, and can speak of this meal in the highest terms. I have used other calf meals, but this one is the best I ever tried. I never saw a calf gain more rapidly and thrive better than mine did while using your "Royal Purple" Calf Meal. I can cheerfully recommend it to all our stockmen who wish to raise large, healthy calves. —Stanley W. Croxall.

Note—The above Mr. Croxall keeps a large herd of pure-bred Holstein cattle, and is an excellent authority on Calf Foods.

Royal Purple Calf Meal is equally good for young colts, lambs and young pigs. Put up in 25-lb., 50-lb., and 100-lb. bags. Secure it from our dealer in your town.

W. A. Jenkins Mfg. Co., Ltd., London, Can.

FREE BOOK

Send for our 80-page book which describes the common diseases of stock and poultry; also methods of feeding and our many products. Get a copy to-day.

Pinehurst R. O. P. Dual-Purpose Shorthorns

Am offering 2 choice young bulls ready for service; ages 11 months and 18 months, of the same family as Buttercup = 111906 —, the champion 3-year-old Shorthorn cow of Canada in R. O. P. See photo of this cow on page of this issue. Write for prices, etc. or better still, come and see my stock.

G. W. CARTER PINEHURST FARM, ILDERTON, ONT.

SPRING VALLEY SHORTHORNS

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had, and a few females. **KYLE BROS., Drumbo, Ont. (Phone and telegraph via Agr.)**

Imported SCOTCH SHORTHORNS

Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G.T.R. is only half mile from farm. **J. A. & H. M. PETTIT, FREEMAN, ONTARIO.**

OAKLAND 60 SHORTHORNS

Present offering is 7 bulls from 10 to 20 months of age; also a few cows with calves at foot, all choicely bred dual-purpose animals, and priced below their value. Crown Jewel 42nd still heads this herd. **JOHN ELDER & SONS, HENSALL, ONTARIO.**

FAIRVIEW SHORTHORNS AND CLYDESDALES In Shorthorns we can offer you a choice, from 60 head, including both bulls and females, of Lavender, Missie, Augusta, Duchess of Gloster, Village Girl, Miss Ramsden and Clara breeding—the best of cattle and the best of pedigrees. In Clydesdales, write for our list of winnings at Toronto, London and Guelph 1917 shows, Canadian-bred classes. We also have a nice offering in Shropshires. **ROBERT DUFF & SONS, Myrtle Station, C.P.R., and G.T.R. MYRTLE, ONTARIO**

PURE SCOTCH SHORTHORN BULLS

Our present offering of young bulls, sired by our herd sire Broadhooks Star, a son of the great Newton Kingleader, Imp., are the best lot of bulls we ever had on the farm. Come and see them, or write for particulars. We also have females of the richest breeding and highest individuality. **GORDON SMITH, Woodslee Sta., M.C.R., Essex County, SOUTH WOODSLEE, ONT.**

ESCANA FARM SHORTHORNS

For Sale—2 herd-headers of serviceable age; one a Cruickshank Orange Blossom by Right Sort Imp. and one a Jilt, by Raphael (Imp.); also one good farmer's bull. Can also spare a half-dozen females. **J. F. MITCHELL, BURLINGTON, ONTARIO. Farm ¼ mile from Burlington Junction.**

FIFTY IMPORTED SHORTHORNS

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice. **George Isaac, (All Railroads; Bell Phone) Cobourg, Ontario.**

IRVINEDALE STOCK FARM

Herd headed by Marquis Supreme. For sale, 4 granddaughters of (Imp.) Right Sort, two are Scotch and two Scotch topped; also two bulls, 1 roan 16 months by Gainford Select, and one white, Scotch topped sired by Brownhead, 7 months old, priced to sell. **JOHN WATT & SON, G.T.R. & C.P.R. R.R. NO. 3, ELOR, NTARIO**

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding and are thick, mellow fellows, bred in the purple. **WM. SMITH, COLUMBUS, ONTARIO. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.**

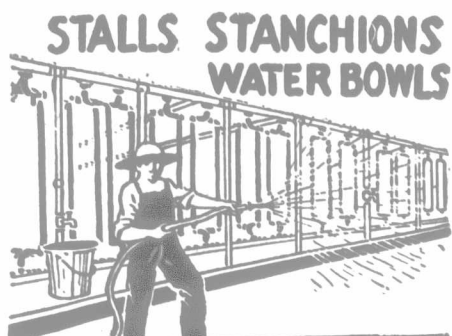
SHORTHORN BULLS Will. A. Dryden

of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls. **Brooklin, Ontario County Myrtle, C.P.R. Brooklin, G.T.R. Brooklin, C.N.R.**

A. G. Farrow, Oakville—SHORTHORNS

Herd headed by Proud Lancer (Imp.) and Pride of Escana, a great son of the great Right Sort Imp. I have a few bull calves of the better sort. Three imported ones left. Prices right. Farms one mile from station. Trains every couple of hours each way.

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TORONTO STABLE EQUIPMENT

CLEANLINESS and order pay in dollars and cents in the stable. If we furnish the equipment for your stables, chores will be lighter, your stock healthier and therefore more profitable. Away with wood and filth and disease. Toronto Steel Stalls and Stanchions are galvanized, or painted, inside and out by immersion. Toronto Water Bowls and other fittings save you money and cut down the work. Get the Stable Equipment book and read all about it. 148

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JOHN A. BRUCE & CO. LIMITED

REGAL TRADE MARK SEEDS HAMILTON

WE OFFER

Red Clover		Per Bushel
No. 1.	Govt. Standard	\$25.00
No. 2.	" "	24.00
No. 3.	" "	22.00
Alsike Clover		Per Bushel
No. 1.	Govt. Standard	\$17.00
No. 2.	" "	16.00
No. 3.	" "	14.50
Timothy		Per Bushel
No. 1.	Govt. Standard	\$ 6.50
No. 2.	" "	5.75
No. 3.	" "	5.00
2 1/2 Bushel Cotton Bags		45c each

FREE: Our 112-page Catalogue of Seeds, Plants, Bulbs, Implements, Poultry Supplies. Write for it to-day.

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Established 63 years. Hamilton, Ont.

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American FULLY GUARANTEED CREAM SEPARATOR

A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for only \$17.95. Closely skims warm or cold milk. Makes heavy or light cream. Bowl a sanitary marvel, easily cleaned. Different from picture, which illustrates larger capacity machines. See our easy Monthly Payment Plan. Shipments made promptly from Winnipeg, Man., Toronto, Ont. and St. John, N. B. Whether dairy is large or small, write for handsome free catalog and easy payment plan.

AMERICAN SEPARATOR CO.
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Strawberry Plants, etc.

We have a full line of first-class Strawberries, Raspberries, Currants, Gooseberries, Grapes, Asparagus Roots, Fruit Trees, Ornamentals, Roses, Seed Potatoes, etc. Write for free catalogue.

H. L. McConnell & Son, Port Burwell, Ont.

Questions and Answers. Miscellaneous.

Polishing Horns.
Can you give a recipe for polishing horns?

2. Is there a law preventing a man from using a jack for breeding purposes and charging a fee?
H. N. S.

Ans.—1. We do not know of any recognized recipe. Stockmen differ in the methods they employ. Sand papering the horns and then rubbing well will bring a fairly good polish. Using a little oil and plenty of rubbing with a soft cloth will give very good results.

2. We cannot find anything in the Stallion Enrolment Act or in any other Act that would prevent the use of a jack for breeding purposes.

Feeds—Seed Corn.

1. Has the price of bran, shorts and coarse grains been fixed by the Food Controller, and if so what price are retailers allowed to charge for the above articles? When the increased hog-production campaign was under way we were given to understand that the price of shorts was to be fixed, but it seems as if the quantity is regulated until it is almost unobtainable at country points.

2. Is seed corn to be stopped from coming into Canada from the U. S.? Where can good seed be obtained?
R. C. A.

Ans.—1. See answer to question "Bran and shorts" in this issue.

2. An embargo has been placed on seed corn, but we understand that certain varieties are being secured by the Dominion Seed Commissioner and will be made available through the seedsmen. Apparently the only available supply of seed corn is in the Southern States. The corn growers of the Northern States had their corn crop affected last fall similar to the Ontario seed corn growers.

Receipts—Agreement.

1. I am securing a sample of peas and potatoes, and would like to put them in the kind of soil where they will give the best results. I have a piece of clay loam soil which was plowed out of clover and sown to oats a year ago. Would this be satisfactory for these two crops? It was plowed last fall.

2. I secured building material from a local planing mill and made payment in instalments during the autumn months. I received receipts for the same but lost two of them. On January 2, I made the last payment by giving a note to the bank. Would it be advisable for me to secure a receipt that would be good for the entire account? Would "Paid up to date" cover the same?

3. Is there a way in which a farmer's son can leave his wages in the farm? I have been working for two years at home without an understanding concerning wages.

4. What is a suitable color for a farm house kitchen. I wish to paint both walls and ceiling. Would a molding about 10 inches deep look all right?

5. When and how are chickens caponized?

6. Can a calf be castrated as soon as the weather gets warm, or should it be done before May?
G. L.

Ans.—1. If the soil is in good heart, the crops mentioned might do very well on the piece of land suggested. However, peas do best as a rule on sod and potatoes also give satisfactory results if planted in a good clover sod.

2. Under the circumstances, it would be advisable to have your receipt read "Balance in full of account."

3. An agreement might be made whereby wages should be paid at a certain date, or an agreement to the effect that in lieu of labor being performed for a certain length of time an interest would be given in the farm or stock.

4. Such colors as pale green, salmon pink, or grey are quite satisfactory. Also, a border might be used to good advantage.

5. Male birds are caponized when around four or five months old. Special instruments are required for performing the operation. The birds soon recover and, as a rule, they fatten up better than if not altered. However, the practice has not become common except in commercial flocks.

6. Some castrate calves when the signs are right, but others alter their calves at all times of the year except when weather is very cold or flies are bad.

COMPLETE DISPERSION SALE OF 40 Pure-Bred High Quality HOLSTEINS

AT Norwich, Ont., Friday, March 15, 1918

Sale will commence at 1 o'clock. Farm, 1 1/2 miles east, 1/2 mile south of Norwich.

There are included in this sale six yearling daughters of Butter Baron Posch A; a 26.31 lb. bull; one 11-months' daughter of King Segis Alcartra Calamity, from a 23.93-lb. two-year-old; two daughters of Hulet's Sir Prince Colanthus Abbecker: 5 calves by Prince Echo Sylvia, a 33.55-lb. bull, and from the R.O.M. cows. In the offering also are Aaggie M. Posch, 20.04 lbs. butter, 506 lbs. milk at two years, also two of her daughters, her bull calf, her dam and sister; a 23.93 lb. 2-year-old with 542 lbs. milk in 7 days, 81 lbs. in one day; 1,019 lbs. milk and 44.72 lbs. butter in 14 days, also two of her daughters; a 23.16 lb. junior four-year-old and two of her daughters; the first-prize cow at Guelph, 1917, with 25.06 lbs. butter, 546 lbs. milk in 7 days, 82 lbs. milk in 1 day; her bull calf and granddaughter; also four of her sisters; a 16.22 lb. 2-year-old and her two sisters, from the same cow; one with 13.40 lbs. butter in 7 days at 22 months old. The four nearest dams of the young herd sire, Lady Pauline's Sir Sylvia, average over 31 lbs. butter in 7 days. This sire as well as the females combine show qualities with heavy production. The entire offering will be sold without reserve.

Conveyances will meet trains on day of sale. Lunch at noon for those from a distance. Catalogues on application to:
H. C. HANMER, Proprietor —or— **T. M. CALEY, Secretary**
NORWICH, ONT. NORWICH, ONT.
Moore and Longworth, Auctioneers

WAR FEED For Cattle and Hogs

VELVET BEANS IN POD
18% Protein, 4% Fat
Cheap, satisfactory feed for open feeding. Wire for prices. Car Lots only. Quick Shipments.
F. W. BRODE & CO., MEMPHIS, TENNESSEE
ESTABLISHED 1875 — INCORPORATED 1915. Branch Office, DALLAS, TEXAS
Headquarters for Cottonseed Meal and Cracked Cake
We will pay you full Prices for your Empty Bags

5% INSTEAD OF 3%
Your money can earn 5% just as easily as 3% if you invest it in the debentures of the Standard Reliance Mtg. Corp'n.
Our booklet, entitled "Profits from Savings," tells you all about it.
Write now for a copy. It's free.
STANDARD RELIANCE MTG. CORP'N.
82-88 King St. E., Toronto, Ont.

MESSRS. A. J. HICKMAN & CO. (Late Hickman & Scruby, Court Lodge, Egerton, Kent, England. Exporters of **PEDIGREED LIVE STOCK** of all descriptions. Specialty made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

Hospital for Insane, Hamilton, Ont.
ONLY THREE BULLS LEFT
(1) A splendid fellow, more white than black, born May 1917. He is a grandson of Dutchland Sir Mona, and his dam is a half sister of the famous Totilla of Riverside.
(2) Born September and December, 1917, of A. 1. R.O.P. dams.
APPLY TO SUPERINTENDENT.

LLENROC STOCK FARM
On the Boulevard of the Beautiful Niagara River
We offer a fine young bull from our senior sire and from a 29-lb. cow; also a young bull from Sir Veeman Hengerveld and from a 15-lb., 2-year-old, who is a granddaughter of Diana Konigen Pieterje, 37-lb. Write for prices and pedigrees. Address
W. C. HOUCK, R. R. No. 1, CHIPPAWA, Ontario.

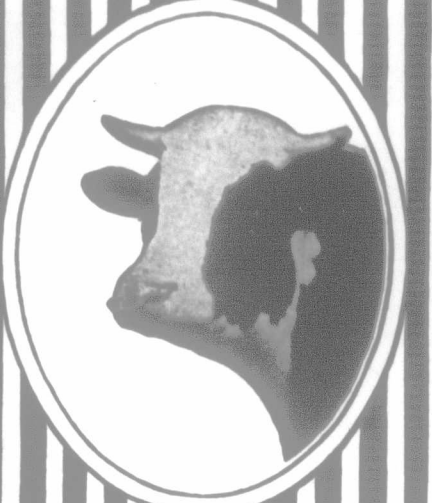
SUMMER HILL HOLSTEINS
A number of choicely-bred bulls. One a real show bull, beautifully marked, dam a 30.76 junior four-year-old; sire's dam 34.69. The three nearest dams average over 100 lbs. milk a day. Can spare a few good heifers.
D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.

WALNUT GROVE STOCK FARM
Holstein-Friesian Cattle, Tamworth Swine. We are offering a choice lot of 5 months' sows and boars and also have several nice young litters. Must clear a number quick to make room. We are also offering White Wyandotte Cockerels at \$3 each. Satisfaction guaranteed. **C. R. JAMES, R. R. No. 1, Richmond Hill, Ont.** Take Yonge Street Radial car from Toronto—stop Thornhill.

Record Breeding and Great Individuality
are combined in the young sons we are now offering from daughters of Lewis Prilly Rouble Hartog, and sired by Baron Colantha Fayne. They will improve most herds. Several are of serviceable age. See these.
T. W. McQUEEN OXFORD COUNTY TILLSONBURG, ONTARIO

SILVER STREAM HOLSTEINS
Present Offering — six extra well bred bull calves, sired by bulls with 34-lb. backing, and from tested dams, individually as good as their breeding. For fuller particulars and prices, write, or better come and see them.
J. MOGK & SON, R. R. 1, TAVISTOCK, ONTARIO

DUMFRIES FARM HOLSTEINS
Present Offering—A few bull calves.
S. G. & ERLE KITCHEN ST. GEORGE, ONT.



MANOR FARM HOLSTEINS
As Good as Victory Bonds. Bull Calves Ready For Service.

No. 1. Born April 2nd, 1917.
Dam, Manor P. H. Vincent 5 years 22.87
Half Sister to Manor P. H. Flower 30.50
Grandam, Lady Vincent 11 years 29.57
(World's record when made)

No. 2. Born May 13th, 1917.
Dam, Manor P. H. Tensen 2 years 14.22
Half Sister to Manor P. H. Flower 30.50
Grandam, Tensen of Elmwood 5 years 22.45

Both Sired by King Segis Pontiac Posch

I have got to make room so these attractive young fellows are priced way below value, and will more than bring you 5 1/2% on your investment. **Don't Delay, but write at once.**

GORDON S. GOODERHAM, CLARKSON, ONTARIO

HOLSTEINS

OUR CONSIGNMENT TO THE WOODSTOCK SALE
Wednesday, March 20th, 1918

Includes PIONEER DUCHESS HARTOG 39722. On her dam's side she is sister to Duchess Wayne Calamity 2nd, Canadian Champion in the R.O.P. with 16,714 lbs. milk, 846 lbs. butter in 365 days, and as junior 4-year-old, 29.28 lbs. butter in 7 days. She is also sister to Duchess Wayne Calamity, 25.20 lbs. butter in 7 days. Her sire is Canary Hartog, whose three nearest dams average over 30 lbs. butter in 7 days and 108 lbs. milk in 1 day. Her grandam is Royalton De Kol Violet, 29,963 lbs. milk, 1300.4 lbs. butter in 365 days. This handsome heifer will freshen before the sale, and will be just through the 7-day test as a 2-year-old. We are also consigning a choice 3-year-old, due to freshen the day of sale, and a good, young bull, sired by Canary Hartog, out of a sister to Calamity Snow Mechthilde 2nd, just finished a record of over 23,000 lbs. milk and over 1,000 lbs. butter in 365 days.

WALBURN RIVERS & SONS, R.R. 5, Ingersoll, Ontario

Questions and Answers.
Miscellaneous.

Germination of Turnip Seed.

I have a quantity of turnip seed which is about six years old. It has always been kept dry. Do you think it would be all right to sow? Could I test it by putting some of the seeds between two pieces of blotting paper and keeping them moist?

H. W.

Ans.—Turnip seed is of an oily nature and retains its vitality for a considerable length of time. The safest way would be to test it. This can be done by counting out 100 seeds and putting them between moist sheets of blotting paper, or by planting them in a pot of soil in the house. By using 100 seeds, the percentage germination can easily be figured and a person can sow according to the germination. It will only take a few days for the seed to germinate, if it has retained its vitality.

Continuation School Fees.

Where a township and town adjoin each other in the same county, can the town, having a continuation school, put a head tax of three dollars a month in first form, two dollars in second, and one dollar in third for pupils attending school residing outside the town limits, a general and special school rate being paid in township? The principal and a majority of trustees made these charges within the last month. Would this be lawful?

WELLAND CO.

Ans.—The foregoing statement does not give us sufficient information respecting the facts of the case to enable us to answer your questions in a direct way. We would refer you to The Continuation Schools Act, Revised Statutes of Ontario, 1914, Chap. 267, Sec. 5(2).

At the London Consignment Sale
on March 14

I am offering a choice young bull, nearly ready for service; he is of low, thick-set type. His two grandams average 31.28 lbs. butter in 7 days, and their average % of butter-fat is 5.27. He is a full brother to the sire I am using in my own herd.

B. R. BARR, R. 1, Mossley, Ontario

Grandsons of Rag Apple Korndyke 8th

We have four young bulls of serviceable age, by our herd sire, *Sir Waldorf Korndyke*, who is a son of the mighty Rag Apple Korndyke 8th. Their dams' records run as high as 31.31 lbs. butter and 704 lbs. milk for 7 days, and *every calf is a show individual*. We also have one 8-months bull by a grandson of May Echo Sylvia and from a daughter of a 31-lb. cow. Extended pedigrees mailed on request. *Are you interested?* Write **J. W. STEWART - North Star Stock Farm - LYN, ONTARIO**

CHOICE BULLS—READY FOR SERVICE

No. 1.—By a son of *May Echo Sylvia*. His two nearest dams (both Canadian champions) average 5.62 lbs. butter in seven days. Price \$1,000.00
No. 2.—By a son of *May Echo Sylvia*. His two nearest dams (one a four-year-old) average 34.17 lbs. butter in seven days. Price \$600.00.

We have sold thirty-five bulls this winter.

Highland Lake Farms, R. W. E. Burnaby, (Farm at Stop 55, Yonge St. Radial) Jefferson, Ont.

LYNDALE FARM — Offer No. 2.

Last week we offered a 12-months son of *Champion Echo Sylvia Pontiac*, and this week we want to mention specially a 10-months grandson of the great *King Segis* from a granddaughter of *Sara Jewel Hengerveld 2nd B*, 30.11 lbs. of butter in 7 days. A good individual and priced right.

BROWN BROTHERS, LYN, ONTARIO

MAPLE SOIL STOCK FARM OF HOLSTEINS

I am offering a few choice heifers, sired by *King Segis Pieterje*, that have just been bred to *Finderne King May Fayne*; also some heifers and cows due to freshen all the way from February until April. All bred to *Finderne King May Fayne*; a few heifer calves sired by *Finderne King*. Get some good ones.

H. C. HOLTBY R. R. No. 1 GLANWORTH, ONTARIO

When writing advertisers will you kindly mention *The Farmer's Advocate*.

50 HEAD The First Annual Consignment Sale of the 50 HEAD
London District Holstein Breeders' Club

will be held in London, at the Brunswick Hotel Stables,
corner of York and Talbot Sts., on

Thursday, March 14, 1918

when some of the best males and females of the most popular strains will be offered for sale. Sons and daughters of such sires as *Finderne King May Fayne*, whose dam made nearly 34 lbs. of butter in one week at 4 yrs. and 4 months of age; *Colantha Fayne Butter Baron*, whose dam made over 33 lbs. butter in 7 days; *Judge Hengerveld DeKol 8th*, whose dam, at 5 years, made 32 lbs. butter in 7 days; also near relatives of the \$50,000 bull.

These will all be young cows and heifers — no three-teaters or slack quarters — just the kind that will make you money, the majority of them milking or due to freshen soon.

If you want something choice in Holsteins, do not fail to be on hand at 1 p.m., on March 14th. Sale to be under cover. Catalogues will be ready by March 1st. — Write for one to the Secretary:

T. MERRITT MOORE,
Auctioneer

FRED. BODKIN,
R. R. 2, Wilton Grove, Ont.

29.68 lbs. butter, 563.7 lbs. milk

as a junior three-year-old

This is the official record of

Burkeyje Hengerveld May Echo (12658)

Her dam "Burkeyje Hengerveld", is Canada's first 20,000 lb. 4-year-old. Her sire is a son of "May Echo" and a 3/4 brother of the great "May Echo Sylvia" (world's champion).

You can buy her son, sired by "Hillcrest Ormsby Count", a son of "RAUWERD COUNT DEKOL LADY PAULINE," 29,000 lbs. milk, 1,113 lbs. in 1 year, 112 lbs. milk in 1 day. Dam of K. P. Rauwerd, 3,413 lbs. butter as senior 3-year-old, 103 lbs. milk in 1 day.

Where Can You Equal This for Production and Re-Production?
He is largely white in color—a beauty. Write us for Price, etc.

JOS. O'REILLY, R. R. No. 9, PETERBORO, ONTARIO

HOLSTEIN BULLS

Bulls of serviceable age and younger, from tested and untested dams. Write:
R. M. HOLTBY, PORT PERRY, ONT.

Horse Out of Condition.

A fifteen-year-old horse is dull and low in flesh. He urinates freely, eats well and is given good feed. What would you advise for conditioning him?

A. S.

Ans.—The frequent urination is an indication of slight bladder or kidney disorders. However, without specific symptoms we cannot diagnose the case, as the kidneys are subject to a number of disorders. The failing condition may be due to the teeth being bad. If such is the case not much can be done for a horse of the age mentioned to keep him in condition, as he would be unable to properly masticate his feed. The following is a condition powder: One teaspoonful three times daily of the following, equal parts sulphate of iron, gentian, ginger and nuxvomica.

Mare in Foal.

1. I have a 13-year-old mare due to foal in two months, but on going to the stable the other morning I noticed blood on the vulva and a little in the urine on the floor behind her. The mare is in first-class condition, is exercised regularly and is fed on good hay and grain. The foal appears to be all right, judging by the movements of the foetus. I am puzzled regarding the presence of blood.

H. D.

Ans.—The organs of conception are evidently all right, else the mare would have aborted. It is possible that the blood is due to some slight trouble in the urinary organs. If a slight amount of blood appeared on one occasion only and the foetus is alive and the mare is healthy it is not likely that there will be further trouble. However, the mare should be watched closely, and slipping, fright, etc., guarded against.

Question

M

Qual

1. Would the months old be fit
2. Would or using it or offeri
3. Is its us Ontario?

Ans.—1. Yes a little stronger
2. No.
3. No.

S

A sells his bus who takes all lo lumber. B ther wood. A gives years.

1. Can C ta A's bush after th if he can trespass
2. Who will the date—both timber?

Ontario.

Ans.—1. No
2. A. In answer the assumption fined strictly to trees and down limited.

Cri

What can I d crippled at the wo They do not se appetite. I am chop with a sma
2. I have a hair on large p part of her bod was ringworm altogether like

Ans. 1. A pr is forcing regula food, and providi The trouble oft ing or sleeping Give one and or Epsom salts food and give 1 three times dail pigs to take exerc

2. The hair v an animal is t Hair will usually and a greyish sca the scales with s and then applyr daily until cure mended. Someti with a skin dis In this case p Treatment consist a purgative and twice daily with solution of one septic. Keep and warm until each dressing.

Stable

What is a gox a stable that is wide. About 30 or 8 head of hors
2. How can to the water bas be kept from fre

Ans.—1.

ventilating the st by the windows a them opening in a direct draft on not provide for In up-to-date to have in-take then a foul-air or centre of the sta cupola in the ro draft on the catt about a foot and then something to deflect the a damper may be to regulate the a in-takes should b to furnish 15 squ cow. An outlet fairly good size t and from 20 to should be allowe With a system the air in the sta

2. Covering the only means o the frost. It v freezing usually when there is a stopped it might

Questions and Answers.
Miscellaneous.

Quality of Meat.

1. Would the meat of a boar pig seven months old be fit for human consumption?
2. Would one be liable to a fine for using it or offering it for sale?
3. Is its use prohibited by law in Ontario?

W. K.
Ans.—1. Yes, although it might be a little stronger than the ordinary pork.
2. No.
3. No.

Sale of Bush.

A sells his bush to B, a sawmill owner, who takes all logs that are fit to cut into lumber. B then sells the bush to C for wood. A gives contract to B for three years.

1. Can C take any more wood from A's bush after the day and date is up, or if he can trespass how long after the date?
2. Who will the bush belong to after the date—both the standing and the lying timber?

Ontario. A SUBSCRIBER.

Ans.—1. No.
2. A. In answering thus we do so upon the assumption that A's sale was confined strictly to a mere privilege to take trees and down timber during the period limited.

Crippled Pigs.

What can I do for pigs that are badly crippled at the weight of about 125 pounds? They do not seem to have much of an appetite. I am feeding barley and oat chop with a small quantity of roots.

2. I have a heifer that is losing her hair on large patches over the greater part of her body. At first I thought it was ringworm but it does not appear altogether like it.

J. B.
Ans. 1. A preventive for crippling is forcing regular exercise, giving laxative food, and providing good sleeping quarters. The trouble often arises from high feeding or sleeping in cold, damp quarters. Give one and a half ounces of raw oil or Epsom salts. Feed lightly on laxative food and give 1 to 3 grains of nux vomica three times daily. Endeavor to get the pigs to take exercise.

2. The hair very often comes off when an animal is troubled with ringworm. Hair will usually fall out in circular spots and a greasy scale will form. Moistening the scales with sweet oil to remove them and then applying tincture of iodine twice daily until cured is the remedy recommended. Sometimes animals are troubled with a skin disease known as eczema. In this case pimples may be formed. Treatment consists in giving the animal a purgative and then dressing the parts twice daily with a warm five per cent. solution of one of the coal tar antiseptics. Keep the animal comfortable and warm until thoroughly dry after each dressing.

Stable Ventilation.

What is a good method of ventilating a stable that is 90 feet long by 35 feet wide. About 30 head of cattle and 7 or 8 head of horses are kept.

2. How can the water pipes leading to the water basins in front of the cattle be kept from freezing in cold weather?

W. H. F.

Ans.—1. There are different ways of ventilating the stable. Some do it largely by the windows and for this purpose have them opening in at the top so there is not a direct draft on the stock, but this does not provide for any outlet for foul air. In up-to-date barns it is customary to have in-take flues along the wall and then a foul-air outlet leading off from the centre of the stable, or from the end to a cupola in the roof. In order to prevent draft on the cattle, air can be brought in about a foot and a half from the floor and then something attached to the inside to deflect the air upward. A slide or damper may be arranged in this in-take to regulate the amount of fresh air. The in-takes should be of sufficient dimensions to furnish 15 square inches of air space per cow. An outlet 24 inches square is a fairly good size for a medium sized barn, and from 20 to 28 square inches outlet should be allowed for each cow stabled. With a system of in-takes and outlets the air in the stable should be kept pure.

2. Covering the pipes is practically the only means of protecting them from the frost. It will be found that the freezing usually takes place at a point where there is a draft; if this could be stopped it might lessen the difficulty.

*Production is Patriotism, honest and good
Holsteins the cows to make the most food
Belleville's the place to come on the hop
For Belleville producers "Go over the top."*

BELLEVILLE CLUB HOLSTEIN SALE, APRIL 3, 1918

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

Sovereign Stock Farm

is consigning to the Perth District Holstein Breeder's Sale, to be held at Stratford, Ont., March 13th, a grandson of **Baroness Madoline**, 34.48 lbs. butter in 7 days, 1,013.75 in 30 days. His five nearest dams' records average 30.95 lbs. Every dam on four generation pedigree tested officially. Three direct dams tested in R.O.P. average 19,049.3 lbs. milk. Also two richly bred females, safe in calf to a son of Baroness. *Get a catalogue and attend the sale.*

WM. STOCK & SONS, TAVISTOCK, ONTARIO

35 PURE-BRED HOLSTEINS 35

The entire herd of Noah S. Bender, selling in a great Unreserved Sale at the Farm, Near Tavistock, Ontario
TUESDAY, MARCH 19th, 1918

Just A Few Pointers Regarding This Offering:

This is not a weeding-out sale; The entire herd sells without reserve; Of the thirty-five head, thirty-two are females; There will be twelve fresh cows; There is not one defective udder; There are ten daughters of King Lyons Colantha; There are six daughters of King Lyons Hengerveld; A good clean herd of high-class, choicely bred Holsteins.

Write for Catalogue Now. Remember the Date, March 19.

TERMS: Cash, or 6 months' credit on bankable paper, a 7 per cent. per annum.

Noah S. Bender, All trains met at Tavistock on day of sale. Tavistock, Ont.

Roycroft Farm Holstein-Friesians

Our 30-lb. bulls have all been sold, but we still have several sons of Pontiac Korndyke of Het Loo, that are just nearing serviceable age. Get one of these for your next herd sire, have a brother of Het Loo Pieterje, the world's greatest junior two-year old, at the head of your herd. We also have a 9-months, 27.78-lb. son of King Segis Alcartra; and one other, same age, by Dutchland Colantha Sir Mona. See them at once or write early.

W. L. SHAW - ROYCROFT FARM - NEWMARKET, ONTARIO.
Take Yonge Street Radial Cars from N. Toronto



AAGGIE COLANTHA DE KOL

The daughters and granddaughters of such noted bulls as Dutchland Colantha Sir Abbekerk, (7140), Woodland Sarcastic Lad (4890), Sarcastic Mercedes Lad (8411), and Maple Crest De Kol Champion will be in the offering. The latter is the present senior sire. He is the only son of the only cow in the world to have two daughters with year's butter records over 1,320 lbs. Some of the young things are sired by Count Midnight Mercena, whose thirty nearest tested dams average over 26 lbs., and King Aaggie Fayne, whose dam and sire's dam average 31.56 lbs. in 7 days; 122 lbs. in 30 days. The latter two bulls are in the sale.

All stock advertised sold without reserve. Sale at 1 p.m. Transportation from Brown House, Aylmer, to farm, on day of sale. Aylmer is on M.C.R. and G.T.R. lines. Sale held under cover. Laidlaw Bros. sale the following day. Write for catalogue to

J. M. VAN PATER & SONS, R.R. No. 1, DUNBOYNE, ONT. Auctioneer: T. Merritt Moore.

**Compare the
SANITARY KING
with all other Cream
Separators**

Then you will understand why so many farmers are using the

"Sanitary King"

Built of the very best material, which insures long life. Stands solid, turns easy, close skimmer, splash oiling system, solid or detachable spindle. Capacities for from one cow to a large herd—operated by hand gasoline or electricity. Sold on easy terms if desired. Write for local agent's address. Try it before you buy.

King Separator Works of Canada
Bridgeburg, Ontario

THE VETERINARIAN

A valuable book which tells you all about the treatment of diseases of your live stock, given FREE with a trial ton order of
LINSEED OIL CAKE
"Maple Leaf" Brand
Write to-day for lowest prices.
The Canada Linseed Oil Mills, Limited
Toronto and Montreal

FOR SALE

**Two Dual-Purpose
HOLSTEIN BULLS**

One two-year-old. Dam, officially tested gave as a four-year-old, 11,498 lbs. milk and 434 lbs. butter fat. One year-old, whose dam as a three-year-old also officially tested, gave 8,057 lbs. milk and 340 lbs. butter fat in 296 days.

D. Z. GIBSON, Caledonia, Ont.

**For Milk, Butter, Cheese, Veal,
Holstein Cows Stand Supreme**

If you try just one animal you will very soon want more.

WRITE THE

HOLSTEIN-FRIESIAN ASSOCIATION
W. A. Clemons, Sec'y, - St. George, Ont.

Garden of Oxford, Holstein-Friesians
Choice Bulls; I have six extra good, strong and vigorous young bulls of serviceable age, three being sons of the Prince Colanthus Abbekerk, one the son of King Segis Alcartra Calamity, and the other two the sons of King Lyons Hengerveld. These are all from good dams of high test and would prove a valuable asset at the head of anyone's herd. Prices reasonable. Apply to, or come and see them at Tavistock, Ontario.
JOHN G. MORGENROTH, Rural Route No. 6.

KING SEGIS PONTIAC DUPLICATE
A 3/4 brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write us also for females.
R. W. Walker & Sons, Manchester Station, G.T.R., Fort Perry, Ontario

Look! Dispersion Sale Study!

60 Pure-Bred Holstein Friesians

The Property of J. M. Van Patter & Son, Woodland Farm
Aylmer, Ontario

Tuesday, March 12, 1918

Among the offering are granddaughters and great granddaughters of Netherland Aaggie De Kol, ex-champion R.O.P. cow; record 21,666 lbs. milk, butter 881 lbs. Four generations in this family have R.O.P. records that average 16,805 lbs. milk and 671.7 lbs. butter. Also many descendants of Aaggie Mercedes, 29.19 lbs. butter in 7 days, 110.89 lbs. in 30 days as junior 4-year-old; milked over 1,100 lbs. in 11 days. **This herd is in healthy condition and entirely free from contagious diseases.**

All stock advertised sold without reserve. Sale at 1 p.m. Transportation from Brown House, Aylmer, to farm, on day of sale. Aylmer is on M.C.R. and G.T.R. lines. Sale held under cover. Laidlaw Bros. sale the following day. Write for catalogue to

J. M. VAN PATER & SONS, R.R. No. 1, DUNBOYNE, ONT. Auctioneer: T. Merritt Moore.

IMPORTANT

Holstein Breeder's Sale

34 selections from the noted Ourvilla Herd, selling at

OURVILLA FARM, AYLMEER, ONT.

WEDNESDAY, MARCH 13th, 1918

30 Milking Cows and 4 Young Bulls, All Bred at Ourvilla Farm.

All but six animals in the sale are either daughters or granddaughters of that noted sire Dutchland Colantha Sir Abbekerk, with 31 R. of M. daughters and 16 R. of M. sons; 20 daughters average 21.36 lbs. butter in seven days, nearly all with first and second calves. Nearly all of these will be bred to Finderne King May Fayne (whose dam and three of his sisters at 3½ years of age averaged 36.02 lbs. butter in seven days, three of these hold world's records) or to Maplecrest De Kol Champion, whose dam is the only cow in the world having two daughters with over 1,300 lbs. butter each in one year, viz., Banostine Belle De Kol, 1,322 lbs., (world's record when made) and Maplecrest Appliation, 1,344 lbs.

Rigs will leave the Brown House, Aylmer, on day of sale, and breeders attending the Van Patter sale on March 12 are invited to remain over.

WRITE FOR CATALOGUE AND FURTHER PARTICULARS

LAIDLAW BROTHERS,

AYLMEER, ONTARIO

Important Sale of HOLSTEINS

WILL BE HELD AT OWEN SOUND

WEDNESDAY, MARCH 20, 1918

consisting of 19 Pure-bred Holstein Cows, bred and in calf to Ormsby Korndyke Pontiac; also calves from "Correct Change," one of the best bulls in Canada; also a number of bulls from the great Toronto Syndicate bull, Sir Lyons Hengerveld Segis. One cow gave, as a two-year-old R.O.P., 12,889.15 lbs. milk, testing 4% butter-fat. There will also be sold 30 high-class grade cows, all heavy producers. There are no boarder cows in this herd—records have been kept—and where a cow showed no profit she was immediately weeded out. In the sale also will be offered one Empire Milking Machine, as good as new, also one Clydesdale Filly, three years old.

Terms:—10 months credit on joint notes at 6% interest. C. P. R. train due 1.05, G. T. R. train due 12.45. These trains will be met on day of sale. Farm 1 mile from Owen Sound Market on Carafaxa Road. For further information regarding this sale write

THOS. McNEA, Proprietor, R. R. No. 6, Owen Sound, Ont.

Questions and Answers. Miscellaneous.

Education for the Stage.

Does a person have to have an education to go on the stage? How old would one have to be and to whom should I apply?

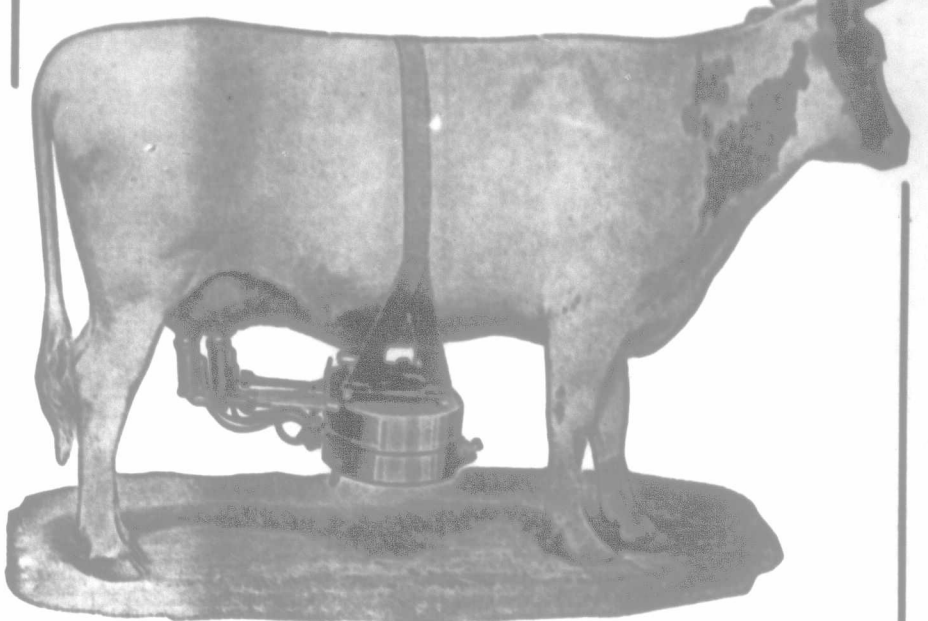
Ans.—It depends altogether on what part you wish to play, but the more education a person has the greater success he will make. To take part in musical comedy a person would have to understand music, or, if taking part in a drama, he would have to know how to act his part naturally. We believe there are theatrical bureaux to which a person could apply for a position, or you might consult the manager of a company, if one visited your town. As a rule, there are parts for persons of all ages.

Curing Pork.

What is a process for curing pork for summer use, using saltpetre, sugar and salt?

Ans.—Some make a brine of 8 lbs. salt, 4 lbs. brown sugar, and 2 ounces of pulverized saltpetre, dissolved in 4 gallons of water. The meat is placed in a cask and the mixture poured over it. It is then weighted down and left for six weeks, after which it is taken from the brine, drained, and then smoked until it is a light brown color. It will require to be smoked every day for a week, after which it may be removed from the smoke house and stored for summer use. To dry salt, hams and shoulders are frequently rubbed with a mixture of 4 lbs. salt, 1½ lbs. brown sugar and 2 ounces of pulverized saltpetre for every 100 lbs. of meat. It should be applied three times for hams and shoulders and twice for bacon, rubbing it well at intervals of about a week.

OMEGA MILKING MACHINES



Omega Milks Fast and Clean

No Tainted Milk No Rubber Connections.

The Omega milking machine draws the milk from the teats by a gentle alternating motion similar to hand action and conducts it to the pail through short, stiff, transparent celluloid tubes. The pail and the teat-cups are suspended from the back of the animal. The pail cannot be knocked over and the milk spilled, and the teat-cups cannot fall to the stable floor and suck up straw, or manure. The Omega is

Sanitary, Efficient and Easily Cleaned

There are no corners and no rubber tubes to harbor fermenting particles of milk in the Omega. The Omega has few parts, and is as easily and quickly cleaned as a milking pail. At official government tests the Omega was the only machine that milked faster and cleaner than by hand. The Omega in a 17-day test on 10 cows, compared with the 17 previous days, increased the total amount of milk given by 3%. The test was conducted by Prof. Leitch, of O.A.C., Guelph.

Users Prize the Omega

Mr. R. R. Ness, of Hawick, Que., the noted breeder and importer of Ayrshire cattle (whose cow is shown above) writes us regarding the Omega as follows:—"In my opinion it is the greatest boon which has ever struck our country, in the interest of the Dairy Farmer. This machine, in my mind, eliminates all the troubles and objections found in other milkers which I have had the privilege of seeing. It certainly has all other machines beaten, in point of cleanliness with those celluloid tubes instead of rubber, the pail hanging on the cow's back, never touching the floor, the position in which the teat-cups are held, insuring the most cleanly way of milking known to-day."

The Health Departments of some large cities demand the use of Omega milking machines, (and their only) as they supply milk with a minimum bacterial count. Learn more about the Omega.

Write To-day

for free booklet which fully describes the Omega and its wonderful records.

C. RICHARDSON & CO.,

ST. MARY'S, ONTARIO

OXFORD BREEDERS' CLUB

WILL HOLD A

Consignment Sale of

70 HEAD REGISTERED

Holstein-Friesian Cattle

at Dr. Rudd's Sale Stable

IN THE CITY OF

WOODSTOCK, MARCH 20, 1918

Every effort is being made to make this sale the best ever held in Canada. More 20-lb. blood—good individuals; heifers, springers, cows in milk. Extra good bulls with the best of breeding with dams' records up to 33 lbs. butter and 4 nearest dams average 30 lbs. in 7 days. Write for catalogue to:

W. E. THOMPSON, WOODSTOCK, ONTARIO

Moore & Dean,
Auctioneers.

M. L. Haley, A. E. Hulet,
Managers.

INDIVIDUALITY—PRODUCTION—PEDIGREE. These three qualities are blended into as near perfection as we think is possible in the sire, May Sylvia Pontiac Cornucopia. As an individual he is almost perfect, as regards production he comes directly from the greatest milk and butter producing families in Canada and United States. His two grandsons are: K. P. Pontiac Lass, with 44.18 lbs. butter in 7 days—the Holstein sensation when made—and May Echo Sylvia, with 41 lbs. butter in 7 days, and 152.1 lbs. milk in one day, 1,005 in 7 days—the world's wonder. This sire is under lease for 2 months and stands for service to a limited number of cows at M. H. Haley's. For particulars write: M. H. HALEY, SPRINGFORD, ONT.

CLOVER BAR HOLSTEINS

We are now offering a number of young bulls, sired by our senior herd leader, Francey 3rd's Hartog 2nd, the noted son of the famous old Francey 3rd, and Century Mares-Less Hartog; also a few females—all choice individuals. P. SMITH, PROPRIETOR, STRATFORD, ONTARIO

Bean Harvester.

Does a bean harvester pull or cut the beans? Where can one be secured?

W. O.

Ans.—A bean harvester is a two-wheeled implement possessing two flat knives which are placed in the shape of a V. Two rows are cut at a time and placed into one windrow. Some growers use a side-delivery rake and bring three or four rows into one. If the local implement dealer does not handle bean harvesters, write any implement manufacturer advertising in these columns.

Weight of Mixed Grain.

What weight of mixed grain, equal parts wheat, oats and barley, would there be in a bushel?

A. H.

Ans.—There is no standard weight for mixed grain, consequently it is usually sold by the cwt. A bushel measure of mixed grain would vary in weight according to the amount of wheat and barley in the mixture. If equal parts wheat, oats and barley were in the mixture, the weight of a measure bushel should be about one-third of the combined standard weight of wheat, oats and barley.

Intestacy.

1. If a wealthy bachelor dies without a will would his only surviving sister be the sole inheritor?

2. Would the families of deceased brothers and sisters inherit an equal share with the surviving sister?

Ontario. J. P.

Ans.—1. No.
2. The nephews and nieces would also take shares, but per stirpes not per capita—that is, the children of a deceased brother or sister would take the share their parent would have taken had he or she survived the intestate in question.

I have a ailment. My a complaint any rate th is your adv

Ans.—Th known to v give details to prescrib unthrifty t balanced ra with vermi roots and a ordinary an provided th in any wa thrifty if in able to disti the cattle fr and from th remedy is a part helleb dusted on th mals. Keep time after th

We keep use. It is v from her cr last fall, an allowed to s comes bitter even long b hay, corn t Can you gi taste, and is

Ans.—Bit invariably c milk of bac of daily in would lie pr utensils, alth from the cov by boiling trouble. [H with it; in factory on may be trac properly rip temperature

Size of

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2. I cont summer, I expect to ca 16 feet in di too large to painted be as it be advisab as the out-si good winter

3. Is the ing out strag this spring?

Ans.—1. is very often insect. The is a serio a heavy p are regularly and no disea may be due of the tree w fertilizing the tree.

2. Asilo o hold approx This is a lit silo built, but to enable yo per day off t opened, then argument aga size. The si much as in a wood that las used for the s be a substanc to preserve it and outside wood. Silage hogs, although amount of m get a good de 3. We hav that strawber by the Depart

Questions and Answers.
Miscellaneous.

Cows Unthrifty.

I have a number of cows which are ailing. My neighbors tell me they have a complaint known as "Hollow tail;" at any rate they are not doing well. What is your advice? W. M.

Ans.—The term "hollow tail" is not known to veterinarians. As you do not give detailed symptoms, we are unable to prescribe a remedy. Cows become unthrifty through lack of a properly balanced ration, through being infected with vermin, etc. Clover hay, silage or roots and a little grain should keep the ordinary animals in fairly good condition, provided they are not affected by disease in any way. An animal will not be thrifty if infested with lice. You will be able to distinguish this trouble by seeing the cattle frequently rubbing themselves and from the hair coming out. A popular remedy is four parts cement and one part hellebore, mixed thoroughly and dusted on the backs and sides of the animals. Keep the animals dry for some time after the cement is put on.

Bitter Milk.

We keep only one cow for our own use. It is very difficult to get the butter from her cream, although she freshened last fall, and if her milk or cream is allowed to stand for a day or more it becomes bitter, gets more bitter with age even long before it sours. She is fed on hay, corn stalks, mangolds and chop. Can you give me the reason for the bitter taste, and is there any remedy? G. H. H.

Ans.—Bitterness developing in milk is invariably due to the growth in such milk of bacteria or yeast. The source of daily infection of the milk or cream would lie probably in some of the dairy utensils, although the germs might come from the cow's teats. Sterilizing utensils by boiling would possibly relieve the trouble. The feed has very little to do with it; in fact the ration is a very satisfactory one. The difficulty in churning may be traced to failure to have the cream properly ripened or to having it the right temperature for churning.

Size of Silo—Plums Drop Prematurely.

1. I have several plum trees which blossom profusely each year. The plums form but fall when they are about the size of a pea. The trees have made excellent growth. They are sprayed with the ordinary apple-tree spray, and there is no indication of disease. What treatment would you advise?

2. I contemplate building a silo this summer. I have quite a large farm and expect to carry a heavy stock. Would 16 feet in diameter and 35 feet high be too large to build? Would good cedar painted be as durable as spruce? Would it be advisable to paint the inside as well as the outside? Is well-matured silage good winter feed for hogs?

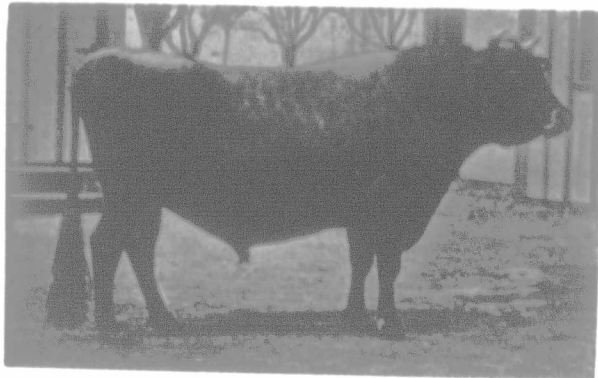
3. Is the Ontario Government sending out strawberry plants to applicants this spring? G. B.

Ans.—1. Plums dropping prematurely is very often due to the work of some insect. The plum curculion for instance is a serious pest of the plum, and causes a heavy premature drop. If the trees are regularly sprayed to control insects and no disease is present, the heavy drop may be due to a constitutional disorder of the tree which might be remedied by fertilizing the land and cultivating around the tree.

2. A silo of the dimensions given would hold approximately 150 tons of silage. This is a little larger than the average silo built, but if you have sufficient stock to enable you to take about two inches per day off the surface after the silo is opened, there would be no particular argument against building a silo of that size. The silage would not freeze as much as in a smaller silo. Cedar is a wood that lasts pretty well and could be used for the silo, although there seems to be a substance in the spruce which tends to preserve it. Painting the silo inside and outside would tend to protect the wood. Silage is not generally fed to hogs, although if there was a considerable amount of mature corn in it they would get a good deal of nourishment.

3. We have seen no notice to the effect that strawberry plants would be sent out by the Department.

GREAT DISPERSAL SALE OF
TWENTY-SEVEN HEAD
GLENBOYLE JERSEYS



at Dr. Rudd's Sale Stables, Woodstock
Monday, March 11, 1918

Sale Will Commence at 2 o'clock

In the offering are that great Jersey sire, Imperial Majesty, and that champion cow, Beauty Maid, with 4-year-old record 14,882 lbs. milk, 672 lbs. fat; their two sons, also Beauty Maid's dam; also Flora of Glenboyle, 3-year-old record 11,954 lbs. milk, 634 lbs. fat, with three daughters by Imperial Majesty; Springbank Butter Girl 3-year-old record 12,544 lbs. milk, 608 lbs. fat, with her daughter by Imperial Beau, son of Beauty Maid; Sadie Miss Polo 2-year-old record 9,874 lbs. milk, 544 lbs. fat, and calf by Imperial Beau—Maid of Dentonia, Fontaine's Belle of Dentonia R.O.P. 9,842 lbs. milk, 531 lbs. fat, the highest Jersey record for cow starting test at age of ten years or over. The above is an indication of the quality of the entire herd which is in the sale. Cows and heifers are bred to Imperial Majesty or to Imperial Beau.

TERMS: CASH. FOR FULLER PARTICULARS WRITE THE PROPRIETOR.

D. A. BOYLE, WOODSTOCK, ONT.

Sales Manager, Tom Dempsey, Westerville, Ohio Auctioneers: Col. D. L. Perry, Columbus, Ohio. William Pullin, Woodstock, Ontario

GREAT DISPERSAL SALE BY AUCTION OF
35 Head of Registered Jerseys

I will sell at my farm, 1 mile west of Dorchester on Hamilton Road, my entire herd of Jerseys on

WEDNESDAY, MARCH 27, 1918

Sale Starts at 1 p.m.

The herd is headed by Olines Oxford You'll Do. He is closely related on his sire's side to Oxford You'll Do, the greatest Jersey bull living, and on his dam's side to "Champion Flying Fox", who sold at auction for \$7,500.00. Among the matrons of the herd is Pride of Riverside, which gave on an average for a week, 54 lbs of milk a day, and a testing of 5.7%. Five of her daughters are in this sale.

Two Chester White sows (registered) in pig to registered boar. TERMS: Cash, or 6 months' credit on bankable paper with interest at 6%. Trains will be met at Dorchester. For full particulars write:—

CHAS. E. ROGERS, Ingersoll, Ontario, Proprietor
ALEX. ROSE, Auctioneer

THE DON JERSEY HERD—

OFFERS:—Several young bulls, all of serviceable age, and all from R. O. P. dams. These are price right. Interested parties should write or see these at once. We also have females of breeding age

D. DUNCAN & SON, Todmorden P.O., Duncan Station, C.N.O.

THE WOODVIEW FARM
JERSEYS
LONDON, ONTARIO
Jno. Pringle, Proprietor

CANADA'S MOST BEAUTIFUL JERSEY HERD
Imported Champion Rower at its head.

This bull, with his get, won first prize on the island of Jersey, 1914, second in 1916, and again first in 1917. Present offering—A few yearling heifers in calf to our great young bull, Woodview Bright Prince (7788), and bred from imported sire and dams. We show our work cows and work our show cows.

BRAMPTON JERSEYS

SPECIAL OFFERING of fresh cows, in-calf heifers and Island bred bulls. Nearly all of the Champion R.O.P. cows are directly descended from the Brampton Herd. Buy at the fountain head.

B. H. BULL & SON
BRAMPTON, ONT.

RECORD OF PERFORMANCE JERSEYS

Choice Bulls and Females. We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our Junior sire, Brampton Bright Togo. Write for records. We also have females.

R. & A. H. BAIRD (G.T.R. Stations—New Hamburg, Bright.) **NEW HAMBURG, ONT.**

THE EDGELEY CHAMPION HERD OF JERSEYS

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times.

JAMES BAGG & SONS (Woodbridge, C.P.R., Concord, G.T.R.) **EDGELEY, ONT.**

SPRING BANK R. O. P. AYRSHIRES

Herd Sires: Netherton King Theodore Imp., and Humeshaugh Invincible. Grand Champion London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year and three-year and the mature classes. Let us tell you about the daughters of Netherton King Theodore. We have sons of both bulls for sale—all have R. O. P. dams. Visitors met at Hamilton by appointment

A. S. TURNER & SON (3 miles from Hamilton) **RYCKMAN'S CORNERS, ONT.**

HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited

Gladden Hill Ayrshires Winners wherever shown—Herd headed by Fairview Milkmaid; sire Hobland Stumpies Heir, Imp.; dam, Milkmaid 7th, a 166.96-lb. R. O. P. cow with 729 lbs. of fat; average test 4.36 per cent. We have three 12-month bulls that were winners at Toronto and London. All are by herd sire. Come and see our females. We also have two three-year-old Clydesdale stallions, one by Surname Imp., and one by Cairndale Imp. Good quality and sure breeders. Will sell one. Price reasonable.

LAURIE BROS. C.P.R., G.T.R., C.N.R., Shipping Stations, **AGINCOURT, ONTARIO**

SUNNYSIDE AYRSHIRES

We have at present the strongest lot of young bulls we ever offered—one by Hobland Masterpiece, one by Sunnyside Matchless, and the others by our present herd sire, Sunnyside Masterpiece.

John W. Logan, Howick Station, Que.

D. M. WATT

For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. **St. Louis Station, Que.**

F E E D S

Cotton Seed Meal, Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed, Digestive Tankage, Vim or Oat Feed, Bran, Shorts, Corn, Cracked Corn, Corn Meal, Feed Wheat, Scratch Feed, Laying Mash, Fattening Mash, Beef and Bone Scrap, Oyster Shell, Poultry Grit, Alfalfa Meal, Charcoal, etc.

If it is in the Feed Line, we have it. Write or phone for prices.

We are also buyers of Buckwheat, Oats, Goose Wheat, Barley, Peas, Beans, etc., both for feed and seed. Also Hay, Straw, Potatoes, Cabbages, Onions, Shallots, and Dutch Sets, etc.

SEND SAMPLE AND STATE QUANTITY
CRAMPSEY AND KELLY
DOVERCOURT ROAD, TORONTO

HAY

SHIPPERS! Consign your carloads to

The E. L. RICHMOND CO.
DETROIT

The Old Reliable Firm. In business a quarter of a century. References—any Bank

Twenty-Five Years Breeding REGISTERED

Jerseys and Berkshires

We have bred over one half the world's Jersey champions for large yearly production at the pail. We bred and have in service the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

HOOD FARM, LOWELL, MASS.

EVERY FARM Should have an Ayrshire. They are profitable cattle.

WRITE W.F. STEPHEN, Secretary
CANADIAN AYRSHIRE BREEDERS' ASSN.
Box 513 Huntingdon, Que.

LAKESIDE AYRSHIRES

A choice selection of young bulls for sale from Record of Performance dams imported and Canadian bred.

SIRE: Auchenbrain Sea Foam (Imp) 35758 many times grand champion.

Fairfield Mains Triumph (Imp.) 51137 a son of the noted Hobland Perfect Piece.

Write for catalogue.
Geo. H. Montgomery, Proprietor, Dominion Express Building, Montreal. D. McArthur, Manager, Phillipsburg, Que.

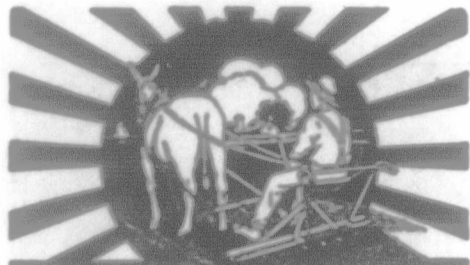
Fernbrook Ayrshires

Young bulls for sale (out of R. O. P. dams) from one to fifteen months old; tracing closely to the world's champions, Garclaugh May Mischief and Jean Armour.

COLLIER BROS., Beachville, Ontario
(OXFORD COUNTY)

Kelso Farm R. O. P. Ayrshires. Herd headed by Pairton Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our 1917-1918 young bulls are sure to please. **D. A. MacFarlane, Cars Crossing, G. T. R., Athelstan N. Y. C.; Kelso, Que.**

JAS. B. ROSS, MEADOWVALE, ONTARIO for high-producing, show-yard AYRSHIRES Herd headed by SNOW KING 47376, first-prize two-year bull at Toronto, 1917. Write me also for anything in Yorkshires.
Meadowvale P. O., Streetsville Station



Every Truck Farmer needs a tillage tool that does fast thorough work with one man or horse. Experienced growers like the "Acme" Pulverizing Harrow because "the comb does the work." They cut, slice, pulverize, and turn the soil twice in one operation. Leave the soil level as a floor and "mellow" as fresh ash. There's an "Acme" to fit your farm—I have to 4 horse. Send today for new free book, The "Acme" Way to Crops That Pay.

Bateman - Wilkinson Co., Ltd. 501 Symington Avenue Toronto, Ontario No. 21 Size "H," 1-horse cultivator. Cuts 4 ft. 4 in. wide 61-2 ft. Wide



LABELS Live-stock Labels for cattle, sheep and hogs, manufactured by the Ketchum Manufacturing Co., Box 501, Ottawa, Ontario. Write for samples and prices

SHROPSHIRE 30 Yearling Rams—12 Yearling Ewes. W. H. PUGH, MYRTLE STATION, R. R. 1 Farm 2 miles from Claremont

Cloverdale Shropshires and Berkshires—40 shearing rams, 70 shearing ewes; an exceptionally choice lot, true to type and well grown, nearly all sired by the show ram, Nock 16 Imp. In Berkshires, the usual strong offering, including sows just bred. C. J. LANG, Burketon, Ont.

BERKSHIRE PIGS are the best of all—the easy-keeping—easy feeding—grazing pig. At the Chicago International, 1917, the Berkshires won the Grand Champion Barrow, the Grand Champion pen and the Grand Champion carload, a record never equalled by any other breed of any kind of animal (Breeder's Gazette). We have a splendid stock of them, both sexes and all ages—English, American and Canadian strains—a large selection of sows bred to Successor's Double II. Our customers are always well pleased. Write, wire or phone your wants. J. B. Pearson, Manager, Credit Grange Farm, Meadowdale, Ont.

Sunnyhill Yorkshires Large English, improved Yorkshires, from prize-winning stock bred for type, quality and production. Sows of breeding age and younger, hogs two to four months. Write to WM. MANNING & SONS WOODVILLE, ONTARIO

Inverugie Tamworths Some choice young sows bred. Sows carrying their second litters. Boars ready for service. Young stuff, any age. All orders promptly attended to. LESLIE HADDEN, R. R. No. 2, Pefferlaw, Ont.

Morrison Tamworths and Shorthorns—Bred from the prizewinning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls from 5 to 10 months old, reds and roans—dandies. CHAS. CURRIE, Morrison, Ont.

Sunnyside Chester Whites and Dorsets. In Chester whites we have both sexes, any age, bred from our champions of many years. In Dorsets we have ram and ewe lambs by our Toronto and Ottawa champion, and out of Toronto, London, and Guelph winners. W. E. Wright & Son, Glanworth, Ont.

BEAVER MEDI CHESTER WHITES won over 75% of the prize money at Toronto this year with three herds showing. Write us for bred sows or young boars. We guarantee satisfaction. We also have Percherons. Wm. Roberts & Sons, Peterboro, Ontario

TAMWORTHS Young sows bred for spring farrow and a nice lot of young boars for sale. Write: John W. Todd, R. R. No. 1, Corinth, Ont.

Meadow Brook Yorkshires Have a splendid offering of young stock to offer at reasonable prices. Write your wants to: G. W. MINERS, R. R. No. 3, EXETER, ONT.

Pure-Bred Tamworths Young boars 6 months old, also young ones not weaned; both sexes of good breeding. Apply Nell H. Purvis, R. R. 3, Sunderland, Ontario.

CHOICE YORKSHIRES All ages and both sexes. A few bred sows and younger stock at right prices; S.-C. White Leathorn eggs, Barron's 282-egg strain, \$2 per 15, \$10 per 100. Fawn I.R. duck eggs, \$3 per 11. T. A. King, Milton, Ontario

Questions and Answers. Miscellaneous.

Western Wheat. Would Western spring wheat purchased by millers be suitable to sow in this locality? H. M.

Ans.—If it is a good sample of wheat and well cleaned it should do well in your locality, provided it is a variety that is suited to our climatic conditions. The Marquis wheat is a variety which is highly recommended as a spring wheat for milling purposes. It has done well in various parts of Ontario.

Abortion. I have bred a cow twice, and each time a discharge comes from her the following day. I have heard several complaints from neighbors who have taken cows to the same bull of their cows losing their calves before going full time, and some believe the bull is diseased. What would be the proper treatment for the cow before I took her to another bull, and how long should I wait before doing so? L. K.

Ans.—The symptoms are not good and we would be very careful for a time as abortion is a bad disease to have in the herd. The disease usually finds its way into a stable through the medium of a diseased bull or a purchased cow. The vagina and exterior genitals should be thoroughly washed with a good disinfectant for a time. A three-per-cent. solution of carbolic acid is a very good disinfectant for internal work. Stalls, gutters, etc., should also be treated with a solution of some coal tar product. We would not breed the cow for six weeks or two months, and during that time would frequently flush the vagina. Once a cow has aborted there is difficulty sometimes in getting her in calf again.

Root Seed—Leaking Stove Pipes.

1. In regard to home-grown root seed, would the roots and tops need to be left on the mangels and turnips, or would they be all right just as they are in the cellar. Would they be injured if touched by frost?

2. What causes and what is a remedy for black soot running out of stove pipes?

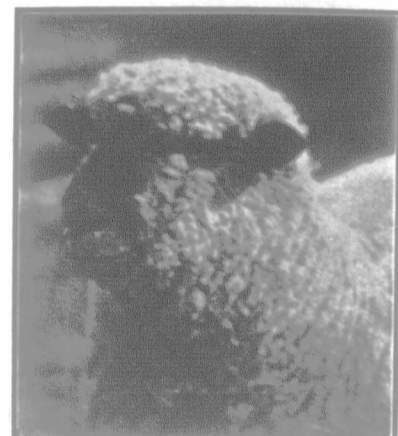
3. I am enclosing a sketch of the front view of my barn in which I purpose putting in larger windows. The wall is 18 inches thick and the stable is 10 feet high. Would it weaken the foundation too much if I enlarge the windows to twelve lights 10 by 12 instead of the four lights as at present? After making the change will the stable be warmer or colder? At present it is very damp. F. G. M.

Ans.—1. Mangels and turnips can be taken from the root cellar and planted in the spring, having the crown come even with the surface of the ground. Mangel seed is a little more easily grown than turnip seed. There would be danger of plants not growing if they had been touched by frost in storage.

2. The black liquid running out of stove pipes is due largely to condensation of moisture, and is caused by insufficient draft and by the chimney being cold, as would happen with a chimney of one thickness of brick built on an outside wall. The trouble very seldom happens where the chimney is built on an inside wall. We have seen the difficulty overcome by having the second pipe length above the stove with a large hole in it, 3 or 4 inches across, and then another pipe with a similar hole in it, or half pipe, to be fitted so that it will slide around the inner one and cover the opening if necessary when starting a fire, although we know of places where this opening is never closed.

3. Enlarging the windows as suggested will not weaken the foundation to any great extent. You will find the extra light will make a big difference in your stable, although it may have a tendency to make it a little colder. However, if you can get rid of the dampness you will find the cold will not be so noticeable. If the top part of the sash, or even the whole sash, were hinged at the bottom so as to open inward from the top, you would be able to ventilate the stable without causing direct draft on the stock. This is one means of letting fresh air into the stable. In order to get rid of dampness good ventilation is necessary, and it may be advisable to put in a flue leading from the ceiling of the stable up through the barn to carry off the foul air.

FARNHAM FARM Oxfords IN A COMPLETE DISPERSAL SALE at the Farm, Arkell, Ontario Thursday, March 21st, 1918



The Farnham Flock was Established in 1881 Importations Added Yearly

Champions at Chicago, St. Louis, Detroit, Syracuse, Toronto, London, Ottawa, Montreal, etc.

Elkstone Hopman Imp., No. 79639, sold recently to Follett Bros., Sask., for \$250. All breeding ewes are bred to this ram.

FARNHAM FARM has been sold, and at one o'clock on Thursday, March 21st, this noted flock of Registered Oxford Down sheep, one of the oldest established flocks in America, will be dispersed by public auction. The flock consists of between forty and fifty breeding ewes, between one and four years of age, and these were all bred to the superior imported ram, Elkstone Hopman, in the month of November. These ewes weigh from 160 to 220 pounds and are of the low down, blocky type. There are also between thirty and forty ewe lambs of the very best quality. The flock throughout is well covered with a good character of wool and traces to importations from such breeders as Hobbs, Brassey, Horlick, Selgo, Bryan, Miss Rothschild and others. On these Mr. Arkell has in the past decade, won hundreds of prizes, diplomas and medals at such exhibitions as Chicago, St. Louis, Detroit, Syracuse, Toronto, London, Ottawa, Montreal and Sherbrooke, and held the champion flock award for Canada up until the time he ceased showing in 1908. At the same time there will also be sold all the horses, cattle, poultry, grain, implements and household furniture. Catalogue of sheep will be furnished as to age and record number of application. There will also be offered by private sale between 70 and 80 ram lambs. Arkell is on the C.P.R., with excellent service between Guelph and Toronto; four train daily connecting with Buffalo, Detroit, etc. TERMS.—Sheep, poultry, hay, grain and furniture will be cash, or 9 months credit will be given on bankable paper, bearing interest at 6%. On horses, cattle and implements, 9 months' credit will be given on sums of \$20.00 or over, with 5% per annum off for cash. Henry Arkell & Son, Guelph, R.R. 2., Phone Guelph, 335 ring 2. JAMES McDONALD, AUCTIONEER

1918 TENS AND TENS OF THOUSANDS OF FAMOUS FLEURY PLOWS have turned MILLIONS of ACRES in Ontario alone; and in 1918 will turn MORE FURROWS than in any previous year. LIGHT DRAUGHT—SMOOTH Running. EASE for Horses—COMFORT for man. FINEST QUALITY of WORK in the FIELD. The famous "ORIGINAL No. 21," "DANDY," No. 13, No. 5 Fleury Plows. THE BEST PLOWS IN CANADA "SPECIAL," No. 15A, One-Horse. These are the leaders in Ontario of the Famous J. FLEURY'S SONS, Aurora, Ontario, Canada

Interprovincial Pressed Brick Handsome, Durable, Economical WRITE FOR FREE SAMPLES TO-DAY INTERPROVINCIAL BRICK CO. OF CANADA, Limited Office: 154 SIMCOE ST., TORONTO Plant: CHELTENHAM, ONT.

ELMHURST LARGE ENGLISH BERKSHIRES From our recent importation of sows, together with the stock boar, Suddon Toronto we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO Langford Station on Brantford and Hamilton Radial

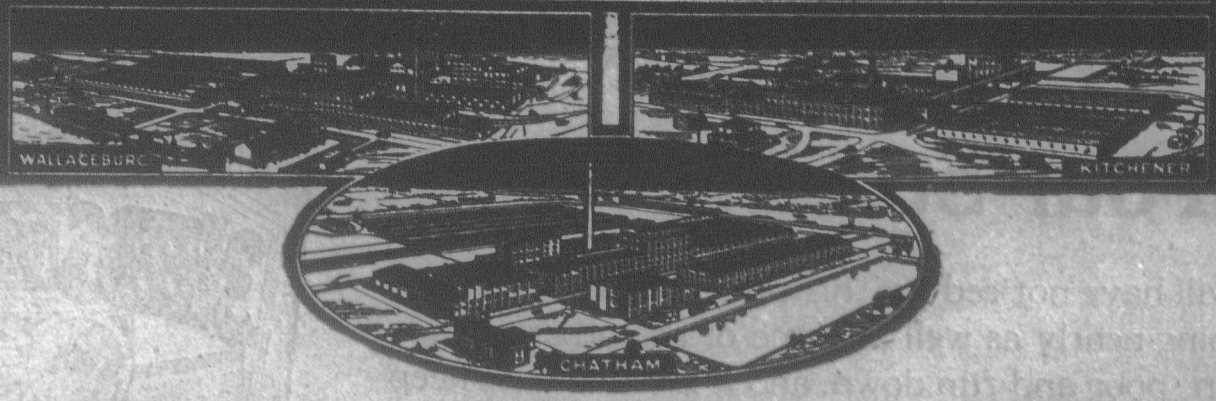
OAK LODGE YORKSHIRE HOGS We have a large selection of extra good boars and sows of different ages. We are selling at prices that make it attractive for the purchaser. Write for what you want. J. E. BRETHOUR & NEPHEWS, Burford, Ontario

When writing advertisers will you be kind enough to mention The Farmer's Advocate



Dominion Sugar Company Limited

The Famous Dominion Crystal Sugars



Our Three Huge Refineries

Will take all the Sugar Beets

Ontario Farmers can Grow

This is Your Opportunity.

You know the sugar need of the world. You must realize that here is a wonderful opportunity for the Ontario farmer—a chance to co-operate with us toward greater sugar production—a chance, while doing this, to make a nice profit for yourself.

Canada's Beet production must be increased. All possible help and encouragement must be given the farmer. Recognizing this, the U.S. Government has authorized a large expenditure to buy artificial fertilizer—which is to be sold to farmers at cost.

We are doing the same thing—in our effort to stimulate the production of sugar beets in Ontario. We have purchased a large quantity of artificial fertilizer—and will sell it at cost to all farmers contracting with us to grow Sugar Beets in 1918. We also supply the best quality Beet Seed at exactly what it costs us.

The market price of sugar is now so high that the factory making sugar from Beets is in a position to pay amply for the product of Canadian farms. Always a profitable crop, Beets are now more than ever of interest to the Ontario Farmer.

Thousands of tons of sugar are lying at the bottom of the Atlantic. There is not nearly enough "cane" sugar grown and refined to supply the world's demands. Therefore, we must produce more Beet Sugar than heretofore. And in order to refine enough sugar for Canada's needs, we have to have more beets. We are prepared to pay well for them.

Not only is a crop of Beets at present prices more profitable than a crop of Oats, Barley or Corn—but it is moreover a crop that yields you a known figure—with guess work as far as possible eliminated.

WHAT WE PAY YOU FOR BEETS IN 1918

On Sugar Beets, you have us committed—with a hard and fast contract—to a

\$9.00 per Ton minimum

(if you contract on a "flat" basis). Our contract calls for a still higher rate per ton if the net wholesale price of sugar rises above \$8.00 per 100 lbs.

The grower has the alternative of contracting with us on a "percentage" basis. In that type of contract, we agree to pay at the rate of \$8.75 per net ton—for beets containing 12% of Sugar—with substantial increase when sugar content is over 12% (last year's percentage was "over 16%").

Beets Highly Profitable.

In the course of an address at the Lambton County Corn Exhibition, in 1916, the late C. C. James (Dominion Government Agricultural Commissioner) made the following weighty statement.

"Lambton County will find that there is no crop which, properly handled, will prove more profitable to the farming community than Sugar Beets. Sugar Beets are a crop which take almost all from the air and from the rain and very little from the soil. If the tops are left in the field there is practically no exhaustion. In that they differ from grains, which take much from the soil. It is a good sign that this industry is spreading in Canada. We have been importing from 12 to 15 million dollars worth of sugar that we might just as well be producing ourselves here at home."

Here is Actual Proof of the Profit there was in Beets last year. The Profit possibilities are greater still this year. Hundreds of Canadian Farmers can tell you Beets have made money for them.

Name	Address	Acres In Crop 1917	Gross Profit 1917	Profit Per Acre 1917	Name	Address	Acres In Crop 1917	Gross Profit 1917	Profit Per Acre 1917
Shuel, Jno. R.	Paquette	10 1/4	\$894.26	\$87.24	Bourassa, Felix	Pain Court	7 1/4	\$843.07	\$108.78
Ludwig, P. G.	Merlin	20	1,585.82	79.29	Ducette, Geo.	Arkwood	8	771.71	96.46
Donovan & Warden	Westlake	118	10,080.25	85.42	Campbell, D.M.	Blenheim	4	514.27	128.56
Agar, Fred.	Chatham	10 1/4	1,198.27	116.90	St. Denis, Adlor.	Tilbury	12	1,096.31	91.36
Bourdeau, Thos.	Chatham	7 1/4	772.33	102.97	Langford, A. E.	Kent Bridge	36	3,446.31	95.73
Newkirk, Geo.	Pain Court	13 1/4	1,337.46	100.94	Hughes, Jas.	Kent Bridge	40	3,700.81	92.52
Fretz, Isaac.	Thamesville	11	1,379.40	125.40	Wilcox, C. P.	Chatham	40	5,631.40	140.78
Frankforth, John.	Comber	10 1/4	1,152.77	112.46	McCreary, D. L.	Wallaceburg	10	1,355.66	135.00
Gore, Jas. E.	Arkwood	20	2,075.70	103.78	Winter, Frank.	Wallaceburg	4	547.26	136.80
Sterling, Jesse.	Pain Court	12	1,253.12	104.42					

Space is not available for more than these few names—but these should be sufficient to show you that we are talking facts when we say "it pays to grow Beets."

Sign this coupon and send it to us NOW. It will bring a prompt answer with full particulars of our offer to supply Beet Seed and Fertilizer at just what they cost us. Act promptly, as it is necessary to plant early for this year's crop.

Dominion Sugar Co. Limited, 123 Tecumseh Road, Chatham, Ont.

Send me Contract Form and full particulars.

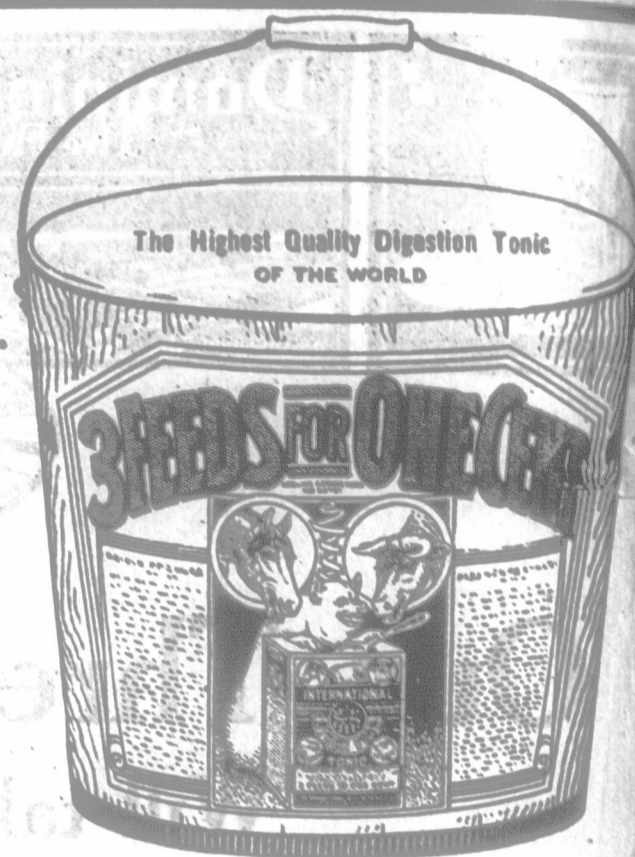
Name.....

Address.....

Any land that will grow a good crop of corn, wheat or oats will grow a profitable crop of Beets. Just HOW profitable you can realize from the fact that we are paying \$9.00 per ton net for beets (on a "flat" contract) as against \$6.00 last year.

It Has Been a HARD WINTER On Your Stock!

No doubt you will have noticed by this time that some of your stock are not doing nearly as well as some of the others. They appear to be thin, poor and run down, and it is difficult to keep them in any sort of condition, no matter how much you feed them. What is the reason? Simply this — they are not properly digesting their food, and a large portion is being passed through their systems unassimilated and an absolute waste.



They Need

INTERNATIONAL Stock Food Tonic



MORE EGGS GUARANTEED

if you use

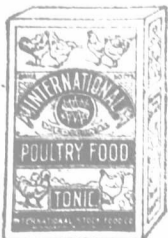
International POULTRY FOOD TONIC

INTERNATIONAL POULTRY FOOD TONIC is a mixture of roots, herbs, spices, seeds, etc., which supply to the system of the hen the elements necessary to maintain the highest state of health.

It acts as a tonic, particularly to the egg-producing organs and the digestive tract. Its use keeps poultry healthy and is guaranteed to make hens lay more eggs.

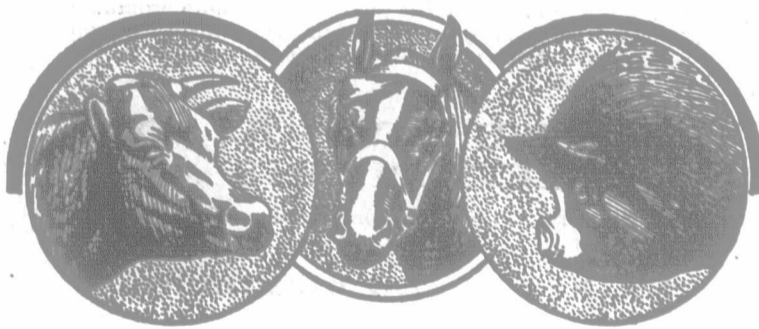
Its cost is only a trifle—one extra egg a month from each hen pays its entire cost, and its use often doubles the number of eggs produced.

This renowned preparation is not an experiment but one that has stood the practical test of poultrymen and farmers for 27 years from coast to coast.



SOLD BY
DEALERS
EVERY-
WHERE
25c., 50c.
and
\$1.00
PACKAGES

INTERNATIONAL
Stock Food Co., Limited
TORONTO, CANADA



Your horses are just beginning the hardest work of the whole year, and they must be put into condition for this work. International Stock Food Tonic quickly tones up the system and makes a wonderful change in stock that has wintered badly. The main trouble after a winter is that with lack of exercise the digestive organs are not in proper condition to assimilate, and a large portion of the feed is wasted. International Stock Food Tonic overcomes this defective assimilation. It keeps the appetite; and the stock derive more nourishment from the usual amount of feed eaten.

50c. and \$1.00 Packages Large Pails at \$3.75. Lithographed Tins at \$1.50.

Sold by all dealers. Its use is guaranteed to keep your stock in better health and make you big, extra profits for its low cost of feeding. Remember you get 3 feeds for 1 cent.

READ THESE LETTERS

Here is a letter from a man who markets \$5,000.00 worth of Hogs annually:

South Woodsee, Ont.

INTERNATIONAL STOCK FOOD TONIC is good and I am using it every day, and couldn't get along without it, and out of the 400 pounds I purchased in September I only have 25 pounds left and am purchasing a further supply at once.

(Signed) A. J. ROOKER.

Owen Sound, Ont.

I have used INTERNATIONAL STOCK FOOD TONIC for over 10 years and would not be without it for any price. I had two cows last year, and they made me a profit of \$298.00 in the year. I feel sure I could not have done it without the use of INTERNATIONAL STOCK FOOD TONIC. By its daily use the cows give more milk and look better.

(Signed) THOS. FORBES.

Orangeville, Ont., May 16th.

Some people asked, the other day—in fact, people are asking me every day—what has made my horses' coats so nice and glossy. I think once you feed a horse with INTERNATIONAL STOCK FOOD TONIC, and get him in good shape for the spring work he will stay fat and have a better coat on after using the INTERNATIONAL STOCK FOOD TONIC.

(Signed) ELLIS I. HOLMES.

Terra Cotta, Ont., October 31st.

I have used your INTERNATIONAL STOCK FOOD TONIC for fifteen years, and am using it to-day, that expresses my opinion better than words what I think of INTERNATIONAL STOCK FOOD TONIC. I think it is the best conditioner for horses in the world. And my experience leads me to believe it makes your horses disease proof.

(Signed) LOUIS L. PLANT.

FOR YOUR HORSES

Keeps horses thrifty and healthy with nice glossy coats. If you have a horse that is hide-bound, rough, off its feed or in a run down or over-worked condition, use INTERNATIONAL STOCK FOOD TONIC. The remarkably quick results obtained will be evident in the improved, all-round condition and appearance of the animal.

FOR YOUR COWS

Keeps the digestion perfect, keeps the appetite, makes poor feed palatable, tones up the sluggish digestive organs of your milk cows, assisting them to extract all the milk-producing substances from the food. Thus by aiding nature the cow will give a larger quantity of rich pure milk that will test high in butter-fat.

FOR YOUR HOGS

INTERNATIONAL STOCK FOOD TONIC will enable you to fatten your hogs for market 30 to 60 days sooner. Its use keeps your hogs thrifty and free from digestive troubles. If you are not using our stock food tonic for your fattening hogs you are certainly not making the profit you should make. Try it on one batch of hogs and you'll quickly be convinced.

International Grofast Calf Meal

Ingersoll, Ont.
February 12th, 1918.
INTERNATIONAL STOCK FOOD CO.,
LIMITED,
Toronto, Ont.

Dear Sirs:
I have used your STOCK FOOD for the last three years with good results. I can especially recommend your GROFAST CALF MEAL to those who are endeavoring to raise good stock, with the least possible cost. The calves I raised last year on your CALF MEAL took first, second and third prizes at Ingersoll Fair for all pure-breds. As my herd does all pure-breds, I raise all my calves and raise them exclusively on milk. This makes it very expensive and I find your GROFAST CALF MEAL an excellent substitute. The sire at the head of my herd is King Johanna Rauwerd, whose two sons average 27,220 lbs. of milk one year, and 1,060 lbs. of butter. Wishing you every success, I remain
Yours truly,
(Signed) W. B. POOLE.
Breeder of high-class, pure-bred Holstein Cattle.

International Stock Food Co., Ltd. Toronto, Canada

Also manufacturers and sole proprietors of International Poultry Food Tonic, Grofast Calf Meal, International Loose Water, White Pine Healing Oil, International Worm Powder, Patch White Liniment, International Snake Remedy, International Hoop Remedy, and various Patent Remedies, etc.