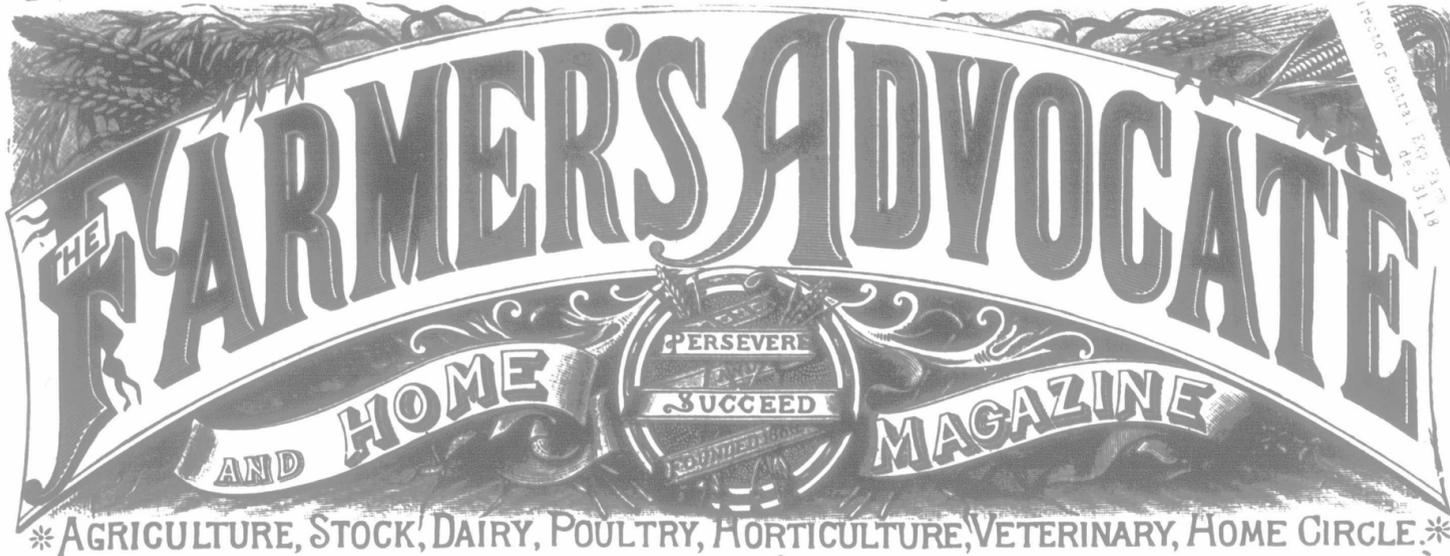


PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



Vol. LIII.

LONDON, ONTARIO, MARCH 28, 1918.

No. 1331



Looking Over the New Fence

A farmer is justified in feeling proud when he shows his neighbors his new FROST fence. It stands up there as "straight as a ramrod" and as spic and span as a soldier on inspection parade.

Its perfectly put on locks, and precisely straight and even spaced stays—its splendid outward appearance—are indications of its staunchness and goodness.

Years of service on many thousands of Canadian farms, with tremendously severe tests imposed on it, attest to its enduring stamina, and confirm all we have said about FROST fence as a lasting investment.

The FROST Company have always had one thought in mind—to build FROST fence so well that buyers of it will come back again every time they require new fence.

Our greatest asset is the great and ever increasing number of FROST fence customers—

an army of boosters for FROST QUALITY.

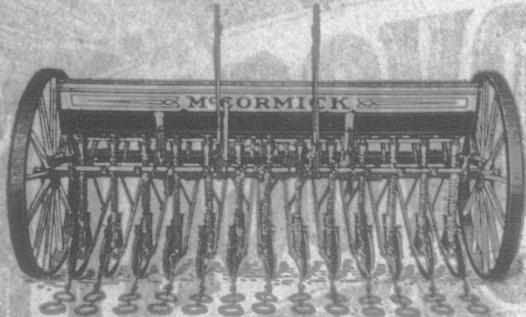
If you were to visit our mills and see how we make and galvanize the wire—how we put that peculiar elastic wave into Frost laterals—how carefully the locks are applied without kinking or weakening the laterals—you would have a pretty good idea why FROST fence is FIRST in quality, in service and in value. The next best thing is to see one stretched up on a field or to examine one at a FROST dealer's. If you don't know a nearby dealer, write us.

A style for every purpose.

Frost Fence First

Frost Steel and Wire Company, Limited

Hamilton, Canada



Buy a McCormick Drill

BECAUSE drill-planted seed gets an earlier, more even start—because drill planting saves seed and produces a better grade of grain—because drill planting saves time and work—and because the McCormick drill is one from which you get all these advantages, buy a McCormick drill.

The McCormick comes in single disk and hoe styles, 11 and 13 marker sizes. All have the famous double-run feed which handles accurately both large grain and small, from peas and beans down to flax, planting any desired quantity per acre, planting it evenly, and covering it to just the right depth. Your crop could not get a better start than the one given to it by a McCormick drill.

See the McCormick local dealer when you are ready to buy. He will show you all the details of construction that put the McCormick drill at the head of its class. Or, if you write the nearest branch house below, we will send you full information.

International Harvester Company of Canada, Limited

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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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See the Hip Roof

It will put money in your pocket. Get tons more ensilage in a Toronto Silo than in any other silo costing about the same to erect. The hip roof lets you tramp down the ensilage right up to the top of the walls.

Now consider the construction of a TORONTO Silo. All woodwork is carefully selected spruce, thoroughly impregnated with hot tar and creosote. The wood cannot rot and is not affected by ensilage acids.

Then Toronto Silos are airtight because the staves are DOUBLE tongued and grooved—double protection against frost as well as air. The Toronto Silo booklet sent upon request. 137

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GILSON



Write for our new easy payment, free trial, plan.—We will send you an engine complete without a payment of any kind to test out on your own farm. Just try it—you'll wonder how you got along without it. You'll be surprised how quickly it will pay for itself.

Write us TO-DAY for particulars of this "Help the Allies" Grinding Outfit and special proposition.

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Dwellings, or any class of buildings, from Concrete Blocks.

THE LONDON ADJUSTABLE BLOCK MACHINE makes all sizes and designs of Concrete Blocks. Price \$65.00. Send for catalogue No. 3.

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 Dept. B., London, Ontario.
 World's Largest Mfg's of Concrete Machinery.

When writing please mention this paper.

APPLE TREES

If you intend planting Apple Trees or any Nursery Stock this spring, be particular as to the kind you get and be sure they are grown right, are healthy and clean, and backed by a reliable, dependable company.

PLANT E. D. SMITH'S TREES

They cost no more than inferior, poorly-grown trees and they are all inspected by Government inspectors.

If you are unfamiliar with the best varieties for your section, we will be glad to assist you in your selection, and such assistance places no one under any obligation to purchase. We have nearly 800 acres devoted to Nursery Stock and Orcharding, and can supply first-class stock of the following selected and inspected trees.

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SIMPLY CAN'T BE CLOGGED.

The simple, scientific, carefully worked-out construction of the light running Gilson Silo is the lightest running blower cutter made. It has broken all records for high elevation and rapid work with light power. A 4 h.p. operates the small size Gilson is rightly called the

KING OF SILO FILLERS

because of its remarkable elevating powers, absolute safety, durability, strength and simplicity—it stands supreme. It has convenient and quick knife adjustment; solid steel-bound cutting wheel; patented safety reverse—and is guaranteed to cut and elevate MORE ensilage with the SAME power than ANY other ensilage cutter IN THE WORLD. Write to-day for catalogue and proof. Manufactured and guaranteed by—

GILSON MANUFACTURING CO. LTD., 509 York St., GUELPH, Ont.



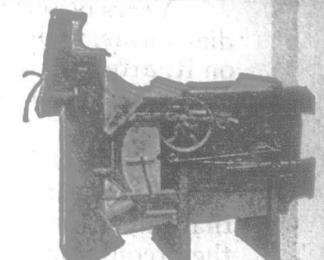
HYLO SILO

Sweet Fresh Ensilage down to the last forkful

THE HYLO SILO is perfectly air-tight. No frozen or spoiled ensilage around the walls. Convenient and perfect fitting doors, adjustable without hammer or wrench. Made of Guaranteed Long Leaf Yellow Pine. Built to last a life-time. Stands rigid when empty.

Write for prices and catalogue. AGENTS WANTED.

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Will Clean Out All Wild Oats

is the fastest and best mill on the market or money refunded. Ask the man who owns one.

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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.

O. A. C. 72 SEED OATS

Registered and Improved, grown on rich, clean soil; large yields. Write for sample and prices.

J. S. HILBORN
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 New Dundee, Ontario

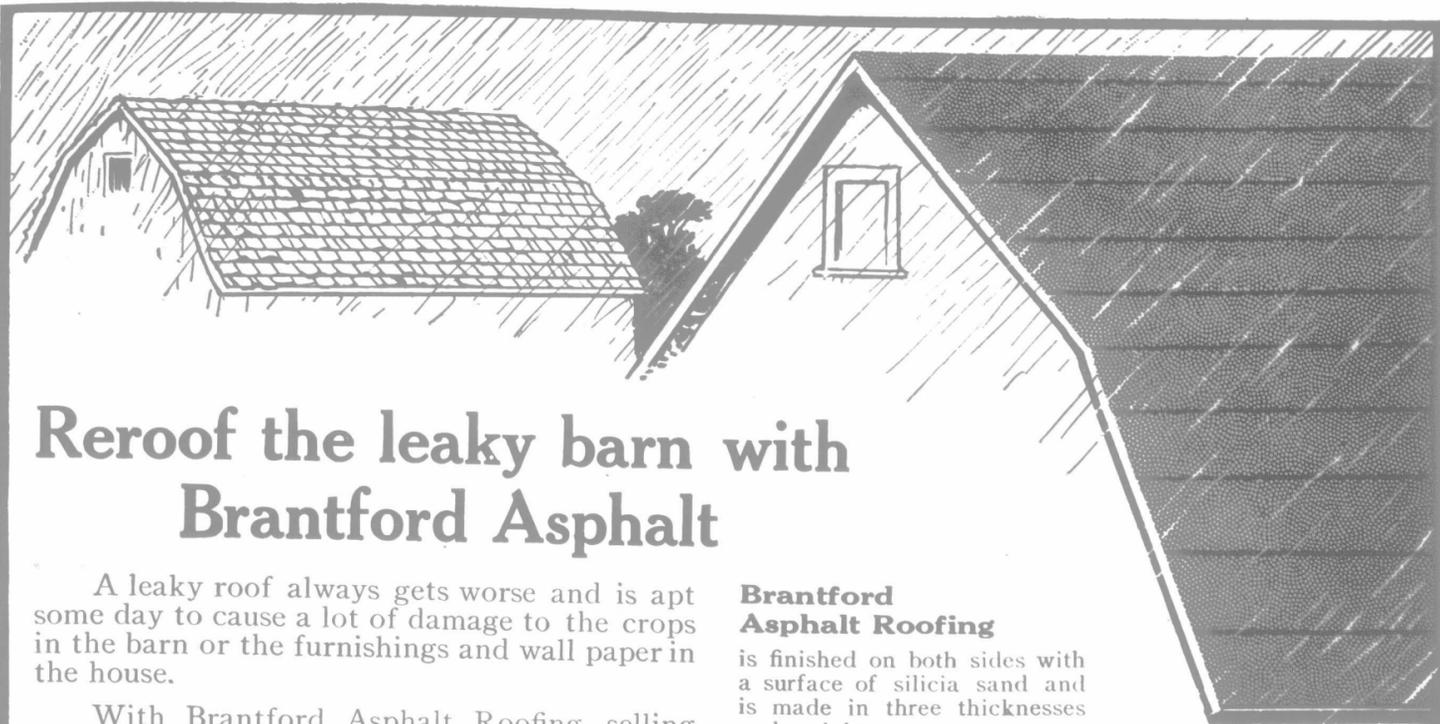
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AT WHOLESALE PRICES.

First-class and true to name. Send for catalogue. No agents.

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Reroof the leaky barn with Brantford Asphalt

A leaky roof always gets worse and is apt some day to cause a lot of damage to the crops in the barn or the furnishings and wall paper in the house.

With Brantford Asphalt Roofing selling at such reasonable prices, it is true economy to roof with it. There is hardly another line of goods that has had the small advance in cost since the war that Brantford Roofing has had. By installing improved machinery and increasing the volume of our output, we have lowered our cost of production which has enabled us to keep down the price of Brantford Roofing below what might be expected in the face of the rising cost of raw material, labor and transportation.

Old wooden shingles are being replaced with Brantford Asphalt Roofing. It can be laid very rapidly, saving time, which means considerable when labor is scarce and high. It is a wonderfully fire-resistant roofing—a fire starting on a Brantford Asphalt Roof being unknown to this day. It is also very durable being completely waterproof and the asphalt blended and tempered to resist all the extremes of the Canadian climate.

Brantford Asphalt Roofing

Brantford Asphalt Roofing

is finished on both sides with a surface of silica sand and is made in three thicknesses and weights.

No. 1 is 60 lbs. per square. No. 2 is 70 lbs. No. 3 is 80 lbs.

Brantford Rubber Roofing

has the same high quality asphalt saturation and coating as Brantford Asphalt Roofing but it has a smooth, rubbery surface instead of being sanded. It is also in three weights. No. 1 is 40 lbs. No. 2 is 50 lbs. No. 3 is 60 lbs.

Standard Mohawk Roofing

While this roofing is lighter in weight than Brantford Asphalt and Brantford Rubber it is the best quality of any low price roofing on the market. It is a standard that has been tested for years and given entire satisfaction. Sanded on one side. One weight only—40 lbs.

Mohawk Rubber Roofing

The same grade as Standard Mohawk except that it has a smooth surface. Used for all classes of temporary works—sheds, barns, shacks, bunk houses, camp sites; and even dugouts in the trenches are covered with it. 35 lb., 45 lb., and 55 lb. weights.

Leatheroid Roofing

Slightly lower quality than Mohawk Rubber and used for same purposes. Has a leathery surface. Exceptionally good roofing at a low price. 35 lb., 45 lb., and 55 lb. weights.

Samples and prices mailed on request.

Brantford Roofing Co., Limited

Head Office and Factory, Brantford, Canada
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96

Happy Farmer Tractor handling 3 bottom 14 inch plow—backsetting Timothy Sod



Thirty-One Cents an Acre!

At Brandon the Happy Farmer demonstrated its ability to plow an acre in 45 minutes at a cost of only 31 cents worth of coal oil! Compare this with the cost of plowing an acre with your best team, with feed at high prices, and men's extra time to be counted in. Will it not pay you to use the

Happy Farmer Tractor

Model A—8-16 Horsepower. Model B—12-24 Horsepower.

Here is the ultimate tractor for efficiency and economy combined! It is famous for its simplicity—few parts to get out of order. Any intelligent farm lad can run it. It is heavy enough for the hardest plowing test and for heavy hauling—light enough to use with the drill. And it will go anywhere; it will plow right up to the fence with no unfinished corners. It will turn in its own space and not mire in soft spots.

Model B's engine is not just "adapted" to coal oil. It is designed *specially* for kerosene. It

burns it perfectly—all of it—with no smoke nuisance and no carbon trouble. Model B will not only pull the plow and the binder, getting your work done early in critical times, but it will deliver 24 horsepower for all kinds of belt work at low up-keep cost.

If you prefer a lower power tractor, Model A supplies the need.

Write us for full particulars about price, delivery terms, etc. Literature free on request.

The Renfrew Machinery Co., Limited

Eastern Branch, Sussex, N.B.

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Branches almost everywhere in Canada

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"I'm Off to Town, Is There Anything More You Want?"

YOUR son or daughter will be able to handle your shopping in town,—to take your produce to market, or to invite "hands" to the threshing or silo-filling, if you own a Ford. Furthermore they always will be glad to make the trips.

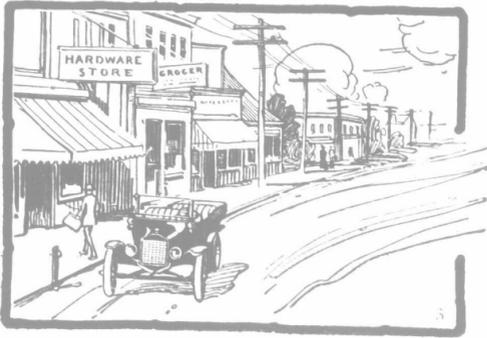
In doing these errands they take a man's place. They save your time—and that of a horse. This time saving means money to you, and again, a Ford, it has been estimated, costs less than two cents a mile to drive, or two-fifths of a cent a mile per passenger. The Ford is, therefore, much cheaper than a horse to drive. It is safer. It is more enjoyable. It requires less attention. It will soon pay for itself. The Ford is the farmer's utility car.

Ford

THE UNIVERSAL CAR

- Touring - - \$595
- Runabout - - \$575
- Coupe - - - \$770
- Sedan - - - \$970
- Chassis - - - \$535
- One-ton Truck \$750

F. O. B. FORD, ONT.



Ford Motor Company of Canada, Limited
Ford, Ontario

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Farm, Garden and Orchard Tools
Answer the farmer's big questions.
How can I get my crops sprayed when help is scarce? How protect my crops against bugs and blight?

IRON AGE Traction Sprayer
meets the need for a fast working, high pressure field sprayer. Covers 4 or 6 rows—50 or 100 gal. tank. Write today for free booklet.

4 or 6 rows

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Better Crops Result from Spraying

Spramotor
It isn't a SPRAMOTOR unless we made it.

This knapsack is ideal for spraying small plots of potatoes, shrubs and all small fruits. It is strongly made, powerful, and easily operated. We make the SPRAMOTOR in a size and style for every need—operated by hand, horse or gasoline power. Prices range from \$7 up to \$100.

Write in Canada. No duty to pay.

Send today for our free book on Crop Diseases and Spramotor Styles.

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Clover Seeds

(Government Standard)

No. 1 Alsike	\$16.00
No. 2 Alsike	15.00
No. 1 Red Clover	24.00
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
O.A.C. 21 Barley	2.00

Terms:—Cash with order. Bags extra, 50c. each. Jute bags for oats, 20c. We will pay freight on clover seeds.

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, Ont.

Clover Seeds

(Government Standard)

No. 1 Red Clover	Per bus. \$24.00
No. 2 Red Clover	23.00
No. 1 Alsike	16.50
No. 2 Alsike	15.50
No. 1 Northern-grown Alfalfa	17.00
Ontario Variegated Alfalfa No. 2	24.00
No. 2 Timothy. (This seed grades No. 1 for 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	1.50
Marquis Spring Wheat	3.25
O. A. C. No. 21 Barley	2.25
Canadian Beauty Peas	5.50
Golden Vine Peas	5.00
White Seed Beans	10.00

Terms:—Cash with order. Bags extra, at 45c. each.

On all orders, East of Manitoba, of \$25.00 or over we will pay the freight.

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

Ask for samples if necessary.

TODD & COOK

Seed Merchants

Stouffville

Ontario

Selected Seed Grain

OATS	Per bush.
O.A.C. No. 3	\$ 1.50
Alsike	1.75
O.A.C. 72	1.25
Newmarket	1.25
Abundance	1.30
Early Yelder	1.25
O.A.C. 21 Barley (choice)	2.00
No. 2 sample	1.75
Black Barley	3.25
Early Centennial Peas	4.25
Wild Goose Wheat	\$2.75 and 3.00
Red Clover—No. 1	\$25.00
Alsike No. 1	17.00
No. 2	16.00
Timothy, No. 1 for purity	5.75
Alfalfa (Northern Grown)	17.00
White Blossom Sweet Clover	18.00

We have a car of New Brunswick Irish Cobbler Potatoes to offer. The best early potato in existence. Write for prices.

Terms—cash with order. All prices ex-house, Guelph.

Cotton bags 50c. each; sacks 15c. each.

HEWER SEED CO.

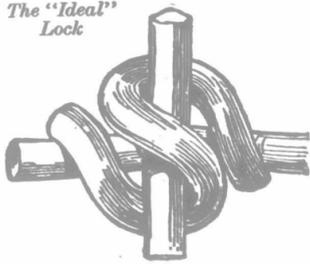
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O.A.C. 72 Oats—\$1.20 per bus.

To dispose of our supply before the rush of work comes, we offer at this low price. Jute sacks 10c. extra. Sample guaranteed satisfactory.

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The "Ideal" Lock



"IDEAL" FENCE PRICES

FREIGHT PAID TO YOUR STATION

Below we give the freight-paid prices to any station (except Electric) in Old Ontario on orders of \$15.00 or over. Prices for New Ontario quoted on request.

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.

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.

HEAVY "IDEAL" FENCING

MADE THROUGHOUT OF FULL GAUGE No. 9 EVENLY GALVANIZED HARD STEEL WIRE, CARRIED IN 20, 30 AND 40 ROD ROLLS.

No. 5380 5-line wires, 38 inches apart, uprights 22 ins. apart, spacing 9, 9, 10, 10. Per rod.....	37c	No. 847 8-line wires, 48 inches high, uprights 16 1/2 inches apart, spacing 4, 5, 6, 7, 8, 8, 9. Per rod.....	63c	No. 1054 10-line wires, 54 inches high, uprights 16 1/2 ins. apart, spacing 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	80c
No. 6390 6-line wires, 39 inches high, uprights 22 inches apart, spacing 7, 7, 8, 8, 9. Per rod.....	43c	No. 8470 8-line wires, 48 inches high, uprights 22 inches apart, spacing 4, 5, 6, 7, 8, 8, 9. Per rod.....	58c	No. 10540 10-line wires, 54 ins. high, uprights 22 ins. apart, spacing 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	73c
No. 7400 7-line wires, 40 inches high, uprights 22 inches apart, spacing, 5, 6, 6, 7, 7 1/2, 8 1/2. Per rod.....	50c	No. 951 9-line wires, 51 ins. high, uprights 16 1/2 ins. apart, spacing 4, 4, 5, 6, 7, 8, 8, 9. Per rod.....	70c	No. 1157 11-line wires, 57 inches high, uprights 16 1/2 ins. apart, spacing 3, 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	85c
No. 7480 7-line wires, 48 inches high, uprights 22 inches apart, spacing 5, 6 1/2, 7 1/2, 9, 10, 10. Per rod.....	51c	No. 9510 9-line wires, 51 inches high, uprights 22 inches apart, spacing 4, 4, 5, 6, 7, 8, 8, 9. Per rod.....	64c	No. 11570 11-line wires, 57 ins. high, uprights 22 ins. apart, spacing 3, 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	77c
No. 841 8-line wires, 41 inches high, uprights 16 1/2 ins. apart, spacing 4, 4, 5, 6, 7, 7, 8. Per rod.....	62c	No. 1048 10-line wires, 48 inches high, uprights 16 1/2 ins. apart, spacing 3, 3, 3 1/2, 4, 5, 6, 7, 8, 8 1/2. Per rod.....	75c	No. 831 8-line wires, 31 ins. high, uprights 16 1/2 ins. apart, spacing 3, 3, 3, 4, 5, 6, 7. Per rod.....	60c
No. 8410 8-line wires, 41 inches high, uprights 22 inches apart, spacing 4, 4, 5, 6, 7, 7, 8. Per rod.....	57c	No. 10480 10-line wires, 48 ins. high, uprights 22 ins. apart, spacing 3, 3, 3 1/2, 4, 5, 6, 7, 8, 8 1/2. Per rod.....	70c	No. 939 9-line wires, 39 inches high, uprights 16 1/2 inches apart, spacing 3, 3, 3, 4, 5, 6, 7, 8. Per rod.....	67c

MEDIUM HEAVY "IDEAL" FENCING

TOP AND BOTTOM WIRES No. 9; OTHER WIRES No. 12; CARRIED IN 20, 30 AND 40 ROD ROLLS.

No. 640 6-line wires, 40 ins. high, uprights 16 1/2 ins. apart, spacing 7, 7, 8, 9, 9. Per rod.....	33c	No. 726 7-line wires, 26 ins. high, uprights 13 inches apart, spacing 3, 3 1/2, 4, 4 1/2, 5, 6. Per rod.....	35c	No. 930 9-line wires, 30 ins. high, uprights 13 ins. apart, spacing 3, 3, 3, 3, 3, 4, 5, 6. Per rod.....	43c
No. 6400 6-line wires, 40 ins. high, uprights 22 inches apart, spacing 7, 7, 8, 9, 9. Per rod.....	30c	No. 7261 7-line wires, 26 inches high, uprights 8 inches apart, spacing 3, 3 1/2, 4, 4 1/2, 5, 6. Per rod.....	41c	No. 9301 9-line wires, 30 inches apart, uprights 8 inches apart, spacing 3, 3, 3, 3, 3, 4, 5, 6. Per rod.....	50c
No. 950 9-line wires, 50 ins. high, uprights 13 inches apart, spacing 4, 4, 5, 6, 7, 7, 8, 9. Per rod.....	48c	No. 1150 11-line wires, 50 inches high, uprights 13 inches apart, spacing 3, 3, 3, 4, 4, 5, 6, 7, 8. Per rod.....	55c	No. 1448 14-line wires, 48 inches high, uprights 13 ins. apart, spacing 2 1/2, 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3, 3 1/2, 4, 5, 5 1/2, 5 1/2, 6. Per rod.....	64c

"IDEAL" POULTRY FENCING

TOP AND BOTTOM WIRES ARE MADE OF No. 9, ALL OTHER WIRES No. 13. MADE IN TWO STYLES ONLY. CARRIED IN 10 AND 20 ROD ROLLS.

No. 1848 18-line wires, 48 inches high, uprights 8 1/4 inches apart, spacing 1 1/8, 1 1/8, 1 1/8, 1 1/8, 1 1/8, 1 1/8, 2 1/4, 2 1/4, 2 1/4, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5. Per rod.....	85c	No. 2060 20-line wires, 60 inches high, uprights 8 1/4 inches apart, spacing 1 1/8, 1 1/8, 1 1/8, 1 1/8, 1 1/8, 1 1/8, 1 1/8, 2 1/4, 2 1/4, 2 1/4, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5, 6, 6. Per rod.....	90c
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Improved "Ideal" Stock Gates—Open Mesh

Made in the following sizes only:

12 feet long, 51 inches high, each.....	\$6.00
13 feet long, 51 inches high, each.....	6.25
14 feet long, 51 inches high, each.....	6.50

Improved "Ideal" Farm Gates—Close Mesh

3 feet long, 48 inches high, each.....	\$3.00
3 1/2 feet long, 48 inches high, each.....	3.25
4 feet long, 48 inches high, each.....	3.50
10 feet long, 48 inches high, each.....	6.25
12 feet long, 48 inches high, each.....	7.00
13 feet long, 48 inches high, each.....	7.25
14 feet long, 48 inches high, each.....	7.50
16 feet long, 48 inches high, each.....	8.00

Supplies for "Ideal" Fence

Ideal Fence Stretcher, each.....	\$10.00
Hand Stretcher for Single Wire, each.....	1.00
Universal Post-Hole Digger, each.....	2.75
Ideal Steel Fence Posts, 1 1/2 in. x 1 1/2 in. angle by 7 1/2 ft. long, each.....	.55

Brace Wire, Staples and Barb Wire

Galvanized Staples in 25-lb. Boxes.....	\$1.85
Galvanized Staples in 100-lb. Boxes.....	7.00
Galvanized Fence Hooks, per 100 lbs.....	7.00
No. 12 Brace Wire, per 100 lbs.....	6.50
No. 9 Brace Wire, per 25 lbs.....	1.60
No. 9 Brace Wire, per 100 lbs.....	6.00
No. 9 Coiled Spring Wire, per 100 lbs.....	6.10
4 pt. 4" Galv. Cabled Barbed Wire, per 100 lbs. (about 95 rods).....	6.75
4 pt. 6" Galv. Cabled Barbed Wire, per 80 rod spool.....	5.50
2 pt. 5" Galv. Cabled Barbed Wire, per 80 rod spool.....	5.25
"Ideal" Single Strand Barbed Wire, per 80 rod spool.....	3.75

Buy Now and Save Money

The enormous demand for steel by the European countries leaves only a limited tonnage for home use—therefore prices are uncertain. We suggest your ordering now, while our stock lasts and prices are right. Remit by Bank Draft, Post Office Order or Express Money Order.

THE MCGREGOR BANWELL FENCE CO., Limited, Walkerville, Ont.

At what age do Farmers Retire?

A farmer retires when ill health compels him to do so, or when he has enough money to keep him for the rest of his days.

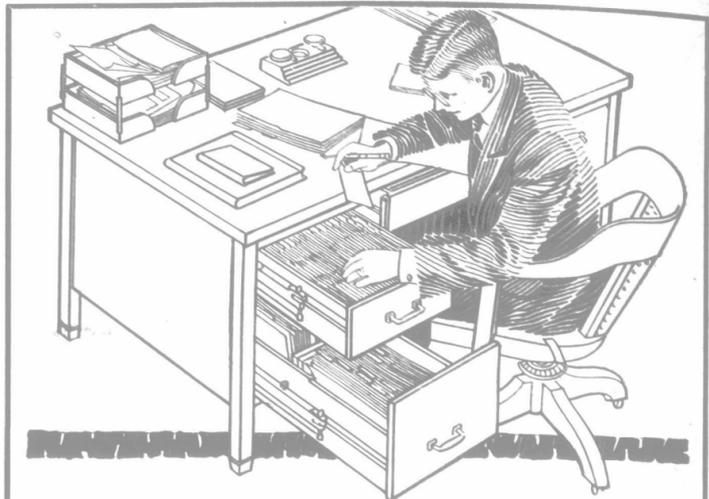
Farmers are much like other men. In the past they have spent freely as they have earned and old age has found most of them without the money upon which to retire.

But the farmer of today—if he is wise—does not leave the matter of his independence in old age to chance. By investing a few dollars each year in an Endowment Insurance he builds up a fund to keep him in comfort when he is old, or to care for his family should death claim him early.

Write for a free copy of "Barlow Drops In" which tells all about it. Address:

THE IMPERIAL LIFE Assurance Company of Canada
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For the Business Man on the Farm

The desk pictured above—the "Efficiency Desk" will do for you, in your record-keeping, what the automobile and the modern tractor have done in the field of actual farm development.

In it you can keep, indexed for instant reference, your Government reports, your market prices on produce for use in basing future prices, and your clippings from farm papers on interesting subjects.

Your accounts, taxbills, insurance papers—everything fits into it—and right at your fingers' ends. You've probably been looking for something like this before—a desk and a record-

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Take a pencil now and write a postal to our nearest branch for descriptive folder and price.

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For outside or inside work this is the paint that gives satisfaction.

A SAFE PAINT-PATH TO FOLLOW

Insist on Ramsay's Pure Paint, because every gallon is tested for uniformity, elasticity and free flowing qualities.

Ask any Ramsay dealer, or write us for interesting booklets and suggestions.

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MAKERS OF PAINTS AND VARNISHES SINCE 1842
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Palmer's Summer Packs

THE shoes for aching feet—light in weight, durable, roomy, comfortable and waterproof. Made from selected Skowhegan leather with water-proofed leather sole and heel and solid leather insoles. The ideal shoe for farmers or others working on the land.

Also specially suitable for woodsmen, trackmen, millmen, sportsmen, laborers—all who require strong, easy fitting footwear.

Get a pair of Palmer's "Moose Head Brand" footwear from your dealer. They will give you foot comfort and great wear.

JOHN PALMER CO., Limited
Fredericton, N. B., Canada 31

There is BIG MONEY IN TRAPPING

MUSKRAT skins will bring much higher prices than ever known—get busy and trap all you can.

You will receive the highest prices if you ship direct to us. Money talks; that is why we do the largest cash Raw Fur business in Canada.

FREE—Hallam's Trappers' Guide—96 pages, tells how, when and where to trap. Hallam's Trappers' Supply Catalog, 36 pages, also Hallam's Raw Fur News, giving latest fur prices and Market reports. All free to you—Write to-day.

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Let's help Food Controller Hanna double the food production this year. If you do your part, you will **DOUBLE YOUR PROFITS**. Doing something for your country and for yourself at the same time is good patriotism and good business. "Double Your Crops," you may say, "is very good advice, but how is it to be done?" We answer, "by using the very highest grade of Fertilizer," such as our "Best-by-Test" Brands. Consult with us about your soil and your crops and we will help you decide what is best to do. Every pound of our Fertilizer is guaranteed. We have full supply of all kinds up to full strength of analysis. We give special rates where farmers club together and order in our load lots.

"Best-by-Test" FERTILIZERS

Write for our FREE Booklet on PLANT FOOD. Live Local Agents Wanted.

CANADIAN FERTILIZER CO., Limited
12 Market Chambers, Chatham, Ont.



All Classes are Liable

Under the

Dominion War Tax Act

Returns covering 1917 details must be filed on or before 31st March next

THE Income War Tax Act applies to every class of person residing or ordinarily resident in Canada.

Every unmarried person, or widow or widower without dependent children, whose income exceeded \$1,500 for the calendar year, 1917, and all other persons whose income exceeded \$3,000 for the same period, must fill in and file the necessary forms.

All persons engaged in farming of any kind, who are liable under the provisions of the Act, must get three copies of Form T-1 and answer in detail all questions asked. Special attention is called to the following points as well as to those specifically mentioned in the Form:

Gross Income Must Include all income from the sale of produce, stock, or other products whatsoever, as well as monies received from other sources, such as Dividends, Interest, etc., as provided in the Forms.

Personal and Living Expenses must not be deducted in determining gross income—the figures must include the value of all food and other necessities of his own production, consumed by the taxpayer or his family.

Depreciation.—In giving figures under Depreciation, particulars of the value of implements, machinery, and outbuildings on hand January 1st, 1917, upon which depreciation is claimed should be shown, but must not include any amount for dwelling occupied by the taxpayer.

The amount expended for labor in the preparation of land for crops and in the cultivation, harvesting, and marketing of the crop should be stated, as well as the cost of seed and fertilizer and the amount expended for labor in caring for live stock, cost of feed, repairs to farm buildings, but not cost of repairs to dwelling. The cost of small tools and material which is used up in the course of a year or two, such as binder twine, pitch forks, spades, etc., should be shown as these are deductible.

The cost of labor may include board of hired men, but no amount as wages for the taxpayer himself will be allowed.

Penalties.—Default in filing returns renders the person or persons liable on summary conviction to a penalty of one hundred dollars for each day during which the default continues. Any person making a false statement in any return or in any information required by the Minister of Finance shall be liable on summary conviction to a penalty not exceeding ten thousand dollars or to six months imprisonment, or to both fine and imprisonment.

Don't forget to fill in three copies of the Form. Keep one copy and file the other two with the Inspector of Taxation for your District.

Forms may be obtained from the District Inspectors of Taxation and from the Postmasters at all leading centres.

Postage must be paid on all letters and documents forwarded by mail to Inspector of Taxation

**Department of Finance,
Ottawa, Canada**

INSPECTORS OF TAXATION.

For Ottawa and District — K. Fellowes, Cor. Bank St. & Laurier Ave., Ottawa, Ont.
 For Kingston and District — G. A. Macdonald, Kingston, Ont.
 For Toronto District — Hugh D. Paterson, 59 Victoria St., Toronto, Ont.
 For Hamilton and District — Berkeley G. Lowe, Customs Building, Hamilton, Ont.
 For London and District — George R. Tambling, London, Ont.

Spring Wheat Seed for Ontario

THE world demand for wheat in 1918 justifies the greatest possible effort towards increased production. The small acreages of Fall Wheat put in last fall will mean increased acreage in Ontario available for Spring Wheat. The Ontario Government is co-operating with the farmers in order to provide seed. It has purchased 50,000 bushels of No. 1 Marquis Spring Wheat Seed through the Seed Branch of the Federal Department of Agriculture. More will be purchased if necessary to fill needs.

Distribution—Seed is sold only in 2-bushel bags. Carloads will be placed at certain points in the Province where less than carload orders can be filled. Where Farmers' Clubs or other organizations buy in carload lots, the price at their local stations will be the same as at distributing points.

Where to buy—Purchases may be made either in the warehouse at the distributing points, or orders may be placed with the nearest District Representative of the Provincial Department of Agriculture, or they may be sent direct by mail to the Markets Branch, Department of Agriculture, Parliament Buildings, Toronto.

Payment in Cash—Price is \$2.74 per bushel at all local stations. **In all cases, without exception, Cash must accompany order.** Send remittance by check, postal note, post office or express money order made payable to Ontario Department of Agriculture, Markets Branch.

Order Early—In the event of the requirements of the Province being under-estimated, there may not be enough seed to go around. It is advisable in order to insure having their orders filled that purchasers should place orders as soon as possible. All orders are subject to confirmation and will be filled in the order received. As seed is delivered in 2-bushel bags, order should be for even numbers of bushels, and no order for less than 2 bushels can be accepted.

Names of Distributors are:

Alliston—L. Coffee & Company.
Barrie—Brown & Company.
Bolton—A. A. McFall.
Brantford—Dominion Flour Mills.
Chatham—The Canada Flour Mills Company, Limited.
Durham—Rob Roy Cereal Mills Company.
Guelph—Jas. Goldie & Company, Ltd.
Hamilton—Wood Milling Company.
Kemptville—Kemptville Milling Company.
Lindsay—Spratt & Killen.
Listowel—Hay Brothers.
London—Hunt Bros. Ltd.
NewMarket—W. H. Eves.
Orangeville—E. C. Clark.
Orillia—D. C. Thompson.
Oshawa—Hogg & Lytle.
Peterboro—The Campbell Flour Mills.
Port Hope—H. Sculthorpe.
Port Perry—Hogg & Lytle.
St. Catharines—Maple Leaf Milling Company.
St. Mary's—St. Mary's Milling Company.
Simcoe—Norfolk Co-operative Association.
Stouffville—Stiver Bros.
Toronto West—The Campbell Flour Mills.
Welland—Maple Leaf Milling Company.
Woodbridge—W. D. Matthews & Company.
Woodstock—James Cullen.

Ontario Department of Agriculture

Markets Branch
Parliament Buildings, Toronto

Sir Wm. H. Hearst,
Minister of Agriculture

Dr. G. C. Creelman,
Commissioner of Agriculture



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The Farmer's Advocate and Home Magazine

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1866

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LIII.

LONDON, ONTARIO, MARCH 28, 1918.

1331

EDITORIAL.

Keep the sheep and kill the dogs.

Breed the work mares this year and work the brood mares.

The nation can keep up its spirits without pouring so much down its neck.

The German defensive war grows rather aggressive on the Eastern front.

The better prepared you are for spring, the less you will feel the labor shortage.

The farms of Canada are looked to in 1918 for the biggest yields they have ever given.

The Railways got what they went after. They generally do for they are strong lobbyists.

The war must be won now or our children will have to take up the fight for liberty later on.

Get the best help you can; use it the best you can, and if you can't do any better help yourself.

When the knolls in the country whiten and the land pulls up loamy and friable, be ready for the field.

Tractors are here to stay and are a big help, but on the farm the horse will still be relied on for the draft work.

If Russia does not soon awaken there will be some re-formed spelling of the word with a capital P and a small r.

The man who put in high-priced steers last fall to feed through the winter doesn't see any big profits at present beef prices.

The feed question is still unsolved. Everyone hopes that a favorable crop year will put an end to some of the difficulties now experienced.

At the time of writing "sap's running" and doubtless by the time this reaches our readers some of them will be "boiling down," or "sugaring off."

Many complaints have come to hand that millers in Western Ontario have been overcharging for millfeeds. The set price should be lived up to. Laws not enforced are worse than useless.

The Newark News says that the most courageous slacker was the fellow who married his mother-in-law to evade military service. Most men would rather be officered by the military than the militants.

Seed corn is said to have sold at from \$30 to \$50 per bushel at an auction sale in Essex Co. the other day. Good seed pays. This was guaranteed to germinate 98 per cent. The cost of filling the silo is going up too.

Beef Prices.

At the present time there does not appear to be any chance that prices for live cattle will advance very materially this spring. Those who put cattle in to feed last fall at prices around ten cents per pound run a small chance of making any great profit this year, and the man who eats the expensive cuts of beef from city tables is far from justified in calling the cattle feeder a profiteer. Figured any way you like, with feeds as high in price and as hard to get as they have been during the past few months, the margin between the purchasing price of the cattle last fall and the selling price this spring is bound to leave little more than the manure for the work of the field. Of course, there will be special cases where a small margin of profit will be made, but the great bulk of the cattle which will go on the market during the spring months, unless prices advance which does not seem likely, will net the feeders very little for their efforts. In this there is a danger that fewer cattle may be fed next fall and winter than has been the case during the winter of 1917-18. The producer will not continue any line of production which does not leave him at least a living profit, and any attempts to beat down prices only have a tendency to discourage production. It is true that eleven or twelve cents per pound live weight is a big price for finished beef, but it is also true that the cost of producing this meat has advanced so rapidly that there is less profit for the feeder in a great many cases than accrued from the cattle-feeding business when the finished product sold at about half the price.

Uses for Spring Wheat.

This spring there will be more spring wheat sown in Eastern Canada than has been the case in any single season for some years, and circumstances justify this departure from the general cropping system. Wheat is needed to support the Allied cause. A question has been raised as to whether or not it would be advisable to plan to sow spring wheat in with fall wheat on such fields as may show considerable winter killing. Provided the fall wheat is not of a too early ripening variety, and the spring wheat used is fairly early in maturity, sowing spring wheat crosswise of the drills of fall wheat might give very good results. Another important point to remember in this spring's cropping is that there is some likelihood of there being an order passed before next fall prohibiting the use of marketable wheat for feed. Keeping this in mind and knowing that peas are hard to get for seed this spring and that husking corn seed is practically out of the question, it might be well to mix a fair proportion of wheat with oats or with oats and barley in the seeding this spring, in order to have some heavier feed for pigs, fattening cattle, and cows on test next winter. A peck to one half bushel of spring wheat to the acre mixed with oats and possibly a little barley would ensure some heavier feed. It would be well to consider the time of ripening in arranging the mixture. Spring wheat should ripen fairly well with Banner, or O. A. C. 72 oats.

Titles.

It has been reported that some hold-up has taken place in the putting through of titles for Canadians. We believe that the list has not been sent to the Imperial authorities. Most Canadians, democratic in spirit, believe that we already have enough titles in Canada, possibly too many. Titles can never be anything else but a menace to democracy. They promote class distinction. They tend to set apart those who are fortunate, or unfortunate, enough to have them bestowed upon them. They are not in the interests of the public welfare, and are a relic of feudalism. Hereditary titles should from now on have no place in Canada.

Municipal Garbage-fed Piggeries.

Some steps have been taken to induce urban dwellers to "keep a pig" as the slogan reads, but a number of cities are adopting the wiser and more feasible plan of establishing municipal garbage-disposal piggeries. The garbage from one home will not go very far in maintaining a healthy, growing pig, so the greater part of the ration will necessarily have to be purchased in the form of grain. Those people who would keep a pig around their dwellings at all are the class who do not throw much valuable food into the garbage pail, hence grain will have to constitute the bulk of the pig's ration. But grain or millfeed is the controlling factor in hog production right now, and nothing could be gained by diverting the inadequate supply from one channel into another. More than that, under farm conditions there are usually by-products of the dairy and kitchen, roots, soiling crops and pasture, which decrease very much the grain required to produce one hundred pounds of gain. On the other hand, the urban dweller, usually inexperienced in hog feeding, must purchase practically all the feed required to develop and finish his pig at the highest market price. His grain comes dear, and he has next to nothing which will act as a substitute to conserve feed and cheapen production. If there were plenty of grain and few already engaged in swine production, the situation would be vastly different, but as it is nothing can be gained by drawing on the now-limited supply of feed in order that it may be fed by inexperienced hands under altogether unfavorable conditions. The feeding of domestic garbage by untutored people is also a great source of danger to the industry for disease is sure to result and control would be difficult. The most valuable garbage comes from the homes of wealthy people, hotels, clubs, restaurants, etc., and the poorest kind is found in the garbage pail of the ordinary, thrifty wage earner. The latter class of people would be the only kind so situated as to look favorably on the back-yard pig sty and with little or no table offal to be disposed of, grain or millfeed would be resorted to.

The city of Worcester, Mass., has operated a municipal garbage disposal piggery for forty years, and their scheme, which is discussed elsewhere in this issue, is considered the most successful and efficient on the American continent to-day. True, some grain is fed there, but it is dispensed by trained, practical feeders who so manage the plant that garbage is the main ration and grain or millfeeds a secondary consideration. If those interested in production would assist the cities in utilizing a valuable product which is usually incinerated, and show them how it might be converted into a kind of food for which the whole world is clamoring to-day, some good would surely result.

Real Breeding Classes.

The Farmer's Advocate has pointed out in times past the mistake of over-loading mature breeding stock with fat for the show-ring. Repeated extra fitting undoubtedly injures individuals as breeders, and as it is the best individuals of the respective breeds that go into the show-ring, eventually considerable injury is likely to be done the breed as a whole. Of course, there is no compulsion to highly fit for the show-ring, but the judge is called upon to place the animals according to their condition on the day upon which he is judging them. This being true, and fat covering a multitude of defects, the animal most superbly fitted generally heads the line. In some cases doubts have arisen in the minds of the spectators regarding mature females in high fit. Many will say they are non-breeders, and too often in the past such over-fitted animals have proven of little value as breeders. In the West, one Exhibition Board, at least, has seen fit to revise the prize-list so that only breeding females shown in breeding condition are eligible. It has been made necessary to show the females in mature classes with offspring at

This, of course, is one to four, and the mixture may be made stronger or weaker as desired. The seat of application should be clipped, and the animal tied, or some arrangement made to prevent him biting or licking the part. The blister causes an irritation, and if the patient be at liberty he will lick or bite the parts, and thereby get some of the blister on his lips and tongue, or he may bite sufficiently hard to scarify the skin of the blistered parts. The blister should be applied a little at a time with smart friction, then a little more, etc., until fifteen to twenty minutes of smart rubbing have been spent in the application. In about twenty-four hours a little more of the blister should be rubbed in, and in about twenty-four hours longer sweet oil, clean lard, or other non-irritant lubricant, should be applied. The patient's head should now be let down, and if he can be provided with a comfortable box-stall, it is advisable. The blistered parts should be oiled every day until the scale becomes loose and is removed, which is generally in ten days to two weeks, when, if necessary, another blister can be applied as at first and when further blistering is required it should be done in about every four weeks. While blistering in this manner causes the hair to fall out, it does not destroy the hair follicles, provide reasonable attention to directions be observed; hence, there is no danger of causing an area permanently devoid of hair. There are certain ingredients, such as nitric acid, sulphuric acid, arsenic, corrosive sublimate, etc., which have well-marked blistering and corrosive action and if used, except in small quantities, in blistering applications, will surely destroy the hair follicles and leave a permanent scar, or bare spot. Blemishes of this nature are often noticed after the application of many of the proprietary medicines which are advertised as a "Sure Cure" for nearly all the diseases to which the bones, muscles, tendons, etc., are liable. In cases where a paste blister is used it is necessary to give the patient a rest for at least two days, and wise to continue the rest for at least a few days longer until the acute inflammatory action is allayed. In cases where it is necessary to continue the work or drive the patient during and immediately following the application of a blister, a liquid preparation is generally used. This avoids the necessity of tying the patient so that he cannot reach the parts with his mouth, as there being practically none of the irritant on the hair, or surface of the skin, he cannot irritate his lips, etc., with it. Then again, the ordinary liquid blister is not usually of as great strength as the paste blister, it does not cause so acute an irritation and usually requires repeated application to cause well marked skin irritation. We, of course, refer to liquid blisters prescribed by those versed in such matters, not to some of the proprietary medicines advertised, such as the different "Cautic Balsams", etc., which quickly produce more marked superficial irritation than a safe paste blister. Liquid blisters are often referred to as "Sweat Blisters," from the supposition that the exudate they usually cause and the results that follow, are due to a sweating of the parts.

Two drams of either cantharides or biniodide of mercury mixed with four ounces alcohol, make a good liquid blister. Of course the mixture can be made either weaker or stronger by using less or more of the drug, in proportion to the quantity of alcohol. The usual method of using preparations of this kind is to apply a little with smart friction once daily, until the parts become red-hot, then applying oil daily until they become smooth again; then applying the blister again, as at first, etc. The application of a blister in any form, with the idea of curing some bone disease, as bone spavin, ringbone, splint, etc., is from the assumption that the counter-irritation caused by the blister increases the depressed inflammation and hastens its course to completion. The course of diseases of the bones of a



Clydesdale Brood Mares at Pasture.

joint usually destroys the articular cartilages which clothe the surfaces of the bones that contact each other after which the bones become united, as one bone, by bony union. This is called *ankylosis*, and when it is completed inflammation and pain cease. Counter-irritation, such as blistering, or firing and blistering hastens this process, and if the bones involved are not those in which the normal motion is considerable, lameness will disappear and whether or not a more or less marked stiffness will remain, depends upon the extent of said motion.

WHIP

The Feminine Character in Brood Mares.

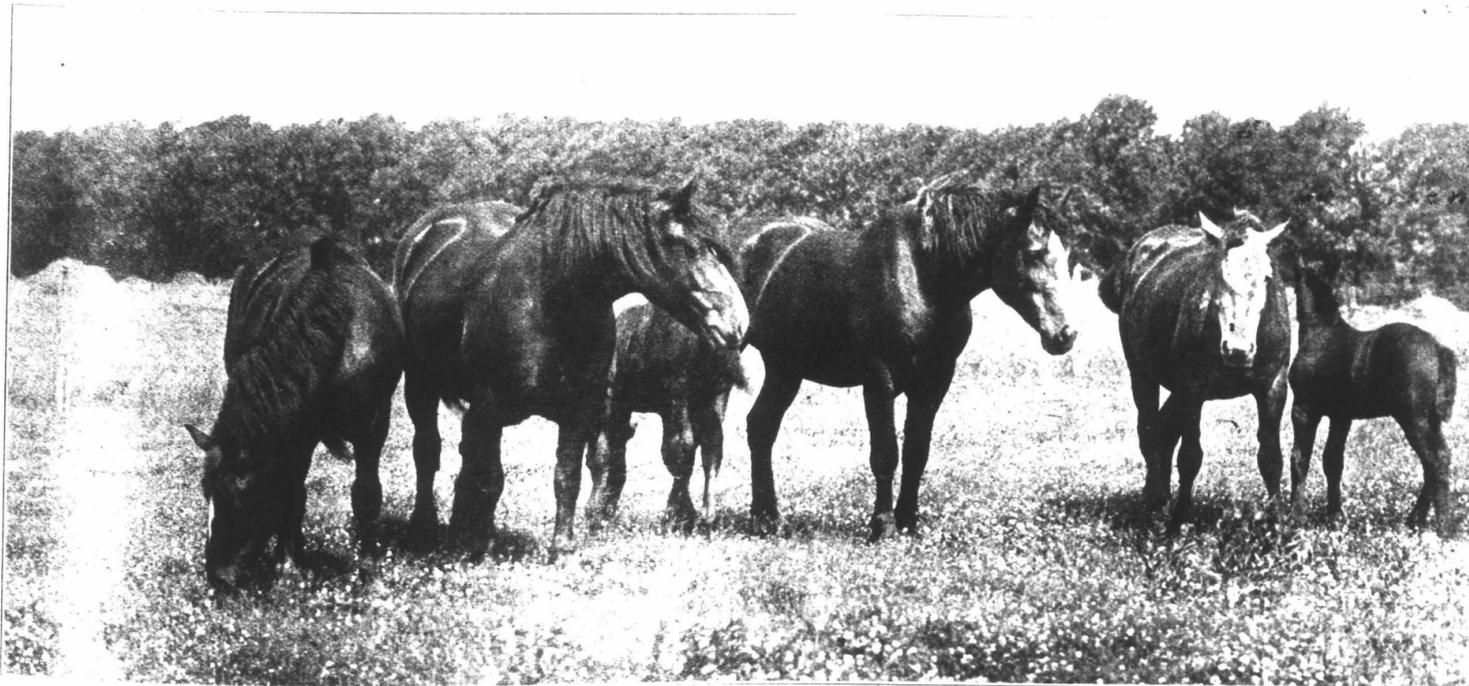
The good brood mare is a treasure to her owner. She asks for little but good food, liberty and kindness. Differing from the male of her species whose function is to dominate and procreate by an ever ready aggressive and at times spasmodic energy, she produces continuously and is shy and timid, because continually vulnerable through her maternity. Therefore, a watchfulness for herself and her progeny are ever part of the quiet and constant activities of her life.

Such feminine exercises are instinctive, and that they may become characteristic will depend somewhat upon the way we treat her. It is impossible for us to kill in the mare this instinctive predisposition of sex, but we may by mismanagement prevent it from becoming habitual and characteristic. The acknowledgement of those instinctive qualities of the female will help us to recognize the good brood mare when we see her, and the

feminine character which shows itself in the disposition and build of a good brood mare is accepted by breeders as denoting her value as a matron.

We will find feminine character outstanding in the head, neck, loins and body, and to a less extent, in the female's general condition. In the appearance of the head we will especially find the mare's predisposition towards feminine function, in her body the ability towards its performance. The eye will be fairly large and set out prominently, giving a wide range of vision, which encompasses the following goal without effort. Its expression in repose will be quietly contemplative, kindly and unselfish in its depths, differing from the eye of the stallion, which is focussed by self interest and glowing with the fires of aggression. This expression of the mare's eye will be verified by her passive appreciation of kindness and fondling, differing from the stallion in whom a restless reciprocation denotes the vigor of his kind. There will be no sulkiness or dullness in the expression of her eye or the carriage of her head, nor the opposite ready excitability or over activity. The ears will appear from the front to be set high on her head because the soft submissive line of her neck is straight from the head to the shoulder, differing from the ears of the stallion, the hard aggressive line of whose crest rises above them. The mare's loins will be strong to carry the body's load, the ribs will be wide and long to hold the organs of digestion, the coupling roomy, and the flanks well let down.

The management of the brood mare should be directed by considerations of her femininity. Her instincts of liberty and self reliance should be gratified by an approach to natural conditions. Her diet should not be too stimulative, her exercise should be normally constant



Illustrating the Feminine Character in Brood Mares.

and not spasmodic, nor intermitting with periods of unnatural constraint.

In her years of matronly maturity her feminine character becomes evident to every observer. In the field she moves more quietly, coming towards us in an attitude of meekness, yet confidence and self-respect. Never like the stallion, who comes shaking his high crest in invitation to playful battle. But it is not so in her youth, because sex has not then so set its mark upon her. As a foal she gambles in equal terms with the colts, full of suddenly overflowing activity, and perhaps evident sex character as developed later should not be considered desirable at an early age, because the passiveness and meekness which become characteristic of the regular exercise of the maternal function may mean in the filly a lack of constitutional vigor, which will cause her to fail later as a brood mare.

The robust filly, as she grows older will, more than the colt, show a disposition towards quietness of mind and fleshiness of body, which while admirable and prophetic of future usefulness, should not be encouraged to the point of sluggishness. Her environment should present an enticement to fairly constant activity in the search for and choice of food, and when such is the case this proof of a superabundant power of sustaining herself will mark her as the coming mother of well-nourished foals when with this quietly active disposition and normally fleshy condition, the filly shows a kindly eye, alert understanding ears, a long, straight and fine topped neck, a wide loin, deep ribs and roomy coupling, a soft skin and silky hair, she bids fair to become the mother of generations that like herself will be the most useful and beautiful creatures on our farms, beautifying our lives by their presence and enriching us by their toil. T. L. NASH, Sask.

LIVE STOCK.

The recently organized Canadian Co-operative Wool Growers Ltd. is one of the big things accomplished in the co-operative world, and deserves the support of sheep raisers. Its field is Dominion-wide.

It only requires a short time to dock the lambs and castrate the males among them. Ram lambs harass the flock in the autumn and have to be separated at considerable expense of time and convenience.

It has been demonstrated at the spring sales that the use of the curry-comb and brush, and perhaps a blanket, for a few days previous to the sale, means additional dollars in the public appraisal of the animals offered.

The season will soon be here when the largest proportion of the spring pig litters will be born. Allow the in-pig sow plenty of exercise and access to the soil. This treatment will correct many constitutional disorders common in sows after such a winter as that just coming to an end.

There can never be any appreciable progress so long as scrub sires are used. Consider this well and make plans to breed this spring to the best pure-bred sire available. A lifetime of breeding scrub live stock will not be a pleasant past to look back upon, and if a change is intended, do it now.

The present feed situation suggests that purchases be made this summer. It has become quite as necessary to buy feed as coal in the summer time for the next winter's use. The by-products of the mills are in excess of demand during summer months, but in winter the reverse is true. The course to pursue is obvious.

It is reported that Hon. G. W. Brown, formerly Lieutenant-Governor of Saskatchewan, has purchased the Senator Edwards Shorthorn herd, of Rockland, Ont. There are twenty-seven head in the herd, and these are being shipped to Mr. Brown's farm at Ricketon, Sask. "Joe" Barnet is to have charge of the farm.

A breeder of pure-bred cattle, in a modest way, who dispersed his herd this spring wrote "The Farmer's Advocate" that he started with a few common cows but always used fair sires. At his auction sale held a few weeks ago the live stock, implements, and equipment realized \$11,000. The average good farm sale usually brings around \$5,000, in these times, so the pure-bred herd meant something to this breeder. More than that, his annual revenue from it was superior to what one might expect from an ordinary herd.

Short Ribs for the Feeder.

Editor "THE FARMER'S ADVOCATE": The discouraging condition of the Toronto cattle market is causing serious disquietude among Ontario feeders. Judging from what one gathers about the stock yards and from the directions received by stock drovers, "The Bears" seem to be getting their claws into a vengeance as far as the market for cattle is concerned. The drift of what is going on would seem to be precipitate panicky selling at present prices, and to clam up deliveries developing a bit of artificiality because of the abnormal cost of stock. "The Farmer's Advocate" is cited as an excuse but a Toronto retailer stated that his trade was going on as usual, except probably that consumers were getting over the cost of their cuts but they had loads of meat for the theatres. This does not help the man who turns the stuff on the hoof who at the same time contemplates

big operators paying \$19 per hundred for live hogs, while cattle ranged at \$11 and \$12—an extraordinary spread, cost of production and food product values considered. The new government regulation limiting packing house profits at not over two per cent. on their gross annual sales nor more than eleven per cent. on actual capital investment, will hardly relieve the cattle feeder when he counts up the cost of filling his stalls last fall and the fabulous price of feed. At the end he finds himself squeezed in some kind of a deadly ring. About all that is going to be visible to him for his year's toil is a costly pile of manure which is a long, long remove from the 80 per cent. dividends of Sir Baken Spareribs. What is left to the beef feeder to live on will be a bit of short rib skinned to the bone and the marrow extracted. The net outcome will react upon the country's supplies of beef and against cattle feeding before another season with killing effect. There are limits to the endurance of the farmer and a word of warning to the wise should be sufficient. For marketable cattle what is now due is a substantial advance in prices.

Middlesex Co., Ont.

ALPHA.



Champion Barrow at the International.

A Berkshire, bred and shown by Hood Farm, Lowell, Mass.

New Professor of Animal Husbandry for O. A. C.

BY W. H. P.

Live stock men throughout Ontario will be pleased to learn that Wade Toole, Managing Editor of The Farmer's Advocate, has been appointed to succeed Prof. G. E. Day as head of the Live Stock Husbandry Department at the Ontario Agricultural College. Prof. Day's engagement with the Dominion Shorthorn Breeders' Association necessitated the appointment of a new Chief for the Department, and President Creelman is to be congratulated on the choice he has made. Mr. Toole's early training and career have fitted him admirably for the work which lies before him at Guelph, and his good judgment as well as the broad and optimistic view which he entertains in regard to the live stock industry are guarantees of his future success.

The new Professor of Live Stock Husbandry at the O.A.C. was born on a 150-acre farm, in Ontario County, Ontario, on March 3, 1886. There a useful herd of 20 to 25 Shorthorns was maintained in his younger days, two or three good Clydesdale mares were numbered amongst the farm horses kept, some steers were fattened, and Yorkshire hogs were bred, but only for pork purposes. A flock of pure-bred Shropshire sheep was taken in hand by Mr. Toole when yet a mere lad, and the returns from this venture were used to defray the expenses of a college course. The Short Course in stock and seed judging at the O. A. C. was attended in January, 1907, and the regular course was entered in the fall of the same year. At the end of the second college year, Mr. Toole headed a large class for the two years' work and received the general proficiency medal. He was a member of the O. A. C. Stock Judging Team at the Chicago International in 1910. After graduating in the spring of 1911, Mr. Toole joined the staff of "The Farmer's Advocate" as Live Stock Editor, and since October 1913 has occupied the Managing Editor's chair. His early training on the home farm, in the heart of that great live-stock district in South Ontario, awakened a very strong liking for the industry with which he has become so closely associated, and during Mr. Toole's seven years' engagement with "The Farmer's Advocate" he has enjoyed many opportunities for travel and to become acquainted with the live stock industry from every angle. His practical experience with the herds and flocks at home, his training, and his close connection with the industry, are most worth while working on the staff of the "Farmer's Advocate" a trained eye and sound judgment are of great value. The Management and Editorial staff of "The Farmer's Advocate" regret the loss of Mr. Toole's services to the industry, but the College and the Province's stock industry are fortunate in the energetic efforts of the new Professor of Live Stock Husbandry. The best wishes of "The Farmer's Advocate" accompany Prof. Toole to his new position. We are glad to see him first, and we bespeak for him the success and interest in live stock.

Steer Feeding for War Time Markets.

EDITOR "THE FARMER'S ADVOCATE":

At the present time with the high prices and scarcity of all concentrated feeds, steers should not be highly fitted for market. The present crisis calls for an exceptional output of all food products, especially meat, and every effort should be made to raise as many cattle as possible, and to feed them largely on foods, which cannot be used for human consumption, or are not especially adapted to some other equally important class of live stock such as pigs. For these reasons, therefore, the following experiment was planned and carried out at Macdonald College during the past winter. Keeping in mind the necessity of rapid growth and cheap gains, and the advisability of a ration which did not involve more labor than necessary either in the process of growing or feeding the crop, corn silage was chosen as the basic feed in the experiment, the idea being to test to what degree corn silage could be utilized in a ration, with clover hay, to replace expensive concentrates. Corn is a heavy yielding crop; it can be grown comparatively cheaply without an excess of labor; it can be grown to advantage in many rotations; it is easily stored and can be fed conveniently with no waste products; it has a high feeding value and is relished by the stock fed.

A great deal of experimental work has been done in the past, at various experimental stations and agricultural colleges, in regard to feeding corn silage to various classes of live stock. Most of these experiments have, however, been planned with the idea of replacing other roughage rather than concentrates in the various rations. Some experiments have been conducted with the different kinds of roughage as the sole ration, but only for the purpose of wintering young stock and not preparing them for market.

An experiment was carried on at Macdonald College in which some Quebec and some Western steers were fed. They were divided into three lots each and fed similar rations respectively, thus duplicating the experiment. The rations were made up of (1) corn silage, (2) clover hay, (3) a meal mixture, consisting of equal parts of oat feed and dried distillers' grains. These concentrates were not chosen on account of their individual qualifications but rather because they were available and would serve as a representative meal mixture. The quantity of hay was constant in all the rations. The first lot, in each case, received a large allowance of silage and no meal, the second lot somewhat less silage and a small allowance of meal, while the third lot received still less silage and a large quantity of meal. The rations were fed for nine weeks, the quantities being slightly increased at the end of each three weeks.

Average Weight per Steer.

Feeding period 9 weeks.

	Initial Weight	Final Weight	Total gain	Gain per day.
QUEBEC STEERS				
Lot 1. No meal.....	876	946	70.7	1.12
Lot 2. 4 lbs. meal.....	873	1004	131.7	2.09
Lot 3. 6 lbs. meal.....	915	1032	117.3	1.86
WESTERN STEERS				
Lot 4. No meal.....	883	1003	120.0	1.90
Lot 5. 4 lbs. meal.....	909	1055	145.7	2.31
Lot 6. 6 lbs. meal.....	884	1022	138.5	2.20

Note:—The quantity of meal above is the average daily ration for the three periods.

All the steers showed a remarkable thriftiness and were in very good condition during the entire period. They were not highly finished, but were in good shape for the present requirements of the market at the end of the trial. As may be seen from the above table, the three lots of Western steers made both cheaper and larger gains respectively. In the Western steers those fed no meal made the cheapest gains, while in the Quebec steers those fed a small quantity of meal and a large allowance of silage made the most economical gains. In both cases those which received a liberal allowance of silage with some meal made the greatest gains, and these fed a small amount of silage and a large quantity of meal made good gains but at too high a cost. The results of these experiments, therefore, show that:

1. Steers can be profitably fed and fairly well fattened on a ration consisting wholly of corn silage and leguminous hay.

2. When concentrates are added in moderate quantities greater gains can be made economically.

3. When a heavy meal ration with a small roughage allowance is fed, steers will make good gains but with increased labor and scarcity of feed the practice is not economical.

C. E. B.

...ent of many dairymen's success... brought their first really high... at the head of their herd. The... time, but it turned out to be... There is an opportunity to... some of the ablest of dairy... Don't allow the other fellow to get

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Duplex ra... a good showin... year being les... rape. In econ... able showing v... cover a period... of gain.

Sweet clov... pastures, and... has been show... unlikely to co... succeed. The... third that of d... a self-feeder, a... per cent. of t... ing on rape pa... When a th... nction with... required for o... same class of... junction with... required for o... per cent. ratio... 4.41 pounds, w... required 6.16... made.

The cost of... out pasture is... shown for the... on pasture, b... the non-pastu... up to the sam... This group av... self-feeder dry... ration group a... group on the s... pounds live w... which showed... cost. The gro... the test as to... same as when... This season... is shown as 1... feed, from 1... pasture showed... with the grain... pork and s... the same order... that the fe... hand feeding... the present ca...

Swine Feeding Experiments at Lacombe.

BY G. H. HUTTON.

Swine feeding experiments carried on at Lacombe Experimental Farm, Alberta, in 1917, were intended to cover the questions which are being insistently put forward as to the actual value of pasture as compared with the dry-feed lot and the relative value of different pastures for hogs. Similar work had been under way during previous seasons, but not on so large a scale as in 1917, when from five to over seventy animals were used in single phases of the work. Figures as to costs of grain under different systems of feeding have been secured from ear lot groups. It is felt that since the results represent average farm conditions as to numbers of hogs included, they form a basis upon which the practical feeder may safely construct his plans and direct his feeding operations. The work in 1917 provided for the more definite determination of the acre-carrying capacity of the various pastures under test by holding in reserve a group of hogs from which drafts could be made or to which withdrawals could be sent, depending upon whether any group of hogs were not holding down their pastures to proper proportions or on the other hand were pasturing their area too closely.

Three groups of hogs were fed inside the same grain ration as those on the various pastures, and the comparison of cost of gains in these grounds with those on pasture is striking.

The following were the pastures used in the 1917 pasture experiments: Alfalfa, dwarf Essex rape, duplex rape, thousand-headed kale and sweet clover. Comparisons were made between the cost of making a pound of pork gain on the self-feeder on rape pasture as against feeding a three per cent. grain ration by hand on rape pasture, and both the self-feeder and the three per cent. ration fed in the dry feed lot.

The acre-carrying capacity of alfalfa was low this last season, due in part, at least, to the fact that the early part of the season was very wet. The land on which this pasture was located was not sufficiently well-drained to ensure good development of alfalfa during a wet period. As to earliness, alfalfa has the advantage over any of the other pastures tested, and because of this fact, should command a place on every farm where it can be grown. It will be found ready for the young pigs when they most need the variety pasture supplies, and weeks earlier than rape, which we consider the best late pasture crop for hogs. These two pastures, alfalfa and dwarf Essex rape, make a good team for the feeder to drive together in his endeavor to cut down the grain cost of pork production. The legume is available early, while the rape pasture supplies the needful in variety for a period much later in the season than anything else so far tested. Together they stand to complete the fall pasture season, while divided they fail to meet the requirements of the hogs for the full growing period.

Duplex rape and thousand-headed kale both made a good showing for a short period only, their season last year being less than half as long as that of dwarf Essex rape. In economy of gain these pastures made a favorable showing while they lasted, but the gains did not cover a period long enough to represent relative economy of gain.

Sweet clover failed to hold its own with the other pastures, and since this is the second year such failure has been shown, it is fair to assume that this legume is unlikely to compare with alfalfa where the latter will succeed. The carrying capacity per acre is about one-third that of dwarf Essex rape when grain was fed through a self-feeder, and the grain saved per acre about twenty per cent. of that effected by the same method of feeding on rape pasture.

When a three per cent. grain ration was fed in connection with rape pasture, 4.72 pounds of grain were required for one pound of pork gain made. When the same class of grain was fed through a self-feeder in conjunction with rape pasture 4.34 pounds of grain were required for one pound of pork gain made. The three per cent. ration without pasture showed a grain cost of 4.41 pounds, while the self-feeder group, without pasture, required 6.16 pounds of grain for every pound of gain made.

The cost of gain under the three per cent. ration without pasture is not materially greater than the costs shown for the groups receiving a three per cent. ration on pasture, but the hogs were lighter at the finish on the non-pasture group, and the cost of finishing them up to the same weight would widen the spread slightly. This group averaged 103.5 pounds at the close; the self-feeder dry lot 112 pounds; the three per cent. grain ration group on rape pasture, 118 pounds; while the group on the self-feeder and rape pasture averaged 199 pounds live weight. It will be noticed that this group which showed the greatest gain made it at the lowest cost. The groups were all divided in the beginning of the test as to litters, and were therefore practically the same age when these weights were taken.

The season on the self-feeder pasture system of feeder is showing being most economical. It has saved feed, labor and interest on investment. Rape pasture saved 2.153 pounds grain per acre as compared with the cost of producing the same amount of pork on the pasture, both groups being fed grain through the self-feeder. It is important to compare the per hog gain under the two systems of feeding. It would appear that the labor cost of feeding under the self-feeder system is less than one-half the labor cost of hand-feeding. Expressing the idea in another way, the production capacity for handling hogs under the self-

feeder system is one hundred per cent. greater than under the hand-feeding plan.

As to the method of seeding alfalfa and rape pastures, we advise sowing in drills (about twenty-one inches apart), for the reason that the hogs pass between the rows and the plants are less injured by trampling than when sown broadcast, and appear to grow with greater vigor. In order to meet the increasing consuming power of the hogs with age, the area under rape should be from two-thirds to three-quarters greater than that under alfalfa. Since the return per acre on the basis of grain saved from the area allotted to hog pasture is a liberal one it will be better to err on the side of having too large rather than too small an area of land for this purpose. I believe that an acre of rich land will produce sufficient pasture of the varieties now under con-

An Efficient Garbage Disposal Piggery.

At this time considerable effort is being made to conserve our food supplies and Canadian cities are beginning to manifest considerable interest in the economical disposal of garbage. With this in mind, it seems opportune to present a few facts concerning the municipal garbage disposal piggery operated by the city of Worcester, in the State of Massachusetts. This information has been given to the public by Frederic Bonnet, Jr., Professor of Chemistry and Sanitation, Worcester Polytechnic Institute, Worcester, Mass. Garbage, of course, is not so valuable as it was previous to 1914, when Canadian urban dwellers practiced com-



A Group of Yearling Romney Marsh Rams on a Farm in England.

sideration to carry an average of four thousand pounds live weight of hogs for the pasture season, provided they are being grain-fed through the self-feeder. This season the rape pasture (self-feeder) acre carried hogs at the rate of 9,254 pounds to the acre, for a period of one hundred and forty-six days. The land was very rich. Though alfalfa carried much less weight to the acre, we feel that the estimate above given is a safe one under the conditions set forth.

In showing a remarkable grain saving, pastures have this year only duplicated the results of previous seasons. If all the hogs being grown in Alberta were fed grain through the self-feeder, given access to alfalfa pasture in early summer, and rape pasture for late summer and fall, a total saving of tremendous volume would be effected in the grain required for the same production of pork now turned out; the hogs would go to market carrying a greatly reduced investment in labor and interest and would find their ultimate destination in two months less time than those now handled under the old system.

In order to make a broad comparison between different breeds as to the cost of producing pork, a large number of Yorkshire, Berkshire and Duroc-Jersey sows, due to farrow in the spring of 1917, were purchased from many different breeders. By such purchase the majority of the different strains of the different breeds as far as represented in Western Canada were included in the experiment. Two hundred and forty hogs was the maximum number in this test at one time.

The pigs were weaned at the same age, given the same class of pasture, and fed the same kinds of grain in the same proportions through the self-feeder. The test was begun on May 7, 1917, and concluded on January 17, 1918, when the tardy growers of the different breeds were finally weighed out.

This is the second of a series of three tests which were outlined over a year ago with the object of securing in quite a large way data as to the difference in cost, if any, of producing pork with these three breeds. A full summary of the results will not be available until the third test is completed. It might be said that the average number of pounds of grain required to make a pound of pork gain with the three breeds in this particular test was 4.99.

In view of the urgent need for increased production in 1918, let the figures showing pounds of grain required for one pound of gain receive the earnest attention of the feeder, for even at the present high prices of grain they point to the fact that a fair percentage of profit may be realized from this business, that the pig patriotic may be also be the pig profitable.

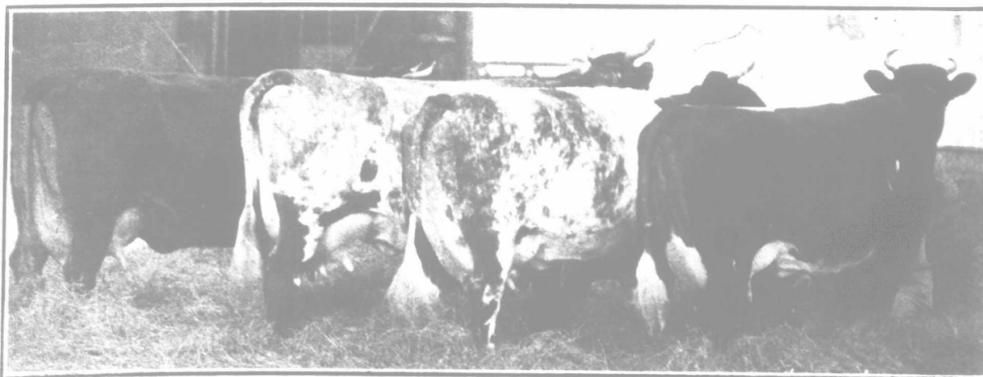
paratively little thrift in the management of their households.

Worcester is one of the old and well-established cities of New England, with a population of about 175,000. It is an industrial city with diversified industries, but with no unusual characteristics. Its foreign population, according to the census of 1910, amounted to only 33.5 per cent. In 1872, when the population was 44,000, the Superintendent of the Municipal Poor Farm, began sending a wagon into the city now and then to collect enough garbage to feed the pigs. The work developed with the growth of the city until in 1917 about 70 per cent. of the garbage of Worcester (20 to 30 tons per day) was taken to the Home Farm and fed to 2,000 to 3,000 pigs. The Home Farm proper consists of 376 acres owned by the city, which leases an additional 220 acres at a rental of \$1,500 per year. The city is divided into 21 districts from which the garbage is collected twice a week without charge to the householders or business men. There is also a special collection for the fish offal and rotten eggs from markets and commission houses, which collection is made daily in special cans with tight-fitting covers. These cans are provided by the dealers. Since this material is not fed to swine, but is buried, no revenue is derived from it, and it is a direct tax on the scavenger department of \$1,760 per year. The teams leave the Home Farm at seven a.m., and have on an average a 13-mile haul daily (maximum 18, and minimum 10). It requires from two to four hours to make a load. Owing to the fact that Worcester has practically no alleys, the average time per house collection is 1.65 minutes (maximum 3.9; minimum 0.4).

The rules of the Board of Health require the individual householder to provide a suitable water-tight covered receptacle to keep garbage and swill until the same is removed by the city scavengers. No person is allowed to deposit in the garbage any tin cans, water, ashes, glass, sweepings, oyster or clam shells, sawdust, cork dust, old boots or shoes, dead animals, etc.

Garbage Feeding Economical and Sanitary.

With the growth of the city and the development of the garbage feeding plant, complaints began to arise as to the economical and sanitary aspect of the scheme. A committee was appointed in 1914 to investigate conditions, and the chairman reported thus: "That disposal by feeding is the most economical method; that the greatest intrinsic value of the garbage, the feeding value, is made use of; that the garbage of Worcester cannot only be disposed of without cost, but that the revenue from the sale of hogs has almost been sufficient to pay for collection." The sanitary experts reported



A Group of Milking Shorthorns at Flintstone Farm, Dalton, Mass.

quite as favorably, and Dr. Edward Cahill, of the Massachusetts Bureau of Animal Industry, made the statement that 95 per cent. of all the hogs of Massachusetts are garbage-fed. Of 2,276 hogs sold by the Worcester pig farm to a local packing house, only 11 were condemned by the United States Government meat inspectors. This speaks very highly of the health maintained in the swine herds.

Operation of the Garbage Piggeries.

The garbage as it comes from the farm is neither washed nor steamed. Washing is considered uneconomical because so much valuable food material is washed away and wasted. It is declared to be unnecessary since no material advantage is gained thereby. Cooking or steaming the garbage has been found by experience to be bad, since the garbage is thereby made more acid than it ordinarily is and substances are incorporated in the food which are harmful to the hogs and which would not be eaten in the raw garbage. A hog is more capable of picking over and culling garbage than any man or machine can be.

Inoculation Against Cholera.

The double treatment for swine cholera is practiced in the State of Massachusetts under rigid Government supervision. This makes it possible to inoculate the hogs on the garbage-feeding farm and immunize them against hog cholera. Restrictions are placed on the double treatment in Canada, but the single or serum alone treatment may be used on garbage-feeding plants. It is furthermore required that the garbage be cooked. Speaking at the last Swine Breeders' Association meeting, in Toronto, Dr. F. Torrance, Veterinary Director General for Canada, expressed the opinion that the serum alone treatment combined with the cooking of garbage would protect the herds. At Worcester, the hogs are fed until they are frequently over a year old. It might be considered impracticable to use the single treatment on such hogs, as it only renders them immune for a period of six weeks to two months. It is not a Canadian practice to feed hogs up to the age stated, but if it were found to be economical and desirable some suitable arrangement might be made with the Health of Animals Branch, whereby the hogs could be protected against hog cholera.

Out-of-Door Feeding Platforms.

The pigs are fed in pens until about six months of age, during which time they consume garbage. They are then turned into hog lots (100 pigs to about three acres), with out-of-door feeding platforms made in 8-by-8-foot sections of 2-inch plank. These are mounted on skids and have a half-round timber on two sides to prevent the garbage being pushed off. The cost per section was \$7 with farm labor. Several sections are placed end to end, and when the ground around the platform becomes fouled the sections are skidded to another location and the ground of the former location plowed up. By this means the garbage trampled into the ground is kept from decaying and producing foul odors. The platforms are shoveled clean daily, and the material removed is composted or buried. The hogs are kept for about fifteen months, when they are sold. They then weigh 250 to 300 pounds. A herd of sows and boars are kept to provide feeding stock, and farrowing is controlled so there may be a sufficient number of pens. During farrowing and sometimes during inoculation a little grain and middlings are fed. Boars are rarely kept more than two years, and only prolific sows that are good mothers are kept for repeated breeding.

Cost and Revenue.

Space will not permit of a detailed description of buildings and equipment, but suffice it to say that the average net cost of disposal per year for nineteen years was \$10,169, or \$0.074 per capita. The total cost of collection and disposal per year now totals \$60,435. About 1,500 swine are sold each year, and at the price of pork in 1917 realized a total of \$60,000. In the years 1902 and 1910 a clear profit was shown over and above the cost of collection. In 1902 the total expenditures were \$18,765.03; the total receipts were \$18,766.99. In 1910 the total expenditures amounted to \$37,039.68, and the total receipts were \$43,224.25. The estimated cost of building and stocking a 20 to 30-ton garbage piggery is set at \$81,700.

There are about 2,000 swine on the Worcester farm during the winter months, but in summer this number is increased to 3,500. About 100 to 150 pigs, depending upon the size, will take care of one ton of garbage per day. One caretaker can care for about 250 to 300 pigs a day—feed them, bed and clean out the pens. About five cords of cleanings are produced daily (1,500 to 1,600 cords per year) and have a value of about \$4 per cord as fertilizer at the farm. The Home Farm has never bought fertilizer in any material quantity for its farm land, or truck garden, and the scavenger department has never been credited with the value of the pig manure from the piggery.

We have endeavored to set down briefly the system followed on a successful garbage-feeding hog farm. Such plants are common in the United States. There is a possibility that the close to conserve feed and produce more food may lead cities and private individuals in Canada to consider garbage feeding. Before attempting any such plan, the promoters of such a scheme should become thoroughly acquainted with the details of the work and place the responsibilities connected with the operation of same in the hands of a competent and trained man.

Don't allow the flock of sheep to run in yards or old orchards where burrs are standing or where other weeds will get into and injure the fleece.

A Good Live Stock Show at Brandon.

Once more the Manitoba Winter Fair at Brandon was a substantial success. The visitors to the event were impressed by the high quality of the Clydesdales and Percherons, by the outstanding quality of the fat cattle, and by the success of the bull sale. The last-mentioned feature unmistakably marks the progress of the pure-bred cattle industry of Manitoba and the West generally. The quality of the bulls was good, and buyers were on hand to bid on the best animals. In all 189 bulls were sold, bringing \$48,060, or an average of \$254. The 154 Shorthorns brought an average of \$238.35; 18 Aberdeen-Angus brought an average of \$337, and 6 Herefords averaged \$281.68. The Shorthorn females, 8 in number, averaged \$321.25, and 2 Hereford females averaged \$402. The feature of the sale was the price paid for Rosewood 2nd, a Nonpareil year-old Shorthorn bull, bred and contributed by J. B. Davidson, Myrtle, Man. This bull sold for \$2,200 to C. McMillan, Oak Bluff.

The fat classes for cattle were well filled, and the entries were brought out in good fit. The grand champion bullock of the show was calved in 1916 and bred by J. D. McGregor, Brandon, Man. The name of this animal was Glencarnock Victor 3rd, following in order the two animals previously bred at Glencarnock and champions at Chicago.

The Clydesdale exhibit was of very high order. The classes were exceptionally large, the horses were unusually well fitted, and the winners had to be exceptionally good. In the aged-stallion class, no fewer than 23 horses lined up, and the judge, Dean Rutherford, of Saskatoon, encountered some heavy work in placing the awards. The winning horse was Edward Garnet, a big, stylish animal, shown by Ben Finlayson, Olds, Alta. In the three-year-old class, Thomas Halpenny, Regina, won with Baron Wallace of Hillcrest. There were over twenty in the two-year-old class, and here R. H. Taber, Condie, Sask., won the first-prize ribbon with Duke of Hillcrest, a quality horse by The Bruce. The yearlings also constituted a strong class; here Taber also stood first with Prince of Hillcrest, which entry later carried off the male championship of the show. The female classes were well filled, and some beautiful mares paraded before the judge. In the four-year-old and over class, Flashend Princess, shown by G. C. Porterfield, Brandon, stood first. Doon Lodge Manita, owned by Mrs. W. H. Bryce, Arcola, won the Canadian-bred championship for females.

The Percheron exhibit was not as large as has been seen in other Western show-rings, but the quality of the horses was uniformly high. The outstanding representative of the breed was George P., shown by Dr. Read, Regina. He was a very showy horse and hard to fault. He won the aged class and the championship for the breed.

THE FARM.

Comments on Correspondence.

EDITOR, "THE FARMER'S ADVOCATE":

I have been a reader of your valuable paper for a number of years, and I have read many farmers' letters with pleasure, and a few, I must say, with disgust. It seems as though men in almost every walk of life have something to throw at the poor old farmer, in this time of stress and strife. The common by-word is "The farmers are getting rich." I think a great deal of this kind of talk is the farmer's own fault. Farmers are just like a lot of hens, if they lay an egg they have to cackle to let everybody know it. If a farmer happens to hit luck and make a few dollars, he has to advertise it, but he never advertises his mistakes or failures.

Now, just think what our city cousins and our ex-Food Controller, and a lot of our Government officials, who have never raised a hog and probably wouldn't know a hog from a load of hay, would think if they happened to read that letter in the February 28 issue, by J. P. Cole, where he says he made \$79.90 profit on four pigs not five months old. Can you blame the city folks for calling-us profiteers? I will just run over Mr. Cole's figures for fun for myself. He just gives account of 2,000 pounds of feed. If I am not mistaken, Government experiments have shown that it requires from 5 to 6 pounds of grain to make a pound of pork; 2,000 pounds divided by 5 gives us 418 pounds of pork. His four hogs weighed 720 pounds, so when we subtract 418 pounds we have 302 pounds of pork unaccounted for. That at \$18 per cwt. would be \$54.36, leaving his profit at \$25.54, which I would consider a very good profit. Maybe Mr. Cole keeps his brood sow and young pigs on hot air, but I find that it costs me more to make the first 100 pounds of a hog than it does the second 100 pounds.

We are making good money this winter feeding hogs, because we happened to be lucky enough last fall to have a lot of soft corn, but for the man buying all his feed, I think he has to be a good feeder if he breaks even. Yes, and here is a little more of the sunny side of the hog business: We must not forget that hogs, like human beings, will sometimes die in their young days, and again a man may get a nice bunch of hogs almost ready for the market when along comes hog cholera and away go his hogs into a hole in the ground, profit and all. We never had the cholera in our herd, but we will have to make a lot more profit yet this year to even up what we lost in the year 1916.

I have been looking over the hog and grain markets for the past fifteen years and comparing them, and I have come to the conclusion that the man who is raising hogs is about where he always was—just a little

profit if he figures right. But I don't think any of us will make that 11 per cent. on our investment, like the privileged packers are allowed. By the way, I see by to-day's paper that the Government is talking of laying aside a little, and, in case the packers have to sell on a declining market and lose money, it will be paid back to them. Now, would not this be a good way to increase the production of pork,—just let the Government lay aside a few millions to pay the farmer all he loses by holding his hogs till they are finished, even if the price does drop a couple of dollars a hundred, because we all know that there are thousands of hogs sold every year half-fat, for we know not when the price will drop?

I don't want you to think that I am an old grouch, because I am not. I am a young man who came in the first class of the M. S. A., but I am exempt on account of physical unfitness. I have been on a farm all my life and like the work, and I know that there is a good living, and a little to lay aside, on the old farm for the fellow who is willing to work hands, feet and head from five o'clock in the morning until eight o'clock at night. I don't think that many farmers will ever get rich.

Essex Co., Ont.

J. A. HEATHERINGTON.

Better Plowing Essential.

EDITOR "THE FARMER'S ADVOCATE":

To-day, more than ever before, the writer, as well as many others who held the plow fifty years ago, can testify to the truth that we grew more grain per acre on the run-down clay farms than we have in the past three years, even with all the tile draining and artificial fertilizers that are being expended on the farms. The writer, being a close observer and having farmed on various kinds of soils, firmly believes that at least two-thirds of the failures on low-muck and sandy lands and clay farms especially can be traced to the wide, flat lands leaving no drainage. We well remember seeing all the fields plowed in about six-pace lands, and after the crop was put in many of the furrows were run through with a plow and the cross furrows cleaned out nicely. This gave drainage and warmth to the soil and a complete failure, as we have known them too frequently the last few years, was unknown. The cause of this mode of plowing is no secret. It can be traced to the riding plows and other riding machinery, and the fear of the present young generation of a few bumps. I would like a little space to show the new beginner how to produce the greater production we read so much about, and give the thinker something to think over. In some of the particulars some may not agree with me, such as a clean cut, wide bottom plow, with a coulter, wheel and skimmer that will turn a miniature furrow of 1½ inches deep by 2½ inches wide, and a good stiff team that will turn a full furrow on striking out the lands. These first two furrows should be turned flat over so their edges just meet firmly together, but not one piled on top of the other to be dragged over the surface when cultivation begins. Strike out your lands six or seven paces wide and back furrow each land off by "geeing" about until the proper width. You will not plow two lands before you will see what a nice slope you have from the centre of the land to the ditch. If the furrows are turned over flat, rolling is of very little use and lost time, and the disk should be run lengthwise a couple of times, taking care not to get too deep so as to tear up the sods or weeds on top to start before your crop gets up and crowd it out. The disk when properly used is a good pulverizer, but otherwise it throws the land into knolls and holes for water to stand in. It should always be lapped half way to avoid the above unevenness. If the land is stubble or corn ground, there has been nothing better invented to pack and level it with than the good old drag harrow, and if it only could be made to ride easily it would not be so little used. By the time a field is dragged four times over there is scarcely a foot of land in that field that the horses have not stepped on. Work the lands mostly lengthwise and don't try to fill the furrows up, but work the edges down, and when you get a good crop when your neighbor has none you won't mind the reaper bumping a little.

In conclusion I want to put in this already too lengthy letter a few don'ts. Don't get your seeds too deep down in the cold, wet ground. Don't roll after planting, unless you give it a harrowing after. Don't plant corn, beans, or potatoes, deep in a hole, but on top, and cover with earth; try this if you want these to grow this year and you surely do as seeds never were higher in price. Don't sow timothy or clovers in front or behind the drill without rolling or dragging first. Try this with one-third less seed. Give a light dragging after as those spindly little plants cannot shove their way through two inches of heavy soil, and half of the seed after or before a drill goes three inches deep. Don't think you are gaining time by plowing wide lands, as you are not. One gains one round across the field every time a land is struck out. I want to tell you how a neighbor of mine made a complete failure growing factory peas last year. He had the sod field plowed without a skimmer so the grass and weeds showed in the edge of every furrow, and plowed in as wide lands as possible. He crossed and cornerwise disked so deeply that the field was all covered with bits of sod. He rolled and dragged it and drilled them in at least four inches deep, then rolled the sods in to grow and the peas so solid they could not get through the ground, and as peas cost the company from \$12 to \$15 to seed an acre, it is a serious thing to make such mistakes.

Elgin Co., Ont.

G. H. C.

Note.—It is hardly likely that the farms which our correspondent speaks of farming fifty years ago were as badly run-down as far as fertility is concerned as they are now after a half century of cropping. The land would be new then.—EDITOR.

Human

EDITOR "THE FARMER'S ADVOCATE":

In December on the stump in ment. Not as a three years ago would vote as I

I knew, and every day, that political pariah but had never g or party issues, strong enough, the Conservativ me for my suppo

During the Gordon, (Ralph vince on Canada in a nearby town of our men in F enemy, the app especially of Br the great need o boys at the fro service for over ing party and a important one c roused within m I offered my se Union candidat sides of politics v

At first it w old party friends Then I began to teaching of year arguments, but healers. At the had a splendid men and women favor of conscrip surprised also tha in the franchise and well defined justice and mor than the men of of female suffrag fostered a politic was making Cana ing and becomi women were giv be for political p

In this camp with them when and encouragement at the front, an issue in the pres tension of the fr wisest laws that Ottawa could pa the privileg mu as they will b erment parasit prejudiced on ge talk with, and become, the ma as strong partiza to or read only probably never g to politics as the value will come reform, political ment of existi in connection wit all cases depend least as far as the

But the men I less. With the was that they that was enough felt that the Unio under a non-de the Union Gove the honest-mind party only could conscription and butchered in Fran Getting down men were partiz political machine thoroughly built would almost say unswerving devo life, some positio which will ensur a chance to make of voter who is re ness of governm after year by the tive or political fr some more or less and enables the r as so much certa is the biggest cur clean government male of influenc heeler, he acts for ignorant, shiftless at the time of an el

A second class and his surname, changing the first generally unreso does not stand c

Human Nature and Politics.

EDITOR "THE FARMER'S ADVOCATE":

In December last for the first time in my life I went on the stump in my county in support of Union Government. Not as a party man, mind you. I gave up party three years ago and vowed to myself that in future I would vote as I pleased or thought best or not at all.

I knew, and my knowledge of the fact is increased every day, that such a course would brand me as a political pariah or outcast. I had always voted Liberal but had never given much thought or time to elections or party issues. However, I was always considered a strong enough Liberal to make the candidates for the Conservatives believe it not worth while to ask me for my support.

During the autumn and early winter, Major C. W. Gordon, (Ralph Connor) lectured throughout the province on Canada's position in the war, and I heard him in a nearby town. His graphic portrayal of the heroism of our men in France, the powerful organization of the enemy, the apparent sloth and inefficiency of the Allies, especially of Britain and English speaking countries, the great need of men to help and take the place of our boys at the front, many of whom had been in active service for over three years, and the need of subordinating party and any other mean consideration to the all important one of doing all we could to win the war, roused within me my first real feelings of patriotism, and I offered my services in the election campaign to the Union candidate, knowing that my friends on both sides of politics would repudiate me as a job seeker.

At first it was rather amusing to be treated by my old party friends on both sides as if I had the small pox. Then I began to pity those who were so blinded by the teaching of years that they would close their ears to all arguments, but those of their own party papers and hee-lers. At the different places we held meetings I had a splendid chance to study human nature in the men and women I met. The women were, as a rule, in favor of conscription and a Union Government. I was surprised also that although it was their first experience in the franchise their ideas were comparatively clear and well defined, and they seemed to have less of prejudice and more of a fair-minded desire to vote right than the men of either side. I had always been in favor of female suffrage for I felt that the masculine vote had fostered a political system of graft and corruption that was making Canada a disgrace, and the slime was spreading and becoming thicker every year, and I hoped if women were given the franchise their influence would be for political purity, at least.

In this campaign I met many women voters, talked with them when their hearts were yearning for sympathy and encouragement to bear the absence of loved ones at the front, and for knowledge of the questions at issue in the present crisis, and I still feel that the extension of the franchise to women will be one of the wisest laws that the statesmen, not the politicians, at Ottawa could pass—They will, if allowed to vote, use the privilege much the same as the men, inasmuch as they will be influenced by friends and government parasites. They will hear, read and be prejudiced on general questions by the people they talk with, and the papers they read. They will become, the majority of them, almost if not quite as strong partisans as the male voters and will listen to or read only one party's arguments. They will probably never give as much feeling, thought and time to politics as the men but—and here is where their real value will come in. If any question concerning moral reform, political trickery, national progress, or betterment of existing conditions comes up as a plebiscite or in connection with an election, I think we can in almost all cases depend on the women voting for the right, at least as far as they can see the right.

But the men I met in this campaign! They were hopeless. With the greater number the predominant feeling was that they belonged to the "Grand Old Party", and that was enough said, if they were Tories they piously felt that the Union Government was their party working under a non-de-plume and that all who worked for the Union Government had turned Tories. While the honest-minded Liberals maintained that the Liberal party only could save the country from the disgrace of conscription and save our precious boys from being butchered in France.

Getting down to an analysis of feeling, I found that men were partisans for three principal reasons. The political machine of both parties has been built and thoroughly built on the hopes and aspirations of, I would almost say, the majority of voters who hope by unswerving devotion to party to gain, at some time in life, some position or emolument under the Government which will ensure them a life of greater ease and honor; a chance to make a little more money. This is the class of voter who is responsible for all the graft and wickedness of governments the world over. Held off year after year by the indefinite promises of his representative or political friends in power or given possession of some more or less soft job, he sticks slavishly to party and enables the machine to manipulate blocks of him as so much certain filling material in an election. He is the biggest curse to be found in the state, as far as clean government goes. This monster is too often a male of influence in his county or community; a party heeler, he acts for the machine in herding together the ignorant, shiftless and unthinking and don't-care voters at the time of an election.

A second class takes his party politics like his religion and his surname, from his father and thinks as much of changing the first as either of the others. He is also generally unreasoning, ignorant and prejudiced. He does not stand out distinctly, but shades into and

partakes of the feelings of each of the other two classes and is probably as hopeless as far as any real support to his country goes—No matter how flagrantly corrupt his party has been he will not believe anything against them, he also is a "sure count" with the political heeler.

A third partizan is the one who is afraid to change. He fears the turning out in the cold by his own machine and non-acceptance by the opposite group. Being prepared for it I was amused to notice how quickly the cordiality of the Tories toward me cooled after the Union Government came into power and my usefulness and the campaign ended. How much more self-respect would be engendered in a number of our voters and how much purer governments we would have if voters would only realize that their representatives and political friends considered them as so much fuel useful principally at election seasons to keep the party machine in action, and how faithful they are to this machine even against their own interests.

In my presidential address before the farmers of Nova Scotia last year, I spoke of the contemptible action of both parties in the local house in allowing legislation asked for by the farmers to pass the house of assembly with the understanding that it would fail to pass the local Senate, thus hoodwinking the farmer into believing that his representatives were doing all they could for him. In spite of the fact that the representatives had thus made a laughing stock of the farmers there were a number of farmers of both parties in my audience who were indignant at my arraignment of the political tricksters who had fooled them. In regard to this last class, or, in fact, all classes of partizan voters, I would like to live to see the day when a man or woman voter will be as much ashamed of having to confess that they are, and always have been followers of one particular party as they are ashamed to-day of being called turn-coats.

These classes of partisans cannot believe that a man could change his vote from pure and disinterested motives. In the campaign in December last I found comparatively few who took me at my face value and believed that I was working from patriotic purposes. The Tories thought I had turned Tory permanently. A few Liberals considered me a weak Liberal who had been influenced by the enemy's false appeal to patriotism. A large number of both parties were sure I was after a Government job, and a few insinuated that I was getting paid straight for speaking as a former Liberal in favor of Union Government.

In any case I would not have missed the experience for a good deal. I learned a lot more about human nature and had my ideas about the political system confirmed and strengthened.

N. S.

R. J. MESSENGER.

Favors Four-foot Sleighs.

EDITOR "THE FARMER'S ADVOCATE":

Having noticed your articles re wide sleighs, I thought I would tell you the opinion of the people in this district. The general opinion of the farmers is that sleighs should be four feet, centre to centre of the runners on the ground. Many farmers have already got their sleighs made that width. This being a lumbering district and having used sleighs of both four and five feet, teamsters all say for an all-around sleigh four feet is by far the best width of all. A sleigh being much lower down than a wagon and the load placed directly on top of the runners instead of in between the wheels as on a wagon, I do not think it necessary to have sleighs made four feet eight inches as a wagon is.

Muskoka District, Ont.

R. V. KNIGHT.

Prevent White Grub Injury.

Crop Protection Leaflet No. 5, by C. Gordon Hewitt, Dominion Entomologist, has recently been issued by the Dominion Department of Agriculture and deals with white grubs.

White Grubs, which are the larvæ of the well-known May Beetles, or June bugs, will, it is expected, cause serious injuries in the Province of Ontario, and possibly in other sections of Eastern Canada in 1918. The statement is based on our knowledge of the life-histories of these insects. The grubs feed naturally on the roots of grasses, so when sod land is ploughed up they are deprived of their usual food and readily attack such crops as corn, potatoes, strawberries, etc., if grown on the land. The injurious species require three years to complete their life-cycles; in other words, a period of three years elapses from the time the eggs are laid until the grubs which hatch from the same are mature, transform to the pupal state and appear as beetles. In 1917, the beetles were very abundant in certain districts in Eastern Canada, and eggs were deposited freely. The grubs hatching from these eggs did not develop much during the past year, but in 1918 they will grow more quickly and, being more voracious, will undoubtedly cause serious injury to the roots, etc., of various kinds of field crops. They will continue to feed throughout the growing season, and in the autumn of 1918 go deeper into the soil to pass the winter. In the spring of 1919 they will again come near to the surface, feed for a short period and then rest for a time preparatory to changing to the pupal state. It will be seen, therefore, that the second year in the life of the grub is the destructive one.

Methods to Prevent Serious Injury.

CROPS FOR INFESTED LAND.—The female beetles lay their eggs in sod land, and also land bearing such crops as timothy and the small grains. Suitable land nearest to groves or woods is favored by the beetles, which feed upon the foliage of the trees and then visit such nearby fields to lay their eggs. In districts where the beetles were abundant in 1917, it is to be expected that such land is now more or less infested with the grubs, and it would, therefore, be unsafe in 1918 to plant on newly broken sod land, or on land grown to the above crops in 1917, any crop which would be attractive to the grubs. Crops particularly favored by white grubs are potatoes, corn and strawberries. In addition to these, other crops which are grown in wide rows, and timothy, are liable to injury. The safest crops to grow on land which is suspected of harboring grubs, are alfalfa, clover or buckwheat. If it is not desirable to use infested land for alfalfa, clover, or buckwheat, the same may be again planted to timothy or small grain. Such crops as corn or potatoes should not be planted in 1918, on newly broken sod land in districts where the beetles were abundant in 1917. Corn or potatoes grown on land which grew the same crops in 1917, and which were kept cultivated and comparatively free of weeds during the flight of the beetles in May and June, 1917, will be reasonably safe from injury by white grubs in 1918.

CULTURAL AND OTHER METHODS.—Under garden conditions, grubs are often turned up when the land is being dug or ploughed. As many of these as is possible should be removed by hand and destroyed. Under acre conditions there are unfortunately no practical measures known to destroy the grubs when they are known to be present in the land, and destroying crops. Late summer ploughing which brings many grubs to the surface,



Two Necessities on the Up-to-date General Farm—Sheep and an Automobile.

crushing numbers of them and exposing others to weather conditions, is useful particularly in years when the grubs are changing to beetles.

Land known to be seriously infested and required for cropping in 1918 may be ploughed in late spring, thoroughly harrowed and planted to a late crop. Such late cultivation will attract to the fields, crows, black-birds, and other birds, which are known to feed readily upon these grubs, particularly during their nesting period. Domestic fowls, such as chickens and turkeys, are also fond of white grubs and should be allowed the run of infested fields when these are being ploughed.

Limited areas may be practically freed of white grubs by turning in hogs, either in spring after the first of May, by which time the grubs will have come near to the surface, or in late summer when the crop has been removed. These animals are very fond of white grubs, and will root them out and devour them. An intestinal worm of hogs, called the giant thorn-headed worm, is known to pass one stage of its life-history within white grubs. The worm is introduced into the hog when the latter devours the white grub. There is little danger of this happening, of course, if the hogs are allowed the run of fields in which no such animals had been pastured within three years, as any worm infested grub in the land during such period will have matured and disappeared.

Representation.

EDITOR "THE FARMER'S ADVOCATE":

I notice in your issue of February 28th a letter from Mr. Pierce in reference to the adoption of a better method of representation, and the use of the referendum. Permit me to endorse all he says with one exception: It would not do to give an elector three equal votes in a constituency electing three members. What is necessary in order to secure minority representation is the giving of a single transferable vote to each elector in a constituency in which several members are to be elected. Under our present system of single member districts it is absolutely impossible to secure proportional representation; so that the first step in reforming our present system is the grouping of our small districts into larger ones and the election therein of several members.

Some time I may trespass upon your space to show what kind of representation we do actually get under our present system. Now, however, I venture only to point out the fundamental error in our present methods. We have divided our electors into various portions and have given each portion the privilege of electing a representative. But each portion so happens to be composed of those who live together in the same district, not of those who think together. Hence we cannot get any correct representation of opinion. H. G. Wells says of Proportional Representation that it is "not the substitution of something for something else of the same nature; it is the substitution of right for wrong." And in the same connection Prof. H. A. Overstreet says: "Think of what our 'official' brain centers are now. Districts and precincts! Square miles of space inhabited by heterogeneous crowds of beings having nothing deeply and continuously in common! It is preposterous. The true social brain center is the group that functions in common, that has interests and knowledge in common. Until we tap such centers as these we shall remain as we are now, socially and politically brainless."

Brant Co., Ont.

W. C. GOOD.

Keep the Ball Rolling.

EDITOR "THE FARMER'S ADVOCATE":

Having seen in your issue of February 7th the suggestion of "Subscriber" with reference to "Wider Sleights", I can say he has given expression to my ideas on this subject, as did the article in your February 28th issue on the same topic. I think this is a subject that should be discussed by farmers, to see if some means could be arrived at by which sleights would have to be wider. New sleights could be built wider without much expense, but to get the sleights we have rebuilt seems to

me to be the greatest difficulty. Yet if a law were passed requiring all sleights on the roads to be the same width as wagons, and manufacturers were not allowed to make undue profits on hub runners (because we would have to buy them), I think the change could be made.

Let us keep the ball rolling till we have wide sleights on our roads.

York Co., Ont.

SUBSCRIBER.

Germination Tests.

EDITOR "THE FARMER'S ADVOCATE":

Articles which urge the importance of sowing only seed whose vitality has been proved, are very gratifying reading to those whose work is in connection with the seed supply. A small addition could profitably be made to the instructions for testing seed, given in the article on the seed supply in your issue of February 7th. It is some years since the method of home testing by means of moistened blotters between plates was first recommended. Experience has shown that it is unsatisfactory, and that much good seed will be lost if grain is discarded owing to its failure under such a test. At the office of the Seed Branch considerable attention has been given to methods of home testing, and it has been found that even in the laboratory, where more attention is naturally given to the seed than would be possible in the majority of homes, the method gives very unsatisfactory and contradictory results owing to the difficulty of maintaining constantly the proper degree of moisture. After all the recommended methods had been tried out, it was found that the simplest, as well as the only satisfactory way is to plant the seeds in a small box or can of moist earth, which is kept in a warm place until the vital seeds have sprouted. This is especially true of Western oats which share with corn the distinction of being the most deceptive of common farm seeds. The superiority of the method is so evident that in the Seed Laboratory at Calgary oats are always tested so, rather than in the standard germinator, the blotters of which are kept moist automatically. It is important too, that whenever possible a sample of seed which is known to be good be sown at the same time as the sample to be tested. Then if the good sample fails to grow well, one may be sure that proper conditions have not been maintained. If the results of a test are not convincing or if facilities for testing are not at hand, any one may have his seeds tested free at the seed laboratory. The samples should be addressed to the Seed Commissioner, Dept. of Agriculture, Ottawa, and, if not exceeding twelve ounces in weight, are carried free by the mails.

H. B. SIFTON,

In Charge of Germination Laboratory.

No Carping Criticism.

EDITOR "THE FARMER'S ADVOCATE":

Enclosed please find postal note of \$1.50 as renewal of my subscription for 1918. We are well pleased with "The Farmer's Advocate." We have been taking it now for a number of years, and think it is improving each and every year. Life nowadays on the farm is so hurried and burdened with work that we have scarcely time to read any paper at all, but we always find time to read the "Advocate," even though we have to curtail our hours of sleep, and think that it is time well spent. It is no flattery to say that your editorials on the various questions affecting the farmer that frequently arise are excellent, calm, fair, appropriate, sensible, timely and to the point. The trouble with some of us too often is that we are inclined to indulge in carping criticism, and it sometimes does more harm than good, and gives us a bad name, for we often hear urban dwellers say that "the farmers will grumble anyway; that they are never satisfied, no matter how much they get for their produce they want more." We cannot deny that there is often some truth in this assertion, and although we get plenty of reason for grumbling it is better not to let it become a habit with us. The conditions that give cause for grumbling are often those of our own making. We grumble at the Government and its officials, and

then when election time comes around we listen to the race cry, religious cry, and every other old cry that is raised by the professional politician, and we vote to give the professional place and power in preference to the farmer who would best serve our interest. It is no wonder that leading men who spend their time and use their talents advocating the cause of the farmer, after a while become discouraged and quit. The representatives of the big interests are always on the alert and when they see a leading man advocating the farmer's cause, they first try to choke him off and if they don't succeed that way they then try coaxing him off, and invite him to a banquet or to speak at a club meeting usually held in the city of Toronto, where they wine him and dine him, and pet him and flatter his vanity, until he concludes a "separate peace," and what is worse, he often joins the enemy and hits back at the defenceless head of the poor unfortunate farmer. Now, this is all our own fault. If we don't stay loyally by our leaders and support them, especially in the hours of adversity, we need not expect them to lead us to the land of promise.

However, the future is looking brighter for the farming class. A few years of war and consequent scarcity of food has taught the urban dwellers and the powers that be that the farmer is at least a factor and of some importance. And the frantic efforts of our leaders to conserve food and fuel and to increase production have, in many cases, only clogged the wheels of progress. But it has taught the farmers that our leaders are not the oracles of wisdom we used to think they were, and we must do our own thinking now as well as our own physical work.

"Others' follies teach us not,
Nor much their wisdom teaches:
And most of sterling worth is what
Our own experience preaches."

Ontario Co., Ont.

JOSEPH FOX.

Gang Threshing Would be a Success.

EDITOR "THE FARMER'S ADVOCATE":

I have read your valuable paper for some time, but have never found any articles which have interested me more than those on "Gang Threshing." Where help is so scarce and the fall ploughing a very important matter, if not a vital one, it is practically impossible to get the ploughing done when there are so many threshings to attend and silos to be filled.

Regarding small outfits run by gasoline engines, I may say there are few men who understand gasoline engines and can repair or adjust them when they get out of order, besides they have to be kept dry or the ignition and batteries will not work. True, it would cost more at the time, but think of the great amount of extra time that would be saved in changing bands, etc. Besides there wouldn't be such early and late hours at both ends of the day that are caused by changing hands.

Personally, I might say, that on account of such a large number of threshings which I had to attend and being alone the greater part of last fall, resulted in my not getting half my fall ploughing done. Gangs cannot help but be a grand success and a great time-saver to the over-worked farmer these days. Could many of our prominent farmers not lay this before the Minister of Agriculture and the owners of threshing outfits, and next fall be ready to carry out this valuable scheme?

Northumberland Co., Ont. WARREN A. ATKINSON.

Record Prices For Seed Corn.

In the report of a farm sale recently held near Harrow, Ont., seed corn was said to have sold at from \$30 to \$50 per bushel. The variety was White Cap Yellow Dent, and the seed was guaranteed to germinate 98 per cent.

Canada's Young Farmers and Future Leaders.

What I Like About My Part of Canada.

EDITOR "THE FARMER'S ADVOCATE":

The backbone of true patriotism is love of home. It is characteristic of Canadians, that the part of this wonderful country in which we dwell, is to us the best part of Canada. Sad, indeed, is the lot of the man who does not like his own part of Canada, for contentment is the keynote to highest efficiency and true happiness. Happy is he who has found his work and lives in congenial surroundings. But I like to think of "our part," not alone in its geographical sense, but rather in its relation to our work, or our place in service to the nation. Perhaps the views of a young farmer may be of interest, in view of the increased attention paid agriculture of late. Formerly the farmer was regarded by most people as a very useful and necessary man, but probably he himself is chiefly to blame for the inferior position in which he was placed. Farmers generally were too indifferent, conservative and unorganized, to be a very dominant force in national affairs. True, they worked hard, and produced much wealth, but as a rule the railways, manufacturers and middlemen got

most of the benefit. However, owing to the world food scarcity the farmer to-day is taking his proper place, and here are a few reasons why farming is one of the best and greatest vocations of the present day.

Wherein lies the chief charm of farming? Is it the easy life, the money, or the pleasure? With chores every day of the year, including Sunday, with long, arduous days in seeding, harvest and threshing the farm offers no inducement to a lazy man. As to money, it is doubtful if the average farmer who pays his honest debts, supports church and other beneficial institutions, improves his home, lives and dresses comfortably, and takes time to enjoy life a little is saving very much hard cash. True, prices are high now, but taxes, machinery and other expenses eat huge holes in the farm receipts, and the city business man would be surprised at the small margin a farmer has to himself. As to pleasure, our urban cousins with their many companions, movies, concerts and theatres might find our country pleasures tame indeed. For sport in ordinary times we have football, hockey, tennis, boating, driving, skating, and snow-shoeing. "In times like these" we should be busy enough not to need very much of these exercises, however. Occasional concerts and entertainments of mostly

home talent help to make country life pleasant, and during the long winter evenings and rainy days, our hobbies, books and magazines, and piano become real friends to us. The city young people pay others to amuse them, we have to depend on our own resources, and I think in the end it is better to learn to be good company for oneself.

As a life-work farming is attractive to me for several reasons. First, it is a man's job every day. The manual labor involved demands fit bodies, and in return we get good health and appetites and sound sleep. Modern agriculture demands trained minds, and the most brainy men will find ample scope for their intellects. Again it demands trained hands, for a farmer has to be a carpenter and machinist and be proficient in many other trades in his work. Lastly, to be a true success a man must be of a high moral make-up, for farming more than any other vocation is a partnership between God and man. Even the most careless about religious matters must take his Partner into account in his work. Though he may say very little, may not even analyze his feelings, yet underlying all his work he must realize his dependence upon God for success. This gives one's successes a better flavor, for the farmer

can feel that none before. The animal he rears, the increase added to who exchanges so or wage, or the another's ingenuity increase, cannot who, in partnership from the raw material.

Again, farming. The farmer is, in his own farm is dependent on his fellow may keep what crops, and is not and time of doing independence, and wishes, when he li any superior for mixed blessing per in their own interest. This independent appearance of our standing character neighbors. For in



EDITOR "THE FARMER'S ADVOCATE":

Most farm equipment of machinery, the uses. However, on comparison to its pe labor, pulleys, belts, chusively for pumpi grindstone, separate venience is lost if th chine it has power t

To set up a horse spare time and less as the brand-new, ex fore it is desirable.

Below several sk rished. They are has proved to his more designs, but t ideas.

A shows how to c shaft bushings.

Board should be a

1. With compas desired.

2. Saw out with

3. Inside descri a good space from of rim.

4. Mark out two as shown in Fig. A.

5. Cut out inside

Cut out as above made to give pulley pr

when pulley is assem

lugs with grain one

gives extra strength.

B shows arms for

Select a board a li

face and of suitable t

1. Cut long en

enough to move in an

2. Bore a hole i

the centre. Two arm

C shows bushing

1. Put arms in p

2. Measure exac

side of lugs.

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end of arms, and tight

can feel that he is creating wealth where there was none before. Every bushel of grain he grows, every animal he rears, every product he produces is that much increase added to the nation's resources. The city clerk who exchanges so many hours a day for a stated salary or wage, or the business man who buys the product of another's ingenuity and industry, selling at a substantial increase, cannot realize the satisfaction of the farmer who, in partnership with Nature, is creating wealth from the raw material.

Again, farming is a challenge to our individuality. The farmer is, in a way, master of his destiny, as far as his own farm is concerned. Of course, every one is dependent on his fellowmen to some extent, but a farmer may keep what kind of stock he wishes, grow particular crops, and is not bound by hours or rules in the manner and time of doing his work. This gives him a sense of independence, and he is thus able to do what he himself wishes, when he likes, and does not have to answer to any superior for it. This independence is not an un-mixed blessing perhaps as farmers have not co-operated in their own interest as they should, but that is another subject. This individuality should be manifest in the appearance of our farms. We should have some outstanding characteristic to distinguish our farm from our neighbors. For instance, an appropriate name, the

breeding of a particular kind of horses, cattle, or poultry, buildings painted in some color scheme, at least something different from the common run.

Another advantage is a variety of work. Many of our jobs would be very monotonous as a yearly proposition, but very rarely does any particular operation last more than a few days. If some of them did last into the weeks, I fear we would be heartily tired of them and long for a change. What variety of work we have in the year's operations! The factory hand or tradesman who daily goes over the same routine, does not have the satisfaction of finishing up an operation for the year, and commencing something entirely new. It certainly adds zest to our daily labor.

Again, every year gives the farmer a greater chance. While it is necessary to plan for several years ahead, and our stock and crops are dependent on work done in the previous years, yet every spring brings renewed hope of better success. One season may be too wet, another too dry, yet here in Ontario we can always depend on some crop, and the mistakes of one year need not be repeated the next. Besides there is the interest of experimenting, and the keen farmer will not be content to drift along in an old rut, but will be ever branching out and trying new methods.

Nor must we forget the beauties of Nature that the

poets rave about. The sunrise and sunset, the rolling fields of grain, the flowers and birds, are all seen and appreciated by the farmer, but you may be sure he says little about them. He is too much afraid of being thought sentimental, but were he shut up in a factory or office he would certainly miss them greatly. Nature is a great study, the growing grain, the trees, even the weeds that cause so much trouble, all have their vital interest. The oriole that sings to us at breakfast and the bob'o'link, as we plow, are old friends that we miss when they migrate. Most farmers are fond of their animals which are so dependent on them for food, and do their part to earn it. They too are interesting, especially when young and when they are ready to be sold, though sometimes it is very hard to part with old faithfuls.

Lastly, we have the fact that in farming, as perhaps in no other vocation, the home and business are closely knit together. The home is not merely a place to eat and sleep, it is a vital part in the concern. Every member of the home should have a share in the enterprise and its success. Herein lies the greatness of agriculture that home is the centre of its operation, and this is the greatest reason why I like my part of Canada.

Huron Co., Ont.

M. J. SLEMMON.

Automobiles, Farm Machinery and Farm Motors.

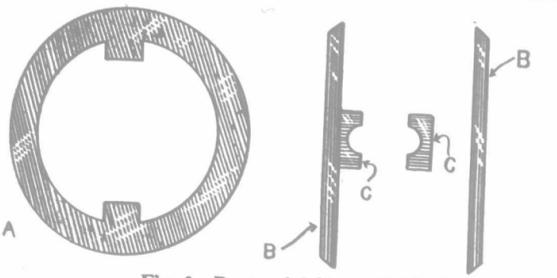


Fig. 1—Parts of Adjustable Bushing Pulley.

Homemade Pulleys.

EDITOR "THE FARMER'S ADVOCATE":
Most farm equipment includes that useful piece of machinery, the gas engine. It can be put to many uses. However, on most farms it is put to few uses in comparison to its possibilities. Often by using a little labor, pulleys, belting, etc., the small engine used exclusively for pumping water can be made to run the grindstone, separator, pulper, and so on. This convenience is lost if the engine is not attached to the machines it has power to operate.

To set up a homemade shaft outfit calls for little spare time and less actual cash. It is practically as good as the brand-new, expensive article for light jobs; therefore it is desirable.

Below several styles of home-made pulleys are described. They are thoroughly practical, as the writer has proved to his own satisfaction. There are many more designs, but the following will supply you with ideas.

A shows how to cut rim for pulley with adjustable shaft bushings.

Board should be as wide as pulley diameter.
1. With compass draw a circle as large as pulley desired.
2. Saw out with compass saw.
3. Inside describe another smaller circle, leaving a good space from outside circumference for thickness of rim.

4. Mark out two lugs directly opposite each other, as shown in Fig. A.
5. Cut out inside portion.

Cut out as above until a sufficient number have been made to give pulley proper width of face. Cut lugs so that when pulley is assembled the grain will cross; that is, cut lugs with grain one time and across the next. This gives extra strength.

B shows arms for same.
Select a board a little narrower than width of pulley face and of suitable thickness.

1. Cut long enough to catch on lugs, but loose enough to move in and out freely.
2. Bore a hole in each end, nearer the ends than the centre. Two arms are required.

C shows bushing for same.
1. Put arms in pulley, one on each side of lugs.
2. Measure exact distance between when on each side of lugs.

3. Make a block as long as width of arms, wide as distance between arms, and of suitable thickness as shown.
4. Bore a hole lengthwise through block, one-eighth of an inch smaller than shaft diameter.
5. Saw in half, leaving one half of hole in each part, as shown.

To Assemble Pulley.
1. Nail parts of rim, previously sawn out, together, putting lugs in the same straight line with each other.
2. Slip rim over shaft.
3. Nail one-half of bushing on each arm equidistant from the ends, being sure to put these on squarely.
4. Put arms in pulley.
5. Put a bit of proper size through holes in each end of arms, and tighten enough to be solid.

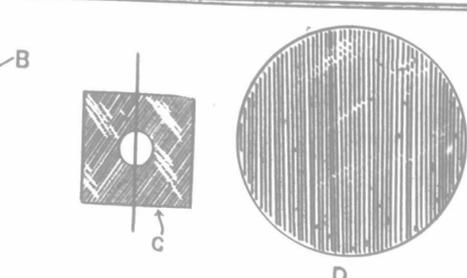


Fig. 2—Parts of Solid Pulley.

1. Select a piece of strong wood of a length as great as pulley diameter, and of suitable width and thickness.

2. Cut tenons of about one-half inch shoulder on arm, as far down as width between outer and inner rim of pulley.

Bushing for same.

Refer to sections E and F.

To Assemble Pulley.

1. Lay arm on rim with tenons in proper position for actual use.

2. Cut a piece out of rim to let tenons fit into the space tightly.

3. Reduce thickness of tenon to same as that of rim.

4. Build up by laying the rest of sections one on each side and nailing solidly. Repeat until completed.

5. Put crown on pulley.

6. Attach to shaft same as solid pulley.

Larger Pulleys.

Slight changes are necessary for larger pulleys.

1. It may be impossible to get boards wide enough for one-piece rims in pulleys of large diameter. If so, lay two boards side by side and fasten so by means of cleats. Saw out same as for one board. Be careful in building up rim to put pieces in their respective places.

2. Large pulleys (those having adjustable bushings) require more bolts in arms. Place two bolts near bushing and one near lugs on each side of shaft.

3. Large pulleys (those having adjustable bushings) require the bushings to be made slightly different, as follows: Bushing must be an inch longer than width of arms, also an inch thicker than is necessary. Lay arm on bushing in same position as it will assume in actual use, leaving one-half inch of bushing on each side of arm. Using this as a guide, cut a groove wide as arm and half an inch deep in bushing. Repeat on the other half of bushing. This prevents side motion of bushing, and is much stronger all through.

4. It is seen that larger pulleys must be stronger throughout than small ones; thicker rims, heavier arms and larger bushings. However, the maker can easily regulate all this.

Perth Co., Ont.

CLARENCE BINGHAM.

Battery Queries.

I have received some good information regarding the management of cars or autos. There is a large battery in hind seat of my car, I don't know what kind of battery it is. I read on one side of it: "everready multiple battery—best for ignition, superior to storage batteries, recommended for automobiles, motor boats and air ships, non-evaporating and water proof". I would like to know if this is a wet battery or if it is likely to need charging this spring.

R. T.

Ans.—Your battery is not of the wet type. It is of the style that operates continuously until worn out.

AUTO.

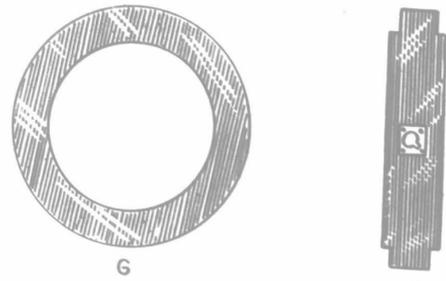


Fig. 3—Parts of Arm Pulley.

6. With a circular plane or key-hole saw put a crown on pulley.

If pulley has been carefully made it will be strong, solid and have a firm grip on shaft.

If pulley grips lugs, but not shaft

1. Reduce width of lugs slightly.

2. Or, plane a little off inside faces of shaft bushing. Perhaps they meet without gripping shaft.

If pulley grips shaft, but not lugs, reduce thickness of bushing.

Solid Pulley.

D

D shows how to cut rim for solid pulley.

Refer to section A, parts 1 and 2.

E shows square bushing for same.

Shaft should be square for this bushing.

1. Make square hole in sections of rim a little larger than shaft, taking care to have holes exactly in centre of rim section.

F shows key-way bushing for same.

Shaft should have key-way for this bushing.

1. Get a flat piece of iron, or steel, and drill hole in it a little larger than shaft. Steel plate should be one-half an inch thick and of proper size, as shown.

2. Make key-way in plate to correspond with the one on shaft.

To Assemble Pulley With Square Bushing.

1. Nail sections of rim together.

2. Slip pulley on shaft.

3. Secure with small steel wedges driven between pulley and shaft.

With Key-way Bushing.

1. Nail sections of rim together.

2. Bore hole through pulley, in the centre, a little larger than shaft.

3. Fit steel plate to pulley, securing it with screws or small bolts.

4. Slip pulley on shaft.

5. Drive key home.

Finish by crowning pulley in both cases.

Arm Pulley.

G shows how to cut rim of arm pulley.

Refer to section A, parts 1, 2, 3, and 5.

H shows arm and bushing of arm pulley.

Gasoline Engine Queries.

1. Will a 2½ H. P. gasoline engine run a 22-inch circular saw?
2. Will a 2½ H. P. gasoline engine saw wood, the wood being from 3 to 8 inches in diameter if fed slowly?
3. Will a 2½ H. P. engine run satisfactorily without batteries but with the magneto alone?
4. Which is the better, batteries or magneto?
5. Is it needful to have both batteries and magneto?
6. If a 2½ H. P. gasoline engine will saw light poles for home use, what size of pulleys should I use to obtain the right amount of speed?
7. Will a 2½ H. P. gasoline engine saw wood such as light sawing, if so what size of pulleys should I use, the wood being from 3 to 8 inches in diameter? Our timber is mostly composed of small poles.
8. What is the difference between coal oil and kerosene?

U. C.

1. Yes.
2. Yes.
3. Yes.
4. The magneto gives a constant spark while the battery spark weakens as the cells become old. The magneto is probably the better.
5. No. Magnets have been so improved during recent years that one can start as well off them as off the battery.
6. This question can't be answered definitely, because the enquirer hasn't given the speed of his engine. A 22-inch saw should run about 1,640 r. p. m. To get the proper proportion of the pulleys divide the engine speed into the saw speed. For example, suppose the engine runs at 410 r. p. m. $1,640 \div 410 = 4$, hence the engine pulley should be four times as large as the saw pulley. If, however, the engine speed were 328 r. p. m. then $1,640 \div 328 = 5$ and the engine pulley should be five times as large as that on the saw.
7. A 2 horse power engine is generally considered not large enough for 8-inch poles, but will handle 3 to 6 inch stuff at about 1 to 1½ cords per hour. The saw to use with it should be 20 inches in diameter, and the speed 1,800 r. p. m. The proportion of pulleys should be worked out as explained in No. 6.
8. None. They are the same thing.

W. H. D.

Piling on the Load.

Do you realize that a gasoline motor in an automobile does not start under a load, but that to get the machine in motion the load must be piled on the power plant after it commences operation? If you are unfamiliar with the fact it is well in future to bear it in mind because when constantly impressed upon a driver's intelligence it counts for a great deal in economical up-keep as well as the reduction of wear and tear. Because it is impossible to start your motor under a load the power plant is connected to the driving mechanism by an apparatus which is called the clutch. A pedal in the foot board which everyone knows by the name of the "clutch" or the "clutch pedal" controls the clutch and when pressed down takes the load off the motor and by lifting puts it on again. There are three types of clutches in general use, the dry multiple disc, the wet multiple disc and the cone. The dry type is composed of a set of steel plates having faces made of asbestos material. Connections are made alternately to the fly-wheel or to the clutch shaft of the transmission. A spring forces the plates together, when the clutch is engaged, and thus they are made to revolve with the fly-wheel of the motor. The load is taken off the engine when the clutch pedal is pressed down and the plates separated so that they cannot act as a unit. In a clutch of this type it is folly to ride the pedal, that is to keep your foot constantly upon it. If you persist in doing this the asbestos faces of the plates are bound to wear and very soon the clutch will begin to slip. While your machine is running keep your foot off the clutch pedal and so allow the plates to remain in maximum contact all the time. When a clutch slips you are wasting a lot of gasoline and energy because the power developed by the motor is not being transmitted fully to the rear axle. Perhaps you have experienced clutch difficulties and maybe you remember occasions when the motor has been racing its head off but the car has been moving sluggishly and on some occasions would have difficulty in ascending the smallest hills. The whole fault was due to the fact that the clutch was not in strong enough contact to deliver all the power from the engine through the driving mechanism to the wheels.

On the multiple dry disc type adjustment can be made by moving the lock nut or adjusting nut on the clutch release rod to allow more room between the clutch release bearing and the plates. There is a set screw in the rear end of the clutch release rod by means of which the clutch pedal itself can be adjusted. It is well to remember that no oil or grease should ever be put on the clutch discs. The clutch itself contains two grease cups which should be looked after every five hundred miles.

In the wet type of clutch the plates run in oil and should you find a shipping, clean out the case very thoroughly with kerosene and put in new oil. The mixture in which the plates work is called an oil bath and you should prepare it exactly in accordance with the manufacturers' instructions.

We only mentioned one cone clutch but to be absolutely accurate there are two, the leather face which runs dry and the fabric face which operates in an oil bath. The main thing to remember about the dry type is that the leather should always be soft and pliable.

When it becomes dry it has a tendency to grab. Neats-foot oil is a good dressing for the leather as it has proven itself very valuable under all occasions. Castor-oil is also recommended by some people and they have been known to prefer it to Neats-foot oil. We may also add that Fuller's Earth is spoken of very highly. The fabric face cone clutch must be handled similarly to the wet multiple disc clutch. When it commences to grab remove the oil bath, clean out the receptacle and put in a new mixture that is, above everything else, clean.

Now you know in a general way practically everything about clutches. Furthermore you should not be afraid of them because as you can see there is nothing mysterious or complicated about their operation or maintenance. When your power plant is running nicely let out the clutch very smoothly remembering that as you let it out you are piling a load upon the motor and that the easier you put it on the quieter your moving off will take place. Engines are built of the finest material but if you jerk and jump your car these severe actions cannot fail to ultimately result in damage to your motor. It is also well to know that if for any reason you push down your clutch pedal while skimming along the road that it should be let back as evenly as possible not only for the comfort of the passengers but in order that the strain may be as uniform as possible. Men who are known as skilful drivers and mechanics are usually those who give the most attention and use the most care in the handling of their clutch. AUTO.

THE DAIRY.

Don't neglect the animals that are a little "off" their feed. A good deal of trouble can oftentimes be saved by giving treatment early. Both ends of the animal should be watched.

Every dairyman should have a number of good books in his home, and among them should be several on dairying. A dairyman and his family cannot learn too much about the business they are engaged in.

Have you purchased a spring balance and secured a few milk-record sheets yet? Some of your neighbors have and are already enthusiastic over the prospect of knowing their cows by milk and fat production as well as by name.



A Herd of Holsteins Near London, Ont.

Feeders and cattle alike are looking forward to the return of such a summer scene.

With the coming of warm days the cows become more "picky," and greater care must be taken in preparing the rations so as to make them appetizing to induce the animals to take a full feed so that production will not suffer.

Goldie's Nehalem Beauty, a four-year-old Jersey heifer of Oregon State, is not only a show animal but a heavy producer. In two years and two months she gave 27,691.2 pounds of milk and 2,068.15 pounds of butter. At 50 cents a pound for butter she returned her owner a good revenue.

Between February 1 and 15, 46 Holstein cows and heifers were accepted for entry in the Record of Merit. There were 22 in the mature class, with Abbekeek Queen Countess, a New Brunswick cow, as the winner, with 30.38 lbs. of butter. In the senior four-year-old class, Daisy Mahone Wayne was first. In the seven days she gave 690.9 lbs. of milk, which made 39.03 lbs. of butter. Ladega Idaline Mercena headed the junior four-year-old class. She gave 638.5 lbs. of milk, making 28.49 lbs. of butter. R. K. Augusta was the only senior three-year-old to qualify. Her butter record was 29.71 lbs. In the junior three-year-old class Burke's Hengerveld May Echo was first. Her butter record was 29.65 lbs. Rose Teake Houwtje was the only senior two-year-old qualifying. She gave 468 lbs. of milk. There were seven junior two-year-olds, and the highest record was made by S. C. M. Leonora Hengerveld. Her milk record was 444.8 lbs.

Managing a Dairy Farm.

Success in dairying depends a good deal on how the farm and herd are managed. Some men appear to have little difficulty in getting ahead while others find it hard to make ends meet under their present system of handling the work. S. G. Carlyle, Superintendent Demonstration Farms of Alberta, gave many practical hints in an address delivered at a recent dairy convention. While Western conditions were discussed, to a certain extent many points were applicable to the Eastern dairymen. The following are excerpts from Mr. Carlyle's address.

In the unusual times in which we find ourselves just now, there is perhaps no line of production placed in such unfavorable condition as dairying. We find that the concentrated feeds, such as bran, oil cake and oat chop, and which are essential to heavy milk production, have doubled in price. The price of labor has not only doubled, but the high-class labor required for the care of a first-class dairy herd is practically impossible to get. To offset these drawbacks we find that the price of dairy products has increased about 30 per cent. against grain 150 per cent. and beef and pork more than 100 per cent.; and these products can be placed on the market at a much less labor cost than dairy products, so that the dairy industry has suffered and will continue to suffer until the prices of other commodities are normal again. Managing a dairy successfully at present is no easy task, and certainly the business is not as remunerative as other lines of farming. It may be taken as axiomatic, however, that a man can win in any farm enterprise only by persistent application to a chosen form of work. He can stand the losses of temporary adverse conditions better than he can stand the losses incident to throwing away his experience and learning a new game, and I assume that I am talking to a producing group of men who are determined to stick.

Conditions of Market and Feed.

The important initial consideration in establishing a special dairy enterprise is the market and the distance of the farm from railway station. As milk and cream are very perishable products, especially in warm weather, it is necessary that they should be delivered to the consumer or manufacturer in a fresh condition, and this necessitates frequent shipments. If the dairy farm is situated some distance from the city or railway station the time spent in delivery is too great and the cost too high in many cases to show a profit.

Another important general consideration is the character of the soil and climate. Dairy cattle require succulent feed and through the summer months this can be cheaply supplied by luxuriant pastures, either natural or tame. On this account a farm of moderately heavy soil, rich in organic matter, is preferable to light sandy soil. Liberal precipitation of moisture is likewise desirable.

Pure Water.

To carry on dairy farming successfully it is important to select a suitable farm. Perhaps the most important consideration next to good soil is a good water supply. Eighty-seven per cent. of milk consists of water, so it is absolutely necessary for a dairy cow to have a plentiful supply of good pure water. If we can select a farm with a spring of running water near a good building spot, the conditions in this respect are ideal. But if on the other hand a deep expensive well has to be drilled with expensive pump and gasoline engine for driving it, not only does it require a greater outlay at the beginning, but the cost of operating every day throughout the year adds considerably to the cost of producing one hundred pounds of milk. A young man engaged in the dairy industry in this province told me the other day that he had to drill nearly 400 feet for water, and that the well pump and small pumping engine cost him nearly \$1,500, and that it took between three and four hours a day to pump water for his stock. If he could have had a sufficient supply of water from a spring he could have built a reasonably good dairy stable for the cost of the well.

Sunlight, Sanitation and Convenience.

After selecting a farm of good rich soil, well watered and lying reasonably close to market or railway station, comfortable and convenient stables should be erected. These buildings should be placed near the main road and as near the centre of the farm as it is possible to get, but always keeping in mind a good elevation, which is essential for dry yards and good drainage from buildings. In the dairy business a great deal of water is required for washing utensils, and unless good drainage is provided from the dairy buildings, impurities will soon develop which will contaminate the milk. The dairy building and the ice-house may be built together,

and should be laid out, and about twenty feet from the barn from the turned out. The light, as sunlight of room should and also behind containing two some are 38 or 4 the ceiling requ cubic feet of air

After the be laid out, and located as near farming. The d of milk every d compelled to do responding shrin In the laying comfort and conv In order to hav comfortable, and there is a great cost of production

Close Selection

In selecting the numbers should be when dairy feeds scarce. There n Babcock test wer never a time whe No one can affor producer at prese

No doubt a gr prices, are selling the cows to rustle mistake, for, if d deteriorate, and neglect our dairy and conditions a become as profita the time for the look to the future improve the herc buying first-class cheaper to-day th it would be advi first-class herd and

There is a cal of bacon to feed hog raising go w with a little shorts makes a feed for y upon, so that with milk utilized in th from the herd and from the business improved condition pared with the grai

C

Dairy farming at \$1.00 per bush per ton, and it car \$9.59 per ton. T 20 cents per pou potash. A ton of per ton, and the \$2.56 per ton cal manure put back the \$2.56. In th older European co depleted in fertilit farmers who) have their farms back to

This has been d on the soil, but als In Ontario and the chiefly the clovers province these crop fully. The one hop in this country is in of fodder crops, clovers and peas, as shape for the small

Succulen

The most comm cut green and know greatly improved l the oats. This m green oats alone, a leaves the soil in l follow, as a certain the roots. Oats a fodder, but if run t make excellent alfalfa is the great there is none bette in a great many di parts of the provin is a splendid fodder number of farmers as pasture for sheep extant for dairy ca flavor imparted to into the rape directl flavor has not been fully grown in any I asset in supplying months.

Tame grasses su

and should be located near the dairy barns, preferably about twenty feet distant, and on the opposite side of the barn from the barnyard or where the cows are turned out. The dairy barn should have plenty of light, as sunlight is the great germ destroyer, and plenty of room should be left in front of the cows for feeding, and also behind for cleaning out. The average stable containing two rows of cows is usually 36 feet wide, some are 38 or 40 feet. The wider the stable, the lower the ceiling required. In this cold climate about 576 cubic feet of air space is sufficient for each cow.

After the buildings are arranged the farm should be laid out, and in the farm plan the pasture should be located as near the stable as is consistent with good farming. The dairy cow manufacturing a large amount of milk every day should not travel very far, and if compelled to do so will pay the owner back by a corresponding shrinkage in the milk pail.

In the laying out of the farm and dairy buildings, comfort and convenience should be the two great factors. In order to have the animals do well they must be comfortable, and by having the buildings convenient there is a great saving of labor which will reduce the cost of production.

Close Selection to Meet High Cost of Production.

In selecting the cows for the dairy, quality rather than numbers should be considered, especially in these times when dairy feeds are so high in price and labor is so scarce. There never was a time when the scales and Babcock test were so badly needed in the dairy stables; never a time when the herd should be culled so closely. No one can afford to feed oat chop and bran to a low producer at present prices.

No doubt a great many people, attracted by the high prices, are selling these expensive grains and leaving the cows to rustle around straw stacks. This is a great mistake, for, if dairy cows are poorly fed they soon deteriorate, and it would be a national calamity to neglect our dairy herds. As soon as the war is over and conditions are normal again, dairy farming will become as profitable as it formerly was. And now is the time for the dairyman to remain steadfast and look to the future rather than the present and start to improve the herd by culling out inferior cows and buying first-class sires. High-class bulls can be bought cheaper to-day than for several years past, and I think it would be advisable to start now and build up a first-class herd and be prepared for after war conditions.

The Call for Bacon.

There is a call from the Allies for a great supply of bacon to feed their armies in the field. Dairy and hog raising go well together. The skim-milk mixed with a little shorts or oat chop with the hulls sifted out, makes a feed for young pigs which cannot be improved upon, so that with present prices of butter and skim-milk utilized in this way, and with the poor cows culled from the herd and the rest well fed, a profit can be derived from the business without taking into account the improved condition of the soil on the dairy farm compared with the grain farm.

Conserving Fertility.

Dairy farming takes but little from the soil. Wheat at \$1.00 per bushel, the normal price, is worth \$33.22 per ton, and it carries with it elements of fertility worth \$9.59 per ton. This value is calculated on a basis of 20 cents per pound nitrogen and 6 cents per pound potash. A ton of milk at \$1.50 per cwt. is worth \$30.00 per ton, and the elements of fertility are only worth \$2.56 per ton calculated on the same basis, but the manure put back on the farm soil will more than offset the \$2.56. In the older parts of the country and in the older European countries where the land has become depleted in fertility by continued grain growing, the farmers who have engaged in dairying have brought their farms back to their former state of fertility.

This has been done not only by applying the manure on the soil, but also by growing luxuriant fodder crops. In Ontario and the Eastern States these crops comprise chiefly the clovers and corn. In some parts of this province these crops have not as yet been grown successfully. The one hope of profitable farming in the future in this country is in the growing of some kind or kinds of fodder crops, preferably of the legumes, such as clovers and peas, as these crops leave the soil in excellent shape for the small grains to follow next season.

Succulent Feed the Year Round.

The most common fodder crop in Alberta is oats cut green and known as green feed. This feed can be greatly improved by sowing one bushel of peas with the oats. This makes a better-balanced ration than green oats alone, as peas are rich in nitrogen, and it leaves the soil in better condition for the crops that follow, as a certain amount of nitrogen is stored up in the roots. Oats and peas not only make good dry fodder, but if run through a blower and put in a silo, make excellent silage. In the irrigated districts alfalfa is the great fodder crop, and needless to say there is none better, especially for the dairy cow; but in a great many districts of the central and northern parts of the province it has not proved a success. Rape is a splendid fodder crop and is being used by a larger number of farmers every year, its great value being as pasture for sheep and hogs. It is used only to a limited extent for dairy cattle on account of the objectionable flavor imparted to the milk, but if the cows are turned into the rape directly after milking for an hour or so the flavor has not been detected. Turnips can be successfully grown in any part of the province and are a good asset in supplying succulent feed through the winter months.

Tame grasses such as timothy, Western rye grass,

brome grass, and some others, can be grown successfully over a great part of the province, and where well cured make excellent feed in conjunction with green-feed silage and roots. Corn has proved a profitable crop in the southern part of the province, and where put in the silo alone or mixed with green oats, green oats and peas, or alfalfa, makes a splendid succulent feed through the winter months.

New Brunswick Farmers' and Dairymen's Convention.

The forty-second annual meeting of the New Brunswick Farmers' and Dairymen's Association opened in Fredericton, March 12, and despite the stormy weather and the difficulties caused by the tie-up of railway facilities as a result of the heavy snowstorms, a large number of farmers from all parts of the province put in an appearance, and the convention may be said to have been of a thoroughly representative character. After the visitors had been formally welcomed to the city by the Mayor, the President of the Association, Isaac Baird, of Chipman, Queen's County, opened the proceedings with a very interesting and instructive address, in which he pointed out that the tiller of the soil was upon looked as the main hope of the country at the present time, and would continue to be so for several years to come, and he trusted that they would all measure up to the requirements that would be demanded of them. The progress which the agricultural industry had made in the province during the last few years showed very plainly that there was no part of the Dominion offering greater advantages to farmers than did New Brunswick, its nearness to the markets of the Old Country, and those of the United States, also, not being the least of these. The call to farmers to extend their operations and increase their output, was one they could not afford to let go by unheeded; patriotism demanded it of them, and their own interests should induce them all to their utmost. It was a matter for regret that the past season had not been as favorable as they could have wished, but he hoped that none would allow themselves to be discouraged, but that one and all would produce as much as possible in the coming year.

The Hon. J. F. Tweeddale, Minister of Agriculture, dealt with the food question, and the farmers' duty in regard to it. He admitted that it was not very much use to call on tillers of the soil to increase their output unless they could be provided with an adequate supply of help, and to this end leave of absence had been asked for, for those men who had been drafted under the Military Service Act, who had previously worked upon farms. If a farmer needed help to put his crops in and later to harvest them it would be forthcoming. The idea that any man off the street would be satisfactory as farm help, as some people seemed to think, was all nonsense; an inexperienced farm hand was almost worse than no help at all. He, the Minister, wanted to induce farmers to increase their live stock operations. Many men preferred to grow crops that would bring in quick returns, rather than look after stock. This might have been the most profitable course to take down to a few years ago, when the price of meat of all kinds was less than half what it is at the present time; but having regard to the high prices now ruling, and despite the high cost of feeds, live stock must surely pay farmers to produce. The trouble often was that the present high prices tempted farmers to sell young animals that were too good for the butcher, and should be kept for breeding purposes; and if that practice was to continue it would be idle to expect to raise the standard of the stock in the province very much, no matter how good sires they might use.

An address from the Provincial Representative of the Food Controller followed, in the course of which the great shortage of food supplies of all kinds was emphasized and the urgent need of greater production pointed out.

The raising of sheep was dealt with by T. Hetherington, one of the provincial live stock husbandmen, who pointed out that New Brunswick farmers were very much behind their brethren in several of the other provinces in this respect. The dog nuisance could not be relied upon as an excuse, as there was now a law that, properly administered, would put the dog out of business. The majority of districts in the province were ideal for sheep raising, and in view of the demand for mutton for food, and of wool for clothing, it was astonishing that so few farmers cared to go in for sheep. Now that the government had organized facilities for co-operative marketing of wool, and had established stations where it could be graded, farmers should avail themselves of these facilities, and each keep a few sheep at least. With wool at present high prices those who did not keep sheep seemed to be throwing away golden opportunities.

A. C. McCullough, the provincial poultryman, was the next speaker, and he put up to the farmers very plainly the opportunities they were missing by not keeping a reasonable number of hens. There was no reason why every farmer should not have at least a hundred hens on his farm, and no stock would give such high returns for the labor involved in looking after it as poultry. Those who did keep poultry in many cases did not take the trouble to look after them properly, and the result was that they did not get the profits they should get, and then they said poultry did not pay.

Prof. Enslie of Ottawa, addressed the members on the fertilizer question, more particularly on the value of lime, and urged them all to make as much use as possible of that mineral, as there were few soils that would not be considerably improved, and their pro-

ducing power augmented by the use of it. He was followed by Prof. Brownlee of the Dominion Experimental Farm at Fredericton, who gave an instructive account of the experiments he had been carrying on with potatoes at the Farm. Many strain tests had been conducted, and the results fully noted. Similar tests had been carried out by farmers in different parts of the province, and the results compared with those obtained at the Farm, and in several cases the results obtained by the individual farmers were much better than his own. For instance the highest yield of Irish Cobblers obtained at the Farm was 229 bushels per acre, whereas the highest yield obtained by farmers with the same variety was 474 bushels, and the lowest 371 bushels. Better results had been obtained by some farmers with Green Mountains than he had been able to get, the best he could do being 291 bushels, while others had got as much as 350 bushels. The Experimental Farm at Ottawa had been trying Fredericton grown seed in comparison with some of their own, and the results obtained showed the great superiority of the former. For instance, Irish Cobbler, Fredericton seed, yielded 360 bushels to the acre; the Ottawa seed yielded 68 bushels; a difference of 292 bushels. In the case of the Green Mountain potatoes the seed from the Experimental Farm at Fredericton yielded 345 bushels, while the Ottawa seed yielded 99 bushels, a difference of 246 bushels. In the case of Gold Coin potatoes the Fredericton seed yield was 356 bushels, as against 22 bushels from Ottawa seed.

Prof. Trueman of the Truro College, gave some sound and practical advice on breeding and feeding dairy cattle, and illustrated his remarks by some tables of statistics. He pointed out that farmers should not be disappointed if the offspring of a particularly good cow were not such heavy producers as their dam, for she might be a better producer than the average of her ancestors, and her offspring would simply follow the average. By continually using bulls from heavy producing dams, however, it was possible to raise this average with each generation.

Co-operation was the theme of a stirring address by J. D. McKenna of the Maritime Farmer, Sussex. He told his audience that they had already had some experience of the benefits of co-operative purchasing in the way of fertilizers through their societies, which had, by buying in quantities, been able to supply farmers direct at cost price. They were anxious to extend their operations and increase their efforts and get cheaper feed, but the millers refused to sell feed to the agricultural societies, unless the latter would take flour also, which the farmers did not want. In view of the fact that flour was so badly wanted overseas, it seemed strange that the millers should try to force it on the societies who did not want it, so that they might be able to get feed as well, and he had taken the matter up with the Food Controller, who told him he would "scarily" every miller in the country if they refused to change their tactics. As soon as the millers got at the Food Controller, however, that official climbed down, and said the millers were correct in their attitude and he should not interfere. The result was that millfeed could only be bought through the retailer, and the full retail price had to be paid for it.

Prof. Grisdale gave New Brunswick agriculturists some sound advice when he recommended that they go in for growing flax. Some of the best specimens of fibre he had seen he said were grown in this province, and it would certainly pay farmers to put some of their land under that crop. A factory had been established at Ottawa, so farmers were sure of a market for all they can produce. Referring to tractors, he said they were all right for the prairies where the fields were a mile long, but for Eastern Canada, money laid out on them was more or less wasted. A heavy team of three horses and a double-furrow plough would give the farmers of Eastern Canada far more satisfactory results than any tractor, at less than half the cost. He also advocated larger fields, as the time wasted in turning about the small fields resulted in serious loss. The milking machine he said was an appliance that could be very profitably used by a man having a dozen cows, as it saved a large amount of labor, and proved more of a success on some kinds of cows than hand milking. He also urged the need of increasing the supply of pork, not only on account of the very remunerative price it is now bringing, but on account, more particularly, of the demand from overseas.

Reports from the several county vice-presidents indicated that the past season had been anything but a satisfactory one as a rule. The cold, late spring, with the excess of wet weather that accompanied it, interfered very seriously with seeding operations, and as a rule the crops obtained were inferior in quality and much below the average in yield. Hay was about the only crop that was plentiful but the scarcity of help prevented many farmers from getting in all they had and a considerable amount was left standing in the fields and was later ploughed under. The area seeded to wheat was larger than for many years, and had the crops been better, would have given very satisfactory results. Oats were a fair crop, a good crop, in fact, on dry and well-drained land; buckwheat almost a total failure. Barley was less grown than formerly, and few farmers seemed to care whether they grew it or not. Potatoes were not up to the average owing to the wet season; turnips were also less than usual, and in some districts owing to the lack of farm help, had to be left in the ground to freeze. In some parts of the province many fields were not seeded to anything on account of the land not being in workable condition through the wet; and in many others the crop sown failed to come up and everything—time, fertilizer, and seed, was wasted.

A visit was as usual paid to the Experimental Farm, three miles below the city, and Superintendent Hubbard,

showed the visitors over the barns pointing out the various objects of interest and explaining the work under way. The cattle, sheep and horses were paraded for the benefit of the visitors, and the successes obtained in the process of grading up a herd by the use of pure-bred sires was brought to their notice. Later, Mr. Hubbard gave a very interesting account of the work of the Farm, and of the best methods adapted for provincial requirements as shown by results obtained there.

Addresses on Agricultural Societies were given by M. A. McLeod the provincial superintendent, and others, after which the series of resolutions prepared by the resolution committee and others were discussed. These included resolutions asking the Dominion and Provincial governments to protect the farmer by guaranteeing the price for pork for the next two years at not less than 20 cents; also asking for a bonus of 25 per cent. on all gang ploughs purchased, this being considered an aid to greater production; for the passage of a law preventing the running at large of bulls and dogs; in opposition to the Daylight Saving Scheme which they soundly condemned from the farmers' standpoint; asking for severe restrictions on the sale of oleomargarine, in the interests of the dairy industry; and that millers be not permitted to insist on the purchase of flour as a preliminary to the supplying of mill feed. A resolution was also passed condemning the Food Controller for his inactivity in looking after the farmers' interests in this respect. This resolution was, however, later rescinded, on receipt of a telegram from that official that he was taking steps to see that the millers fell in line with the farmers' requests. Another resolution asked for better facilities for giving an agricultural education in rural schools. A motion that in future years part of the proceedings should be carried on in the French language caused rather a heated discussion, but it was ultimately resolved that a certain number of French speakers should give addresses in future.

The officers appointed for the ensuing year were as follows: President, L. M. Anderson, Sackville; Vice-President, J. A. Bernier, Edmundston; Recording Secretary, C. M. Shaw, Hartland; Corresponding Secretary, A. R. Wetmore, Clifton, and Treasurer, H. H. Smith, Hoyt Station.

The Provincial Seed Fair reflected the conditions of the past season for the exhibits, although as a rule of good quality, did not measure up to the standard of some former years. The entries, however, were about up to the average.

Oxford County Holsteins Make High Average.

The annual spring sale of the Oxford County Holstein Breeders' Club was held at Woodstock, on Wednesday, March 20. The general average for the 70 head catalogued was \$181.39. Few sales this year with so large a number of immature animals consigned have reached a much higher figure. The 29 cows three years old and over averaged \$226.55; 10 two-year-old heifers averaged \$189, and 14 heifers under two years averaged \$126.20. The 17 bulls, including a large number of calves, made an average of \$162.35. The grand total for the sale was \$12,697.50. Lady Veeman Abbekerk, a 28.53-lb. four-year-old of show calibre, and from A. E. Hulet's consignment, brought the top price going to Wm. Stock & Son, of Tavistock, Ont., for \$525. The same consigner's three-months-old bull calf, Madam's Pauline Sir Abbekerk, made the highest price for bulls, going to the bid of Jas. G. Currie & Son, of Ingersoll, at \$430. The sire of this youngster is Prince Colanthe Abbekerk and his dam is Madam Pauline Canary, a 30-lb. daughter of the champion cow, Madam Posch Pauline. Pioneer Duchess Hartog, a two-year-old heifer consigned by Walburn Rivers & Sons, brought \$385. She was within a few days of freshening and is a sister of the great R. O. P. two-year-old, Duchess Wayne Calamity. She was purchased by W. Cook, of Brantford. Following is a list of the animals selling for \$100 or over, together with the names and addresses of their purchasers:

CONSIGNED BY T. J. LAMMIMAN & SON.

King Fayne Albino, A. Pearce, Tillsonburg	\$105.00
Lady Jane Clothilde, Wm. Longworth, Ingersoll	120.00
Segis Winnie, W. H. Cohoon, St. Thomas	145.00
Segis Fayne Calamity, S. Hartley, Woodstock	112.50
Betsy Fayne Abbekerk, W. H. Cohoon	285.00
Segis Canary Albino, R. Barnes, Woodstock	175.00
Canary Julia Fayne, W. H. Cohoon	170.00

CONSIGNED BY FRED V. HEENEY.

Colanthe Vale, A. S. Downham, Thamesford	165.00
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CONSIGNED BY FRED ROW.

Mercena Kent Abbekerk, Wm. Copley, Bright	125.00
Bonheur Colanthe, J. R. Masters, Woodstock	140.00

CONSIGNED BY WALBURN RIVERS & SONS.

Pioneer Gift Mechthilde, J. McWhinney, Marshville	200.00
Pioneer Cudhess Hartog, W. Cook, Brantford	385.00
Noney May Schillaard, R. E. McIntyre, St. Mary's	260.00

CONSIGNED BY OSWALD WALLACE.

Hiemke Canary Mercena, Geo. H. Cross, St. Thomas	190.00
Ina Mercena, R. B. Brock, Simcoe	150.00
Hiemke Calamity Mercena, Alex. Hoyle, Ingersoll	100.00

CONSIGNED BY JAS. G. CURRIE & SON.

Baldy Midnight Ormsby, J. Daveidge, Woodstock	100.00
Princess Pride Ormsby, W. H. Cohoon	210.00

CONSIGNED BY ALFALFADALE STOCK FARM.

King Aaggie Valdessa, G. S. Cuthbert, Woodstock	185.00
Lady Mercena Lindley, W. H. Cohoon	185.00
Glenwood's Daisy Corinne, G. L. Hewitt, Bright	145.00
Pontiac Maid Francy, J. J. Fox, Guelph	310.00

CONSIGNED BY A. E. CORNWELL.

Bessie Posch Cornelia, F. B. Shaver, Copetown	300.00
Countess Cornelia Mercena, Fred C. Dunseath, Stratford	250.00

CONSIGNED BY F. W. LEE.

Minnie's Butter Baron, John Mansen, Ingersoll	120.00
Lady Fayne of Cedarbrae, E. Sipel, St. Thomas	270.00

CONSIGNED BY A. DUNN.

Baron Korndyke Segis, A. Small, Putnam	330.00
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CONSIGNED BY WM. PULLIN.

Princess Mary Korndyke, G. W. Montgomery, Woodstock	185.00
Pauline Abbekerk Posch, W. H. Cohoon	180.00

CONSIGNED BY M. McDOWELL.

Oxford Jewel Segis, John Knox, Plattsville	135.00
Calamity Fayne Segis, W. H. Cohoon	235.00
Oxford Aaggie, R. E. McIntosh, St. Mary's	140.00
Charlotte Ormsby, F. W. Kennedy, Oxford Centre	170.00
Alice Jewel, J. McKay, St. Mary's	205.00

CONSIGNED BY W. E. THOMSON.

Togo Segis Korndyke, D. J. McKay, St. Mary's	145.00
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CONSIGNED BY A. E. HULET.

Prince Colanthe Sylvia, Geo. Oliver, Bright	185.00
Madam Pauline's Sir Abbekerk, J. C. Currie & Son, Ingersoll	430.00
Lady Keyes Mercena, Robt. Thompson, St. Paul's	450.00
Shadelawn Lassie, J. W. Innis, Woodstock	325.00
Lady Veeman Abbekerk, Wm. Stock & Son, Tavistock	525.00

CONSIGNED BY MCGHEE BROS.

Roderick Mercena, W. E. Phoenix, Wilton Grove	200.00
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CONSIGNED BY E. D. HILLIKER.

Mercena Paul Calamity, W. B. Thornton, Woodstock	165.00
Posch Pietertje Houwtje, G. E. Brown, Dundas	110.00
Jenny Pietertje Houwtje, M. Willis, Grand Prairie Alta	140.00

CONSIGNED BY CHAS. N. HILLIKER.

Lady Abbekerk Favorit, Wm. Duffy, Union	220.00
Schulling Canary Mercena, E. Siple, St. Thomas	290.00
Queen Abbekerk Favorit, A. B. Shaver, Copetown	200.00

CONSIGNED BY B. D. SMITH.

Mechthilde Sir Colanthe, W. F. Hodges, Woodstock	100.00
Cedarbrae Daisy Colanthe, M. Willis	130.00
May Abbekerk Butter Baroness, Wm. Anderson Beachville	110.00

CONSIGNED BY GEO. R. MCCOMBS.

Shadelawn Lillie Queen, Ross Smith, Oxford Centre	240.00
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CONSIGNED BY M. H. HALEY.

Esther Butter Baron, Weir Bros., Woodstock	105.00
Mary Butter Baroness, R. Barnes, Woodstock	180.00
Silver Fayne Bell, R. E. McIntosh	230.00

CONSIGNED BY M. L. HALEY.

Re-Becky Fayne of Cedarbrae, D. J. McKay	150.00
Daisy Butter Baroness, R. E. McIntosh	170.00
Pauline Baroness, J. Daveidge	120.00

CONSIGNED BY W. M. SNYDER.

Sarah Posch Colanthe, R. Day, Thamesford	120.00
Sylvia Pietje Colanthe, J. R. Masters	110.00

CONSIGNED BY A. H. TEEPLE & SON.

Countess Dutchland Fayne, Wm. Longworth, Ingersoll	150.00
Dot Houwtje, M. Willis	110.00

CONSIGNED BY GEO. T. PROUSE.

Dot's Abbekerk 2nd, J. Mawhinney, Marshville	110.00
Nell Jean De Kol, R. Barnes	125.00
Rose Abbekerk Mercena, Geo. Bishop, Norwich	145.00

Malton Stock Farm Holstein Sale.

On Tuesday, March 19, C. Slavin, of Malton, held his dispersion sale when a number of high-quality, registered Holstein cattle and Clydesdale mares were disposed of. The cows sold had splendid backing and would materially aid in building up the herds to which they went. A good deal of the offering was young stuff which tended to keep the average down. However, the 22 cows sold averaged \$186.65, and the two-year-olds, \$140. The calves averaged less than \$40 apiece. The highest-priced animal of the sale was Pietertje Favorit De Kol, a nine-year-old cow, which went to the bid of D. Aitchison, Elora, for \$275. Following is a list of the animals selling for \$100 or over, together with the names and addresses of their purchasers:

Count Echo Pontiac, C. L. Fraser	\$200.00
Manor Segis Pontiac, R. A. Jefferson, Weston	217.00
Pietertje Favorit De Kol, D. Aitchison, Elora	275.00
Bella Wayne Sarcastic, J. C. Heslop, Weston	170.00
Inka Darkest De Kol, D. Aitchison	200.00

Imperial Inka Josephine, H. Jefferson, Weston	\$162.50
Elmbank Favorit, H. Jefferson	232.50
Imperial Grace Favorit, Wm. Dawson, Weston	167.50
Elmbank Pietertje Posch, D. Aitchison	230.00
Sadie De Kol Fayne, H. Jefferson	177.50
Johanna Favorit, H. Jefferson	232.50
Daisy Johanna Lena, T. H. Jefferson	230.00
Favorit Johanna Posch, E. Campbell, Inglewood	230.00
Daisy Johanna Dott, W. K. Goodwing, Islington	230.00
Imperial Johanna, D. Aitchison	225.00
Imperial Johanna Pet, Wm. Dawson	205.00
Imperial Favorit, J. Pierson, Dixie	170.00
Inka Josephine De Kol 2nd A., W. Winters, Malton	162.50
Lucila Favorit, J. C. Heslop	150.00
Weston Cornucopia De Kol, W. J. Sanderson, Malton	150.00
Pauline Canary Segis, M. Dawson, Brampton	200.00
Blanche Segis, W. K. Goodwing	172.50
Favorit Calamity Posch, D. Aitchison	130.00
Favorit Canary Starlight, C. L. Fraser	150.00
Josephine Canary De Kol, Wm. Dawson	150.00
Imperial Pietertje De Kol, J. Nesbit, Downsview	130.00
Pietertje Echo Favorit, W. J. Sanderson	100.00
Favorit Echo Pontiac, A. Gracey	100.00

POULTRY.

Incubation.

EDITOR "THE FARMER'S ADVOCATE":

The incubator has to-day come to be a necessity on every poultry plant where it is desired to hatch chickens in large numbers. Especially is this true where it is necessary to get early roasters and broilers, as these chicks must be hatched before the usual hatching season and at a time when it is almost impossible to get broody hens. Even if hens could be secured it might not always be convenient to care for a sufficient number of broody hens to get chickens in paying numbers for market purposes.

Whether eggs are incubated in machines or under hens there will always be a percentage of loss, due to chicks dead in the shell or to weak vitality in breeding stock. Beginners very often expect too much of an incubator, and start with the idea that it should hatch better and with less attention than hens will. This is expecting rather much of any machine, for it is hardly to be expected that artificial methods could be an improvement on natural.

Before buying an incubator, become acquainted with the different makes of machines, and if any are used in your neighborhood learn all you can about them and what results they are giving, for in buying hatching machinery the best that can be obtained to do satisfactory work is the cheapest in the end.

In heating the incubator secure a room or cellar where there is not too great a variation in temperature, and at the same time have good ventilation so as to have a supply of fresh air day and night without direct draft on the machine. You will get printed instructions with each machine which should be carefully followed out in regard to setting up, levelling, etc.

In warming up the machine for the first time allow it to heat up gradually, and make sure you have it properly adjusted, the regulator working perfectly and running at an even temperature for a couple of days before you entrust any eggs to it. Excessive heat in the egg chamber will spoil the embryo of an egg more quickly than too low a temperature. All eggs for hatching, whether in incubator or under hens, should be as fresh as possible when set, and should be from strong, healthy breeding stock which are housed in sanitary quarters and not forced too much for egg production. Select medium-sized eggs that are well shaped and have smooth, strong shells. Eggs for hatching should be kept in a cool, dry, clean place, and if they have been received from a distance you will get better results by allowing them to settle a day before placing in the incubator. After the eggs are placed in the machine do not touch them until the second day when they will have to be turned twice a day until the 19th day. This can be best accomplished by removing a few eggs from the tray, and with the hands gently rolling the remainder over, then filling in the removed ones in the space left. Always do the turning of the eggs before touching the lamp, as any oil on the hands when turning will affect the hatchability of the eggs. The eggs should be tested about the 7th day to remove all infertiles, and again about the 14th day to remove any dead germs. It is important that the infertile eggs and dead germs be removed, as they interfere with the uniformity of the temperature in the egg chamber, and so lessen the chances of a good hatch. After the eggs start to hatch the incubator should not be opened until the hatch is over, as the loss of moisture is very detrimental to the hatch. The chicks can be removed to the brooder about 24 to 30 hours after the hatch is completed, during which time the temperature can be gradually lowered a few degrees. The chicks should not be fed until at least 48 hours old as the last stage of development in the embryo is to absorb the yolk of the egg, which is considered food enough for 2 days, and if feed is given before the yolk is used up it will cause serious digestive trouble. You cannot be too careful in keeping the incubator lamp and burner perfectly clean and making sure to use only the best grade of kerosene. After the chicks have been removed from the incubator it should be given a thorough cleaning, and it should be well disinfected with some solution such as creolin or zenoleum before being used for the next hatch or stored away to await next hatching season.

Chateaugay Co., Que.

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EDITOR "THE FARMER'S

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Wellington Co., Ont.

Incubating Eggs.

In order to have early chicks, it is almost essential that the eggs be incubated by artificial means. Failure to have the pullets out early in spring is one cause of shortage of eggs during the winter. Sometimes the hens go broody early in the season, but it is more customary for the majority of them to start laying in early spring and then become broody on in May and June. It has been proven conclusively that the late-hatched pullets do not give winter eggs. A good many do not care to invest in an incubator, as they only wish to hatch from seventy-five to one hundred chicks in a season. Under these circumstances there are two ways of securing the early hatch; one is to buy day-old chicks from poultrymen who cater to this trade, while another method is to take the eggs from your own flock to a custom hatching plant. These plants are not numerous as yet, but it is possible that they will increase in number as the demand for this work increases. H. K. Revell, is one poultryman who has been doing custom hatching for a couple of years with very satisfactory results. The first year around 1,500 eggs were brought to him unsolicited. On the strength of this, he increased the capacity of his incubator the following year and did a little advertising. He was forced to turn down nearly 2,000 eggs, owing to lack of capacity in his machine. All told, 12,200 eggs were set. Again the following year the incubator was run to capacity, and many customers could not be accommodated. Mr. Revell writes: "We were taxed to the limit last year and must enlarge incubation capacity. I charged \$2 per tray of 75 eggs, and ran the machine from March 18 to July 8, burning 3,931 pounds of chestnut coal in that time. Fifteen hours weekly were spent looking after the machine and eggs. The customers brought their eggs and called for the chicks. I believe one might work into a large plant if he so desired, doing work for people at a distance, and combining custom work with selling day-old chicks." From the above statement it will be seen that farmers and poultrymen are quite ready to pay for having their eggs hatched. Those who had their applications in early have early chickens, but those who had their hatch come off in July could not expect many winter eggs. There may be incubators in your neighborhood that are not run to capacity. Possibly only one hatch is brought off in a season, and the machine would be available for custom work. While the natural method may be the most reliable one for incubation there are limitations to its efficiency, the chief of which is the uncertainty of the time the hen will go broody. Whether incubation is by the natural or artificial method, try and have the hatch off early.

Young Hens Lay Best.

It is generally considered that pullets are the most profitable for egg production, but all pullets do not give a heavy egg yield when prices are high. However, if they are hatched early in the spring and are given proper attention, they will bring in more revenue than their two or three-year-old sisters. The accompanying illustration shows the profit on yearling, two and three-year-old birds. This test lasted for three years with sixty hens. The birds were of high quality as the first year 857 dozen eggs were laid by the sixty birds. After paying for feed and labor, there was a profit of \$124 on the flock, or over \$2 per bird. The egg yield dropped to 745 dozen the second year, leaving a decrease in returns of \$28. In the third year there was a heavy dropping off in eggs, as only 576 dozen eggs were produced, but even then there was a profit, though it was less by \$70 than that from the hens the first year. From the above figures it is clearly shown that as a bird increases in age she decreases in producing value. If egg production is the aim, then it will pay to raise sufficient pullets to keep the flock up to strength. On in the summer when the egg yield drops is as good a time as any to dispose of the birds. By so doing the profit on the flock can be kept at high-water mark. When a yearling hen ceases to lay in midsummer, she must be fed for several months before she will again commence laying. With feed at a high figure a poultryman cannot afford to keep very many idlers in his pen. Culling is essential and one time to do it is at midsummer. The pullets should be culled in the fall and only the best placed in the winter laying quarters. At the time the account of production was figured in the illustration, the feed cost \$90 for the sixty birds; this is \$1.50 per hen, which is less than it will cost to properly feed a bird this season. It is the receipts above the cost of feed which count. A limited ration usually gives small returns. The hens that lay the eggs must be fed. If your fowl haven't been doing as well as they should, plan on raising a number of pullets this summer and get rid of the old birds.

A Family Necessity.

EDITOR "THE FARMER'S ADVOCATE":
As I send you my renewal for 1918, I feel I owe you a few words to extend my appreciation of your many valuable articles, which appear in your paper each and every week of the year. It is looked for in the home as a real family necessity. I have been a subscriber for many years past and hope to be favored with its seasonable, sound information for many years to come.
Wellington Co., Ont. ALBERT S. BROWN.

Back-door Poultry Keeping as a Profitable Side Line.

EDITOR "THE FARMER'S ADVOCATE":

Now that the greater-production campaign is in full swing, it should apply to the poultry industry as well as others. The question is often asked, does poultry pay? Some claim there is big money in it, while others declare that if all the feed the hens eat were charged up the results would be disappointing. I have often heard farmers' wives boast of how much money they had made the past season from their poultry. When the husband speaks up, "Yes, but if you paid me for the feed you would come out at the small end of the horn." I believe to the women is due the credit of raising ninety per cent. of the poultry and eggs disposed of on our markets today; if the men had their way I venture to say that very few hens would be kept on the farm. Ask any farmer if there is money in poultry, and in nine cases out of ten he will say, "Not if you take into consideration the cost of feed." This, of course, is only guess work—as with many other departments on the farm, no record is kept. The farmer raises the grain and feeds the fowl, the good wife markets the product and takes care of the money, and the poor farmer naturally enough thinks there is no money in keeping poultry. The only way to decide this question properly is to test it out thoroughly by keeping an accurate account of all receipts and expenditures for the year. I have always kept a few hens, when so situated that I could, but like many others was never able to tell with any degree of certainty whether the feed or the eggs and chickens cost the most. Last year I kept strict account, and for the benefit of those who contemplate going into back-yard poultry keeping, my experience may be of some interest.

On January 1, 1917, I started with eighteen White Wyandottes—sixteen females and two males. I keep nothing but White Wyandottes, and my experience is that they are decidedly the best general-purpose fowl in existence. At all the laying tests they have proved themselves the champions, and as broilers or market fowl they can't be excelled. Some time in February I sold a friend two pullets, leaving fourteen. During the summer we lost four hens—one stole her nest away under some boards, and when we missed her and due search was made for the body we found her dead on the nest; one got sick and died, and the other two died just because they wanted to, for I could find no symptoms of any disease. I paid \$10 for an incubator and \$10 for a

spending \$10 for an almost worthless incubator that spoiled half the eggs, we could have made a much better showing on the right side of the ledger. Of course, my fowls are all pure-breds. "Oh, yes," some will say, "yours are pure-breds, but we could not get such prices for common mongrels." I admit it, but why keep mongrels? It costs no more to feed pure-breds than it does culls, and you can always sell your surplus stock at good prices. The proof of the pudding is in the eating.

Receipts.

Eggs sold for hatching	\$17.00
Eggs used and sold for market	54.77
Chicks used and sold for market	22.50
Chicks sold for breeding purposes	82.00
Stock on hand Dec. 31 (19 fowls at \$1.50)	29.00
Total	\$205.27

Expenditures.

Stock on hand Jan. 1, 1917, 18 fowls	\$18.00
Advertising eggs and fowls	11.65
Coal oil for incubator	1.62
Incubator	10.00
Breeding cockerel	10.00
Feed	93.16
Total	\$144.43

The net profit was \$60.84, on an investment of \$18, being 338 per cent., or a net profit of \$3.38 per head, including the males. To take the average number of hens for the year as thirteen, which would be the maximum, this would show a net profit of \$4.68 per hen. All feed was valued at market price. If anyone can show up a business that will give better returns on the investment than this, I will be willing to quit poultry keeping and go at it.
Middlesex Co., Ont. R. J. GRACEY.

HORTICULTURE.

The Fruit Marketing Question Again.

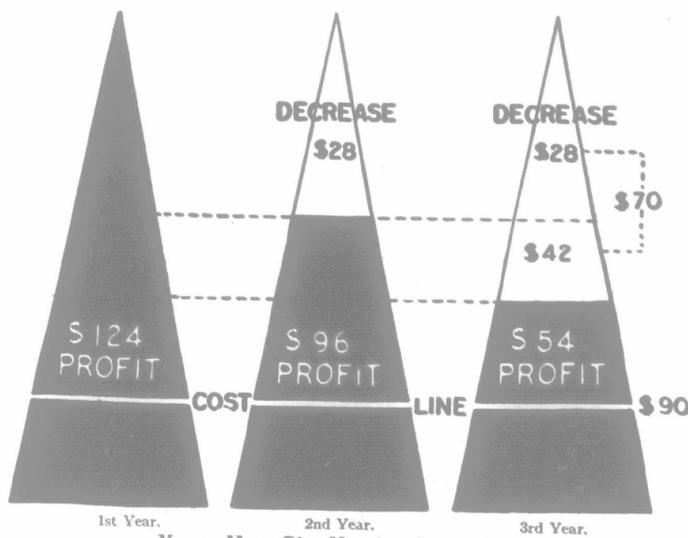
At a meeting of the Niagara Fruit Growers, held at Grimsby, Ont., late in February, P. J. Carey, Western Ontario representative of the Dominion Fruit Branch,

discussed fruit marketing as it applied to present conditions. True, this is a subject which has been well threshed out from time to time; but as every season approaches, growers become interested in marketing methods and look about for ways and means of improving their methods of selling and distributing. The speaker discussed marketing from two angles and said:

"The methods of selling the packed fruit can now be reduced to practically two, namely, shipping to the commission man and selling locally at stations. Both ways, no doubt, have many good things to be said in their favor but they are faulty in some respects, of course. Speaking for the commission men as a whole, I can testify that in most cases there seems to be a desire on their part to handle the fruit to the very best advantage, and I believe, the growers receive fair and honest treatment. I desire, however, to mention one fault that is apparent among the commission men. Where there happens to be a scarcity of fruit on offer, or, say, at the time when the new fruit is first making its appearance on the market, they are apt to take advantage of the scarcity and jump the prices out of sight, regardless of the quality of the fruit, and the retail man finds that he has paid an exorbitant price for what is little better than trash, and while he is laboring hard to sell without a loss, the fruit goes into decay. Nothing in my judgment could be further from right than this method of selling. The retail man who has been bitten goes back determined to buy safe next time, and the consumer who finds that he has paid an extremely high price for an inferior article, is not too ready to repeat his purchase.

"Many things can be said in favor of local buying at stations. The competition between buyers should make it possible for the grower to get the last cent for his fruit. This method of marketing, too, tends to distribute the fruit over a larger area, on account of the many buyers who are anxious to do business. There is one fault, however, with this method of marketing, and that is the grower loses his identity, and consequently takes no responsibility for a faulty pack, or loses interest in growing fruit of good quality.

"In the apple district north of the Lake, we found that where f. o. b. sales were effected and prices fixed, the packers lost interest in the pack, and in such cases the standard of pack was lowered. This seems to be one of the weaknesses of human nature, from which few of us



Young Hens Give Heaviest Production.
(From I. H. C. Bulletin.)

cockerel to mate my pens, and these two items alone assisted materially in raising the expense bill. The highest price we got for market eggs was 60 cents per dozen, and the lowest was 35 cents. The highest figure we asked for breeding fowls was \$5, and the lowest was \$2. For the culls that were used and went to market the price was 20 cents per pound live weight, and the eggs used in the house were credited at the market value at the time. I bought an incubator for we can never get our hens to sit early enough to hatch early pullets. I like to have pullets hatched not later than April for the next winter's layers. This incubator had a guarantee as long as your arm, guaranteeing to hatch a chick from everything you put into it, even snowballs. I tried the first hatch myself, with poor success. The boy thought he knew more about running an incubator than I did, so he took control of the next hatch, with no better results. Then Mrs. G. said that neither one of us knew anything about running an incubator, and she took charge of the next hatch and the results were no better. We set four times—50 eggs each time—and although ninety-five per cent. of the eggs were fertile the very best results that our combined skill could extract from this wonderful machine was forty per cent. of the fertile eggs. To prove that the fault was not with the eggs, we set the first hen that wanted to sit about January 1, and she hatched a chick from every egg. We hatched 80 chicks, and one day two worthless hounds broke into the yard, and before Mr. G. noticed them they had killed ten chicks and a kitten, which the children prized more highly than all the chickens. I am merely stating this to show that if it had not been for the dogs and

are free. The grower too who counts on selling locally is not so apt to care for his orchard in order to raise the best quality of fruit. This latter weakness on the part of the grower is intensified by the fact that the buyers fix each day a flat price to all for a certain kind of fruit regardless of quality.

"If the buyers had the courage to discriminate sharply in prices according to quality of fruit, it would tend to raise the standard all round.

"The shipping of peaches by carloads to different points of distribution should be encouraged. I know of no better way of marketing the fruit crop. There are thousands within shipping distance who never have an opportunity of securing a basket of our peaches. Distribution of fruit is the secret and I think the consumption could be almost doubled if special effort were made by the associations and dealers in having representatives at the different points to distribute car lots of fruit."

Keep the Peach Trees Free From Leaf Curl.

In the past peach leaf curl has defoliated whole orchards, and it has even been so severe as to depopularize peach production in various districts for a number of years. A dry, sunshiny spring is seldom accompanied by any severe visitations of leaf curl, whereas cold, wet, backward seasons usually see this disease quite prevalent. For this reason growers have sometimes thought that leaf curl on peach trees was due to climatic conditions, but the fact has been amply demonstrated that peach leaf curl is a fungous disease and weather conditions either promote or prevent its spread, depending on whether the season is wet and cold, or dry and sunshiny.

When a tree is affected the leaves become distorted, curled, thickened and yellowish-white, pinkish, or purplish in color. These symptoms are first noted when the leaves begin to expand in the spring. However, a little later in the season it will be observed that they turn brown and fall. The disease may even spread from the leaves into the shoots and destroy them. In severe attacks the trees are frequently almost completely defoliated, the fruit is stunted or drops to the ground, and the vitality of the tree is very much impaired. Such an attack prevents the development of fruit buds even should the tree survive the cold of the following winter. Peach leaf curl is always more severe in cold, wet springs.

Prevention in this case has its proverbial value. Spray with lime-sulphur with a strength of 1.035, or 1 gallon of commercial lime-sulphur to 7 gallons of water. This should be done early in the spring before the buds have started to swell, and care must be taken to see that every bud is thoroughly covered. Somewhat weaker solutions of lime-sulphur or Bordeaux mixture will prevent the leaf curl, but will not kill San José scale, which is apt to be found wherever peaches are grown. Experts, therefore, deem it advisable to use the strong solution of lime-sulphur as previously recommended.

Drive Out the San Jose Scale.

If the San José scale has made its appearance in the orchard, or has become an unwelcome visitor in the community, do not neglect to spray well with lime-sulphur before life has become too far advanced in the trees. The dormant spray should be applied with a vengeance, as that is the only way of holding San José in check. The standard strength for combatting this scale is 1.035 specific gravity, or, in other words, 1 gallon of commercial lime-sulphur to 7 gallons of water. When applying this mixture, bear in mind the following points of advice given by Prof. Lawson Caesar:

1. Do not spray when the trees are wet; this weakens the wash.
2. Do not spray just before a rain because the rain will rapidly wash the mixture off, unless it has first become thoroughly dry.
3. Do not spray when the thermometer is at or below freezing point. The mixture does not seem to get into contact with the insects so well as in warm weather.
4. If possible, start soon enough to finish by the time the buds are bursting; if not through then and the scale is abundant, spray ahead at the regular strength until all the trees are done. Often no damage to leaves will follow. In any case the spray will do less injury than the scale.
5. Test the strength of the lime-sulphur with a hydrometer. It is the only business-like way where concentrated lime-sulphur is used.
6. Take advantage of the wind. A strong wind is often helpful, especially for large trees.
7. Do not be stingy with the material. Cover every inch from the base of the trunk to the topmost twig. Remember a single female mated may mean 1,000,000 by the end of the season. It may take eight gallons or more for a large tree, but only thoroughness will pay.
8. A good gasoline outfit is very much quicker and more satisfactory than a hand pump for large old orchards, but good work can be done with a hand pump too.
9. Keep the spray machine in good repair. Pump clean water through it every night and take off the nozzles to prevent their getting set. It will save much lost time. A circular piece of leather, 3 inches in diameter, placed at the base of the nozzles will largely prevent the mixture running down the rod and wetting the hands.
10. Use gloves to save the hands.
11. Try to supervise all the spraying yourself, or put it in charge of your best man.

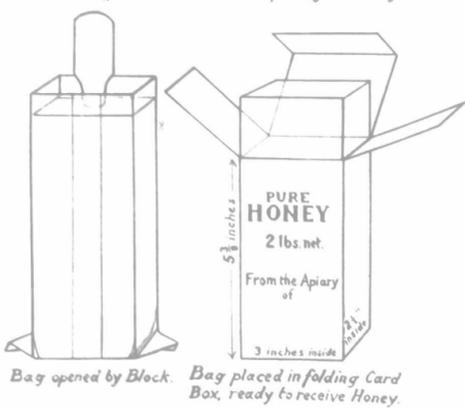
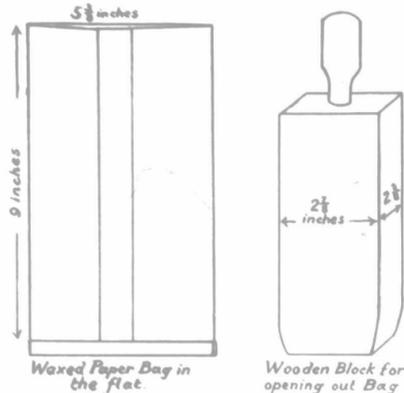
THE APIARY.

Paper Containers for Honey.

EDITOR "THE FARMER'S ADVOCATE":

In consequence of the high price of tin pails and glass jars an experiment in designing paper containers for granulated honey was commenced in February 1917 at the Central Experimental Farm, Ottawa. Nearly all kinds of honey produced in Canada will granulate hard 6 to 8 weeks after extraction, and in this form they can be conveniently distributed in small quantities in attractive inexpensive containers made of paper.

The most promising result has been obtained by pouring the honey when commencing to granulate into bags made of white bond paper, water-proofed with paraffin wax, the bags having been previously opened out on a wooden block and placed in attractive rectangular cartons, printed in one color. Two sizes of containers have been tried, one holding 2 pounds of honey, the other 5-pounds. To prevent bulging, the containers when filled were wedged in a box or frame, but it seems that it would be better to pack them before filling in the boxes in which they are to be shipped and to add small amounts of honey to each by means of a narrow spouted jug and spoon until all are filled. In this way the containers would be handled only once. A convenient size of shipping box would be one made to hold 60 pounds, that is thirty 2-pound containers in 5 rows of six, or twelve 5-pound in 3 rows of four, the box to be made $\frac{3}{8}$ of an inch deeper, longer and wider than the carton content to take corrugated paper or other wrapping. By using an extension 4 to 5 inches deep and the



same length and width as the boxes, the boxes may be tied on one another to stand while the honey is granulating. White honey gathered at Ottawa, poured into the bags while thickening on September 20, was perfectly hard and fit for shipment on October 30. The packages seemed to be appreciated by housekeepers the paper being easily peeled off the honey. The bags that had their bottoms folded three times and not sealed were more satisfactory than those with sealed bottoms, because it was found that they were less liable to tear when opened on the block. Leaking was practically eliminated when the bags in the cartons were filled with thickening honey and were packed at once in the box.

The inside dimensions of the 5-pound carton were 4 inches wide by 3 inches thick by 8 1/4 inches high. The bag to go inside this was made in the form of a tube 6 7/8 inches wide, and 14 1/2 inches long with 3 folds reducing it to 12 inches long. The 2-pound carton was 3 inches wide by 2 1/2 inches thick by 5 3/4 inches high inside. The bag to go inside this was 5 3/8 inches wide, 11 inches long with three folds reducing it to 8 1/2 inches long.

The cost of the 5 pound cartons printed, was \$12 per thousand, and the bags for them \$12 per thousand, total \$24 per thousand. The cost of the 2 pound cartons printed was \$8 per thousand, and the bags for them \$8, total \$16 per thousand. 5-pound tin pails cost, lithographed, \$9 per hundred, plain \$8 per hundred, and 2 1/2 pound pails, lithographed, cost \$6 per hundred, all by E. B. Montreal, in January, 1917. There is therefore very considerable saving in the use of cartons, both in outlay to the bee-keeper and in cost of honey to the purchaser. Indeed, the saving is somewhat more than the above figures would indicate, because the

lighter weight and bulk of the cartons and bags, which are supplied in the flat, reduces the cost of the freight compared with pails and glass jars. Against this saving must be placed the extra time taken in opening and filling the paper bags and cartons. The price of pails and cartons has advanced during the year and in Dec. 1917, lithographed 5-lb. pails are being quoted at \$12.50 per 100, and the 5-lb. card cartons at \$18 per 1,000.

F. W. L. SLADEN,
Dominion Experimental Farms. Apiarist

FARM BULLETIN.

The Bender Holstein Dispersal.

The public dispersion sale of pure-bred Holstein-Friesian cattle held by N. S. Bender, Tavistock, Ont., on March 19, was one of the most successful of the season. The cattle were taken mostly by Mr. Bender's neighbors who knew the offering and appreciated them. Bonnie Lyons Colantha, a heifer which, as a senior two-year-old, milked 61 lbs. a day, and out of a good dam, realized \$425. The majority of the offering were sired by King Lyons Hengerveld and King Lyons Colantha. Following is a list of the animals selling for \$100 or over, with the names of their purchasers

Females.

Bonnie Lyons Colantha, John Morgenroth, Tavistock	\$425.00
Home Farm Pearl DeWitt, Jesse Looker, Mitchell	195.00
Home Farm Annie DeWitt, Allan Bean, Maplewood	220.00
Belle Lyons Colantha, A. C. Hallman, Breslau	170.00
Bonnie Lady Hengerveld, H. Purcill, Listowel	190.00
Lilly Colantha Veeman, Wesley Heinbuch, Tavistock	182.50
Home Farm Minnie Lyons, Jesse Looker	200.00
Bessie Lyons Colantha, J. C. Kaufman, Tavistock	180.00
May Hengerveld Veeman, Wm. Stock, Tavistock	100.00
Home Farm Katie Lyons, Wm. Stock	130.00
Veeman Beauty Queen, Allan Bean	195.00
Patsy Colantha Faforit, Jacob Mogk, Tavistock	175.00
Home Farm Queen Hengerveld, H. F. Edworthy, Waterdown	135.00
Home Farm Lydia Hengerveld, Wesley Heinbuch	150.00
Home Farm Colantha DeWitt, John Morganroth	285.00
Graceland Pussie Lyons, Bert Leuzler, Bright	160.00
Home Farm May Lyons, Wm. Stock	150.00
Jennie Lyons Abbekerk, Jesse Looker	117.00
Lilly Lyons Greenwood, John Morgenroth	165.00
Patsy Hengerveld, Wm. Stock	125.00
Home Farm Patsy Lyons, Fred Stock, Tavistock	120.00

Males.

Korndyke King Colantha, John Masters, Woodstock	105.00
Colantha Hengerveld Lyons, Wm. Kaufman, Tavistock	135.00

Mr. Parsons Replies.

EDITOR "THE FARMER'S ADVOCATE":

Someone has been good enough to send me a clipping from your paper dated March 14th in which a Mr. E. T. Lennox attempts to criticize some statements I made in an address recently delivered before the Canadian Club of Orillia. Mr. Lennox surely wilfully misrepresents my entire attitude. In that address I tried to show that producers of all classes should stand together in their mutual interests. My whole thought was to make it appear that all producers were doing fairly well at the present time and that they ought to have more confidence in and goodwill toward each other.

I pointed out that in the case of the Grain Growers' Grain Company and their associated companies (the three of which had been amalgamated according to newspaper reports) the total profits of the three concerns had amounted to over \$1,800,000 on a capital, it was stated, of \$2,000,000, which is equal to ninety per cent. profit. I also noted the well-known case of a certain packing house that was said to have made eighty per cent. profits on its capital. It must be remembered, however, that I made clear that these instances of making enormous profits on capital were altogether extraordinary and that neither in agriculture nor in manufacturing were large profits the rule but rather the exception. Notwithstanding Mr. Lennox's denial of the profits of the Grain Growers' Grain Company and associated companies, I must surely take the printed statements as given in the newspapers unless some are officially corrected. I may also state that I can furnish proof of the case I mentioned of the farmer being unwilling to purchase a buggy with one hundred bushels of wheat as his father had done in earlier years.

Mr. Lennox makes a statement as follows:—"Some years ago the Secretary of the Manufacturers' Association stated in Winnipeg that they were two thousand five hundred strong, were like a young giant and did not know their own strength, and could paralyze the trade of the Dominion and bring seven million people to the verge of starvation." Now, if Mr. Lennox will bring proof of this statement, which I have never heard of previously, I will agree to devote one hundred dollars to any charitable institution that the Editor of The Farmer's Advocate may select.

Let me add a further well-known fact, among those who have had to consider national affairs in a large way, that if it had not been for the manufacturing industries of this country during the period of the war, Canada would have been bankrupt to-day. The time

has come when we should consider first and foremost national questions, and not our war burdens. We cannot afford to believe for one moment of this country against each other upon which all If they are prosper cannot prosper. of our great nat each other to the

It may surprise the Chairman of a thousands of mer plants of Ontario spared, in order in many cases the wages rather than needed. This is all season.

President C.

Oak Grove

Moderately good sale conducted at Hawkesville, Ont. the animals selling names of the purchaser:
Eliza Broadhooks
May Broadhooks
Lady Rosamond,
Red Ribbon, G. E. Morning Rose, W. Miss Abbott, John Meg Sultana, S. I. Sultana Broadhook
Rettie Broadhook
Princess Rettie 2
Good Rose, Andrew
Princess Rettie, F. Morning Lassie, S. Scott Rettie, G. Morning Gold, Ja Sultana Beauty, V. Scott Princess, C. Retana, G. E. M. Catalia, G. E. M. Morning Beauty, Bullrush, C. D. Red Scotch, Russel Royal Diamond, J.

Thinks Far Own

EDITOR "THE FARMER'S ADVOCATE":

I have seen of Advocate" re gain experience in th bute to the discus outfit for six ye would be sufficien running with an or gasoline. A s unless wood and would use from 10

Gasoline, 10 gal. at Cylinder and mach Feeder
Bagger
Mow or stack men Straw man
Grain carriers each Extra man for p carrying bags

The threshermen kinds of grain, fu expense for runn bushels per day.

A threshing req breakages and lost high.

Men would no furnishes the help to their work again

The threshing I put up with good of his charges and dollars for his out

Farmers in Or pay any one ma average farmer I a move every day to pay the cash of strange men, and sleeping in a fo night late in the fa

I suggest that select a threshing machinists in the not be more than keep it in good y Each farmer shou threshing and the Stormont Co.,

has come when great national interests must be considered first and foremost of all and all our petty, foolish, sectional, and selfish considerations give way to large questions and policies that alone will enable us to bear our war burdens and fulfil our destiny as a nation. Surely we cannot afford to be fighting with each other. I do not believe for one moment that either the agriculturists of this country or the manufacturers have any grudge against each other. These are the two great interests upon which all the rest of the country must depend. If they are prosperous well and good, but if not others cannot prosper. A large study and broader outlook of our great national questions will lead us to esteem each other to the fullest possible extent.

It may surprise Mr. Lennox to know that I was Chairman of a committee last summer that furnished thousands of men to the farmers from the manufacturing plants of Ontario, at a time when they could be badly spared, in order to help reap the harvest; further, that in many cases the manufacturers paid the difference in wages rather than that there should be crops not garnered. This is also to be our program for the coming season.

S. R. PARSONS,
President Canadian Manufacturers' Association.

Oak Grove Farm Shorthorn Sale.

Moderately good prices were realized at the Shorthorn sale conducted by L. K. Weber, Oak Grove Farm, Hawkesville, Ont., on March 7. Following is a list of the animals selling for \$100 or over, together with the names of the purchasers.

Eliza Broadhooks, Wm. Moore, Aberfoyle.....	\$255
May Broadhooks, G. E. Morden, Oakville.....	225
Lady Rosamond, John Stevens, Bornholm.....	200
Red Ribbon, G. E. Moore, Oakville.....	290
Morning Rose, Wm. Moore.....	300
Miss Abbott, John Stevens.....	215
Meg Sultana, S. H. Pugh, Milverton.....	210
Sultana Broadhooks, G. E. More.....	300
Rettie Broadhooks, G. E. More.....	205
Princess Rettie 2nd, P. J. McLean, Puslinch.....	265
Good Rose, Andrew Knox, Norwood.....	200
Princess Rettie, P. J. McLean.....	305
Morning Lassie, S. Smith, Aberfoyle.....	155
Scotch Rettie, G. E. More.....	225
Morning Gold, Jas. Douglas, Caledonia.....	200
Sultana Beauty, Wm. Moore.....	195
Scotch Princess, G. E. Morden.....	105
Retana, G. E. Morden.....	150
Cataliza, G. E. Morden.....	105
Morning Beauty, Jacob Lerch, Preston.....	225
Bullrush, C. C. Diefenbacher, Wallenstein.....	225
Red Scotch, Russel Johnson, Britton.....	162
Red Morning, G. E. Morden.....	135
Royal Diamond, Jas. Douglas.....	100

Thinks Farmers Should Own Their Own Threshing Outfits.

EDITOR "THE FARMER'S ADVOCATE":

I have seen opinions expressed in "The Farmer's Advocate" re gang threshing and as I have some experience in threshing I thought I would contribute to the discussion. I have been running a threshing outfit for six years and farming also. Eight men would be sufficient for a No. 3 separator of any kind running with an 8 to 12 horse power engine—coal oil or gasoline. A steam outfit would require 10 men unless wood and water were provided. This outfit would use from 10 to 12 gallons gasoline per 10-hour day.

Gasoline, 10 gal. at 40c.....	\$4.00 per day
Cylinder and machine oil.....	15 "
Feeder.....	2.00 "
Bagger.....	1.00 "
Mow or stack men (two).....	3.00 "
Straw man.....	2.00 "
Grain carriers each \$1.50.....	3.00 "
Extra man for putting on oat mow or carrying bags.....	1.50 "

The threshermen here are charging 8c. a bag for all kinds of grain, furnishing two men with the mill and expense for running it, and average 400 bags or 800 bushels per day.

A thresher requires a fair price as he must stand, breakages and lost time and men are scarce and living high.

Men would not stand for lost time. If the farmer furnishes the help, in case of a break the men go back to their work again.

The thresher has to stand lost time, breakage and put up with good and bad grain and take his living out of his charges and pay from twelve to sixteen hundred dollars for his outfit ready to thresh.

Farmers in Ontario do not thresh enough grain to pay any one man to go out gang threshing as the average farmer has about 500 bushels which means a move every day. The majority of farmers do not like to pay the cash out for the help at threshing and board strange men, and the working men do not care about sleeping in a four-wheeled cabin on a rainy or cold night late in the fall.

I suggest that six or eight farmers go together and select a threshing outfit and appoint two of the best machinists in their number to run it, as there must not be more than two men to handle this machine to keep it in good working order and to understand it. Each farmer should buy gasoline and oil for his own threshing and the gang stand repair and breakage.

Stormont Co., Ont. LINDSAY DOREE.

The Daylight Saving Bill.

EDITOR "THE FARMER'S ADVOCATE":

Considerable interest has been taken by the press in the proposed Daylight Saving Bill. Last year a Bill to this effect was brought before parliament, and, after some discussion when a good deal of fun was made of it, and some of the Western members said they had daylight to burn, the bill was very properly thrown out. This year because they expect to adopt it in the United States some think Canada should do the same. It is easily seen that the author of the Bill is not a farmer, nor does he understand farm conditions, this year, especially, when the farmer is asked to produce all he can to help win the war, and to keep the people from starving. Is the way to do it to take an hour off the best part of the day? From five to six o'clock in the evening is worth two hours in the morning, especially, during haying and harvesting, as owing to the heavy dews with which we are favored in our fine Canadian summer climate, it is too damp to do much before nine o'clock. Of course some people think that the farmer is a law unto himself and can make hours to suit conditions. Forty years ago if this Bill had been passed it would not have done the farmer any harm. At that time the farmer worked from sunrise to sunset, having tea between four and five in the afternoon. To-day conditions are changed and the modern farmer works on the ten-hour system as nearly as he can. When spring opens up, say April 1, he gets up between 5 and 5.30. By the time the stock is attended to and breakfast over, he tries to get to the field about 7. With an hour and a half off at noon he works till six o'clock, being about nine and a half hours in the field. In the beginning of April the sun rises about 5.30 and sets about 6.30. In September conditions are about the same. What better time could we have? If the clocks are put on an hour as the Daylight Bill proposes, the farmer, to have the same length of day would be up before the sun, just when he is enjoying his nap, or lying awake planning the work for the day. He would not get up any earlier than he does now so consequently he would get about 8½ hours in the field before six o'clock, when the day would be finished as the farmer cannot be expected to go on working and his town and city brothers and sisters enjoying themselves. Standard time cannot be improved upon for the farmer. If the town or city dwellers wish to start work an hour earlier than they do, if they are in favor of it, it could easily be arranged at the factories, shops, etc., without changing the time of the Dominion. It is most absurd, and we trust that farmers will bring their views before their representatives so that when the Bill comes before the House it will receive a speedy exit. I hope I have not trespassed too far on your valuable space. We consider "The Farmer's Advocate" the best farm paper published in the Dominion and no farmer can afford to do without it. Simcoe Co., Ont. D. W. LENNOX.

Montreal District Milk Shippers Meet.

EDITOR "THE FARMER'S ADVOCATE":

The Milk Shippers Association, District of Montreal met in that city, March 19. It was decided that the price of milk to the dealers in the city this summer would be 30 cents per gallon, increasing to 32 cents for the month of September. The price for last October, November and December was 30 cents per gallon, increasing to 32 cents on the first of January, so that it is practically a mid-winter price that will prevail during the summer, in place of the usual reduction of four or more cents per gallon.

W. F. Stephen, who has been secretary of the association for 17 years is now retiring from office on account of pressure of other business. The increased

cost of feeds, cows and labor, he claimed, had not been met with a corresponding increase in milk prices. Notwithstanding the difficulties under which the milk producers were laboring, they would stick to the business as a patriotic duty, if they could only get sufficient remuneration that would allow them a decent wage. As it was, many of the milk shippers were not earning anything on their investments.

There was more profit in raising beef cattle, sheep or pigs, said Mr. Stephen. There were also serious obstacles aside from the matter of profit. The shortage of feed in the districts supplying Montreal with milk had been so great that farmers were feeding their seed grain to the cattle, depending on securing their seed from the West later. This was a perilous situation as there was a general shortage of seed grain.

Montrealers, Mr. Stephen contended, were getting their milk at a lower rate than in most parts of the American continent. Fourteen to sixteen cents a quart were the common prices in most American cities at present. Evidence of the trouble that dairy farmers were having lay in the fact that they were being compelled to pay less attention to the dairy and more to the more profitable branches of agriculture in order to make ends meet. As a result, he expected a distinct decrease in the supply of milk to be forwarded to Montreal this summer. The farmers were not to blame. They were the butt of circumstances over which they had no control.

James Winter of Ormstown was elected secretary of the association in the place of Mr. Stephen, concerning whom a resolution was passed in appreciation of his long and faithful services. Other officers elected were: President, H. S. Tannahill, Huntingdon; 1st Vice-President, Paul Denis, Como; 2nd Vice-President, David Black, Lachute. AGRICOLA.

The Shorthorn Sale at Kirkton.

At the sale of pure-breds, held by A. N. Watson, Kirkton, on February 19, the following named Shorthorns sold for \$100 or over. The names of the purchasers are also given.

Blue Belle, Wm. Brock, Centralia.....	\$330
Rosewood, Wm. Brock.....	180
Lavinia, Jos. Creevy.....	302
Evergreen Lass, John Hanna, Kirkton.....	225
Tipperary, Wm. Hanna, Kirkton.....	235
Cinderella, Jas. Moore, St. Mary's.....	225
Red Rose, J. Pringle, St. Mary's.....	200
Clover Blossom, Wm. Reel, Fullarton.....	175
Isabelle, J. Pridham, Russeldale.....	175
Roan Lassie, J. Pringle.....	175
Rosalea, A. Pringle, St. Mary's.....	130
Cloverlea, J. Randal, Paris.....	200
Minto Lad 2nd, J. Randal.....	140
Greenhurst Lad, J. Sawyer, Mitchell.....	180
Model Lad, W. Sinclair, Woodham.....	140

An Old Envelope.

A communication was recently received at this office in a Farmer's Advocate return envelope sent out to the subscriber in 1883, thirty-five years ago. Many of these among our oldest readers will remember the old illustrated envelope with its horse, cow, poultry, farm produce and the home life scene. The Farmer's Advocate counts among its subscribers many who have taken the paper more than three decades, some over four decades and a few over a half century.



Nature's Beauty Returning.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending March 21.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14
Toronto (Union Stock Yards)	6,081	3,718	4,193	\$12.50	\$11.75	\$12.00	1,181	908	801	\$17.25	\$14.50	\$17.00
Montreal (Pt. St. Charles)	533	431	491	12.50	11.35	12.00	1,324	1,370	1,166	15.00	12.50	16.00
Montreal (East End)	332	733	352	12.50	11.35	12.00	1,403	1,553	580	15.00	12.50	16.00
Winnipeg	2,353	3,313	1,621	12.75	10.50	12.50	49		61	16.00	11.00	14.00
Calgary	1,833	932	1,552	11.35	8.75	12.00						

	HOGS						SHEEP					
	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14	Week Ending Mar. 21	Same Week 1917	Week Ending Mar. 14
Toronto (Union Stock Yards)	7,811	7,023	7,202	\$20.75	\$16.00	\$20.15	307	753	425	\$20.70	\$15.25	\$19.50
Montreal (Pt. St. Charles)	1,155	842	1,568	21.25	16.25	20.75	17	44	43	17.00	14.50	17.00
Montreal (East End)	666	955	455	21.25	16.25	20.75	24	69	35	17.00	14.50	17.00
Winnipeg	6,524	6,718	6,168	20.00	14.75	20.10	23	3	33	20.00	12.50	17.00
Calgary		5,709	3,731	19.25	13.75	20.50	23	816	142		13.00	

NOTE.—The total of the graded stock at each stock yard will vary from 1 per cent. to 5 per cent. of the actual receipts offered for sale. Any variations from this will be noted.

Market Comments.

Toronto (Union Stock Yards).

There was a liberal movement of cattle to the stock yards during the week, about sixty-two hundred being on sale, three thousand of which were offered on Monday, seven hundred on Tuesday, sixteen hundred on Wednesday and the balance on Thursday. On the whole, a week of active trading was experienced at prices ruling from 25 to 40 cents higher on all classes of cattle, compared with values of a week ago. On Monday trading was very active and most of the cattle offered were sold by early afternoon. On the following day prices were about steady, but on Wednesday the market was somewhat slow, sales of medium and common cattle being inclined to drag and many of these grades were carried over to Thursday, on which day the market showed renewed activity at prices about steady with Monday's quotations. The quality of the cattle was better than for some weeks past, many choice animals being in the pens and included was a sprinkling of beef cattle. Only a limited number of heavy steers were on sale; two head of these sold at \$13.25 per hundred, a straight load of fourteen head averaging twelve hundred and fifty pounds; shipped from St. Mary's, Ontario, went to an outside buyer at \$13 per hundred, while a few odd head also sold during the week at this latter figure, and the majority of the offerings from \$12 to \$12.50 per hundred. Of steers weighing from ten hundred to twelve hundred pounds, a number of head averaging eleven hundred and seventy pounds sold at \$13 on Monday. On Wednesday, a load of equal weight realized \$12.40, and five head of choice cattle of ten hundred and fifty pounds, \$12.50. Quite a number of loads of good cattle of these weights sold from \$11.75 to \$12.35 per hundred; common quality realized from \$10.25 to \$10.75. A number of sales of choice baby beef were made at fancy prices, a few being sold at \$12 to \$11, seven head of about eight hundred pounds average bringing the latter price on Monday, while nine of seven hundred and fifty pounds sold on Wednesday at \$13.50. Straight loads of butcher cattle under one thousand pounds were weighed up at from \$11 to \$11.75, while one-half load reached \$12. Cows and bulls were active and steady in sympathy with other grades of cattle, and a few sales were made at \$11 to \$11.50 for these of extra choice quality, while most of the best animals moved from \$10 to \$10.75, and good from \$9 to \$9.75. Common bulls sold from \$7.75 to \$8.51, and common cows from \$7 to \$8. The demand for stockers and feeders for grass feeding is increasing, and a number of shipments were made during the week to country points. Good feeders are selling from \$9.50 to \$10.51, according to weight and quality, and good stockers from \$8.75 to \$9.50. There is a considerable movement of calves at the present time, eleven hundred being on sale, most of them of dairy breeding from the dairy sections of Ontario. A price of \$17.25 was paid for a few choice veal, while \$16.50 to \$17 was the ruling price for the best veal calves, and \$12 to \$15 for those of common quality. Lambs and sheep are in less demand but the supply is limited. Two decks of

CLASSIFICATION	No.	TORONTO (Union Stock Yards)			MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS								
heavy finished	149	\$12.67	\$11.75-\$12.75	\$13.00				
STEEERS								
good	657	11.92	11.50-12.25	12.50	95	\$12.25	\$12.50-	\$12.50
1,000-1,200 common	49	10.61	9.75-11.25	11.25	34	10.90	10.90-	10.90
STEEERS								
good	1,781	11.36	10.75-11.75	12.25	85	11.15	11.00-\$11.50	11.50
700-1,000 common	642	10.06	9.25-10.50	10.50	67	10.00	9.75-10.25	10.75
HEIFERS								
good	650	11.61	11.00-12.00	12.50	40	11.15	11.00-12.50	12.50
fair	460	10.37	9.75-10.75	10.75	20	10.00	9.50-10.75	10.75
common	66	9.10	8.75-9.50	9.50	6	8.75	8.50-9.25	9.25
COWS								
good	385	9.89	9.00-10.50	11.00	33	10.25	9.75-10.50	13.50
common	652	8.09	7.50-8.50	8.75	53	8.75	7.00-9.50	9.50
BULLS								
good	91	9.98	9.00-10.50	11.00	15	10.50	10.50-	11.00
common	58	8.08	7.75-8.75	9.75	17	9.50	8.50-9.75	9.75
CANNERS & CUTTERS	244	6.25	6.00-6.50	6.50	46	6.25	5.25-6.75	6.75
OXEN	2	12.75	12.75-	12.75	12			
CALVES								
veal	1,162	15.24	14.00-17.00	17.25	1,324	11.24	10.00-14.50	15.00
grass	19	8.00	7.00-9.00	9.00				
STOCKERS								
good	12	9.25	8.75-9.50	9.50				
fair	22	8.21	7.75-8.75	8.75				
FEEDERS								
good	96	10.34	10.00-10.75	11.00				
fair	65	9.75	9.50-10.00	10.00				
HOGS								
selects	7,364	20.48	20.25-20.75	20.75	897	21.15	21.00-21.25	21.25
heavy	6	20.75	20.75-	20.75				
(fed and lights	270	18.97	18.25-19.75	19.75	236	20.40	20.25-20.50	20.50
watered) sows	157	18.97	18.25-19.75	19.75	18	18.75	18.50-19.00	19.00
stags	14	16.55	16.25-16.75	16.75	4			
LAMBS								
good	250	19.50	19.00-20.50	20.70	7	17.00	17.00-	17.00
common	39	17.00	16.00-18.00	19.00				
SHEEP								
heavy	42	12.43	11.00-14.00	14.00	10	13.15	13.00-13.50	13.50
light	27	14.00	13.00-15.00	16.00				
common	9	8.00	7.00-9.00	9.00				

lamb sold during the week at \$20.60, a number of others realized \$21.70, while sheep were moving at \$12 to \$15 for those of good grading, and from \$7 to \$10 for common.

Hog receipts were somewhat lighter than those of the previous week, and in a strong demand quotations ruled very high. On Monday \$21.25 per hundred was the quotation for selects, fed and watered, while two decks brought \$21.11. On Tuesday only seven hundred hogs were on sale, and these were weighed up at \$20.50. This latter price covered most of the sales on Wednesday, although two decks realized \$20.75. On Thursday the market was steady at the higher level. There appears to be a shortage of finished hogs in the country, and receipts are lighter than those of a year ago. Demand is very keen at the present time, and prices are likely to rule high for an indefinite period.

Of the disposition from the yards for the week ending March 14th, Canadian packing houses bought 435 calves, 67 bulls, 21 heavy steers, 3,250 butchers, 9,340 hogs and 331 sheep and lambs. Local butchers purchased 150 calves, 348 butcher cattle, 83 hogs and 184 sheep and lambs. Canadian shipments were made up of 30 calves, 100 milk cows, 35

butcher cattle, 420 stockers, 103 feeders. There were no shipments made to United States points during the week.

The total receipts from January 1st to March 14th, inclusive, were 47,527 cattle, 6,923 calves, 85,982 hogs and 1,950 sheep; compared to 45,515 cattle, 7,210 calves, 107,535 hogs and 1,131 sheep, received during the corresponding period of 1917.

Montreal.

Receipts of butcher cattle for the week totaled eight hundred and ninety-five compared with eight hundred and forty-three on hand during the previous week. The market opened strong and maintained this condition throughout a period of active trading, in which the average price of good quality steers was advanced \$1 per hundred on a basis of quality above the closing price of the previous week. The percentage of good stock among the offerings has not been surpassed at any time this season, a circumstance due largely to the strong demand for cattle of good finish for the Easter and Hebrew feasts. Some excellent sides were made. Two cows of good finish which averaged fifty hundred and ninety-five pounds each, and dressed out one at nine hundred and ninety-seven pounds and the other at ten hundred and twenty-three pounds, at an average of sixty-three per cent. of the

total live weight, sold for \$13.50 per hundred. One of these cows gave a surplus fat supply, other than the kidney fat, of four hundred pounds. There is always a big demand for stock of this kind during the Lenten season. Steers weighing from ten hundred to twelve hundred pounds, of which there were ninety-five on hand, realized high prices, which were justified as most of this number dressed out from fifty-four to fifty-six per cent. of the live weight; about fifty head sold at \$12.50 per hundred-weight, and the remainder at slightly lower figures. Twenty-five head of medium quality steers of these weights sold at \$10.90 per hundred. There were very few good quality animals under ten hundred pounds on sale, most of the finished stock being of heavier weights. Good cows in fat condition sold readily from \$9.75 to \$10.50 per hundred, those of common grading were, in some cases, 25 cents weaker, selling from \$7 to \$9.50, while butcher heifers sold well in mixed lots with the steers. Butcher bulls sold mostly at last week's prices, although one exceptionally good bull weighing twenty three hundred and twenty-five pounds and dressing out sixty-three per cent. of the live weight brought \$10.75 per hundred. Veal calves continue to increase in

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 best heavy fat...
 good butchering

numbers and decrease in quality, circumstances which caused a cut of from \$2 to \$3 per hundred, the average price for the week being around \$11. The export trade in this class of stock has not yet started and the supply is too heavy for the local trade, chiefly on account of the lack of good quality.

There were hardly enough sheep and lambs on hand to make a market and prices were unchanged from those of last week, sheep selling from \$13 to \$13.50 per hundred, and lambs at \$17.

Receipts of hogs while fairly liberal were inadequate for the demand. The market opened strong and active at \$21.50 per hundred for long-run selects, off car weights, and \$21.25 for short-runs, and maintained a strong condition all week, closing with a strong tendency to advance. These prices were paid only for hogs weighing from one hundred and fifty pounds up.

Pr. St. CHARLES.—Of the disposition from the Yards for the week ending March 14th, Canadian packing houses and local butchers purchased 1,106 calves, 67 canners and cutters, 29 bulls, 356 butcher cattle, 1,508 hogs and 43 sheep and lambs. Canadian shipments were made up of 29 milk cows. There were no shipments made to United States points during the week.

The total receipts from January 1st to March 14th, inclusive, were 6,080 cattle, 4,188 calves, 13,198 hogs and 4,987 sheep; compared to 8,478 cattle, 4,907 calves, 14,851 hogs and 4,529 sheep, received during the corresponding period of 1917.

East End.—Of the disposition from the Yards for the week ending March 14th, Canadian packing houses and local butchers purchased 589 calves, 332 butcher cattle, 455 hogs and 35 sheep and lambs. Canadian shipments were made up of 20 butcher cattle. There were no shipments made to United States points during the week.

The total receipts from January 1st to March 14th, inclusive, were 7,225 cattle, 3,172 calves, 8,485 hogs and 4,668 sheep, compared to 9,544 cattle, 4,473 calves, 11,351 hogs and 5,766 sheep received during the corresponding period of 1917.

Buffalo.

Cattle—A rattling good cattle trade all around at Buffalo the last week. Anything in the steer line was advanced from a quarter to forty cents and on choice and fancy fat cows the advance was fully as much. The supply for the opening day of the week figures eighty loads or 2,000 head and fell below the needs. Receipts were light after Monday and a good, strong market in consequence prevailed. There were around fifteen to twenty cars of steers on the shipping order, best of which landed from \$13.50 to \$14. A drove of very heavy, gobby fat cows, for Jewish demand, sold at the very fancy price of \$14. Fat heifers of any class sold higher and were ready sale. Best handy butchering steers sold up to \$12.50 to \$13.00, with best handy butchering heifers from \$11 to \$11.25. Stocker and feeder demand was strong, a couple of loads of steers, weighing around seven hundred selling at ten cents, but the best selected lots of feeders are quotable up to \$10.50. Bull market was about steady, prices of these of late weeks had taken a heavy decline, best heavy fat kinds selling around \$11 to \$11.25. Milk cow and springer trade firm for the best heavy kinds, about steady on the medium and common grades. Fancy milkers sold up to \$180.00. Offerings for the week totaled 2,875 head, as against 3,650 head for the corresponding week last year and 3,675 head for the like week a year ago. Quotations:

Shipping Steers—Natives—Choice to prime, \$13.15 to \$14; fair to good, \$12.50 to \$12.90; plain, \$11.50 to \$12; very coarse and common, \$10.75 to \$11.

Shipping Steers—Canadians—Best, \$12 to \$12.50; fair to good, \$11.25 to \$11.75; common and plain \$10 to \$11.

Butchering Steers—Choice heavy, \$12.50 to \$12.75; fair to good, \$11.50 to \$11.75; best handy, \$12 to \$12.50; fair to good, \$11.25 to \$11.75; light and common \$10 to \$10.50; yearlings, choice to prime \$12.50 to \$13; fair to good, \$11.75 to \$12.

Cows and Heifers—Best heavy heifers, \$11 to \$12; good butchering heifers, \$10.50 to \$10.75; fair butchering heifers, \$9.50 to \$10.25; common, \$7.50 to \$8.25; very fancy fat cows, \$11 to \$12.25; best heavy fat cows, \$10 to \$10.75; good butchering cows, \$9 to \$9.50;

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 Interest at Highest Current Rate

THE ROYAL BANK OF CANADA

Capital Authorized - - - \$25,000,000
 Capital Paid Up - - - 12,911,700
 Reserve Funds - - - 14,564,000
 Total Assets - - - 321,000,000

HEAD OFFICE, MONTREAL

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 SALE NOTES COLLECTED

SAVINGS DEPARTMENT
 At all Branches

The Farmer-Banker Alliance



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medium to fair, \$7.50 to \$8.50; cutters, \$6.50 to \$6.75; canners, \$5 to \$6.
 Bulls.—Best heavy, \$10 to \$10.75; good butchering, \$9 to \$9.50.

Stockers and Feeders.—Best feeders, \$10 to \$10.50; common to fair, \$8.50 to \$9.25; best stockers, \$8.50 to \$9; fair to good, \$7 to \$8; common, \$6 to \$6.50.

Milchers and Springers—Good to best, (small lots) \$90.00 to \$120.00; in car loads, \$80.00 to \$100.00.

Hogs.—Prices showed a bad break the fore part of the week, but before the week was out the decline was fully regained. Monday, when values went off 25 to 50 cents from the previous week's close, light hogs sold from \$18.50 to \$18.75, heavies ranged from \$18.20 to \$18.40 and pigs landed at \$18.25. Tuesday prices were still lower, range being from \$18 to \$18.35, heavies and pigs selling down to the low figure, Wednesday prices were jumped 25 to 35 cents, top being up to \$18.65, and Thursday light hogs brought \$18.80 to \$18.90, heavies ranged from \$18.35 to \$18.60 and pigs \$18 to \$18.50. Friday the good weight hogs were generally steady, bulk going at \$18.60, light grades were \$15 to 25 cents higher, yorkers and mixed grades bringing from \$19 to \$19.15 and pigs, which showed the greatest improvement, ranged up to \$19. Roughs the fore part of the week sold around \$16.25 and Friday they brought from \$16.50 to 16.75. Stags went from \$14.50 down. Last week receipts were 23,500 head, as against 21,413 head for the week before and 11,500 head for the same week a year ago.

Sheep and lambs.—Last week started with top lambs selling mostly at \$19, Tuesday's range on the best was from \$18.75 to \$18.90, Wednesday nothing sold above \$18.80, Thursday's market was stronger, top being \$18.90 and Friday the best handy lambs sold from \$19 to \$19.15. Cull lambs ranged from \$18 down and heavy lambs, kinds weighing around 100 pounds, sold in the same notch as good culls. Yearlings were quoted Friday up to \$17. Sheep were scarce all week. Wethers that were choice but pretty heavy sold at \$14.50 and a more desirable kind was quoted up to \$14.75. Ewe range was from \$14 down. Monday a load of fresh clipped lambs made \$15.50. Receipts for the week totaled 13,209 head, being against 17,906 head for the week previous and 14,800 head for the same week a year ago.

Calves.—All former American records for veals were broken at Buffalo last week. Monday choice lots sold mostly at \$19 and culls went from \$16. Demand was very strong after Monday and an advance was noted from day to day. Friday, which was the record breaking day, best veals sold from \$20.50 to \$21 and culls ranged from \$17 down. Last week's receipts were 3,800 head, as compared with 3,053 head for the week before and 2,700 head for the same week a year ago.

Toronto Produce.

Live stock receipts at the Union Stock Yards, West Toronto, Monday, March 25, were 186 cars: 3,446 cattle, 448 calves, 1,779 hogs, 135 sheep and lambs. Slow market. Butchers, 10 to 20 cents lower. Cows, steady to 20 cents lower. Bulls, drug on market—none sold. Calves, sheep and lambs steady; one lot 37 lambs sold at \$20.85. Hogs, \$21 per cwt., fed.

Breadstuffs.

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

Oats.—(According to freights outside) Ontario, No. 2 white, 94c. to 95c., nominal, No. 3 white, 93c. to 94c., nominal. Manitoba oats, No. 2 C. W., 96½c., No. 3, C. W., 92½c. (in store, Fort William). Extra No. 1 feed, 91½c.; No. 1 feed, 90½c.

Barley.—Malting, \$1.78 to \$1.80.
 Peas.—According to freights outside; No. 2, \$3.50 to \$3.60.

Corn.—American (track, Toronto), No. 3 yellow U. S. A. War Board Prohibit importation.

Rye.—No. 2, \$2.50.
 Flour.—Manitoba flour (Toronto, new, bags.) War quality, \$11.10. Ontario flour (prompt shipment, new bags), war quality, \$10.70, Montreal; \$10.70, Toronto.

Hay and Millfeed.

Hay.—Track, Toronto, No. 1, \$17 to \$18 per ton; mixed, per ton \$14 to \$16.
 Straw.—Car lots, per ton, \$8.50 to \$9, track, Toronto.
 Bran.—Per ton, \$35.
 Shorts.—Per ton, \$40.

Hides and Wool.

Prices delivered, Toronto:

City Hides.—City butcher hides, green, flat, 12c.; calf skins, green flat, 23c.; veal kip, 18c.; horse hides, city-off, \$5 to \$6; sheep, \$2.50 to \$5.50.

Country Markets.—Beef hides, flat, cured, 11c. to 12c.; green, 10c. to 11c.; deacons or bob calf, \$1.75 to \$2.50 each; horse hides, country take-off No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$5; horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 16c. to 17c.; country solids, in barrels, No. 1, 15c. to 16c.; cakes, No. 1, 18c. to 19c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c.; coarse, 58c.; washed wool, fine, 82c.; coarse, 80c.

Farm Produce.

Butter.—All class of butter kept stationary in price, selling as follows on the wholesales: Creamery, fresh-made pound squares, at 50c. to 52c. per lb.; creamery solids, at 48c. to 49c. per lb.; dairy, 35c. to 40c. per lb.

Oleomargarine.—32c. per lb.
 Eggs.—The egg market also remained practically stationary, No. 1's selling at 45c. to 46c. per doz., and 1 selects at 48c. to 49c. per dozen, wholesale.

Cheese.—Cheese remained unchanged in price; old cheese selling at 30c. per lb.; new at 24c. per lb., and new twins at 24½c. per lb.

Beans.—Beans continue to be very scarce and therefore firm in price. Japanese hand-picked whites selling at \$6.75 per bushel.

Honey.—Honey is off the market.

Poultry.—Receipts continue to be very light with only a moderate demand. Fat live hens, however, are expected to have an active demand during the next week owing to the near approach of the Jewish passover. The following prices were quoted for live weight: Chickens, milk fed, per lb., 30c.; chickens, ordinary fed, per lb., 24c.; fowl, 3¼ lbs. and under, per lb. 22c.; fowl, 3½ lbs. to 5 lbs., per lb. 25c.; fowl, 7 lbs. and over, per lb., 30c.; ducklings, per lb., 25c.; geese, per lb., 18c.; turkeys, per lb., 25c.; turkeys, old, per lb., 22c.

Potatoes.—Potato receipts have been exceptionally heavy with a very slow trade at slightly lower prices: New Brunswick De awares selling at \$1.90 per bag, and Ontarios at \$1.65 to \$1.80 per bag, wholesale—Cobbler seed potatoes keeping stationary at \$2.50 per bag.

Montreal Produce.

Horses.—Farmers are evidently making preparations for their spring work, and in this connection were enquiring for good plugs of mares at around \$150 each. Carters were also making enquiry, though transactions were not very frequent. Prices were \$250 to \$300 for heavy draft horses weighing 1,500 to 1,700 lbs.; \$200 to \$250 for light draft, 1,400 to 1,500 lbs.; \$125 to \$175 for light horses; \$50 to \$75 for culls; and \$175 to \$250 for fine saddle and carriage horses.

Poultry.—Supplies in the market were light, and receipts from the country were almost nil, so that prices were firm. Turkeys were firm at 35c. to 36c. per lb., while milk-fed chickens brought around that range also, while good chickens were 30c. to 33c. Best fowl sold at 27c. to 30c., and from this the price ranged down to 23c. Geese 25c. to 27c.; ducks, 26c. to 30c.

Dressed Hogs.—The market for dressed hogs continued to display a very firm tone, but prices were holding about steady. Abattoir, fresh-killed stock continued at 28c. to 23½c. per lb., while country-dressed was available at 25c. to 25½c.

Potatoes.—The market experienced a considerable decline owing to the milder weather having induced larger deliveries. Car lots of Green Mountains changed hands at \$1.60 to \$1.65 per 90 lbs., extra track, 20 cents being added to these prices, per 80 lbs., ex-store, in smaller lots. Quebec whites \$1.75 and reds \$1.70.

Honey and Maple Syrup was hardly quotable last week. No trading took place in the old crop, and the first of the new crop was just in the making, and unquotable as a market. As for the weather, it is favorable but the woods are very full of snow. Prospects seem to be for a good crop. Honey was not in active demand, No. 1 white clover comb being quoted at 22c. per lb.; No. 2, 19c. to 20c.,

Continued on page 550.

called by His Name. If it is true that our soldiers—or many of them—look up to Christ as their ideal Man, yet look down on His professed followers as “canting hypocrites,” whose fault is it? Is it our fault—yours and mine?

Let us, in this day of tremendous realities, look at the matter honestly. We can't afford to gloss over flaws in the Church's machinery while millions of men are facing death and asking for some word of the Beyond—some word that they can trust.

We call ourselves “Christians,” are we really serving Christ? Do we, in soldierly fashion, obey His orders each day? Do we accept our particular cross—the cross He asks us to endure—as cheerily as the soldiers accept hardship and danger? Do we rejoice that we are counted worthy to suffer something for His sake? Or do we complain and grumble when we can't have exactly what we want?

We are sent out to be His witnesses—the proof He offers to the world that He is not dead, but Living and in the midst of His Church. “Ye are manifestly declared to be the epistle of Christ,” wrote St. Paul to the Corinthian Christians: and it was to the same Corinthian disciples that he held up a marvellous picture of Christ—the picture of perfect Love—for them to copy. Love is kind, though unkindly treated, rejoiceth in the good fortune of other people and delights in pointing out their virtues. Love endures unflinchingly all pain, trouble and illwill, hoping still in darkness, when all earthly hope has failed. Compare our copy with the Original—with the Love of Christ—and see how poor an imitation we are showing the world. But the War is not yet over—we are invited again to be His witnesses. Let us pray:

“Grant us love Thy Love to own,
Love to live for Thee alone,
And the power of grace make known
We beseech Thee hear us.”

DORA FARNCOMB.

The Windrow.

If the present scarcity of ordinary skins continues, leather for shoes may soon be made of the skins of whales, sharks, walrus and codfish. Experiments are being made to make these available.

Lantern rockets, with parachutes attached, are now sent up over Paris on dark nights, to reveal the whereabouts of attacking air-planes; and it is proposed to open the “catacombs,” ancient stone quarries running under half the city, to use as shelters when bombs are being dropped.

Many astronomers are now making extensive preparations to observe the total eclipse of the sun which is to visit the United States on the 8th of June. The eclipse will be visible only to a strip of country extending from the mouth of the Columbia River in Washington to the coast of Florida, and varying in width from 65 to 40 miles.

Fruit, uncooked, unadorned and served as nature gives it to us, has the approval of doctors and dietitians. It is a recognized fact that our bodies work much better when there is a surplus of alkaline ingredients in the blood, and that difficulties arise if the surplus is acid instead. Contrary to what might be expected, fruits which contain more or less acid always leave alkalines behind them to be absorbed by the blood. Meat, eggs, fish, cheese and all cereal foods, on the contrary, leave an acid record. In order to maintain the desirable healthy alkaline condition of the blood nothing could be more logical than to finish a meal of meat, bread and pastries with fruit. Because this is true fruits and green vegetables, most of which have the same alkaline characteristics, are often called blood purifiers. They are as essential to a healthy condition of the body as is oil to a smoothly-running engine.

The Fashions.

How to Order Patterns.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state in which issue pattern appeared. Address Fashion Department, “The Farmer's Advocate and Home Magazine,” London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

Send 15 cents per number when price is not marked.

When ordering please use this form:—
Send the following pattern to:

Name.....
Post Office.....
County.....
Province.....
Number of Pattern.....
Age (if child or misses' pattern).....
Measurement—Waist..... Bust.....
Date of issued in which pattern appeared.....



No. 9648 Blouse with Convertible Collar, 34 to 44 bust. Price 15 cts.
No. 9651 Three-Piece Shirt, 24 to 32 waist. Price 15 cts.
No. 9379 Boy's Suit, 2 to 6 years. Price 10 cts.



No. 9499 Suspender Dress, 6 to 12 years. Price 10 cts.
No. 9519 Girl's Dress, 10 to 14 years. Price 15 cts.



No. 9634 Dress with Panel Trim, 34 to 44 bust. Price 15 cts.
No. 9635 Dress, sizes 16 and 18 years. Price 15 cts.



9619 Fancy Blouse, 34 to 42 bust. Price 15 cts.
No. 9651 Dress for Misses and Small Women, 16 and 18 years. Price 15 cts.
9623 Skirt with Pointed Tunic, 24 to 32 waist. Price 15 cts.
No. 9558 Two-Piece Skirt for Misses and Small Women, 16 and 18 years. Price 10 cts.



No. 9525 Blouse with White Collar, 34 to 42 bust. Price 15 cts.
No. 9640 Blouse with Tunic, 34 to 42 bust. Price 15 cts.
No. 9641 Three-Piece Skirt, 24 to 32 waist. Price 15 cts.
No. 9692 Two-Piece Skirt, 24 to 34 waist. Price 10 cts.



No. 9643 Girl's One-Piece Dress, 10 to 14 years. Price 15 cts.
No. 9377 Boy's Suit, 2 to 6 years. Price 10 cts.

through with the labor of women only. But it seems to me this a something that must not be undertaken recklessly. I do not say that it is impossible. There are women who are so big and strong of bone and muscle and so filled with robust health, that they can go out and do such work without being very much the worse for it; but I do think that these are in the minority and that they have no right whatever to dictate to frailer women, already overworked, as to what they shall or shall not do. Let the big strong women go out and work at ploughing, harrowing and pitching up sheaves if they want to, and all honor and glory to them for it, but let them not forget that the weaker woman who manages to squeeze in a pile of knitting along with her housework, or who spares money to the Red Cross from the proceeds of her chickens, is also doing war work none the less important. For a frail woman, carried away by enthusiasm, to attempt heavy farm work, might be only suicidal. By wisely working in some less strenuous way, she may at once preserve such strength as she has and do more for the war than by making a wild spurt and breaking down.

In everything enthusiasm must be tempered with wisdom. It must always be remembered that efficiency can only be secured by good health joined to the will to work just as far as the bodily strength will permit but no further. Never was efficiency so needed as today; yet to-morrow it may be needed even more. If the women make of themselves broken-down wrecks how will the world be served either to-day or to-morrow?

There is one way, however, in which comparatively frail women really can work on the land, finding, too, not less health but more in the process.—That is, gardening, and it is cheering to remember that in the face of the world's urgent call for food, ever so small a plot of land can add to its foodstuffs. Every beet and carrot, every quart of beans and peck of potatoes, spares just so much of the essentials called for over there in Europe. So is it not evident that every garden-bed we make, even for our own use, and every hill of potatoes we hoe (provided there is no man with a horse-draw to do the work) must help our armies and the people of France and Belgium who have been turned out of their homes.

Potatoes especially are good food, and so are beans.—Have you never grown beans? Then try some this year, even though the price is high. They are all good—white, yellow, brown, black, and even the “scarlet runners” that you can train on the fence and that are just as edible as the others. They all contain protein, the great muscle builder, and, moreover, not only do not take anything out of the soil to impoverish it, but, on the other hand, positively enrich it. They are legumes, like clover, and so take nitrogen right out of the air and throw it into the soil, where it will remain ready to help things grow next year.

In order to find time to do all this gardening, it will of course be necessary to curtail work elsewhere, but any woman “with a head on her” can see how this may be done: Unnecessary “frills” in both cooking and clothes will have to be abandoned. If one has a house of many rooms it may be advisable to shut some of them up for the summer. By doing all of the cooking on an old stove in an outside shed and serving the meals on the back porch, or under a tree, when the weather is fit, much toil of cleaning-up in the house may be saved. A tent on the lawn which may be used as a sleeping-chamber will help still more, and will be found more healthful than the inside room.

—But why enumerate? Any wide awake woman can add to the list.

JUST a word more in closing: It is perfectly ridiculous the way the idea still sticks in the minds of some people that the Government, by its food regulations is trying to make us half starve ourselves here. On the very face of it that is as unreasonable a notion as ever was hatched. It would be a fool Government that would ask us to eat less than we need, and so ruin our efficiency here in the face of all the work we have to do.

The only request the Food Control Department makes in the regulations issued, is that we eat certain things to spare others. Wheat, beef, bacon, and sugar have been found the most con-

venient and the and we are ash those four th quantities can

But what a sp left! Brown bre of all kinds; bro rice and other ce poultry and fish and fruits; maple and a reasonabl well as a reason flour! —If we meals on all those

It is no hardsh and muffins.—An experience, for I dozen slices of w year. If you do some good Grah or biscuits for tea and syrup or jam and see how good

Surely the boy that we at least little service for willing to do ever be—well, heartily to say the least. bearing!

Just here, will with me in this help out in a w easily?

Will you please “war” recipe? The “war” issue, so fa partment is conce we may help some to cook with the but do not know given you some r some more, but pe And, anyhow, I th interesting to you have llection,—don't you

Needle Point

“Help the bir can, for they w a service that m ventions, utterly Our Dumb Anima “The best evide is that one is eve F. Cope.

What to do

FARMER'S ADVOCATI Will you please Advocate these que What to do wi daffodils and nar bloomed this winter Will they bloom t out in the spring? be kept in order t to bloom next winte Simcoe Co., Ont.

Bulbs that have in the winter cannot the next summer, b some out of the w time, they may d bulb flowers in the plant fresh firm bu spring. After that undisturbed for s thin them out if ne ford says: “It is n up your bulbs each to think. I prefer undisturbed for tw Then I lit them a ripened, and divid away until fall, whe new beds. The bed can be utilized fo making it necessary which will have comp before it is time to p The soil can be sti rake, taking care n penetrate far enoug with the bulbs.

Papering

Dear Junia—I papering two rooms is a parlor with two east; the other is a one window facing t arch-way dividing t refers to a country ho 1. Would it be a both alike or different of paper would be painted a silver grey? 2. What colored the paper best? AN ATT Welland Co., Ont.

venient and the most needful at the front and we are asked to spare all we can of those four things so that sufficient quantities can be sent over there.

But what a splendid variety we have left! Brown breads, muffins and biscuits of all kinds; brown nutbread and cake; rice and other cereals for porridge; mutton poultry and fish of all kinds; vegetables and fruits; maple and corn syrup, honey and a reasonable amount of sugar as well as a reasonable amount of white flour!—If we can't make out good meals on all those we deserve to go hungry.

It is no hardship to eat brown bread and muffins.—And here I speak from experience, for I haven't eaten half a dozen slices of white bread in the past year. If you don't believe me, just try some good Graham flour bread muffins or biscuits for tea to-morrow, with butter and syrup or jam as an accompaniment, and see how good they are.

Surely the boys at the front deserve that we at least try to do this little, little service for them! If we are not willing to do even this much, we should be—well, heartily ashamed of ourselves to say the least. Think of all they are bearing!

Just here, will you who sympathize with me in this view of the situation, help out in a way that you can, very easily?

Will you please send me your very best "war" recipe? Then we can have a whole "war" issue, so far as the cookery department is concerned, and so, perhaps, we may help some people who would like to cook with the things recommended but do not know how. I have already given you some recipes, and have still some more, but perhaps yours are better. And, anyhow, I think it would be more interesting to have a round-robin collection,—don't you? JUNIA.

Needle Points of Thought.

"Help the birds all you possibly can, for they will do your locality a service that man, with all his inventions, utterly fails to render."—Our Dumb Animals.

"The best evidence of being learned is that one is ever learning."—Henry F. Cope.

What to do With Bulbs.

FARMER'S ADVOCATE: Will you please answer through the Advocate these questions:

What to do with bulbs, hyacinths, daffodils and narcissi? They have bloomed this winter.

Will they bloom this summer if planted out in the spring? How should the bulbs be kept in order to have them ready to bloom next winter?

Simcoe Co., Ont. MRS. J. S.

Bulbs that have been forced in pots in the winter cannot be expected to bloom the next summer, but may be planted in some out of the way place where, in time, they may develop. To have bulb flowers in the garden one must plant fresh firm bulbs in fall or early spring. After that they may be left undisturbed for some time except to thin them out if necessary. Eben Rexford says: "It is not necessary to take up your bulbs each season as some seem to think. I prefer to let them remain undisturbed for two or three years. Then I lift them after the foliage has ripened, and divide them, storing them away until fall, when they are reset in new beds. The beds where bulbs grow can be utilized for annuals without making it necessary to disturb the bulbs, which will have completed their flowering before it is time to put out the annuals. The soil can be stirred with a garden rake, taking care not to let the teeth penetrate far enough to come in contact with the bulbs."

Papering Rooms.

Dear Junia,—I am thinking of papering two rooms this spring. One is a parlor with two windows facing the east; the other is a dining-room with one window facing the south, with an arch-way dividing the two rooms. This refers to a country house.

1. Would it be advisable to paper both alike or different, if so, what shade of paper would be best, both rooms are painted a silver grey?

2. What colored rugs would match the paper best?

AN ATTENTIVE READER.
Welland Co., Ont.

Personally I should like both of the rooms done in the same paper, provided the rugs match in color. But it is in quite good taste to have the papers different, in such a case, if it is made sure that they harmonize. Sometimes it is even advisable to do this, when one room is much darker than the other, or when the exposures are markedly different.

Papers in honey color, amber, chamois, sand, and tobacco brown are all much favored this spring, and very pretty and durable they are. But they would scarcely "go with" your silver gray paint, would they?—So we shall have to think of something else.

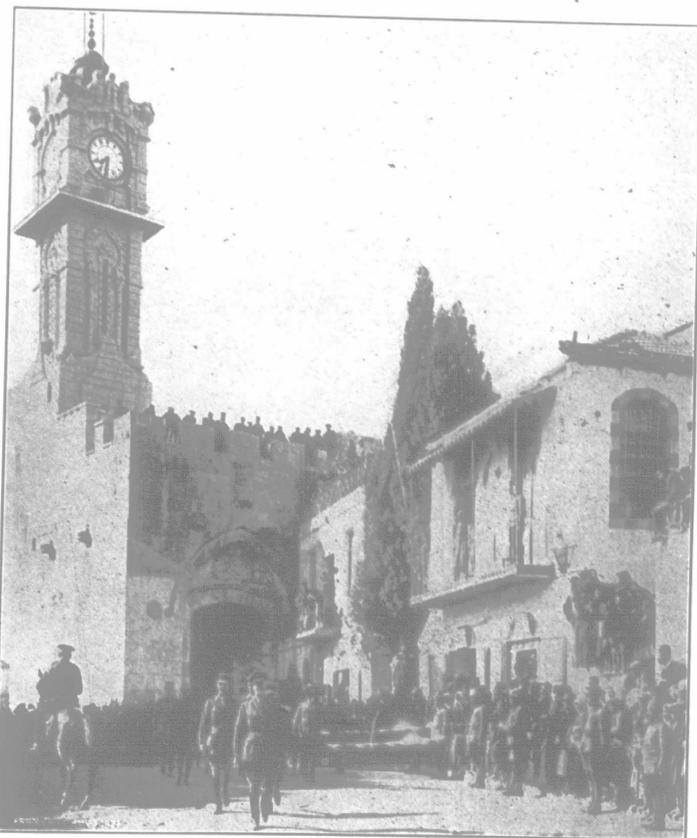
Really your gray paint is very difficult. About the only thing that will go with it is paper of the very same shade, or with the very same shade predominating. You might possibly find this best in a good "shadow paper" of gray and pink tones—not a sharp or defined pattern, you understand. With plain gray paper you would have to add a bright note in a border, and in rugs and curtains. The border, for instance, might have a rose design in very soft pink with green leaves; then the curtains and cushions could be of chintz, also in pink roses and green leaves.

The rugs, with silver gray walls and pink relief might be a very dull old rose, or, possibly, a very quiet olive green if of the very right shade.

cloth or camel's hair brush and a pure mild soap when washing, and afterwards apply an astringent such as bran water. Eat good plain food, avoiding rich pastry and too much grease. Guard against constipation. Drink plenty of pure water. A lotion that may be applied directly to the pimples two or three times a day, is the following: Mix together 2 drachms flowers of sulphur, 3 drachms tincture of camphor, 1 ounce glycerine, 4 ounces rosewater.

The Child.

We have received from "A Mother" Northumberland Co., Ont., a letter which is so long that there is not space to-day in which to give the whole of it, but whose substance is that the mother of a large family should be honored, and that, especially in this war-time, which has so decimated the number of men in the world, it is the duty of women to have children, which are, after all, a comfort and joy.—To all of which, the readers of this paper are likely to give assent. The majority of sensible folk, nowadays, agree that a large family is a very good sight to see—so long as the parents are healthy and the children can be given a good chance to start the battle of life. We are sure "Mother" will agree that a child handicapped from the very start



Allenby Entering Jerusalem.

At Easter time religious interest centers about Jerusalem. This picture shows the victorious allied forces entering Jerusalem on December 11th, 1917. Following the custom of the crusaders, General Allenby and his staff, also the commanders of the French and Italian forces co-operating with him, entered the Holy City on foot, through the Jaffa gate. Underwood & Underwood.

Poems Wanted.

Will anyone who has a poem on "What my Church is doing" (evangelically) or "The power of the cross in Asia", kindly send it to Milton Down, Ayton, Ont.

Pimples on Face.

In reply to a question on this subject we may say that pimples on the face are caused by several things. Sometimes an unhealthy condition of the blood is at the root of the trouble; sometimes lack of frequent bathing; sometimes eating food that is too rich. In some people neglect to rinse soap off the face with clear water, will even give rise to pimples.

To avoid them and cure them, get the health in good condition and take care of the skin. Wash the whole body every night with soap and warm water, and be sure to rinse off the face with clear cold water. If there are black-heads, scrub the face gently with a

brush by disease and poverty is one of the tragedies of this world.

"Mother" closes with a poem which is very beautiful. Its title is "A Child", but she does not give the name of the writer.

"A little child—a smile, a song from God, Wakening echoes from far ages past That still endure through all the spaces vast,

Peopled with shades who once this sad earth trod.

A child to love, to lift us from the clod,

To curb our faults, our virtues to expand,

To open wide the clutching miser hand,

To bid us run, and sing—forget to plod,

A little child, with trusting eyes and clear,

Seeking for Truth, and holding without fear

The balance fair 'twixt righteousness and fraud

A little child in loving kindness given,

To lift me, childlike, to my home in heaven.

Easter Cookery.

Hot Cross Buns.—Make buns of ordinary bread dough (preferably made with milk instead of water) and to it add a little butter, sugar, raisins or currants and an egg. Shape into round buns and place in well-greased pans about 2 inches apart. Let rise, glaze with a little milk or egg diluted with water, and with a sharp knife score a cross on top of each. Bake 20 minutes. Just before removing from the oven brush with sugar moistened with water. While hot fill the cross with plain frosting.

Scalloped Eggs with Potatoes.—Take 4 cold potatoes, 4 hard boiled eggs, 1½ cups white sauce, a little grated onion, some buttered crumbs. Cut the potatoes into dice and chop the eggs coarsely. Prepare the white sauce by mixing together 2 tablespoons of butter, the same of flour, ¼ teaspoon pepper and ½ teaspoon salt. Stir these together over the fire until the butter is melted and mixed smoothly with the flour, then add the milk, a little at a time and cook until the boiling point is reached, stirring constantly. Continue to simmer for 5 minutes, then add the grated onion. Grease a baking dish, place in it a layer of potato, then a layer of chopped egg, then a layer of sauce, proceeding in the same way until all is used. Sprinkle buttered crumbs over the top and bake 25 minutes. To prepare the crumbs mix them with melted butter.

Swiss Eggs.—One tablespoon butter, 4 eggs, 3 tablespoons thin cream, some grated cheese and some thin slices of cheese, salt and pepper. Melt the butter in an earthen or other baking dish that can be sent to the table. Spread with cheese sliced very thin. Break in the eggs and pour the cream over. Season with salt and pepper, sprinkle the grated cheese over the top, and bake in a moderate oven until the eggs are just set. Serve very hot.

Lemon Crumb Pie.—Line a pie with pastry and fill with the following mixture: Take grated rind and juice of a lemon, ¾ cup water, ½ cup sugar, ½ cup corn syrup, 2 egg yolks, cup fine bread crumbs closely packed, 2 tablespoons butter or sweet cooking fat. Melt the fat, mix all ingredients with it, and pour into the pastry. Bake slowly until the crust is browned and the filling firm. When done cover with a meringue made from the stiffly beaten egg-whites to which have been added 4 tablespoons powdered sugar, ½ teaspoon lemon juice, and ¼ teaspoon grated lemon rind. Brown the meringue and serve hot.

Economy in Cake-making.

BY L. D. MILNER.

WITH the cost of milk, butter, eggs and all the other ingredients used in making cakes soaring continuously upwards, we must, or should economize in every possible way if we would keep them on the table, and some buckwheat and cornmeal cakes, Graham gems, oatmeal cookies—in fact, any cake which does not require a full complement of white flour should not be dispensed with at the present time. It is with the object of showing how cakes can be made at slightly lessened cost—cakes that are as palatable and more digestible than the more expensive ones, that I am telling of some of my—not war-time economies, but ones first used because of sudden shortages of ingredients when miles away from a store, and adhered to because I liked the results of the economized recipes better than those of the original ones.

Even on a dairy farm it is possible to run short of milk, as I found to my sorrow one day, when, after telling two visitors, who were calling on me for the first time, of the wonderful equipment in our recently built milk house. I asked them most cordially to have a glass of milk. My feelings, upon reaching the building and finding the tank in which usually stood a can containing the leftover milk, empty, can better be imagined than described. On my way back to the house I remembered that the man who took the milk to the station had told me before leaving that the morning's milking had just filled the last eight-gallon can. I vowed that day that I'd see I was never left without milk again, but there have been times when I had to economize in using milk for baking. It was on one of those days that I discovered that if half milk and half water is used in making any plain cake batter, the cake is much

The Beaver Circle

Jimmie Zane's Easter Eggs

BY CARRIE HAYWARD.

JIMMIE Zane's merry whistle rang out on the clear, frosty air, as he came in from school one afternoon early in March. He put away his dinner pail, and hung up his skates on a nail in the corner of the kitchen before the whistle ceased. Mother was in the act of removing a pan of deliciously browned biscuits from the oven as the children came in. Five o'clock was the supper hour in the Lane household, as the children were usually as "hungry as bears" after their two-mile walk from school.

Jimmie's whistle ceased abruptly. "Gee! but those biscuits look good. Say Mother! when's Easter?"

"Easter! Why I think it is the last Sunday in this month. It comes early this year," answered Mrs. Zane.

"Let me see," commented Jimmie; "that will be three weeks from next Sunday."

"Are you getting hungry for a feast of eggs, Jim?" said his father, who had just come in.

"No-o-o", drawled Jim, but—"Oh I know what Jim is thinking about" said Beth, who was a couple of years older than her brother; "Uncle Ben and Aunt Clara are coming for Easter. We got a card from them in the mail to-night."

"That will be fine", said mother; "I am not surprised that Jim is counting the weeks."

Jimmie made no reply, but resumed his whistle, as he prepared for supper. True! he was very glad that his uncle and aunt and cousins were coming, but even that anticipated pleasure was not uppermost in his busy mind just then.

The fact was, that his special chum, Tom Darcy, had been telling him at school of the large store of eggs, which he had hidden away, little by little, the year before, and of the surprise and delight, which the big basketful had created, when he brought them in on Easter morning.

Jimmie thought that would be fine, and as the hens were laying fairly well already, he knew that he could easily lay away three or four each day; but the nights were cold yet, and where could he hide eggs so that they would not freeze?

That was the thought that was puzzling, his small brain just now, and even that reflective whistle had failed to solve the problem.

"Children", said mother, at the breakfast table next morning, "be careful to shut the tool-house door, if you go in there for anything. Old Brownie has made up her mind to set, and has chosen a corner in the tool-house for that purpose; but I am afraid it is too early for chickens yet, so I threw her out and shut the door. She will soon forget it."

"The tool-house" thought Jim to himself, "just the place! Why didn't I think of that before". Now the tool-house was a cosy little building. Mr. Zane had put an old stove in it and allowed his young son to build a fire there, and use it for a work-shop whenever he wished.

He had also taught him how to use the different tools wisely and carefully and it was surprising how handy he was becoming with them. But the tool-house was to serve a different purpose just now.

"I'll hide eggs in there" thought Jim, "and if the nights are cold I can put a chunk in the old stove. No danger of freeze then."

Accordingly an old box, with one end out was snugly fitted in a corner, and here, on a nice bed of straw, Jim hid three large yellow eggs that very night.

The next day was Friday. Jimmie awoke cold and shivering, instead of racing out to the barn as usual, he hovered over the stove while mother was getting breakfast.

"What is the matter Jimmie?" she asked anxiously. "I am afraid you have cold."

"O, I guess I'm all right," he answered; but there was a redness about his eyes, and a languid look, wholly unlike this active, fun-loving boy.

"I am afraid you are getting La Grippe," said mother, "and you had better stay at home to-day."

Jim objected at first, but his limbs ached and he finally decided that mother knew best, and so Beth went to school alone.

Jim spent most of the day on the old settee, near the kitchen stove, while mother administered simple remedies, but apparently to no avail. He coughed

and sneezed, grew feverish and thirsty, and complained of the light hurting his eyes. About four o'clock he thought about the eggs and walking rather unsteadily across the kitchen he took down his coat and cap.

"I don't think you had better go out Jim", said mother, "Beth will gather the eggs when she comes from school."

"But I've stayed in all day, mother", he answered half irritably; "I'll just walk out to the barn and back, I believe I'd feel better; and so mother gave a reluctant consent."

Jim felt very queer and shaky and his head seemed to be in a whirl, as he walked towards the hen-house. He only stopped to gather the eggs from the first nest he came to, five in all, then turned and walked slowly back. "I think I'll put these all in the tool-house", he said to himself;

"I might not be able to gather any to-morrow". He stumbled somewhat unsteadily into the tool-house, and hid the eggs beside the three of the day before.

A strange dizziness was creeping over him. He reached the door and put his hand against the casing for support. He had a somewhat hazy idea of old Brownie clucking near by, and mother coming to frighten her away and then he remembered no more.

When he came to himself he was in his own bed, and father and mother and Beth were all watching him with anxious faces.

"How did I get here? What is the matter?" he asked wearily.

"You are ill dear. You fainted in the tool-house, and father carried you in" said mother, as she laid a cool hand tenderly on his hot forehead. "We have sent for Dr. Evans. Beth heard to-day that the measles were in the village, and we think you must be getting them; so you just lie still and let us take care of you."

Dr. Evans soon confirmed their suspicions. "Measels", he said, "and a very severe case, but he is a healthy laddie and I think we can pull him through."

Mother was very thankful now that Beth had had them in her babyhood. She counted much on her, to help wile away the tedious hours of illness and convalescence with Jim, and a good little helper she proved to be.

For several days he was very ill indeed. Beth could not help laughing at his blotched and swollen face, and brought a mirror for him to see. He laughed too, but she said it didn't sound much like Jim.

After the first week he began to get better, but his eyes seemed weak and very sensitive to the light, and Dr. Evans said he must remain quietly in his room, with the windows shaded, for some days longer.

This was the hardest part of Jim's trial, but when mother explained that a little care and patience now, would save a whole lifetime of trouble with weak eyes, he tried hard to be patient.

Beth read stories to him, and even brought Rover and the cat up stairs to amuse him; but he liked best the times when mother could sit by him, and tell him some sweet Bible story, as only mother could tell them.

As Easter drew near she talked to him of that first Eastertime; of the loved from that was laid away in a rock-hewn tomb; of the sorrowing friends and how their sorrow was turned into joy when Christ burst the bands of Death, and came forth into glorious life.

She spoke of the springtime, now so close at hand, when plants and flowers would come out of their dark winter graves into new life and beauty. "The glad Easter time is a herald of new life on every side," said mother, on the day before Easter, and then she told him why the eggs was chosen as a symbol of the resurrection, and Jim suddenly thought of the eight eggs hidden in a corner of the tool-house.

He told mother then of the plot which the measles had spoiled. She laughed merrily. "All right Jimmie! I'll get those eight eggs and you and Beth shall eat them to-morrow."

Mr. Lane had just come up with a piece of good news for Jim, and there was a merry twinkle in his eye, as he heard his wife's remarks, which she, however, failed to observe. Jim was delighted when his father told him that Dr. Evans said he might come down to breakfast on Easter morning.

"Why! it will be just like the Easter story, Jim," said Beth; "you've been shut up here in this shaded room for three weeks, and you'll come out into the light on Easter morning."

"So it will!" said Jim; "I never thought of that."

Uncle Ben, and Aunt Clara, and the three cousins came on Saturday evening,

and the old farm house resounded with the children's voices. Easter morning dawned bright and clear. It seemed so good to Jim to be down stairs again. He was the guest of honor that morning, and he thought they all looked uncommonly merry, as he took his place at the table. After Mr. Zane has asked a blessing on their food, mother said demurely, "Beth you may bring in Jim's eggs, they are keeping warm by the stove."

Jim noticed that no one began to eat until Beth returned. Imagine his surprise when instead of a plate of eggs, she placed before him a basket and quickly removed the cover; and there, instead of eight brown eggs, were eight fluffy little brown chicks, very much alive indeed, and peeping loudly at being taken from their mother.

"Why mother! where did you get them", said Jim, and such a merry laugh as they all had at his expense.

"They are your eight eggs, son", said his father. Don't you remember the day you were taken ill, in the tool-house? The door was left open and old Brownie slipped in and took possession of your nest. I found her a day or two later and have fed and watered her ever since. So you see Jim, I helped you hide your Easter eggs, and they have returned out to be Easter chickens instead."

"And I'm an Easter boy", said Jim. We all came into the light at the same time, didn't we mother?"

One of the Prize Essays.

Our Extra Sow.

A few weeks ago father and I were touched by the cry for an "extra sow", to help meet the needs of the food crisis, and although we were well stocked with pigs and had no more available room we determined not to be behind the times but to go to and buy one.

We bought one at a sale, a large, red chap, and one of the most intelligent and boldest of them all. We brought her home and while we were making an extra pen, put her in the barn. There she had the full run of the floor and the only thing I thought she could hurt was the mows of hay and straw. But we were mistaken, for when we went to bring her to her newly made home, we were surprised to see the granary door flung off its hinges and Mrs. Sow right on top of a heap of barley which she was making away with in huge gulps. A yell and a couple of kicks sent her grunting and waddling out of there, and indeed she was waddling for having been in the granary a couple of hours she had eaten over her limit and we feared for her but being hardy she came through all right.

Nevertheless we saw we had a hard boarder, and a sow to whom objections to her freedom were as chaff before the breeze. Thus after we drove her into her pen we double-barred the door that led to the feed room, double-boarded the sides of the pen and left her to wallow and sleep in the heaps of newly laid straw.

In about an hour before going to the house for dinner, we went in to see her, and there she was lying comfortably in the corner of the pen, sleeping off the effects of the feast, with all the straw of the pen pulled up around her and two small kittens sitting, purring upon her red back. They looked so comical and cosy, that we laughed in spite of ourselves, and told each other that she was satisfied at last.

But we were woefully mistaken, for next morning when we went in to feed her and her neighbors their morning meal, the door of her pen had been sprung open as if by a crowbar, which was nothing less than her long and pointed nose, and she had disappeared, disappeared no one knew where. However, we hunted around the feed passage in every corner and nook, but nowhere could she be found, and besides, none of several bags of meal standing there, had been touched. It was a mystery and one that nearly baffled our detective powers, for we hunted all around that feed passage to discover any hole or means of exit she must have taken to escape, for fully fifteen minutes, and then to our surprise we found a large hole behind the meal box, which had escaped our eyes before, which opened into the hen-house.

Around it we ran and stopped short at the door with surprised and angered faces, for there was Mrs. Sow standing over an empty egg-box with the last one of three dozen eggs cracking and dripping from her mouth. We were

thunderstruck and advanced to play awful vengeance on that egg-eating sow; but, as if she scented danger and knew her guilt, she turned in a hustle and bolted like a red streak, through her exit upsetting the meal box in her race; and when we entered the pig house on the run she was comfortably rooting straw at the far end of her pen.

Well we let her go without punishment, since she was in her pen; and probably she knew it too. We locked her in, cleaned up the spilled meal, and had just made it up not to break the news to mother, when one of the little chaps ran in to announce breakfast was ready, and seeing with his sharp eyes the hole, the spilled meal, etc., wanted to know what was the trouble.

The result being that he found out about the lost eggs and casting off our entreaties for silence, started off to the house to spread the news. This when we reached it, for our belated breakfast there was an awful hubbub, mother was going on fit to kill about the government, that extra sow and the eggs, etc., and declared we had to take that thief away the next day and sell her off the place.

She even called up, over the phone, the pig buyer of the nearby town and told him we had a fine sow for sale. We finished our breakfast in silence, and then went out to fix up the broken pen and take another look at our castaway. She was lying, quite comfortable, at the far end of the pen and paid no attention to us, when we fixed up the door and made it additionally stronger to resist her raids. We did not notice her particularly all that day and she did not again get out of her pen.

Well, the next morning the pig buyer came along, and sorrowfully we went in to get rid of our extra sow; but what was our surprise when on opening the outside door and letting in some light, to see her lying comfortably in the corner, and fourteen little red chaps busy getting their morning meal. We all laughed at the fine sight, and voiced our sentiments of her fine healthy looking brood.

The result being that Mr. Pig-buyer did not get our extra sow, although he wanted to and after making a deal for some other pigs, he went off.

After that Mrs. Sow grew quieter and fearing to leave her brood she never broke out of her pen again, except occasionally, but nevertheless, we thought we could well afford to lose a few eggs and have a little trouble, with such an extra sow that would increase our income and increase food production by such large healthy litters of little chaps.

JAMES THOMSON.

R. R. 1, Centralia, Ont.

Our Pet Chipmonk.

A Prize Essay.

I am going to try to tell you about the funny little pet we had a couple of years ago. We live on a farm and one fine day our hired man, my brother and I were coming in from the hayfield at noon when all at once I spied a little baby chipmonk playing itself by the fence. I ran and caught it before it had time to get away. I guess its mother didn't know it was out; perhaps she was away hunting something nice for dinner and little Johnny had run away. Oh, how his little heart went pitty-pat with fright when I held him in my hands! He tried to bite me with his sharp little teeth, however I managed to get him to the house in my hat.

We put him in a match box with an airhole in the top and gave him some breadcrumbs and apple to eat.

My brother and I went to work and made a cage out of a soap box with a wire screen nailed on the front so we could see him, then we put in a baking powder can filled with wool for a bed. It was funny to see him snuggle out of sight in his little bed to sleep a dozen times a day. In a day or two he became quite tame and many a time we had a good laugh at his comical tricks. He would let any one of us handle him; he would sit on my shoulder and hunt in my pockets for nuts. He liked to get up on the table after dinner and frisk around eating up the crumbs and tasting every thing. He seemed to like honey very much.

You know a chipmonk is only half as big as a squirrel. He is a light brown color on the upper part, with beautiful dark stripes on the back and his breast is white.

We often let him out on the kitchen floor to play but we had to be very care-

LACK OF FOOD—THREATENS THE BATTLE LINE



ONTARIO

"The food wanted by mankind does not exist.

"The word 'shortage' is not strong enough.

"The whole world is up against a nasty thing, familiar to the people of India, called 'famine.'"

—Lord Rhondda,
Britain's Food Controller.

One year ago, only the enemy was on rations.

To-day, Great Britain, France and Italy are on rations.

To-day, Germany controls the wheat lands of Roumania, Russia, Poland and Ukrania.

To-day, the shadows of hunger, famine, disease and death hang over the Allies.

Upon the 1918 crop from Canada and the United States depends the fate of the democratic peoples of the world.

If that crop is sufficient the Allies can be fed.

If that crop is not sufficient the Allies may have to accept a German peace.

That Battle-Line in France and Flanders Must Not Want

Do you realize what a German peace would mean to Canada?

Germany covets our natural resources—our agricultural and mineral wealth, our forests, our fisheries, everything that is Canada's.

Germany won't be satisfied with European territory, with teeming masses, wrangling factions and depleted natural resources. She wants colonies—big, thinly-populated countries in temperate zones for her sons and daughters to go to propagate their kind.

The Kaiser would sacrifice millions of Germans to-morrow if he thought that by so doing he could set loot on Canada's shores as Conqueror.

And what's more, the Germans would offer themselves for the sacrifice, so great is their subjection to the military ideal.

The only thing that balks German ambition is that battle line from the North Sea to Switzerland—and the British Navy.

The Only Thing That Sustains Our Men on Land and Sea—is Food

What are we, each one of us, prepared to do to insure that Food Supply?

Germany, by her submarine cam-

paign, has seen that great Armada, the British Mercantile Marine, shrink in volume.

Germany has seen South America, Australia, New Zealand, India and far away outposts of the Empire practically cut off from supplying food to the Motherland because of the lack of ships.

Forty million Allied men and women having been put on war-work, food production has dangerously decreased in Europe.

These forty million consume more food than when they were in ordinary occupations, and there are fewer men for farming. Hence an increased demand for decreased supplies.

The harvest of France was one-third less in 1917 than 1916, and this year must be smaller still, owing to lack of fertilizers, which cannot be supplied through shortage of shipping.

The world's decrease in live stock, as compared to 1913, is approximately 115,000,000 head.

The heart of this problem is labor.

Without more farm labor more food cannot be produced.

If you really want to serve your Country in a big, practical way, register now for farm labour, or urge and assist your male employees to do so.

Herbert Hoover Says:

"Our European Allies are dependent upon us for greater quantities of food than we have ever before exported. They are the first line of our defence. Our money, our ships, our life blood, and not least of all, OUR FOOD supply, must be of a common stock.

"In pre-war times, Britain, France, Italy and Belgium yearly imported more than 750,000,000 bushels of grain, plus vast quantities of meats and fats.

"The submarine destruction of shipping has made it necessary to abandon the hope of bringing food from South America, Australasia and India.

"Food must, therefore, be shipped from Canada and the United States—the nearest and safest route.

"Canadian and United States supplies are normally 350,000,000 bushels short of the Allied needs. By greater production and conservation Canada and the United States must combine to increase the export of grain by 150,000,000 bushels.

"The remaining shortage of 200,000,000 bushels must be overcome by greater reduction in consumption in the allied countries. And this is being done by Britain, France and Italy rationing her people.

"From two and a half years of contact with the German Army I have come out of the horror with the complete conviction that autocracy is a political faith and a system that directly endangers and jeopardizes the future of our race—that threatens our very independence. It has, however, been able to command complete inspiration of devotion and self-sacrifice in its people to the interest of their nation. The German farmer, in the name of the Fatherland, supports a nation two-thirds as large as the United States and threatens to subject the world from an area one-half the size of Ontario.

"My vision of War is not of an academic problem to be solved by discussion. To me it is a vision of brave, dying men and suffering women and children, for service on whose behalf the greater exertion of the Allies' farmers comes in a direct necessity and a direct plea. The Canadian and the United States citizen who sees war as I see it, needs no inducement and no inspiration, but the thought that every spade full of earth turned and every animal reared is lessening human suffering and guaranteeing the liberty of the world."

Lloyd George's Warning

"I fear the disciplined people behind the German Army, the rationed family and the determination of wife and sister and daughter and mother to stand and starve—so that their fighting men may be fed—I fear it more than the Imperial German Army itself."

Britain is now on Food Rations.

France is now on Food Rations.

Italy is on the verge of starvation.

Only continuous support from us can enable us to hold out.

Only with a disciplined people behind can we hope to win. The rationed British Nation, blood of our blood, bone of our bone, are proudly paying the price and sharing with France and Italy their limited stock of food. For in this there is mighty pride, a conscious measuring of their glory with the best traditions of ancient Sparta, and of Imperial Rome, for Britons know that upon them rests the burden of saving humanity. The story of their service shall ring and echo forever along the hilltops of history.

TO SEND MORE FOOD TO OUR ALLIES IS NOT CHARITY

It is War. The Allies have a right to demand it. They have a right to resent the offer of only what is "left over." Those who are fighting the common battle for civilization and for our protection have a higher claim than had Lazarus, to only the "crumbs that fall from the rich man's table."

The Canadian people must recognize that our Allies have the first claim on our food supplies.

As the shipping situation makes the Allies dependent upon the North American continent for food, it is vitally necessary that Canada should increase her production of food in order to take a larger part in providing for the Allies' requirements. This is especially urgent as the maintenance of a large United States Army in the European field will cause a very heavy drain on that country's resources.

There must be no peace without victory.

For nearly four years Germany has been struggling against the powers of law and order. She has failed so far to make good her escape with her booty by superior strength and skill. And now she is attempting by intrigue, suggestion, device and propaganda to divert the attention of her antagonists from the struggle itself, and thus to gain her ends by relaxing the strength and skill of her antagonists.

What she can gain from these tactics is plain to all the world in the sorrowful experience of Russia.

Germany's most dangerous weapon is not her Zeppelin—that is obsolete. Not her submarine—that can be overcome. Not her machine-like army—that has been repeatedly hurled back by the living armies of freemen. Her most dangerous weapon is her propaganda of peace.

While with her hands she murders and despoils, with her voice she invites to parleys.

When Liberty is in Peril There is Threat of Lasting Disaster in the Very Word "Peace"

Lord Leverhulme, long known in Canada as Sir William Lever, who knows well the German mind, in a recent interview stated:

"You will never be able to dictate terms to Germany till she is beaten. The argument you mention is founded on the dangerous fallacy that because Germany is sick of this war she is sick of war in general. She isn't. I doubt if her Government is even sick of this war. You've read

the speech of that old brigand, Hertling. Is there any sign of repentance in that speech? Is it a chastened speech? Is it the speech of a statesman who wants disarmament and a league of nations? No! Germany is back in her mood of 1914. She believes she is winning the war. She believes she has won now. And if we talk of peace to her she HAS won it. Why, it would be better a thousand times that every man in England should be dead than that Germany should issue from this war with the feeling of a conqueror. You hear people use the phrase, 'to the last man, and the last shilling,' and you think it is only a bit of rhetoric, but to my mind it's the most solemn and absolute truth. I mean when I say it that it would in very truth be a million times better for the people of these islands to be dead, every one of them, rather than live on as the serfs of a triumphant Prussia."

How can any lover of liberty remain insensible to this peril?

Food means Victory and the world made safe for democracy—

Lack of food means disaster and subjugation to Germany.

The Citizens of Ontario Must Lead This Mighty Crusade for Greater Food Production

They did it last year and will do it again.

As the greatest food-producing Province, Ontario must maintain her leadership in America. Great are our opportunities—our responsibility is tremendous.

Upon every man and woman, boy and girl, rests a personal obligation to serve. Every pound of food produced, in whatever form, is a contribution to the Cause of Freedom.

Ontario farmers should sow 500,000 acres of spring wheat.

Every Ontario farmer whose land is at all suitable should put an extra five acres into wheat, even at the expense of another crop.

What YOU Can Do to Help

At all costs production must be maintained.

That's why farmers and farmers' sons are being exempted from military service. Working on a farm is equivalent to service in the Second Line Trenches.

To enable the farm to do the work two factors are essential. The first is Time. Whatever we are to do must be done at once. Nature waits

for no man. The second is Labor. Many farmers cannot plant the acres they would because they cannot get the necessary help. Many are afraid to increase their acreage because they fear they would not be able to cultivate and harvest an unusual crop after they had raised it.

The burden is not one to be placed solely upon the farmer. Neither can it be placed upon the townsman. It is a personal obligation upon every man, woman, boy and girl, in every farm, town and city home in the Province of Ontario.

AWAY WITH CRITICISM—CO-OPERATE! Mr. City Man, don't say that the farmer should do so-and-so, and thus allow criticism in this hour of our Nation's peril to cripple your effort.

Mr. Farmer, don't hastily underestimate the value the city man can be to you.

Get Together in the Fight for Liberty

Let us not lament what MIGHT be, but earnestly face what MUST be.

Fifteen thousand boys between the ages of fifteen and nineteen must be organized as "Soldiers of the Soil" to work on Ontario farms this season.

Farmers can get one or more of these boys by applying to their District Representatives or to the Public Employment Bureaux at Toronto, Ottawa, Hamilton or London.

Unmarried men, exempted from military service, are urged to take up farm work. Married men who have had previous experience on a farm are urged to resume farm work for a season. Employers of labor are asked to assist men to take up farm work.

We urge the farmers and the townsmen to get together for greater production in the interests of a free people and democracy.

Let the Organization of Resources Committee, your District Representatives or the Public Employment Bureaux act as your intermediaries.

When we have done our best, the cry for food cannot be wholly met.

For the rest—our Allies are tightening their belts.

Organization of Resources Committee

Parliament Buildings, Toronto, Ont.

CHAIRMAN: His Honor Sir John S. Hendrie, K.C.M.G., C.V.O., Lieutenant-Governor of Ontario.
VICE-CHAIRMEN: Honorable Sir William H. Hearst, K.C.M.G., Prime Minister of Ontario; William Proudfoot, Esq., K.C., Leader of the Opposition.
SECRETARY: Albert H. Abbott, Esq., Ph.D.

The only thing that balks German ambition is the Battle Line in France and—the British Navy
The only thing that sustains our men on land and sea is Food

Fresh Running Water

For Farm and Country Homes

Just turn a faucet, and the water gushes out in a fresh, pure, abundant stream.

Think of it! No more water to carry by hand for drinking, cooking, washing, scrubbing or for watering the stock. Isn't that a convenience that appeals to you?

In no other way can you invest the same amount of money to eliminate as much hard work as by the purchase of an

Empire WATER SUPPLY System

Empire Systems are simple in design, compact, powerful. Never freeze. Always ready for instant use—day or night. There is an Empire System suited to the needs of every home, and priced so reasonably that no home need go without it.

Write For Free Booklet

We want to tell you about the many advantages of the Empire System. Our free booklet gives descriptions and illustrations. We will also send you an Information Blank, which, when filled out, will enable us to send you full particulars and the cost of a system adapted to your particular needs. Get posted—write to-day.

Empire Manufacturing Co., Limited. HEAD OFFICE AND FACTORY: **London, Ont.**
Branch Office and Warehouse. 119 Adelaide St. W., TORONTO, ONT.

Important Credit Sale of Clydesdales—Shorthorns—Cotswolds—Yorkshires and Farm Implements

AT LOT 20, CON. 3, ORO, near Barrie
THURSDAY, APRIL 4th, 1918

This sale includes two registered Clydesdale stallions—Imp. Solway King, by Baron Solway, and Stately King, by Solway King. Three registered Clydesdale females: a two-year-old, a three-year-old and a nine-year-old, by such good sires as Baron Garty and imp. Mellinside; also four young work horses. The registered Shorthorns comprise ten head of choice young cows and heifers by such good bulls as imp. Newton Ideal, imp. Royal Mastodon, and Superb Chief. One registered bull, by Royal Mastodon, is also in the sale. In grades there are two cows, five steers and four heifers. Twelve choice registered Cotswold ewes, three registered ewe lambs and one registered ram lamb will be sold. In pigs there are three registered Yorkshire sows and eighteen store pigs. A full line of farm implements and machinery will go the same day. All the stock and implements will be sold without reserve as the proprietor is retiring from farming. There will also be offered a bush lot of 50 acres and a pasture farm of 34 acres. Morning trains will be met at Barrie the day of sale.

JAS. A. CALDWELL, SHANTY BAY, ONTARIO

ful that the old cat wasn't in or she would make short work of him. She would sit outside the screen door looking in at him, with eyes as big as saucers and licking her lips.

One day he disappeared for hours and we thought he was lost for sure, but when my sister was lying on the parlor lounge reading after dinner, out he popped as lively as ever. He would sit in her apron pocket with his little head and shiny eyes pecking out while she washed the dishes.

As all stories must come to an end, I must also tell the sad ending of our pet. After having him three months, through carelessness the old cat got her chance at last and she nabbed him so

150-Acre Farm—\$14,000

Herd of dairy cows, horses, implements etc., can be bought with farm if desired. Station 1 mile, school 5 minutes' walk. Upper Canada College site 1 mile, village of Norval 2½ miles. **Grand Stock and Dairy Farm.** Fall ploughing done. Soil clay loam in grand order. Ice house—9 rooms. Price has shipped milk for 12 years to Toronto. 3 barns, 3 silos, frame at 37. **Great bargain, for immediate sale.** Write for new tree catalogues and Bulletin of 750 farms for sale.

THE WILLOUGHBY FARM AGENCY
Dept. 400, Head Office, Georgetown, Ontario

When writing advertisers will you be kind enough to mention The Farmer's Advocate

quickly we could not save him; with one shake he was dead.

He was only a little animal but we loved him dearly and could not help the tears coming as we buried him under a big stone in a strawberry box covered with flowers.

JAMES WARD, (Age 11 years).
Walters Falls, Ont.

Dear Puck.—I am a book-worm and I am going to tell you about some of the books I read. My favorite authors are Ralph Connor (otherwise the Reverend Charles William Gordon), James Fenimore Cooper, Jules Verne, Sir Walter Scott, Andrew Conan Doyle and Victor Hugo.

Ralph Connor is a Canadian writer. His latest publication is "The Major", but I can say very little about it as I have not read it. "Glengarry School-days" and "The Man From Glengarry" are scenes from the vicinity of the Ottawa River. "Corporal Cameron", "The Patrol of The Sun Dance Trail" and "The Foreigner" are stories of settlers of Western Canada. In all his books Ralph Connor paints a very true picture of Canadian life.

I have read some of Dickens' works and I find the "Tale of two Cities" and "Nicholas Nickleby" very interesting. "Romola" by George Eliot is also a very good book. "The Great Masters of Russian Literature" by Ernest Dupuy is a book that will give its readers much information about the lives and works of three of Russia's greatest writers—Gogol, Turgenief and Tolstoi. Have any of the Beavers read the new story "Kitchener's Mob"? It is a soldier's description of a soldier's experience.

James Fenimore Cooper, in his books "The Deerslayer", "The Last of the Mohicans" and "The Pathfinder" tells much of the nature of the North American Indian. "The Pioneers" and "The Prairie" tell of the steady advancement westward of the settlers.

Jules Verne is a writer of books of mystery. "Around the World in Eighty Days", "Twenty Thousand Leagues Under the Seas", and "Captain Antifer" are books that will stir the imagination of the reader.

Sir Walter Scott is a very popular writer. His poems—"The Lay of the Last Minstrel" (1805), "Marmion" (1808) and "The Lady of the Lake" (1810), tell of the warfare carried on by the Highland chieftains. Quentin Durward (1823) is a description of France during the reign of Louis XI. "Ivanhoe" (1830) is an account of the Norman barons and Saxon Franklins in the days of Richard the Lion Hearted.

Andrew Conan Doyle is both writer and politician. His detective stories, especially "Sherlock Holmes", are widely read. "Micah Clarke" is a tale of the Monmouth Rebellion against King James. "The Lost World" is a book telling of the surprises South America contains for the explorer.

Victor Hugo is a French writer whose books are very widely read, especially, "Les Miserables". "The History of a Crime" is an account of the French Revolution.

Well, I must not take up too much space. So good-bye.

From a friend,
ELDEN STOLTZ, (age 13).

You certainly have made a good selection of books, Elden. It has been a great pleasure to read your list.

Junior Beavers' Letter Box.

Dear Puck and Beavers.—This is my first letter to the "Farmer's Advocate" and I hope I am able to write another one. We have taken "The Farmer's Advocate" for quite awhile, and have been very much pleased with it. I have five brothers and two sisters. I go to school every day and I am in the senior second class. We had a concert at our school on Christmas and I said three recitations. There are sixteen pupils coming to our school. The name of it is S. S. No. 4, Usborne. It is a very large one and the teacher's name is Mr. Parsons. He is a very nice teacher. I live half a mile from the school. I have read many books; the names of some of them are: Ali Bab and The Forty Thieves, Dick Whittington, Boys and Girls of other Girls.

I guess that is all I can think of this time. Hoping that my letter is nicely printed in "The Farmer's Advocate" ending up my story with a joke:

A sailor was testifying about the

MARCH 28

explosion of explosion w hospital for me your v was asked.

"Well", h the gun, the the doctor s G.

R. R. No.

Dear Puck second letter I did not see still have co pets I have two cats, a school. Our Duffield and to take grea helps us all s of the Beave the w. p. b. i riddle:

Which dea Joan of Arc's Most people they like a h chop.

Elgin, Ont.

Junior Beav Clarke, Mea ETTYVILLE, ONT.; Mills, Ont.; Ont.; Genevie Harold Kirkp

Beav Mabel I. M if Mary Sew she will repl

Puck hopes has won seed a letter to th garden, later o

Genevieve wishes some write to her.

The D

For the sold because of the Contribution 22: J. B. Krau M. Thomson, Mrs. H. P. W Fred Robinson Alex. Bell,

"Charity", W Previously ack

Curre

Spring farm Saskatchewan,

Canada's par ally opened 122 new repres last parliament

Sir George resolution prov sold by the po weigh 1½ lbs., taining food bo and addresses of measure and qu

On March introduced a bi to all women o only the se mar being distracte however, he pe for seats in the I

John Dillon, Nationalists in Sinn Feiners an de Valera, that an Irish republi

It seems evid now going on in in the history o

explosion of a gun on a war vessel—an explosion which had sent him to the hospital for some months. "Please give me your version of the explosion", he was asked.

"Well", he said, "I was standing beside the gun, there was an awful racket, and the doctor said: "Sit up and take this."

GARFIELD THOMSON, (age 9).
R. R. No. 1, Centralia, Ont.

Dear Puck and Beavers.—This is my second letter to you charming Circle. I did not see my first letter in print but still have courage to write again. For pets I have a team of ponies, a heifer, two cats, and two dogs. I go to Elgin school. Our teacher's name is Miss Duffield and I like her fine. She seems to take great interest in our work and helps us all she can. I would like some of the Beavers to write to me. Hoping the w. p. b. is asleep, I will close with a riddle:

Which death would you prefer to die—Joan of Arc's or Mary Stuart's? Ans.—Most people prefer Joan of Arc's because they like a hot steak better than a cold chop.

Elgin, Ont. JAMES ROBERT POWELL.

Junior Beavers' Honor Roll.—Wilmont Clarke, Meaford, Ont.; Alice Clark, Ettyville, Ont.; Hazel Robertson, Elder's Mills, Ont.; Annie Davidson, Markdale, Ont.; Genevieve McPhee, Park Hill, Ont.; Harold Kirkpatrick, Petrolia, Ont.

Beaver Circle Notes.

Mabel I. Martin, Denfield, Ont., says if Mary Seward will write to her first she will reply as soon as possible.

Puck hopes that every Beaver who has won seed in the competition will write a letter to the Circle about his or her garden, later on.

Genevieve McPhee, Park Hill, Ont., wishes some of the Junior Beavers to write to her.

The Dollar Chain

For the soldiers and all who are suffering because of the war.

Contributions from March 15 to March 22: J. B. Krauskoff, Dublin, Ont., \$1.00; M. Thomson, Mildmay, Ont., \$2.00; Mrs. H. P. Wilson, Dundas, Ont., \$2.00; Fred Robinson, Victoria Harbor, \$1.50; Alex. Bell, Milliken, Ont., \$2.00;

"Charity", Watford, Ont., \$10.00. Previously acknowledged.....\$5,331.90

Total to March 22.....\$5,350.40

Kindly address contributions to The Farmer's Advocate and Home Magazine, London, Ont.

Current Events

Spring farm work has begun in South Saskatchewan, the earliest in 7 years.

Canada's parliament, which was formally opened on March 18, contains 122 new representatives and 100 from the last parliament.

Sir George Foster has introduced a resolution providing that vegetables be sold by the pound, that a dozen of eggs weigh 1 1/2 lbs., and that packages containing food be marked with the names and addresses of the fillers, and the weight, measure and quality of their contents.

On March 20 Sir Robert Borden introduced a bill to extend the franchise to all women on the same terms as men, only those married to an enemy alien being disfranchised. Women will not, however, be permitted to be candidates for seats in the Dominion Parliament.

John Dillon, the new leader of the Nationalists in Ireland has warned the Sinn Feiners and their leader, Eamonn de Valera, that it is useless to discuss an Irish republic.

It seems evident that the great battle now going on in Europe, the most terrific in the history of the world, is the result

of the big drive so long threatened by the Germans. The Kaiser has, nominally at least, assumed command of his armies in person, but with him are the Crown Prince, Field Marshal von Hindenburg and General Ludendorff. The attack was launched on March 21st against the British lines over a front of 50 miles, chiefly along the battle-worn Somme front, while a smaller attack was at the same time made in the Ypres sector. Now 1,000,000 Germans are said to be in the battle, hurling themselves in the solid formations which are so destructive to life, but of which the Kaiser and his leaders reckon nothing so long as their objective is gained; as one observer says, "The German military caste are out for victory, even if to gain it they must destroy the people to whom they have promised its fruit."

In the first great onslaught, which centered at Cambrai, —the thinnest part of the line, held by the Third and Fifth armies in command of Sir Julian Byng and General Gough—the British were greatly outnumbered, with the result that the Germans broke through three lines of defence. Elsewhere also, the lines were bent back, so that at time of going to press the enemy has captured a strip of 45 miles in length and varying in width from 3 miles to 14 1/2 miles just west of St. Quentin. The British lines, which retired in excellent order, fighting furiously and inflicting heavy losses on the enemy who were obliged to advance over thousands of their own dead, reached positions prepared long before, and for the past two days have been holding firmly and fighting with the greatest gallantry, while reinforcements are coming up in great numbers. As yet it is not known whether the Germans contemplate driving through to Amiens and thence to the coast, or following the valley of the Oise down to Paris—possibly the latter since during Saturday and Sunday the city has been bombarded by shells said to be aerial torpedoes fired from a point 76 miles away. Truly this new Battle of the Somme is the world's climax of warfare, and yet both British and French are calmly optimistic. The aims of the German autocrats have been thwarted before this and may be again, to their confusion. Deeds of the most heroic valor and sacrifice are being daily reported from our armies. In several instances small bodies of men have deliberately sacrificed themselves to secure advantage to the rest of their divisions. Some London and Irish, too, have distinguished themselves by defending redoubts and outposts after they were entirely surrounded by German troops, pouring out machine gun fire for hours.

Canadians, apparently, have not yet been in the thick of this struggle, but in the strip of country between Lens and Hill 70 have been undertaking an adventure of their own, having carried out the greatest gas bombardment in the history of the war, so that the Germans were beaten off with heavy losses.

Before this reaches its readers many more events will have taken place, for still the battle rages with unabated fury.

In Russia, notwithstanding the fact that the peace signed by Premier Lenine and Foreign Minister Trotsky was ratified by the Congress of Soldiers' and Workmen's delegates, German troops are pushing on towards Moscow. Also they have entered Nikolaiev, the chief grain storehouse of Southern Russia. As yet the Japanese have made no move into Siberia, but they are ready and only await the assent of the United States to take active part in the war. In Palestine General Allenby has made another victorious advance, three Turk towns falling into his hands.

In the House of Lords, on March 19, Lord Parmoor moved a resolution approving the principle of the League of Nations and the constitution of an international tribunal to prevent war. Lord Landsdowne said he believed that if such a league were able to apply sufficient pressure—economic and otherwise—an almost sure step would be taken towards making an end of all war, but he desired to see the Central Powers also included in the League, as only so can Prussian militarism be most satisfactorily overcome.

The Entente Allies are to use 1,000,000 tons of Dutch shipping, 600,000 of which have been requisitioned by President Wilson and 400,000 by the British Government, compensation to be made to Holland for all losses and damage during the war.

25% Better—
"Gold Dollar" Calf Meal
CUMMINGS FEED MILLS
OTTAWA
J. A. SIMMERS, LIMITED, Distributors, TORONTO



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.

BARRED ROCK EGGS—O. A. C. STRAIN. Two dollars per fifteen. J. Acres, Thornbury.

BRED-TO-LAY BARRED ROCK EGGS FOR HATCHING—the big, healthy kind that have free range. Should hatch well. Eggs \$2 per 13, \$5 per 50. Biggar Bros., Oakville, Ont.

Bronze Turkeys—SELECTED FOR SIZE and vigor. Eggs \$5 per 9; also eggs from White and Barred Rocks, Brown Leghorns and Rouen ducks. J. H. Rutherford, Albion, Ont.

BARRED PLYMOUTH ROCKS—200 EGG line. Champion Guelph winners; write for circular. Eggs, \$2.00 per 15. Jno. Fenn, Plattsville, Ontario.

BLACK, WHITE AND TAN PURE-BRED Collie females; handsome, intelligent heelers. Price \$4. A. Bawtinheimer, Shedden, Ont.

BLACK MINORCA EGGS—BOTH COMBS, two dollars for fifteen; good layers. Write: Fred. Reekie, Camperdown, Ont.

BEULAH FARM WHITE WYANDOTTES—Winners at the principal egg-laying competitions. Official records over 200 eggs. Hatching eggs from two-fifty per setting. Mating list free. McLeod Bros., Box A, Stoney Creek, Ont.

BRED-TO-LAY BARRED ROCK COCKERELS and Indian Runner Ducks. Bred right. Priced right. John Annesser, Tilbury, Ont.

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.

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

CLOVER LEAF BARRED ROCK PULLETS won every first prize at five different fall fairs, 1917. They are excellent layers. Eggs three dollars per fifteen. Satisfaction guaranteed. R. C. Waterbury, Selkirk, Ont.

DAY-OLD CHICKENS FOR SALE—Wyandottes, Rocks, Reds, Orpingtons and Leghorns. Guaranteed safe delivery. Send for free price list—it tells you how to raise them. This is the cheapest and safest way to start a flock of poultry. Hind, 5 Sandford Ave., Toronto.

DAY-OLD CHICKS—EGGS FOR HATCHING—from trap-nested, bred-to-lay S.-C. White Leghorns, White Wyandottes and Barred Rocks. Write for mating list. Brockville Poultry Farm & Hatchery, Brockville, 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.

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 Dunville Poultry Show. Member, Silver Wyandotte Club. J. O. Moore, Grassie, Ont.

HATCHING EGGS, BABY CHICKS, UTILITY Laying Strains, Barred Rocks, Rhode Island Reds, White Leghorns, White Wyandottes. Hatching eggs only from White Rocks, Golden Wyandottes, Non-Bearded, Roseheath Polish. Write for price list. Satisfaction guaranteed. Tay Poultry Farm, Perth, Ont.

MAMMOTH BRONZE TURKEYS—NO breeders left to sell this spring. I am booking orders for eggs at five dollars per nine eggs. Sixteen good females, ten of them being Guelph winners in the last two years, mated to my first-prize year-old tom and first and second-prize young toms, Guelph, 1917. My customers get the benefit of my best birds when buying eggs. Geo. Neil, Tara, Ont.

NOTICE—I HAVE PURCHASED GEORGE Buttery's entire stock of prize-winning, bred-to-lay White Rocks, White Wyandottes and S. C. White Leghorns. Eggs \$1.25 per fifteen. Satisfaction guaranteed. Jack Buttery, Strathroy, Ont.

PLYMOUTH ROCK EGGS—O. A. C. LAYING strain, \$1.50 per setting. Mrs. Berry, 52 Queen's St., Guelph, Ont.

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

R.-C. BROWN LEGHORNS—LOOKI SPECIAL sale. Now is the time to invest in good selected laying stock. Trios of 1 cockerel, 2 females, \$10. We must have the room for our young chicks. Eggs \$3 per 15. Galloway & English, Ingersoll, Ont.

SHEPPARD STRAIN S.-C. ANCONAS—TWO dollars setting fifteen eggs. Utility, one-fifty setting fifteen eggs; nine dollars a hundred. Order from this advertisement. E. W. Bennett, Victoria Ave., Niagara Falls, Ont.

S.-C. W. LEGHORN EGGS. PEN 1 THESE 16 yearling hens averaged 191 eggs each last year, headed by a cockerel whose dam laid 115 eggs from Oct. 1 to Mar. 1.—\$2.25 per 15. Pen 2—Hatched from Pen 1 last year, headed by a rooster whose dam laid 232 eggs in her pullet year. \$2.00 per 15. Cash with order. Frank R. Howson, Wingham, Ont.

TURKEY EGGS—WE HAVE 50 HEALTHY Bronze Turkey Hens, mated to strong, husky, young and old toms; eggs ready in season at \$4 per 10 eggs; few toms left. Send in your order, we have the eggs ready for you. Everything in pure-bred poultry—write us first. We want your surplus of eggs and baby chicks. Stamps highly appreciated. Yamaska Poultry Farms, St. Hyacinthe, Quebec.

WHITE ORPINGTONS—ALDRICH STRAIN, from New York winners, low down, massive kind; hens, pullets, cocks, trio \$15.00. Eggs \$3 and \$5 per fifteen. Wm. Kappler, St. Mary's, Ontario.

50,000 HATCHING EGGS FROM HIGH-CLASS strains of bred-to-lay stock. Single-comb White Leghorns, White Wyandottes, Barred and White Plymouth Rocks. Eggs \$1.50 per 15, \$7 and \$8 per 100. Limited number of baby chicks. Send for circular. C. E. Smith, Scotland, Ont.

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

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

Rose-Comb Rhode Island Reds and Barred Rock eggs for hatching, \$1.50 per 15. Rose-Comb Rhode Island Red cockerels \$3 each. Alex. McKinney, R.R. No. 1, Erin, Ontario

Our Serial Story
An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY.
By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.

CHAPTER XIX.—Continued.

He sprang from his chair and began pacing the room.

Wesley Elliot stared at his visitor without speaking. He perceived that the man dragged his feet, as if from excessive fatigue or weakness.

"I had no thought of such a thing," the stranger went on. "I'd planned, as a man will who looks forward to release from—a hospital, how I'd go about and see my old neighbors. I wanted to have them in for dinners and luncheons—people I haven't seen for years. She knows them. She can't excuse herself on that ground. She knows you."

He stopped short and eyed the minister, a slow grin spreading over his face.

"The last time you were at my house I had a good mind to walk in and make your acquaintance, then and there. I heard you talking to her. You admire my daughter; that's easy to see; and she's not such a bad match, everything considered."

"Who are you?" demanded the young man sharply.

"I am a man who's been dead and buried these eighteen years," replied the other. "But I'm alive still—very much alive; and they'll find it out."

An ugly scowl distorted the man's pale face. For an instant he started past Wesley Elliot, his eyes resting on an irregular splotch of damp on the wall. Then he shook himself.

"I'm alive," he repeated slowly. "And I'm free!"

"Who are you?" asked the minister for the second time.

For all his superior height and the sinewy strength of his young shoulders he began to be afraid of the man who had come to him out of the storm. There was something strangely disconcerting, even sinister, in the ceaseless movements of his pale hands and the sudden lightning dart of his eyes, as they shifted from the defaced wall to his own perturbed face.

By way of reply the man burst into a disagreeable cackle of laughter:

"Stopped in at the old bank building on my way," he said. "Got it all fixed up for a reading room and library. Quite



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FARM FOREMAN WANTED—A MAN AND his wife alone, or with one daughter or son over twelve years old, as working foreman. The wife will be expected to do the house-keeping for the extra hired help. We supply furnished house and all food. Send particulars as to experience and wages expected. Position open immediately. A. Shaver, Glen Dhu Farm, Whitby, Ont.

FOR SALE—FARM 200 ACRES, FIRST-CLASS buildings and stabling. Brick house, slate roof, modern conveniences. Land all under-tiled; lots of water, good orchard and hardwood bush; also house for hired man. Apply Box 142, Springfield, Ont.

WANTED—SINGLE MAN FOR "WELWOOD FARM," must be experienced in all branches of farm work; a good milker, and familiar with feeding and caring for cows on record work. Apply Farmer's Advocate, London, Ont.

WANTED AT ONCE—A SINGLE SCOTCH MAN to work on farm by the year, and also who understands feeding and looking after Short-horns. State wages per year. Apply to A. J. Fox, Harrow, Ont.

WANTED—GIRL FOR GENERAL HOUSE-work in town residence. Small family; assistance given; good home. Every electrical convenience. Good wages. Summer cottage in Muskoka. Apply with references, Box 87, Hespeler, Ont.

WANTED

First-class gardener, one who knows his business—to move to Kingston and work on private garden. Must be fully qualified.

H. W. RICHARDSON, KINGSTON, ONT.

4 DUAL-PURPOSE SHORTHORN BULLS 11 to 13 months of age, good color, sired by "Oxford Butterfly", from good producing dams; also Registered Clydesdale Stallion, rising 3 years, from imported sire and dam.

J. M. McCallum, Shakespeare, Ontario

CREAM

We are in the market for Churning Cream. Twenty-five years' experience should count. You'll find it in our service.

ASK FOR PRICES

The figures of yesterday may be too low for to-morrow. Ship to—

The Toronto Creamery

Church St., (It Pays) Toronto

SAW-BLADES

PRICE OF SAW BLADES F.O.B. FACTORY

20"	\$4.70	26"	\$6.90
22"	5.15	28"	8.25
24"	5.90	30"	9.25

You can order direct from this list, saving both time and money. Simply mention diameter of blade with size of hole wanted, and remit with your order. I ship promptly.

My Catalogue, "The Heart of the Farm," illustrating Lundy Oil Engines, Saw Frames, Grain Grinders, Etc., sent on request.

A. R. LUNDY,
257 KING STREET WEST, TORONTO

3 Imp. Clydesdale Stallions

FOR SALE

Pacific [3173], approved form A 1.
Gartley Forever [8112], approved form A 1.
King's Arms [6117], passed form 1.

All sound and in good condition.

W. L. MOSSIP, ST. MARY'S, ONT.

Seed Beans

Extra quality, hand picked. Samples sent. For sale — \$10.00 per bushel. Sacks free.

Adam Bingham, Millbank, Ont.

For Sale — Clydesdale Stallion

Dan. Spencer (16550); foaled May 12th, 1914; bay stripe, four legs white, best of foot and legs; was first in class and Reserve Champion at Ottawa Fair, 1917. Sire, Sir Spencer Imp. 39653 13211. Dam, Delmena Queen of Cherry Bank (20240).

ALBERT NUSSEY Brysonville, Quebec

a nice idea for the villagers. I'd planned something of the sort, myself. Approve of that sort of thing for a rural population. Who—was the benefactor in this case—eh? Take it for granted the villagers didn't do it for themselves. The women in charge there referred me to you for information. . . Don't be in haste, young man. I'll answer your question in good time. Who gave the library, fixed up the building and all that? Must have cost something."

The minister sat down with an assumption of ease he did not feel, facing the stranger who had already possessed himself of the one comfortable chair in the room.

"The library," he said, "was given to the village by a Miss Orr, a young woman who has recently settled in Brookville. She has done a good deal for the place, in various ways."

"What ways?" asked the stranger, with an air of interest.

Wesley Elliot enumerated briefly the number of benefits: the purchase and rebuilding of the old Bolton house, the construction of the waterworks, at present under way, the library and reading room, with the town hall above. "There are," he stated, "other things which might be mentioned; such as the improvement of the village green, repairs on the church, the beginning of a fund for lighting the streets, as well as innumerable smaller benefactions, involving individuals in and around Brookville."

The man listened alertly. When the minister paused, he said:

"The young woman you speak of appears to have a deep pocket."

"The minister did not deny this. And the man spoke again, after a period of frowning silence:

"What was her idea?—Orr, you said her name was?—in doing all this for Brookville? Rather remarkable—eh?"

His tone, like his words, was mild and commonplace; but his face wore an ugly sneering look, which enraged the minister.

"Miss Orr's motive for thus benefiting a wretched community, well-nigh ruined years ago by the villainy of one man, should be held sacred from criticism," he said, with heat.

"Well, let me tell you the girl had a motive—or thought she had," said the stranger unpleasantly. "But she had no right to spend her money that way. You spoke just now of the village as being ruined years ago by the villainy of one man. That's a lie! The village ruined the man. . . Never looked at it that way; did you? Andrew Bolton had the interests of this place more deeply at heart than any other human being ever did. He was the one public-spirited man in the place. . . Do you know who built your church, young man? I see you don't. Well, Andrew Bolton built it, with mighty little help from your whining, hypocritical church members. Every Tom, Dick and Harry, for miles about; every old maid with a book to sell; every cause—as they call the thousand and one pious schemes to line their own pockets—every damned one of 'em came to Andrew Bolton for money, and he gave it to them. He was no hoarding skinflint; not he. Better for him if he been. When luck went against him, as it did at last, these precious villagers turned on him like a pack of wolves. They killed his wife; stripped his one child of everything—even to the bed she slept in; and the man himself they buried alive under a mountain of stone and iron, where he rotted for eighteen years!"

The stranger's eyes were glaring with maniacal fury; he shook a tremulous yellow finger in the other's face.

"Talk about ruin!" he shouted, "Talk about one man's villainy! This damnable village deserves to be razed off the face of the earth! . . . But I meant to forgive them. I was willing to call the score even."

A nameless fear had gripped the younger man by the throat.

"Are you?" he began; but could not speak the words.

"My name," said the stranger, with astonishing composure, in view of his late fury, "is Andrew Bolton; and the girl you have been praising and—courting—is my daughter. Now you see what a sentimental fool a woman can be. Well; I'll have it out with her. I'll live here in Brookville on equal terms with my neighbors. If there was ever a debt between us, it's been paid to the uttermost farthing. I've paid it in flesh and blood and manhood. Is there any more

—any property you can name worth eighteen years of a man's life? And such years—God! such years!"

Wesley Elliot stared. At last he understood the girl, and as he thought of her shrinking aloofness standing guard over her eager longing for friends—for affection, something hot and wet blurred his eyes. He was scarcely conscious that the man, who had taken to himself the name with which he had become hatefully familiar during his years in Brookville, was still speaking, till a startling sentence or two aroused him.

"There's no reason under heaven why you should not marry her, if you like. Convict's daughter? Bah! I snap my fingers in their faces. My girl shall be happy yet. I swear it! But we'll stop all this sickly sentimentality about the money. We'll—"

An immense yearning pity for Lydia had taken possession of him; but for the man who had thus risen from a dishonorable grave to blight her girlhood he felt not a whit.

"You'd better keep quiet," he said sternly. "You'd far better go away and leave her to live her life alone."

"You'd like that; wouldn't you?" said Bolton dryly.

He leaned forward and stared the young man in the eyes.

"But she wouldn't have it that way. Do you know that girl of mine wouldn't hear of it. She expects to make it up to me. . . Imagine making up eighteen years of hell with a few pet names, a soft bed and—"

"Stop!" cried Wesley Elliot, with a gesture of loathing. "I can't listen to you."

"But you'll marry her—eh?"

Bolton's voice again dropped into a whining monotone. He even smiled deprecatively.

"You'll excuse my ranting a bit, sir. It's natural after what I've gone through. You've never been in a prison, maybe. And you don't know what it's like to shake the bars of a cell at midnight and howl out of sheer madness to be off and away—somewhere, anywhere!"

He leaned forward and touched the minister on the knee.

"And that brings me back to my idea in coming to see you. I'm a level-headed man, still—quite cool and collected, as you see—and I've been thinking the situation over."

He drew his brows together and stared hard at the minister.

"I've a proposition to make to you—as man to man. Can't talk reason to a woman; there's no reason in a woman's make-up—just sentiment and affection and imagination; an impossible combination, when there are hard realities to face. . . I see you don't agree with me; but never mind that; just hear what I have to say."

But he appeared in no haste to go on, for all the eagerness of his eyes and those pallid, restless hands. The minister got quickly to his feet. The situation was momentarily becoming intolerable; he must have time to think it over, he told himself, and determine his own relations to his new and unwelcome parishioner.

"None of that," growled Bolton. "Sit down, young man, and listen to what I have to say to you. We may not have another chance like this."

His assumption of a common interest between them was most distasteful; but for all that the minister resumed his chair.

"Now, as I've told you, my daughter appears unwilling to allow me out of her sight. She tries to cover her watchfulness under a pretense of solicitude for my health. I'm not well, of course; was knocked down and beaten about the head by one of those devils in the prison—Can't call them men; no decent man would choose to even his living that way. But cosseting and coddling in a warm house will never restore me. I want freedom—nothing less. I must be out and away when the mood seizes me night or day. Her affection stifles me at times. . . You can't understand that, of course; you think I'm ungrateful, no doubt; and that I ought—"

"You appear to me, a monster of selfishness," Wesley Elliot broke in. "You ought to stop thinking of yourself and think of her."

Bolton's face drew itself into the merciless wrinkles which passed for a smile.

"I'm coming to that," he said with some eagerness. "I do think of her, and that's why—Can't you see, man, that

eighteen years of prison don't grow the domestic virtues? A monster of selfishness? You're dead right. I'm all of that; and I'm too old to change. I can't play the part of a doting father. I thought I could, before I got out; but I can't. Twice I've been tempted to knock her down, when she stood between me and the door. . . Keep cool; I didn't do it! But I'm afraid of myself, I tell you. I've got to have my liberty. She can have hers. . . Now here's my proposition: Lydia's got money. I don't know how much. My brother-in-law was a close man. Never even knew he was rich. But she's got it—all but what she's spent here trying to square accounts, as she thought. Do they thank her for it? Not much. I know them! But see here, you marry Lydia, whenever you like; then give me ten thousand dollars, and I'll clear out. I'm not a desirable father-in-law; I know that, as well as you do. But I'll guarantee to disappear, once my girl is settled. Is it a bargain?"

Elliot shook his head.

"Your daughter doesn't love me," he said.

Bolton flung up his hand in an impatient gesture of dissent.

"I stood in the way," he said. "She was thinking of me, don't you see? But if I get out—Oh, I promise you I'll make myself scarce, once this matter is settled."

"What you propose is impossible, on the face of it," the minister said slowly. "I am sorry—"

"Impossible! Why impossible?" shouted Bolton, in a sudden fury. "You've been courting my daughter—don't try to crawl out of it, now you know what I am. I'll not stand in the way, I tell you. Why, the devil—"

He stopped short, his restless eyes roving over the young man's face and figure:

"Oh, I see!" he sneered. "I begin to understand: 'the sanctity of the cloth'—my sacred calling—Yes, yes! And perhaps my price seems a bit high: ten thousand dollars—"

Elliot sprang from his chair and stood over the cringing figure of the ex-convict.

"I could strike you," he said in a smothered voice; "but you are an old man and—not responsible. You don't understand what you've said, perhaps; and I'll not try to make you see it as I do."

"I supposed you were fond of my girl," Bolton said, looking in the younger man's eyes stopped him. His hand sought his heart in an uncertain gesture.

"Have you any brandy?" he asked feebly. "I—I'm not well. . . No matter; I'll go over to the tavern. I'll have them take me home. Tired, after all this; don't feel like walking."

(To be continued.)

Gossip.

A Big Sale.

Attention is directed to the big sale advertisement in another column in this issue, to be held at Lot 20, Concession 3, Oro, near Barrie, on Thursday, April 4. James A. Caldwell, of Shanty Bay, is selling at this time and place his entire farm stock, implements, a fifty-acre wood lot and a thirty-four-acre pasture farm. In the live stock are included two choice, registered Clydesdale stallions, one by Baron Solway and the other a colt with five registered dams and by Imported Solway King, a horse which will be included in the sale. There are three registered Clydesdale females including a two-year-old filly, a three-year-old carrying a foal, and a nine-year-old, sired by such good sires as Baron Gartley and Imported Mellinside. Four young work horses will go to the highest bidder. In registered Shorthorns there are ten head of young females by such sires as Imported Newton Ideal, Imported Royal Mastodon, and Superb Chief. These young cows and heifers should meet a ready sale and bring good prices. One bull, Royal Mastodon, will be sold. In sheep there are twelve registered Cotswold ewes, three registered ewe lambs, and one registered ram lamb, and in pigs there are three registered Yorkshire sows, well on in farrow, as well as eighteen store pigs. The farm implements and machinery are all in good repair and include everything necessary to work a large up-to-date farm. Remember the date, April 4. Trains will be met at Barrie on the morning of sale.

Tried, Proven and Endorsed

The Government of Canada, realizing the increasing difficulties which the farmers of Canada are facing through labor shortage, have carefully examined the help problem on the farm with the idea of eliminating extra work and drudgery.

Here is the Government's answer to every farmer and dairyman: "A partial solution of the labor problem is the milking machine."

Empire Milking Machines have been used for over three years on the Government Experimental Farm at Ottawa,— and in view of their past performance, the Dominion Government has now placed an order for six more Empire outfits to be installed on the following Experimental Farms: Fredericton, N. B., Lennoxville, Que., Cap Rouge, Que., Ste. Anne de la Pocatière, Que., Lacombe, Alta., Brandon, Man.



Actions Speak Louder Than Words

Empire Milking Machines are a good investment as they enable one man to do the work of three hired men in the same time. A boy can operate an Empire with ease.

Empire Milking Machines can be installed and operated at small cost,—the initial investment soon being paid for in time and labor saved.

The cost of operating an Empire for one year is just a fraction of the cost of boarding the hired man, aside from his wages—in one year, your saving is enormous.

Empire Milking Machines milk in Nature's way. The action of the teat cups is that of the sucking calf, massaging the teats from tip to udder, gently and uniformly—the same way at every milking.

The experience of thousands of farmers and dairymen is: that cows and heifers take readily to being milking by an Empire. The soft, gentle massaging of teat cups sets up a pleasing sensation which causes the cow to give down readily and stand content while being milked. Empire Milking Machines will lengthen the cow's period of lactation.

Empire Milking Machines are easy to care for. Simple in construction, these machines do their work with speed and efficiency and can be operated by man, woman, boy or girl.

We know of no Empire Milking Machine that is not giving absolute satisfaction and doing all we claim it will do.

Dozens of ~~men~~ men, just like yourself, use Empire Milking Machines and cannot say enough in their praise of the machine and its value to them.

Information saves money so write us today for booklets, testimonials and detailed particulars.

ASK FOR CATALOGUE 10

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

On March 6, 1918, the Dominion Government ordered six more Empire Milking Machine outfits.

Exact Copy of Government Circular issued to Farmers of Canada.

Dominion Experimental Farms.

J. H. GRISDALE, B. Agr. Special Circular No. 13. GEO. W. MUIR, B.S.A.

THE MILKING MACHINE

A PARTIAL SOLUTION OF THE LABOUR PROBLEM

They will take the place of that extra hired man so hard to obtain at the present time. Unlike that hired man they are always there ready for work. Their work is noted for its uniformity from day to day. Milking machines are now recognised.

AS A GOOD INVESTMENT

One man with a milking machine can milk twenty to twenty-five cows per hour. This number would take three men at hand milking. The real drudgery of the dairy farm is eliminated by the use of the milking machine.

The object of this circular is to put before the dairy farmer the value of the mechanical milker under the present conditions of labour on the farm.

There has been in the minds of many dairy farmers a great deal of prejudice against the use of a mechanical milker, but the present is no time to let prejudice stand in the way of increased production.

Every dairy farmer with a herd of 12 or more cows should consider seriously the installation of a milking machine.

The experience of an ever-increasing number of practical farmers, coupled with that of a number of our Experimental Farms and Stations, goes to prove that these machines are decidedly advantageous.

The average cost of installation, taking into consideration the five most popular machines on the market, would be about \$500 for an outfit to milk four cows at once.

Such an outfit would be large enough for a 25- to 35-cow herd. For a 20-cow herd a 3-cow outfit would be sufficient. For a 12- to 15-cow herd a 2-cow outfit would be sufficient.

For each reduction of one unit in the installation there will be a reduction of approximately \$100 in the cost price.

This brings the average cost price to \$16.60 per cow for the large herd; \$20 per cow for the medium-sized herd; and \$25 per cow for the small herd.

This in turn goes to show that while the cheapest installation for work done is with the large herd, nevertheless the first cost is not excessive in the case of a small herd.

The annual cost of operation for a 25- to 35-cow outfit, including repairs, power, labour in caring for engine and washing machines, interest on investment, and ten per cent depreciation on machine, would amount to approximately \$225.

The above is approximately one-third of what the farmer is at present paying his hired man, where board is not taken into account.

Divided between 30 cows, this brings the running expenses to two cents per cow per day.

The average hired man will not milk more than seven cows per hour, which, at 25 cents per hour, costs 7.2 cents per cow per day for hand-milking. One man with a milking machine can milk 20 to 25 cows per hour, which brings the total cost of machine-milking, including the above-mentioned daily running expenses, to 4.5 cents per cow per day.

This is a saving of considerably over one-third and in a large herd would enable the farmer to dispense with a least one, if not two, men, or it would liberate these men for other important lines of increased production.

It also enables one man to milk many more cows than it is physically possible for him to milk by hand.

Not only does a machine decrease the cost of milking, but it gives uniformity in milking. All cows are milked in the same manner every day, and every good dairy farmer knows this is important and that it is hard to obtain with the general run of farm hands.

A machine when properly installed and equipped with a reliable source of power is always there ready for work.

Breakdowns are comparatively rare and usually easily remedied.

Wear and tear is not excessive, considering the nature of the machine, and provided the latter is given proper attention.

A machine that is properly adjusted and handled will not injure the cow's teats or udder any more than the average farm hand.

Three years' experience of mechanical milkers on the Central Experimental Farm does not show that the cows dry off any more quickly than when milked by hand.

There is no more, if as much, objection to the milking machine on the part of the cows than there is to hand-milking.

Old cows used to hand-milking object most, and may not let down their milk readily, but heifers take to machine milking like ducks to water and require hardly any stripping.

Stripping by hand after taking the machine off is advocated by all users, as well as makers, as a precautionary and economical measure.

If the machines are properly handled in the barn, and likewise properly washed in the dairy, the milk produced will be as good, or better, than that produced by hand-milking.

Where extra pains are taken with the machines and the care of the milk a very high grade of milk can be produced.

Careless handling results in bad milk and ultimate failure of the machine.

Last, and of far more importance than the cost price or make of the machine, comes the question of the efficiency of the operator.

Handling the machine is a job for the farmer, his son, or some hired man who has an interest in the success of the machine and the cows.

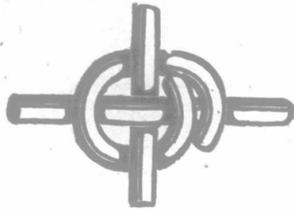
For best results the operator must be quick and quiet, with an eye for details.

Know the machine and the cows, and adapt the one to suit the other, giving each their proper share of attention at the proper time.

Any of the more prominent makes of milking machines upon the market will do good work provided they are properly handled.

The addresses of the dealers or manufacturers of the various machines can be procured from the farm journals, or upon application to the Animal Husbandry Division, Experimental Farm, Ottawa.





FENCE PAGE

Has the Confidence of the Careful Farmer

PAGE Wire Fences are chosen by careful, shrewd farmers, for many reasons. But it is because of the length of service that every Page Wire Fence gives that accounts, in no small measure, for its ever-increasing number of buyers, in preference to all other makes.

PAGE WIRE FENCES ARE BUILT TO LAST

There is nothing extraordinary in Page Fences to cause them to last so long, except that they are made for that very purpose. We know what makes a fence that "stays put"—and we manufacture it accordingly—with the utmost care and the very best of materials.

Only No. 9 gauge wire is used throughout, locks and all. It is subjected to an extra coat of galvanizing to give double resistance against rust. Every inch is tested and inspected before leaving our factories, so that we are able to know for a certainty that every Page Fence is rigid, tight-locked, evenly spaced—that it will give a lifetime of wear to its owner.

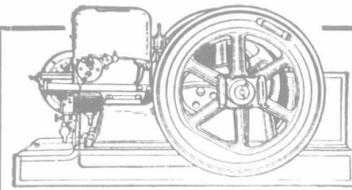
Choose as your next fence the Page Wire Fence and you will never have cause to regret it.

With Page Fences and Page Gates on your farm, your fence troubles are over forever.

Write, or call at our nearest branch for further particulars about Page Fences and Gates.

If you are interested in the Page Farm Engine or Page Wood Saw, we will also be pleased to tell you all about them.

Shipping Terms: Freight allowed on all shipments of 200 pounds or over, to any place in Old Ontario or Quebec, when payment is made within 30 days.



This Farm Engine Will Help You

With labor so scarce, inexperienced and high priced, a Page Engine will prove its worth in a few short weeks. Page Engines are built for farm work. You can afford

a Page Engine because it will actually save you many dollars in the first few weeks you have it.

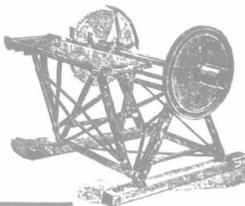
Two types and five sizes to choose from—one type burns gasoline, the other, kerosene. Sizes from 1½ h.p. to 7 h.p.

Let us help you choose the Page best suited to your needs. Write our nearest branch for full particulars.

A Wood Saw For You

The shaft is 4-foot-6-inch lathe-turned steel, that runs in well-habited, dust-proof, non-heating boxes. It will keep in good working order at all times.

The tilting table has a roller at one end to make long poles easy to handle—the balance-wheel and pulley are interchangeable.



THE PAGE WIRE FENCE COMPANY LIMITED.

517 Notre Dame Street, Montreal

Walkerville, Ont.

Winnipeg, Man.

Gossip.

Jas. Douglas, of Caledonia, writes as follows regarding the two head of cattle entered in the London Shorthorn sale, to be held April 2 and 3: "I wish to draw attention of the readers of 'The Farmer's Advocate' to the two head of cattle I have listed in the London sale, a bull and a heifer by the great Browndale, and grandly bred on their dam's side. They are an extra good pair of the low-down, thick, smooth kind, with great substance and hair. The bull is from one of my very best cows and looks like a real good kind to breed from. The heifer is bred right from a good Diamond heifer, by Roan Chief Imp., and will weigh over 1,200 lbs. at seventeen months. Look them up, also their breeding, and get some Whitehall Sultan blood through Browndale."

Sale Dates.

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.—Short-horns.

April 2, 1918.—Menie District Ayrshire Breeders' Club, Campbellford, Ont.—Pure-breds.

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

April 4, 1918.—Jas. A. Caldwell, Lot 20, Con. 3, Oro, near Barrie.—Clydesdales Shorthorns, Cotswolds, Yorkshires.

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

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

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

Champion Bred Gregg Holsteins.

The sixty head of Holsteins which T. G. Gregg, Ingersoll, Ontario, will sell at auction on April 10 are the result of breeding from a herd established years ago when twelve young females were selected from the herd of Walburn Rivers, of Pioneer Stock Farm. The following champions were produced by Mr. Rivers. The three-year-old R. O. P. champion, Calamity Snow Mechthilde 2nd; the Canadian R. O. P. champion two-year-old heifer, Duchess Wayne Calamity 2nd; also Calamity Posch Wayne 3rd, champion of the dairy test at the Ontario Provincial Winter Fair in 1913. This is the kind of blood represented in the herd to be sold by Mr. Gregg on April 10. The first bull to be used on the Gregg herd was Homestead Dewdrop King, a son of Belle Dewdrop, and sired by Dutchland Colantha Sir Abbecker. The next bull in service was King Isabella Walker. The present herd sire is Centre View Calamity Segis, which carries the blood of the two great Kings, King Walker and King Segis. His dam, sire's dam, and dam's sister average 29.46 lbs. butter in seven days. His dam was the winner of first prize in the dairy test at the Ontario Winter Fair, Guelph, 1912. Fully ninety per cent. of this herd carry the blood of the above champions. See the advertisement and write for a catalogue.

Garden Competition for Vegetable Growers.

The Secretary of the Ontario Vegetable Growers' Association, J. Lockie Wilson, Parliament Buildings, Toronto, has sent out notification regarding competitions to be conducted in 1918. The Province is to be divided into four districts, as follows:

1. Ottawa, Kingston, Belleville.
2. Toronto, Welland, Clinton and Louth.
3. London, St. Thomas, Stratford, Brantford.
4. Blackwell, Sarnia, Tecumseh, Sarnia Independent.

In the Vegetable Field Crop Competition the plots entered must not be less than one-quarter of an acre in one block, but members may compete in any or all of the six crops mentioned, namely, onions, celery, tomatoes, cabbage, early potatoes, muskmelons. Members wishing to enter these competitions should notify their local secretary promptly. In the garden competition the minimum is three acres of land, but if the plot contains a greater acreage than the above, the whole will be judged. Entries in this competition should also be made to the secretary of the local branch.

Markets

Continued from page 537.

the latter range also applying to brown comb and white extracted.

Eggs.—It is evident that the price of eggs will not be low this season, although it will be much lower than at present. American eggs are still coming in, and receipts of Canadians are constantly increasing. The price of either was 48c. per dozen, in a wholesale way. The agitation to sell eggs by the pound was again on, but failed.

Butter.—The market displayed a slightly easier tone, but prices do not show change, being 48½c. to 49c. for finest fall make, and 1c. less for fine. Current receipts were quoted at 46c. to 47c., and dairies at 40c. to 41½c.

Grain.—The demand for oats has been fair, but the market has sold off slightly. Quotations were: Canadian Western and extra No. 1 feed, \$1.07½; No. 1 feed, \$1.05½; No. 2, \$1.03; Ontario No. 2 white, \$1.07; No. 3, \$1.04½; No. 4, \$1.03, ex-store.

Flour.—The dearest flour on the list for some time past has been rye-flour, and last week a strong advance took place, carrying the price to \$7.20 per bag. Otherwise, the market is about steady, Government standard Manitoba spring wheat flour in car lots for country points \$11.10 per barrel, in bags, f. o. b. cars, Montreal, and 10c. extra delivered to city bakeries. Ontario winter wheat flour \$11.40 to \$11.50 in broken lots, ex-store.

Mill-feed.—Prices were steady at \$35 per ton for bran, in bags; shorts, \$40; mixed mouille \$60 to \$62 per ton; pure grain mouille, \$68 to \$70.

Baled Hay.—The market was firm at \$17 per ton for No. 2 baled hay, extra; No. 3, \$15.50, and clover mixture \$12.

Seeds.—Trade was fairly active. The demand from country points was good. Prices f. o. b. Montreal were as follows: Timothy 9c. to 14c. per lb.; red clover, 36c. to 40c. per lb.; alsike 22c. to 29c. per lb.

Hides.—The market was steady. Beef hides 15c. to 16c., and 17c. per lb., Montreal inspection; 19c. for steers, 13c. for cows, and 12c. for bulls, flat. Veal skins 34c. to 36c. per lb.; spring lambs 35c. each; sheep skins, \$4.50; horse hides, \$5 to \$6. Tallow 3½c. per lb. for scrap fat; 8c. for abattoir fat; rendered tallow, 15c. to 16½c. per lb.

Chicago.

Cattle—Beeves, \$9.50 to \$14.35; stockers and feeders, \$8 to \$11.90; cows and heifers, \$7.10 to \$12.15; calves, \$10.50 to \$16.

Hogs—Light, \$17.25 to \$17.95; mixed, \$16.90 to \$17.90; heavy \$16.25 to \$16.60; rough, \$16.25 to \$16.60; pigs, \$13 to \$16.75.

Sheep—Native, \$11 to \$15; lambs, native, \$14.50 to \$18.75.

Dunrobin Farms Holstein Sale.

On account of the shortage of help and poor railway service for delivery of milk from Beaverton, the proprietor of Dunrobin Farms has decided to sell the entire herd of 45 choice-bred Holsteins. The train connections to Beaverton are not convenient for a sale of this kind, so arrangements have been made to hold the sale at the Union Stock Yards, West Toronto, on Friday, April 5, at one p.m. The foundation cows of this herd were selected by the late Donald Gunn, probably one of the best cattle judges in Ontario. The sires used have always been of high quality from the standpoint of type and production. The sale is a breeder's sale, and with the exception of the herd sire, Echo Segis Champion, all the offering are females. The sires used at Dunrobin Farms include the following: Earl Tenson, Prince Victor of Manor, Sir Mercedes Netherland, Lakeview Hengerveld Rattler, Sunnybrook Oakland Boy, and the present choice-bred bull, Echo Segis Champion. He is sired by May Echo Champion, the well known full brother of the world's record cow, May Echo Sylvia, and out of a high-testing daughter of Sir Lyons Hengerveld Segis, which is a son of the great King Segis and Blanche Lyons De Kol, 33.31 lbs. butter in seven days. The cows are an extra fine lot, of good type and size and have been well cared for. They give every indication of being heavy producers. Write for a catalogue to Dunrobin Farms, Beaverton, Ont.

From a

We had a man always went to work on the was that he hustling and and death were was hard work man. It used must hurry, comfortable, knew things was nervous as caught the few turned round milking, as if going to happen on the farm no well and move some factory. what sort of a If he carried with him, I wastes a good his employers for wasted time For the man surely does not do as much in will not be as goes steadily on things out right count.

It is worth the habit of earlier in life t easier it will be keep calm and thing out. A High Schools or forgot anything that the mome she went and d take a certain school-room and far on her was gotten when he book, she immed returned for it. to fix the habit time.

The fact is unless we do this cap of the radiat twisted when w cannot be screw it? Stop, back the threads will down. The sam a fruit can. St dozen times of t by saying, "I dic thinking cap on. you for. Go ba right. Let no you.

For the call women who car thing and do it his life to the ot must keep his m It will not do for or to make a mi on the switch is in his place an pounding anywh go through all r run." A wreck train into the dit the home station right thing to d engine is out of wrong part right send in for anothe

"But," do you running locomoti that places life we are working w Are we always as out to see that ev be, every nut tur ings all oiled pro anywhere, each p doing the work fo A careful hand ca of the farm mach pitch-fork may How many have perhaps killed, by stale of a fork tha leaning against t Cows are dried u indifferent milkin work well. Ther milking a cow in.

After we get al to do our work The mind now ru pretty well define now to pull ones see here, old man it ought to have l Go and do it right The most encoura

From a Farmer's Wallet.

We had a man in our neighborhood who always went on the run when doing his work on the farm. No matter what it was that he was doing, he was always hustling and puffing and acting as if life and death were at stake all the time. It was hard work to stand and watch this man. It used to make us feel as if we must hurry, too. Everybody was uncomfortable, even to his horses. They knew things were not going right and were as nervous as he was. The cows, too, caught the fever and stood with one eye turned round toward him when he was milking, as if they wondered what was going to happen next. That man is not on the farm now. He did not get along well and moved away to town to work in some factory. I have often wondered what sort of a hand he would make there. If he carried the same habits of haste with him, I will venture to say that he wastes a good deal of material and costs his employers more than one dollar a day for wasted time, strength and energy. For the man who rushes along that way surely does miss the mark. He cannot do as much in a day, and what he does will not be as good work as a man who goes steadily on about his work, planning things out right and making every action count.

It is worth while for young folks to get the habit of doing things right. The earlier in life they begin to do this, the easier it will be for them in later life to keep calm and steady and think everything out. A lady teacher in one of our High Schools once told me that she never forgot anything she intended to do, but that the moment she thought of it again she went and did it. If she intended to take a certain book with her from the school-room and forgot it, no matter how far on her way home she might have gotten when her mind went back to the book, she immediately turned round and returned for it. A few such trips helped to fix the habit of remembering the first time.

The fact is we ought never to be satisfied unless we do things right. Suppose the cap of the radiator on the automobile gets twisted when we start to put it on. It cannot be screwed down tight. Why try it? Stop, back up, start the cap so that the threads will match. Then turn it down. The same way with the cover to a fruit can. Start it right, if it takes a dozen times of trying. Don't be satisfied by saying, "I did not think." Keep your thinking cap on. That is what it is given you for. Go back if you did not start right. Let no slipshod habit conquer you.

For the call everywhere is for men and women who can and will do the right thing and do it right. From one end of his life to the other the railway engineer must keep his mind on what he is doing. It will not do for him to run past a signal or to make a mistake in the way a lamp on the switch is set. He must not sit up in his place and let his engine get to pounding anywhere, thinking, "She will go through all right to the end of this run." A wreck may send him and his train into the ditch long before he reaches the home station. He knows that the right thing to do is to report that his engine is out of order, stop and put the wrong part right, or if he cannot do it, send in for another engine.

"But," do you say, "none of us are running locomotives or doing anything that places life in jeopardy." No, but we are working with valuable machinery. Are we always as careful before we start out to see that everything is as it should be, every nut turned up tight, the bearings all oiled properly, nothing grinding anywhere, each piece of the mechanism doing the work for which it was designed? A careful hand can add years to the life of the farm machinery. Putting away a pitch-fork may seem a simple thing. How many have been sadly injured and perhaps killed, by slipping down on the stale of a fork that has been carelessly left leaning against the side of a haymow! Cows are dried up by careless, hurried, indifferent milking. It pays to do this work well. There is such a thing as milking a cow in a workmanlike manner.

After we get along in years, we learn to do our work well at greater cost. The mind now runs in channels that are pretty well defined. It is a greater effort now to pull oneself up, and say, "Now, see here, old man, that was not done as it ought to have been, and you know it. Go and do it right." But it can be done. The most encouraging thing about all life

is, that there is always a chance to do better. Young or old, poor or rich, high or low, we are all capable of making improvement in everything we undertake. I know an old man who has only recently learned to write with a pen. He has lost the best part of life because he neglected this when he was young; but you cannot imagine how happy he is now that he can write a fair hand and read pretty well. Doing all things well never fails to bring with it a sense of conquest. That makes life worth living.—EDGAR L. VINCENT.

Questions and Answers.
Miscellaneous.

Guinea Pigs.

1. Where can I purchase guinea pigs?
2. What hospital would be liable to buy them for experimental purposes?

D. S.

Ans.—1. Place an advertisement in these columns.

2. Write the Institute of Public Health, London, Ont.

Feed Prices.

If by Order No. 5, the price of bran and shorts is set at \$24.50 and \$29.50, why are market prices quoted at \$35 and \$40?

F. W.

Ans.—These prices as explained in a recent issue of "The Farmer's Advocate" are f. o. b. Fort William. Bag prices, freight and sometimes bagging and dealer charges must be added as outlined in our issue of March 7, page 366.

Record Holstein.

Will you kindly make clear to me, through the medium of your valuable paper, why the son of the well-known cow May Echo Sylvia is referred to as a 44-lb. bull? Thanking you in anticipation.

R. F. L.

Ans.—We suppose the reference is made on the strength of his dam's record of 44 lbs. butter in seven days. It would be more correct to refer to the bull as a son of a 44-lb. cow.

Contracts—Quack Veterinarian.

1. Would I have to notify the township council and also the contractor to stop them carrying out the contract?

2. If a man makes a business of practicing as a veterinarian but is not a graduated veterinarian, can he be held responsible the same as a regular veterinarian?

A. B. C.

Ans.—1. What contract? If it is township work, interfering with your rights and property, notify both.

2. No man has a right to practice as a veterinarian unless he has his graduation papers and could not be held responsible nor could he set fees.

Pigs Die.

Young sow had litter of 5 pigs. At the age of 4 weeks one pig was found dead in pen from no apparent cause. Next morning another was crippled across back and in hind legs, gradually getting worse, until death came a day and a half later. Sow has been fed on oats finely ground and seems to have a good supply of milk. What is the cause of this, and remedy if any?

H. S.

Ans.—It is impossible for us to say what ailed the first pig. The second may have been injured by the sow. Pigs may be over-fat, as small litters sometimes get. Feed sow on slop and light feed. Give exercise, and if possible let the pigs have a little outside run on warm days.

Bad Seed Corn.

I went to a farmer in January looking for seed corn. I asked him if he had any seed corn for sale. He said he had. I bought 100 bushels at \$4.00 per bushel. I went back in a couple of weeks. He helped me pick it out. He did not guarantee it. I did not ask him to. I shipped it and sold it out for seed corn and it has proven no good. I have asked him to make it right; he does not think he is responsible. Have I any claim on him, if so how should I go about it?

J. L. G.

Ans.—You would have no case against the man who sold you the corn. He didn't guarantee it as to germination and, no doubt, had not tested it at all. You should have bought subject to test.



GOLD DUST'S specialty is dissolving grease. Greasy dairy utensils, for example, are quickly made sweet and clean with Gold Dust. Try Gold Dust on the churn, separator, butter paddles and other things.

GOLD DUST
The Busy Cleaner

THE J. C. FAIRBANK COMPANY
LIMITED, MONTREAL

MADE IN CANADA



Cream Wanted

It will pay you to ship us your cream. We pay express out on empty cans and express in on your cream. We remit for every can DAILY. We supply cans.

WE WANT YOUR CREAM.

LINDSAY CREAMERY, LIMITED, Lindsay, Ont.

The Final Phonograph

Designed—not adapted—to play ALL records

The Brunswick
ALL PHONOGRAPHS IN ONE



MADE IN CANADA

Models from
\$45 to \$250

**The Brunswick Plays Better,
Looks Better and Costs Less.**

MUSICAL MERCHANDISE SALES CO.

Sole Distributors for Canada. Dept. B

204 Excelsior Life Bldg., TORONTO

Please send me booklet showing how the Brunswick plays ALL records better.

Name

Street or R.R.

P.O.

Province

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

Why restrict your choice of records when you can have a phonograph that will play perfectly any and every make of record?

The Brunswick "had to come!" Just as we have seen the automobile perfected during the past fifteen years, so those in the phonograph industry have been watching and waiting for the Final Phonograph. And it has arrived—it is the Brunswick.

In the Brunswick all the best features of all the best phonographs have been frankly adopted. And, with some added refinements of beauty and finish, this wonderful phonograph is priced to you without the necessity of charging for discarded models or experiments.

Among other features that lift the Brunswick above all others is the perfected tone chamber, which, like a violin, is built entirely of wood—white holly, backed by spruce.

Find Out for Yourself

Get the full details concerning the Brunswick. Fill in and mail us to-night the attached coupon and let us send you a booklet that will give you the full story of the Brunswick—"All Phonographs in One," as well as a list of Brunswick Records.

RENNIE'S Big Crop SEEDS

FOOD production—that is the big cry for 1918. Everyone must produce as much as possible—which means every available square yard under cultivation, and the widespread use of Rennie's seeds.

LOOK FOR THE STARS

Every item in the Rennie 1918 catalogue represents unexcelled value, but the items in star borders are simply wonderful.

	Pkt.	oz.	¼ lb.	lb.	5 lbs.
BEANS —Rennie's Stringless Green Pod	.10		.18	.55	2.50
BEET —Rennie's Spinach Beet	.10	.35	1.00	3.00	
CABBAGE —Rennie's Worldbeater	.10	.75	2.25		
CARROT —Rennie's Market Garden	.10	.40	1.20	3.50	
CORN —Rennie's Golden Bantam	.10		.25	.65	
CUCUMBER —White Wonder	.10	.30	.90	3.00	
LETTUCE —Rennie's Selected Nonpareil	.05	.30	.90	2.75	
MUSKMELON —Delicious Gold Lined	.10	.40	1.20	3.50	
PARSLEY —Champion Moss Curled	.05	.25	.75	2.25	
PEAS —Little Marvel	.10		.15	.45	2.00
			.15	.45	2.00
RADISH —Cooper's Sparkler	.05	.20	.65	2.20	
TOMATO —Bonny Best	.10	.60	1.75		
		.60	1.75		
TURNIP —Golden Ball (Orange Jelly)	.05	.25	.75	2.50	

	Prepaid	Not Prepaid
lb. 5 lbs.	lb. 5 lbs.	lb. 5 lbs.
ONION SETS —Yellow Sets—Selected.	.35 1.70	.25 1.20

FLOWER SEEDS

	Pkt.
Lavender Gem Aster	.15
Early Blooming Cosmos—Mixed	.10
Giant Yellow Tulip Poppy—California	.10
New Red Sunflower	.25
Rennie's XXX Mammoth Flowering Hollyhock—Mixture	.20
Mastodon Pansy—Mixture	.25
Rennie's XXX Select Shirley Mixture—Single	.10

When buying from dealers, insist on Rennie's. If your dealer hasn't them, we will ship direct.

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

The One New Idea in Phonographs

The "Organola" Model of our "Phonola" is the only really new idea—the only radical improvement—in phonographs in years.



Model Organola \$250

Into this model we have built tone control pipes, carrying out the principle of the church organ. The tone result is remarkable and marks the "Phonola Organola" as the supreme achievement in phonograph construction.

The "Organola" cabinet is superbly finished. The winding crank is concealed. The motor is noiseless. It is an instrument of real distinction.

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



The Pollock Manufacturing Co., Limited
Kitchener, Canada

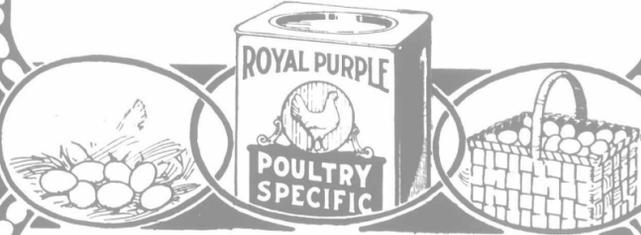
Gossip.

London Two-Day Sale of Shorthorns.

Before the passing of another week the 1918 spring sale of 150 high-class Shorthorns, selling under the auspices of the Western Ontario Consignment Sale Company, in the city of London, will have come and gone and April 2 and 3 counted as two eventful days in the history of Shorthorns in Canada. One hundred and fifty breeding Shorthorns of the calibre of those catalogued for London this spring are not often found in one sale-ring in any country and when sold under the liberal guarantee of this firmly established Club, our prophecy of one more successful sale, even at this very early date, should not be so very far out of order. A review of the pages of the catalogue just issued, in so far as good pedigrees go, will assure the prospective purchaser that a stronger aggregation of breeding Shorthorns was never before assembled in one consignment sale-ring in Canada. As individuals we also have every reason to believe that the quality of the cattle throughout are quite on a par with the breeding. The several consignments seen by our representative included cattle of considerably more show style and character than was usually seen in public sale rings of other years, and from these could be picked several individuals that would make promising material for the coming shows. In calling attention to a few of the better bred lots picked at random throughout the catalogue it is only fair to mention that not all of the better pedigrees are referred to, or that the best contained therein are even mentioned, but with both space and time

Royal Purple Poultry Specific

Is the big link between few eggs and a full basket.



It Increases the Egg Yield

Feed Royal Purple Poultry Specific to your fowls daily in a hot or cold mash. It will keep your hens active and healthy by assisting them digest and assimilate the food eaten.

If you feed our Poultry Specific according to directions to fowls which are properly housed you will get nearly as many eggs during the winter months as you ordinarily get in the summer. It will pay for itself many times over. Read the following letter from Robt. Cameron, Hensall, Ont.

"I have been using your Royal Purple Poultry Specific for the past year and it pays for itself many times over in the extra production of eggs, and it makes my hens lay in the winter when the price of eggs is high."

Sold in large and small packages.

80 PAGE BOOK SENT FREE

Send for this valuable book which describes the common diseases of poultry and stock. It tells how to build and remodel poultry houses and how to raise calves without milk. Write for a copy now.

W. A. Jenkins Mfg. Co. Ltd., London, Canada

limited there has come to our notice a representation of one or more individuals in each of nearly all the more popular families of the day and on the tops of these pedigrees appear such noted bulls as Hillhead Chief (imp.), which has sired two Claret and one Misic bull in the Waldie consignment; Best Boy, the great Canadian bull which is the sire of six in the R. & S. Nicholson's allotment; Sittyton Favorite, a grandson of the noted White Hall Sultan, is the sire of nearly all of the good things in the Wallace E. Gibb consignment. G. & W. H. Nicholson furnish a lot of Cruickshank and Marr breeding, several of which are got by their herd sire, Merry Hampton (imp.). Geo. Gier of Grand Valley has two young bulls and two heifers all got by Escana Champion, a son of the renowned Right Sort Imp. Kyle Bros. of Spring Valley have six females and two bulls listed, which are with three exceptions all got by their former herd sire, Nonpareil Ramsden. H. C. Robson strengthens the sale with some straight bred Minas, Celias and Waterloo Princesses. Brien & Sons' lot brings in some Lovelys and a well-bred Mary Anne of Lancaster heifer, and H. Smith has among others one 12-months bull by his former noted Springhurst sire, Blarney Stone, and a choice yearling heifer by his present sire, Volunteer, a son of the great Blarney Stone. Several other noted bulls figuring in the various other consignments are Archer Sultan by Superb Sultan, Rosewood Chief, the great "Brownale", sire of a 13-months bull, and a one-year heifer in the Douglas contribution, Senator Lavender; Corsican 5th, Rosemary Pride by Lavender Sultan, and others which altogether make up not only one of the largest but one of the strongest offerings ever seen in an Ontario sale-ring. The sale will commence at 1 o'clock p.m. Tuesday, and at 11 a.m. on Wednesday. For catalogues address H. Smith Hay, Ont.

When writing please mention Farmer's Advocate

Guaranteed GRASS AL

Pro
Agricu



LYMAN
GRIMM

A Photo taken in 1915 by F. F. Sota College of Comb Alfalfa & Grimm. During Liscomb, touted hardy, winterk the winter in e above photo.

The same suc met with all o

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In establishi Seed which is k of my seed I fur I specialize in G discovered the Free.

A. B. LYMAN
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THE PRESTON
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SEED

This seed was ir 1916; is of the W ing about ten da White Field B F. O. B. Wm.

LYMAN'S
Guaranteed Genuine
GRIMM
ALFALFA

Proven Hardest By
Agricultural College Tests



↑ LYMAN'S GRIMM LISCOMB Winterkilled ↑

A Photo taken of one of the 47 Fields established in 1915 by F. Forbell, Alfalfa Specialist in Minnesota College of Agriculture. On these fields Liscomb Alfalfa was sown along side of Lyman's Grimm. During the following winter most of the Liscomb, touted by some seedsmen as being very hardy, winterkilled—but the Grimm came through the winter in excellent shape, as is shown by the above photo.

The same success with Lyman's Grimm has been met with all over the country.

Heaviest Yields—Highest In Feeding Value—Best For Seed

In establishing your Alfalfa field, sow Grimm Seed which is known to be genuine. With each lot of my seed I furnish a certificate of its genuineness. I specialize in Grimm Alfalfa only. Book, "How I discovered the Grimm Alfalfa" and seed sample Free.

A. B. LYMAN, Grimm Alfalfa Introducer
Alfalfedale Farm, Box 33, Excelsior, Minn.

We Can.
Save You Money
ON SEED CORN

Leaming, Red Cob Ensilage, Mammoth Southern Sweet; guaranteed 85% to 98% germination.

Prices on application. Special inducements on car lots.

MATTHEWS & CO.
Watford, Ontario

THE MARTIN
DITCHER AND GRADER
DIGS YOUR DITCHES
GRADES YOUR ROADS
EASILY QUICKLY CHEAPLY
REVERSIBLE ADJUSTABLE
PAYS ITSELF IN ONE DAY
DOES THE WORK OF 50 MEN
SEND FOR FREE BOOKLET
THE PRESTON CAR & COACH CO LIMITED
97 DOVER ST. PRESTON CANADA

McCormick's
JERSEY CREAM
Sodas
Contain all the elements of a pure wholesome food at an economical price.

SEED BEANS
This seed was imported from Michigan in 1916; is of the White Field Variety, maturing about ten days earlier than the Native White Field Bean. Price, \$9.00 per bus. F. O. B. Wm. A. Kelly, Rodney, Ont.

Transplanting the Tobacco Crop and the Proper Plants to Use

The tobacco crop requires a very thoroughly prepared seed-bed and pays a higher reward for the labor expended in this direction than almost any other crop.

The preparation of the land for tobacco should begin as early in the spring as possible, first by thorough ploughing followed by double discing and harrowing well. After this the land should be harrowed as soon as possible after all rains. By treating the soil in this way a great deal of soil moisture is held in store for the tobacco crop in case of drought. Before planting, the land should be thoroughly cultivated so as to make the soil as loose and mellow as possible.

Transplanting should be commenced after the danger of frost is over, either, late in May or early in June. Early transplanting gives the tobacco a chance to grow rapidly and resist the late droughts. It may also be harvested earlier making it possible to use the most suitable fall weather for curing the crop.

When the plants have developed from four to six leaves and are five to six inches in height, they are ready for transplanting. During the week prior to transplanting the plants should be "Hardened" by removing the cover from the beds during the greater part of the day, increasing the period each day until finally, if the weather is at all favorable the covers should be left off entirely. The hardening process should not be carried so far as to make the plants woody, because such plants are slow in starting growth in the field.

About half an hour before drawing the plants for transplanting the bed should be well watered. In drawing, select well-formed plants, green and thick set, well provided with roots, and all as equal in size as possible. The greatest care should be exercised to see that all diseased and damaged plants are discarded.

If possible, transplanting should be done on a cloudy or rainy day on in the afternoon, so as to avoid excessive wilting.

Plants that have died or been damaged by cutworms should be promptly reset during the first two or three weeks after transplanting.— Experimental Farms Note.

Questions and Answers.
Miscellaneous.

Cattle Running at Large.

In the Act respecting the protection of pure-bred cattle, what is the meaning of the phrase, "Running at large?" Does it mean running loose on a person's own property? G. H.

Ans.—According to the wording of the Act, male animals are not allowed to run loose on a person's own property, unless in a closed paddock that is of sufficient strength to prevent the animal from getting at large.

Lame Hens.

I have trouble with my small flock of hens. Last summer's hens are laying and look healthy and red about the head, but one by one they are going lame. They are getting rough and scaly on the legs. I keep them dusted with insect powder and keep the pen clean and dry. I am feeding rolled oats, whole oats and barley, and have gotten from 6 to 12 eggs per day from the 22 hens, since before Christmas. The affected birds appear to recover when placed by the heat and fed a little soft feed. C. I.

Ans.—Lameness may result from several causes. Birds jumping from high roosts, stepping on glass or frozen ground, will sometimes cause the feet to swell with the resulting lameness. Bathing and applying kerosene is a treatment which usually gives results. Sometimes an abscess will form which may necessitate lancing. As the birds apparently recover when placed beside the heat, it is possible that the trouble is due to rheumatism, which is an inflammation of the joints and muscles. About the only thing that can be done for this is to keep the birds in dry, well-ventilated houses. Lameness is one of the symptoms of tuberculosis, which is possibly one of the worst diseases that infects the poultry yard. Along with lameness other symptoms are that the birds lose in weight, become weak and appear anaemic. They usually have a ravenous appetite. A post-mortem examination generally reveals numerous raised nodules on the liver.

"Harnessing the Air" to Save Butterfat

The air is a great wizard. Properly employed, (as in a Sharples Suction-feed Separator) it will save North America more than eighty million pounds of butter which fixed-feed separators waste because 95% of them are turned below speed much of the time.

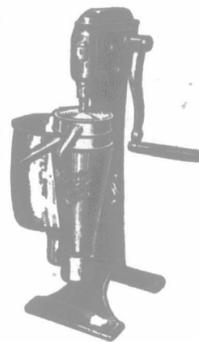
The Sharples Suction-feed principle really harnesses the air and makes it work for you. By means of the suction-feed, just enough milk enters the tubular bowl as can be perfectly separated. As your speed varies so does the suction-feed. Thus, Sharples saves the cream waste that results when fixed-feed separators are turned under speed.

SHARPLES
SUCTION-FEED
CREAM SEPARATOR

Skims Clean at Any Speed

While air is free to everybody, yet the suction-feed principle is exclusive with Sharples and fully protected. Bear that in mind when you investigate a separator and insist on knowing if it will skim clean at any speed. Get proof.

There are no discs in a Sharples tubular bowl which adds further to its superiority. The one-piece bowl is easy to clean, easy to turn—even for a boy. Write nearest office for catalog, addressing Dept. 78



Toronto, Ont. The Sharples Separator Co. Regina, Sask.
The Mitchell & McGregor Hardware Co., Brandon, Man.
Distributors for Manitoba

The Easy Way on Wash Day

Why My "1900" is the Easiest, Quickest and Best Washer for You



NEITHER you nor any other woman needs to be reminded that washing is a mighty disagreeable household task by the "wash-tub and wash-board" method. I have discovered that most women are keenly interested in finding some mechanical aid that will remove this most objectionable of drudgeries. That is why so many Canadian housewives have come to me as the result of my claim that I have the machine that answers the "wash" problem completely. My "1900" Gravity Washer will save you all the work of washing. It does away with all the drudgery of the back-breaking rubbing. It washes clean, because the hot soap-suds are driven right through the clothes until they are thoroughly clean. And does not wear or tear the clothes; they are firmly held while the tub and water are in motion. The finest linens and laces or blankets, come out of the "1900" Gravity Washer without having been strained or stretched—without frayed edges or broken buttons.

The "1900" Gravity is operated with an ease

K. I. MORRIS, Manager "1900" Washer Company
357 Yonge Street TORONTO

you will marvel at. Gravity is the basic reason for its ease of operation. A child can run it.

"Does it wash with speed?" you will ask. The "1900" Gravity Washer takes just six minutes to wash a tub full of very dirty clothes.

Of great importance, too, is the lasting quality of this "1900" Gravity. The tub (detachable, by the way) is made of Virginia White Cedar, bound together with heavy galvanized steel hoops that will not rust, break or fall off. The "1900" Gravity is built for use; it will last a lifetime.

If you are interested, let me tell you more about it. Thousands of Canadian women have written to let me know what a genuine help the "1900" Gravity is to them. A New Brunswick woman says about hers:

"I enclose payment in full for washing machine and wringer. I am very much pleased with the washer. It is the best I have seen. It makes wash-day a pleasure."

Try the "1900" at my expense. I will send it to you for a free trial, without a cent deposit. Do as many washings with it as you like within the trial period of four weeks, and if you then find that you can afford to do without it, send it back at my expense. If you want to keep it, as I know you will, pay for it out of what it saves you, week by week, 50c. a week if you like, until it is paid for. If you want to know specially about this trial offer, better address me personally.



Doctor Greene says:

"The telephone call came at midnight—ten mile drive to the country over ice-covered roads, but the case was urgent. Fortunately I had my tires encased in 'Dreadnaught' chains for just such an emergency, otherwise I couldn't possibly have made the trip in time."

Dreadnaught
TIRE CHAINS

saved a life that night—possibly two lives. Are you still taking chances? The best time to get Dreadnaught Chains is before you need them. Why not right now? Ask your dealer, or write to us for price list and descriptive circular. You save \$1 to \$3 per set because of our superior manufacturing facilities.

McKinnon Columbus Chain Limited
Manufacturers of Electric and Fire Welded Chains
ST. CATHARINES - - ONTARIO 10

PRESTON Implement Buildings
Staunch-Low-Cost-Ready

Plan to make more money in 1918



YOU want all the equipment, all the buildings, all the machines that can be used to increase your crops this year. For never before were the chances so great to make enormous profits.

But before cutting and hauling materials for that new shed get the booklet that tells all about PRESTON buildings.

Here is the neat, sturdy good-looking "Acorn" corrugated iron building you need to house your valuable implements and keep them in good working order.

A handy man with our plans can get this building together in less time than it would take to saw up the

framework of an ordinary building.

This fireproof through-drive building is 20 ft. x 24 ft., height 10 ft. to the eaves. We will ship you all materials—the frame members cut to fit by rapid money-saving machines, the trusses assembled, windows and doors made complete, the metal siding, and all hardware—for \$259.

Big factory resources make this low price possible. Remember, you would have had to raise 224 bushels of Wheat, or 336 bushels of Potatoes, to pay for this building three years ago. To-day 117 bushels of wheat or 170 bushels of potatoes will buy it. It is cheaper to the farmer than before the war.

Send for catalogue giving pictures, prices and details of PRESTON buildings. To-day!

The Metal Shingle & Siding Co., Limited
Preston, Ont.

Makers of Preston Barns, Storage Buildings, Garages and Implement Sheds.



This cut shows one of many arrangements of doors that can be supplied

Homemade Syrup From Sugar Beets.

As one of the consequences of the war the price of granulated sugar has very materially advanced during the past two years. This fact has prompted the inquiry, can a wholesome syrup be made in the home from sugar beets that can be used as a sugar substitute?

To ascertain the possibilities in this direction the Division of Chemistry of the Experimental Farms has been making a number of experiments, taking as a basis the simple process described in the U. S. Department of Agriculture, Farmer's bulletin No. 823. The results of this investigation have shown that a syrup may be prepared from sugar beets which though not palatable for direct use, as on pancakes, porridge, etc., can be successfully employed as the "sweetener" in the making of buns, muffins, cookies and gingerbread and possibly other cookery products in which a dark color is not objectionable. The syrup—the method of making which is about to be described—is of a thick consistency, very dark, and contains from 50 to 60 per cent. of sugar. It is intensely sweet but unfortunately leaves in the mouth a very distinct and unpleasant after-taste which is due, no doubt, chiefly to the mineral salts extracted from the beet in the process of making the syrup. This disagreeable after-taste precludes, in our opinion, the possibility of using the syrup directly on articles of food. However, a number of trials with it as a sweetener in cooking has demonstrated that it can be satisfactorily employed in baking operations, as already stated, the product being free from any appreciable unpleasantness. The process, which is exceedingly simple, is as follows:

1. The beets should be thoroughly washed, and the crowns cut off at the lowest leaf scar and rejected. The remainder of the beet is then sliced as thinly as possible, put into a tub, crock or other suitable receptacle and covered with BOILING water at the rate of 1 1/2 gallons per 10 pounds sliced beets. The whole should be kept hot for an hour or so, with constant stirring, and then strained through two thicknesses of cotton. The juice so obtained is brown or brownish black in color and was found to contain 5.75 per cent. to 6.75 per cent. sugar.

2. The juice, obtained as already described, is boiled down to a volume of approximately one tenth of that originally

Hard, Dry Soil Can't "Stick" You

This New PETER HAMILTON Stiff Tooth Cultivator works in any kind of soil, no matter how hard or dry. For weed killing and growing big crops, you need the help of a

New PETER HAMILTON Stiff Tooth Cultivator

Surpasses all other implements for Summer-fallow work. Built with extraordinary strength all through, to stand the heaviest work of deep cultivation. Has many special features of improvement, including new relief spring. Write to-day for illustrated circular.

The Peter Hamilton Co., Limited,
PETERBOROUGH,
ONT.



Agents wanted in open territory

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present, care being taken that the syrup as it thickens does not scorch or burn. During the boiling the scum which constantly rises should be removed.

To preserve the syrup for future use it should be bottled while still hot in self-sealers and the covers at once tightly screwed down.—Experimental Farms Note.

Gossip.

Thirty-one Pound Breeding in the Belleville Sale.

It is not too often that any consignment sale-ring in Canada, or any other country in fact, can offer cows with records up to 31.94 lbs. of butter and 625 lbs. of milk in 7 days. Cows of this calibre are not too plentiful in most districts and when they are found it is usually pretty hard to induce the owners to put them into a sale without any protection whatever. The Belleville Club, however, have in some way or other, always been fortunate in inducing some member of their Club to consign one or more of this kind in order to give the other contributors a standard at which they could aim. This year it has fallen to the lot of Carman Baker of Brighton, to set "the standard" and for this he has chosen from the best of his herd and has catalogued his great producing cow, Daisy Gerben Verbelte, whose splendid seven-day record for both milk and butter production is mentioned above. In writing "Farmer's Advocate" under date of March 1st, Mr. Baker says: "When we stopped testing her she was striking a 35-lb. gait but as I could not get cotton seed, oil cake or gluten I had to let her drop." He also adds that she was still milking 90 lbs. per day then. That she would be one of the tops of any sale goes almost without saying and to make the sale still more attractive her bull calf, sired by a 34-lb-bred grandson of King Segis Pontiac Alcartra, (the \$50,000 sire) also goes through the sale-ring. Two other heifers make up Mr. Baker's entire consignment. These heifers are sisters, both being sired by Pontiac May Pietertje, son of the noted Pontiac Hermes and May Echo Pietertje, a daughter of the great May Echo, the 31.34-lb. dam of the world's greatest milk producer, May Echo Sylvia. If you have not received a catalogue write at once to F. R. Mallory, Frankford, Ont., and note therein further particulars regarding Mr. Baker's offering.

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Female Labor on the Farm

EDITOR "THE FARMER'S ADVOCATE":

It sames the labor troubles on the farm is not confined to us men and our work.

Last week the "Home Makers' Club" met wid Nora, me woife. Bein' as I had a bit of a cowl I was in the house all day, and, belave me, yer honor, there was somethin' doin' iverly minute and a few words in betwane.

Says Mrs. Finnegan: "Sure and it's the awful toime I be havin'. Here I am wid a man and siven childer and two hoired men, and I can't get a girl atal. I've had foive in the last yare. The first was no good. The second didn't loike the childer, the third didn't loike me man, the fourth didn't loike work, and the last married the hoired man."

"Yis," says Mrs. Doherty, "it's the same wid me. Faith, and the only plan I can think of is to move to Alberta among the Mormons and Tom get another woife. Sure and it's aisier for a good-lookin' man to get an extra woife nor it is to get a girl to work."

Says Mrs. McDuff: "Yer roight, ladies, the min's problim aint half as bad as ours. Sure, a man does all he can and his woife does the rist. We have only two chances for a rist."

"And where's that?" says Nora. "Battleford and the cemetery," says Mrs. McDuff.

Up spakes Mrs. Magee: "We're all agreed as how we can't get no help on the farms. We be always blamin' the girls because they won't work on the farm. Faith, ladies, and it stroikes me as maybe the throuble is wid the farm and not wid the girls atal. Here's a noice girl I knowin Regina. She's a stenographer. She works hard for \$45 a month, and she pays \$30 a month for board and \$5 for washin' and car tickets. She's workin' for \$10 a month, ye see, whin Mrs. Finnegan would pay her \$30."

"Hould on," says Mrs. Rafferty. "Sure and me girl is goin' to school in Regina, and it costs her \$40 a month to live, sayin' nothin' about clothes."

Says Mrs. Finnegan: "What we want to know is how to get female hilp on our farms. Say, Mrs. Black, sure ye always have a good girl. How do ye kape her? It bates me completely how yer girls always stays wid ye till they gits married."

Says Mrs. Black: "Me and me man jist trates her exactly the way we think we'd loike to be trated if we was in her place, and it works foine. Whin I was lavin' home to-day me girl says: 'Now, Mrs. Black, if Mrs. Murphy axes ye to stay for supper, jist ye stop as long as ye loike. I'll look after the house and fade the min and the hins.'"

Jist thin Kathlane come in wid some tay and chicken sandwiches—Nora is consarvin' the ham.

Says Mrs. Thompson: "Say, Kathlane, whin ye was goin' to Collagiate in Regina ye must have mit lots of girls. Can ye tell us why they won't work in the counthry? Sure and a girl on a farm can save more money nor a \$75-a-month-girl can in the city."

Says Kathlane: "Yis, Mrs. Thompson, I'll be tellin' ye. I've talked wid dozens of girls and I'll put ye wise. Take it from me if ye want girls on the farm ye must be after makin' the farm more attractive nor it is now. Wan thing is the lack of convaniences. The danged men will have ivereverything they want, from an autmobile to a harrow cart, as their fathers niver dreamed of, and the women is still carryin' water and churnin' and washin' jist loike the women as come over on the Mayflower. Thin, again, the girls wants some company. On most farms her only chance is to flirt wid the hired man, and whin he is a German or an Austrian that chance is gone. Sure and yez women has bin talkin' for a long toime about 'community centres.' Why don't yez git busy and conscript foive acres more for yer school ground and have a noice garden and park and baseball and tennis and the loikes. Faith, and yer as bad as the min. Why don't ye do somethin'? Give the girls some society and use thin roight and ye can git thin. And there's wan more thing and that's the biggest trouble of all."

"And what's that?" says some wan.

"The long hours," says Kathlane.

"The saints presarve us! Would ye hear the girl?" says Mrs. Flynn. "Sure me grandmother and me mother and meself all got up at four in the mornin' and worked till half-past noine at noight



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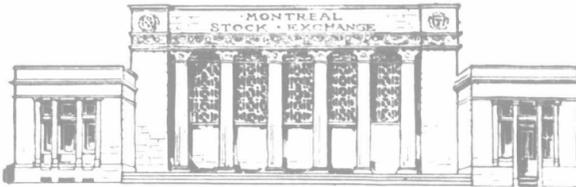
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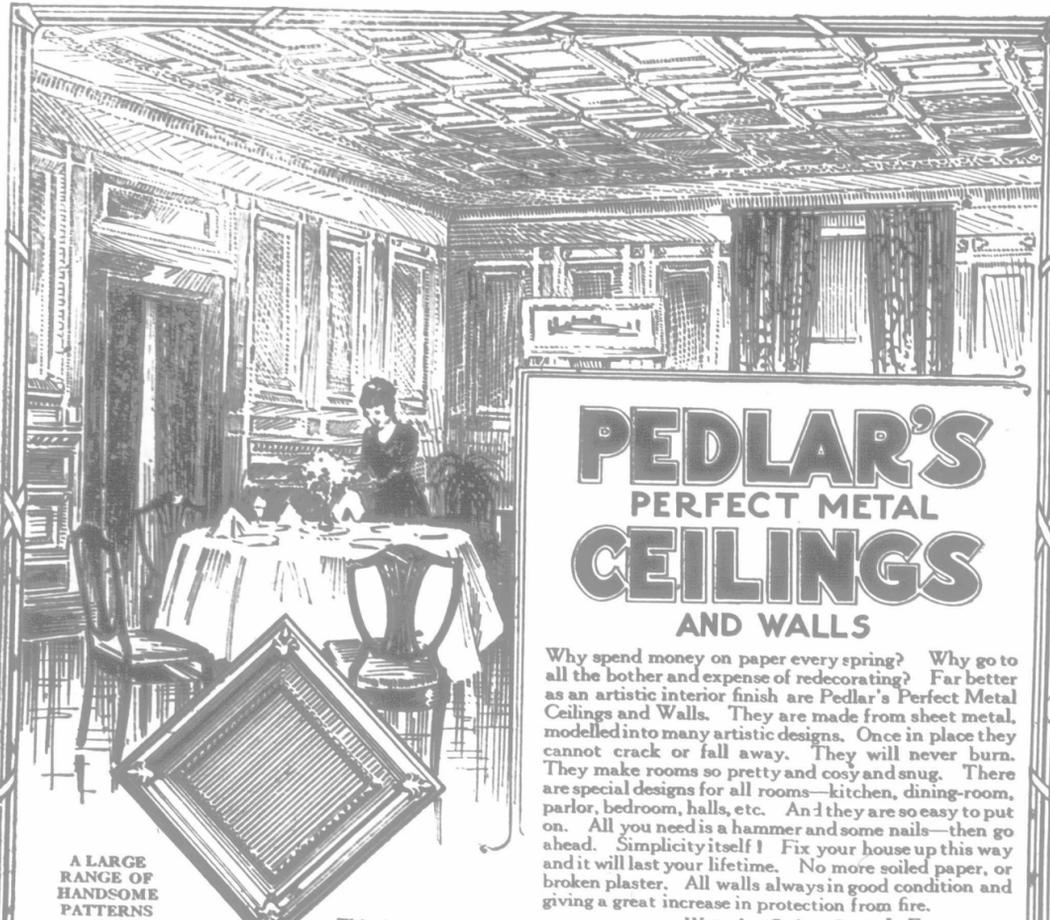
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in the summer. Faith, and ye can't farm widout it."

"All roight," says Kathlane. "Farm yer own way, but don't be moanin' because ye can't get a girl to help ye. If yez wants plinty of help on the farm give yer girl a comfortable place to slape—not a clothes' closet loike Mrs. Finnegan gives her's. Have her git up fresh and happy at six o'clock and lit her be all done wid her bist dhress on and her nose powdered at seven in the avenin', wid two hours off in the afternoon."

"Bedad and yer crazy," vells all the women. "Ye can niver do that."

"Well, do widout the girls," says Kathlane.

Says Mrs. Currie: "Ladies, the girl is roight. God niver intinded farmers to work eighteen hours a day and other pape ten hours. If we can't make a livin' by workin' dacint hours there's somethin' wrong. Us grain growers has busted the elevator combine and us and —has cut the prices of goods a lot. We must kape on doin' as Langley and the FARMER'S ADVOCATE says—'Eliminate the middle man,' and kape on eliminatin' non-producer and millionaires til we can kape good hours loike our city pape as is livin' off our labor, as most of them is."

By this toime the tay was all gone and the ladies wint home and me head soon quit achin'.

Sask.

PAT MURPHY.

Gossip.

Ridgedale Heifer Breaks Canadian Record.

One of the most sensational seven-day butter records made in years has just been completed by the senior two-year-old heifer, Lakeview Dutchland Wayne Rose, owned by Dr. F. A. Heslop of Ridgedale Stock Farm, R. R. No. 1, Freeman, Ont. The official figures for her best 7 days give her 31.71 lbs. of butter and 510.6 lbs. of milk, making her average test 4.97%. She was bred at Lakeview Farm, Bronte, Ont., and displaces Alta Posch, the former Canadian champion senior two-year-old by 4.65 lbs., a record which has stood for almost seven years. We understand she is also an excellent individual and was among the Doctor's first purchase in Holsteins last fall, and this, of course, is his first experience in testing. It must be remembered, however, that her splendid record did not happen just by accident as she is sired by Dutchland Colantha Sir Mona, one of Canada's greatest producing sires which also sired Lakeview Dutchland Artis, Canadian champion senior 3-year-old butter cow, which made 34.66 lbs. of butter from 567.9 lbs. of milk in 7 days, with an average test of 4.88%, and Lakeview Dutchland Hengerveld 2nd, junior champion bull at Toronto in 1915 and grand champion bull at both Toronto and London in 1916 and 1917.

The Maple Lane Dispersal.

The sale of the Maple Lane herd of pure-bred Holsteins advertised for Tuesday, April 2nd, will bring into the sale one of the smaller but select herds of Eastern Ontario, and offers to Ontario breeders 14 choice females, royally bred, at their own price. The fact that Mr. Washington has done practically no testing, will no doubt have a tendency to make them go below their value but usually it is at a sale of this sort when the biggest bargains of the year are picked up. The foundation females were all selected from herds where testing was followed, and consequently these all have creditable records and a few words here regarding the herd bull, which has been in service for the past four years, will be sufficient testimony in behalf of the breeding of all the younger things in the herd. This sire is King Segis Count De Kol, which is also selling on April 2, and he is, on the sire's side, a grandson of King Hengerveld and Blanche Lyons De Kol, the latter being a 33.31 lb. daughter of Pietertje Hengerveld Count De Kol, with over 100 A. R. O. daughters. On the dam's side he also shows up equally well, being out of a \$1,000 A.R.O. daughter of the great King Segis. The sale will be held in the afternoon and all C. N. R. trains will be met at Solina Station on day of sale. The terms will be cash, or 7 months credit will be given on bankable paper, bearing interest at 7 per cent. per annum. There will be no reserve as the farm is sold and possession promised by April 15. Address all correspondence to N. S. Washington, Hampton P.O., Ont.

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Advocate Ads. Pay

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In order to obtain strong healthy plants it is very essential to sterilize the tobacco seed beds before sowing. A large percentage of losses in the field from root-rot and Mosaic diseases originate in the seed beds and can be checked by a thorough sterilization.

The transplanting of diseased seedlings not only means heavy losses from a reduced yield and very inferior crop, but the soil also becomes infected with the disease which renders the growing of tobacco on it in the future a hazardous undertaking. Aside from freeing the beds of disease, weed seeds are also killed by an effective steam sterilization. This alone will pay for the sterilization of the beds by the saving of labor required to weed the beds. The inverted pan method is the most practical and economical to use in the steam sterilization of beds. A good traction engine can be obtained in most any locality where tobacco is grown. The steaming pan or box, which should be from 10 to 12 feet long and 6 feet wide can be made from galvanized sheet iron or tongued and grooved boards 1 1/2 inches thick. The galvanized pan where properly made and reinforced will last longer but will cost more than one made of wood on account of the rather high cost of such material at the present time. In either case the pan should be made very tight in order that no steam will escape from the pan during the steaming operations. There should be a 1 1/4-inch opening in one end of the pan equipped with a galvanized pipe and coupling on which to attach the steaming hose or pipe with the engine. A diffuser should be attached to this opening inside the pan in order to distribute the steam more uniformly to all parts of the pan. Handles should be on the sides of the pan to facilitate moving the pan along the bed. Several farmers in a locality should co-operate in the purchase of the pan.

The bed should be thoroughly prepared for seeding before steaming. The pan should be placed on the bed and the edges firmly pressed into the soil before the steam is turned on from the engine. Best results have been obtained by allowing steam to run into the pan for 30 minutes at a pressure of 100 lbs. on the engine. The steam can then be turned off and the pan removed to another section of the bed. In order to not re-infect the bed one should avoid walking on it after sterilization. The use of two pans will greatly facilitate the work. The frames should be placed around the beds immediately after sterilization. The beds can be sown 1 to 3 days after sterilization.

The surface of steamed soils is inclined to dry out more rapidly than un-steamed soils and will require watering more often until the plants are large enough to cover the ground.

Don't use too much water at first as this will have a tendency to drift the seed and small seedlings, giving the bed an uneven appearance.

G. C. ROUTT,

Plant Breeder and Pathologist, Ottawa.

Questions and Answers.

Veterinary.

Apoplexy.

Pig eight months old, while eating began to stagger, held head to one side, fell down, squealed and appeared to suffer pain. Later on it was lying down with all feet working as if it were running. It lay and acted in this way for 36 hours. I then killed it and a post mortem revealed the kidneys very large, the bladder very full and the heart was also very large.

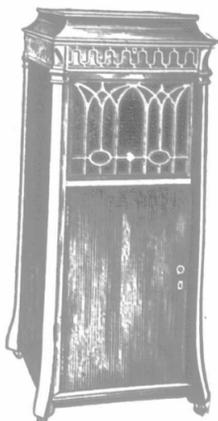
G. McC.

Ans.—This was a case of apoplexy. It is usually caused by high feeding and want of exercise.

Treatment.—Bleeding is recommended. Tie a string tightly above the knee, the vein on the inside of the leg will fill up; then with a sharp knife make an opening into it. For a pig of this age a small tea cup of blood would be enough to extract; then remove the string and pin up the opening in the usual manner, by pressing a small pin through the lips of the wound and tying a thread around the pin. Leave the pin in for two days.

Another treatment is to purge with 1 oz. Epsom salts, feed lightly for a few days and see that the patient takes exercise as soon as he can move.

Prevention consists in allowing exercise every day.



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are included more real choice herd bull prospects than have been sold in a single sale in Ontario in recent years. Good sires are scarce — we have fifty from which to select; they range from ten to fifteen months of age and are ready for service. Nearly all the females are of breeding age and well on in calf or have calves at foot, and all are guaranteed breeders.

Selling at the Fraser House Stables on April 2, and at the Brunswick Hotel Stables, April 3.

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A Dinner to the Live Stock Men will be given on the evening of April 2.

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War Time Seed Supply.

EDITOR "THE FARMER'S ADVOCATE":
Operating under the direction of the Seed Commissioner and composed of members of his staff, the Seed Purchasing Commission aims to insure a reserve supply of staple farm seeds for distribution where needed. Outside offices of the Commission are maintained at Regina, Toronto and Quebec City. The Seed Branch staff of seed inspectors and the chain of Government elevators, under the control of the Board of Grain Commissioners of the Department of Trade and Commerce, co-operate with the Seed Purchasing Commission in the inspection, cleaning, storing, sacking and distribution of seed supplies. The grain trade also assists in purchasing on the basis of small brokerage commissions.

The purchases of the Commission are financed by appropriations made by Orders-in-Council, and proceeds from sales are deposited to the credit of the Receiver General. The Commission makes sales only in car lots of one or more kinds of seed and subject to payment by sight draft with bill of lading attached. Prices are fixed to cover the actual cost of the cleaned seed as nearly as can be determined.

All of the cereal grains purchased for seed are obtained subject to inspection as to definite standards of quality for seed grades. Small premiums per bushel are offered in car lots which will grade for seed with a limited dockage in cleaning. Relatively pure varieties are available in the quantities required only in a few items; hence the operations of the Commission do not interfere unduly with the business of seedsmen who always handle named varieties.

The seed surplus or requirements of each province are estimated by the Seed Branch district officers in consultation with the Provincial Departments of Agriculture, where supplies are needed the latter bodies frequently place orders and assist in the distribution. Much of the seed handled by the Commission is, however, distributed through the usual channels of commerce for seed supplies. Municipal governing bodies, agricultural societies, farmers' clubs or groups of farmers take

Interprovincial Pressed Brick

Red Buff and Fire-flashed Colors

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CREEKSIDE SCOTCH SHORTHORNS

Herd headed by Gay Monarch 79611; dam, Sally 8th imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow, well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers. Geo. Ferguson—Elora Station, C.P.R., G.T.R.—Salem, Ont.

WILLOW BANK STOCK FARM

SHORTHORN CATTLE AND LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK, 1848. The great show and breeding bull, Brownale =80112=, by Avondale, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from Imp. ewes JAMES DOUGLAS CALEDONIA, ONTARIO

IMPORTED SHORTHORN BULLS

We have several newly-imported bulls of serviceable age—Cruickshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere. RICHARDSON BROS., Columbus, Ont.

PURE SCOTCH SHORTHORN BULLS

Our present offering of young bulls, sired by our herd sire Broadhooks Star, a son of the great Newton Ringleader, 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.

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.

SEVENTY-THREE HEAD OF SHORTHORNS

Four good young bulls of serviceable age; Nonpareil Ramsden =101081= and Royal Red Blood =77321=, at the head of the herd. These 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. Also three extra-good grade heifers, from heavy milk-producing dams. James McPherson & Sons, Dundalk, Ontario

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.

advantage of ordering in car lots and thus serve as a control on prices asked by the trade.

SEED COMMISSIONER.

Gossip.

Brantford Dual-Purpose Shorthorns.

The Lynmore Stock Farm, situated near the city of Brantford, Ont., and the property of Frank Cockshutt, is perhaps one of the most noted stock breeding establishments in the Dominion. Not that it compares, even favorably in size with many of the larger farms in the country, but the specialty here, for the past few years has been imported dual-purpose Shorthorns of the better sort, and as the selections with only few exceptions have always been made by Mr. Cockshutt personally, the Lynmore herd has gained in prominence very fast. A trip of inspection to the farm at any time, will, however, furnish a full explanation as to the cause of this success. The excellent type of imported breeding females seen in the stables will please all lovers and admirers of the breed and the present offering of young bulls from these dams and sired by the former herd sire, Lynmore Duke (imp.), are well worthy of inquiry and every consideration on the part of those who are now in need of a high class sire. They have seven, eight, ten and eleven-thousand-pound backing and sires such as Conjuror, Dauntless, Director, and others equally as famous, at the tops, in all their pedigrees. The newly imported herd sire, Thanet Marquis, a choice well-made two-year-old, is at present doing exceptionally well and will be used exclusively on all of the mature cows in the herd. He is got by Kings-thorpe Marquis by Barrington Star, and his grandam, Lady Maud, has a 10,000-lb. milk record for the year. Lord Crawford, the junior sire, is also a promising youngster both individually and in breeding. Being got by the now noted Alberta sire, Director, and out of the 10,000-lb. cow, Rosebud 12th, he should be one of the strongest bred milking bulls the breed has produced.

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TWO-PIECE
STEEL HAMES**



**FOR HARD ROUGH WORK
THEY STAND PRE-EMINENT**

There is no load too heavy or strain too great for these all-steel hames. Two-piece, doubly reinforced at points of greatest strain.

15% Stronger Than Any Other Hame Draft studs, forged steel; Rings electrically welded—will not break; will not buckle or bend, anti-rust treated.

Write for Our Descriptive Folder We can furnish low tops and high tops; light hames and heavy hames in all kinds of finishes and designs for every hame requirement. DEALERS: Write for our dealer proposition and selling helps.

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 Milking Shorthorn Cattle
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 Rhode Island Red Poultry

Our winnings at the Eastern States Exposition speak for the type of our animals—
 Our official production records are equally superior—
 The great size of our herds offers unusual opportunities for selection—
 We would like to send you our catalogues and production records—

Dalton
Massachusetts

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
FOR SALE
Two Dual-Purpose Shorthorn 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.

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.

Glenfoyle Dual - Purpose Shorthorns
 Herd bull College Duke 4th, 95430, big, thick young cows and heifers for sale; 8 young bulls, some herd headers. Also a yearling Clyde, stallion

STEWART M. GRAHAM, LINDSAY, ONT.

Evergreen Hill R. O. P. Shorthorns
 Offering sons 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.

Gossip.
Richardson Shorthorns at Columbus.
 There is no better evidence of the worth of an aged bull than that which can be seen in the get of the good old sire, Proud Monarch, in the herd of Richardson Bros. of Columbus, Ont. Proud Monarch is a Brawith Bud-bred bull by Blood Royal (imp.), and came to the Richardson herd only three years ago, but one needs only to glance over the score or more young things now in the stables by this noted bull to know that he is easily one of the country's best breeding sires. The 1916, 1917 and 1918 calves are all by him and among the 1917 calves are a half dozen choice young bulls, almost any one of which will make a sire worthy of a place in any herd. Next in service and the sire to which the daughters of the senior sire are being bred is the young imported bull, Ardlethen Clarence, a Marr-Clara two-year-old that should have exceptional promise when crossed with Messrs. Richardson's excellent heifers. In summing up the breeding herd it is also pleasing to note the splendid pedigrees attached to each of the good breeding matrons throughout the herd. There are three Duchesses of Glsters all of the true thick stamp, and each with a bull calf at foot by the senior sire. The Wedding Gifts are also three in number to which are added a couple of extra good heifers freshening this spring with their first calves. The Rosemarys and Crimson Flowers are each represented by two, the Marr Missies by three, the Rosebuds by one, and the Louisas by two, making in all a herd of 65 head from which there are offered at present as nice a lot of young two and three year heifers as we have seen priced for sale for some time, to say nothing of the bulls mentioned.

Questions and Answers.
 Miscellaneous.

Self Feeder for Hogs.
 Can you give me the plan of a self-feeder for hogs? What feed do you recommend for pigs of 100 lbs. to be put on pasture? Do you recommend tankage?
 A. F.

Ans.—The plan and description of a self-feeder for hogs was published in the January 17 issue of the Farmer's Advocate. Oats and barley make very good hog feed. Shorts may be used to advantage. We would advise feeding roots to growing hogs. Tankage has been found to give good results, especially where skim milk is not available.

Farming on Shares.
 What is the customary way to work a farm on shares, the owner having the plowing all done and furnishing the seed?
 2. How should alsike clover be taken off on shares?
 3. What will clean black silk poplin?
 E. G.

Ans.—1. There are a number of ways of renting a farm on shares, depending on the nature of farming, the quality of the soil, and the amount of material furnished by the owner. In working farms on shares, the apportionment of expenses borne and proceeds received by the tenant commonly runs from one-third to forty per cent.; thirty-five per cent. being a fair average. This would be where the owner would furnish the land, buildings, live stock and implements. He would receive sixty-five per cent. of the proceeds and pay sixty-five per cent. of taxes, repairs, etc. Where the tenant furnishes implements, live-stock, and does all the work, except furnishing the seed, the apportionment would be on more of an equal basis.
 2. In harvesting the clover on shares, it is advisable to work on a cash basis for labor, etc. The amount which each should receive will depend on the stand of clover or the yield of seed, consequently it is very difficult to give a division that would be equitable under all conditions.
 3. If the silk is only slightly soiled, soap bark may be used satisfactorily. The directions for using same are usually on the package. If badly soiled, gasoline should be used, but if so, care would have to be taken to keep it away from fire.

The Feed for Hungry Calves

Conserve the milk and help the nation. You do not need to feed milk to your calves if you use Royal Purple Calf Meal. It is a perfect substitute for milk. It is partially cooked, and the pure ingredients are so combined that the meal will not injure or derange the digestive organs of even the youngest calf. If you want rapid development and healthy calves, feed

Royal Purple Calf Meal

Let the following unsolicited testimonial letters convince you of the sterling qualities of our calf meal.

John D. Hamilton, Port Hope, Ont., writes:
 "I have used Royal Purple Calf Meal and find it perfectly satisfactory, and I am recommending to my friends. I might add that I find no trouble with the calves scouring while using this meal. I have tried many other calf meals, but never found one that proved satisfactory until I got Royal Purple."

S. M. Osborne, Maxwell, Ont., writes:
 "We have a pretty good calf which is now four months old and weighs 400 lbs. I think your calf meal is fine. I have never fed anything that will make a calf grow as fast as this meal."
 Order Royal Purple from your feedman. It is sold in 25, 50 and 100-lb. bags.

W. A. Jenkins Mfg. Co., Limited
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FREE BOOK
 Send for our 80-page book which tells how to raise calves without milk. It also describes fully the common diseases of stock and poultry.

Springhurst Scotch Shorthorns

Four Bull Calves Fit for Service, a choice lot of thick, well-grown fellows, just the right age for heavy service. One is by our present sire, Volunter, another is by the great sire Blarney Stone, while a third is by the Roan Lady bull, Refiner. If looking for a herd sire, write about these.

Harry Smith, (Exeter Station, Huron Co.,) Hay P.O., Ontario

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

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

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.

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.

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 Ayr.)

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.

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.

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 Glister, 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

A.G. Farrow, Oakville--SHORTHORNS
 Herd headed by Proud Lanor (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

Farm one mile from station. Trains every couple of hours each way.

SHORTHORNS CLYDESDALES
 Will price 4 richly-bred Lavender heifers, 5 to 27 months, oldest one due to calf to Lochiel (Imp). Still have stallion rising 2 cows old, the first Bona's Pride blood; size and quality combined; selling price—Wm. D. Dyer, R.R. No. 3, Oshawa, Ont. 4 1/2 miles to Brooklin, C.N.R., or Myrtle, C.P.R. 2 1/2 miles to Brooklin, G.T.R.

ENGLISH DUAL-PURPOSE SHORTHORNS
 My present offering, 50 young bulls, all from imported stock, bred for milk through many generations. Price 1000 to 1500. Five Cuckshank Butterflys.

F. WALLACE-COCKSHANK, LYNMORE STOCK FARM, BRANTFORD, ONTARIO

MAPLE HALL SHORTHORNS
 Present offering, 7 yearling bulls: One Cuckshank Duke, one 47-month-old, one 48-month-old, one 49-month-old, one 50-month-old, one 51-month-old, one 52-month-old. All pure Scotch, all from imported stock. Also a few young cows with calves, and yearling heifers.

D. BIRRELL & SON, CLAREMONT, ONT.

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When you fertilizer you get the goods thousand When a gold ore the ounce should be active Soda, the

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"Length Overcomes enemies— makes waterproofing of sti that rich dark dress

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Fertilizer Quality

When you buy a ton of fertilizer you are buying what's in the goods and not merely two thousand pounds of weight.

When a smelter buys a ton of gold ore he insists on knowing the ounces of gold in it. You should know the amount of active Nitrogen, Nitrate of Soda, the gold of the fertilizer.

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HUBS and HORSES

The world is short of horses. To get the most out of your team use

MICA AXLE GREASE

"Use half as much as any other"

The mica flakes fill the pores and crevices in the axle and the grease keeps them there. Mica Grease means fresher horses at the end of the day and longer life for your harness and wagons.

EUREKA HARNESS OIL

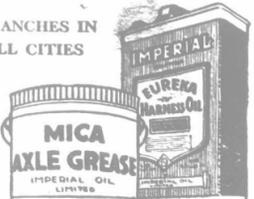
"Lengthens leather life"

Overcomes leather's worst enemies—water and dirt. It makes harness pliable and waterproof, prevents breaking of stitches and imparts that rich black lustre to all dark dressed leather.

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THE HALLIDAY COMPANY, LIMITED, HAMILTON CANADA

FACTORY DISTRIBUTORS

Cost of Increasing the Make of Maple Syrup.

EDITOR "THE FARMER'S ADVOCATE":

I have read with interest many writings on increased production for this coming season. The agitation for an increase of maple products particularly interests me. I have received a letter urging me to tap all the available maples that I have this spring, in an effort to produce maple sugar or syrup to lessen the amount of cane sugar needed. In my case, I cannot see that it would pay. I would be losing money by increasing our present sugar-making outfit. Our present outfit consists of two iron kettles and about eighty buckets. If we were to begin sugar-making on a large scale, we would have to have a larger outfit and purchase an evaporator. We could tap about eight hundred trees. This would mean that we would need over seven hundred new sap buckets, and this would entail an outlay of around \$280. The spiles would cost another \$30, and an evaporator of sufficient size to meet our requirements would cost in the neighborhood of \$200. This would include the arch for supporting the evaporator, also the float regulator, siphons, scoop and skimmer. I would also need a supply of cans for holding the syrup. These would cost about \$20 per hundred for gallon tins. I would also require a storage tank. The above outfit would cost me over \$535, not including any cans for holding the finished product. It would also cost considerable to erect a suitable building for the evaporator, and it would take three or four men to handle the outfit and do the chores around the barn. It is almost impossible to secure three men even at \$3 per day. Unless it were an exceptionally good season, I would not make any more than interest on my investment. Of course, I would be doing work of National Service, but I would like at least a little profit. For this year I purpose making as much syrup as I can with my old outfit. Halton Co., Ont. W. J. Cox.

Questions and Answers. Miscellaneous.

Renting a Farm.

A rents a farm to B but has no lease or witness to the bargain, and has not done any work on the farm. C buys the farm from A and pays him for it. Will C be obliged to rent the farm to B, or may he work it himself? F. S.

Ans.—We cannot see how C is obliged to rent the farm to B under the circumstances. If B had a lease on the farm, A would have been obliged to sell subject to the lease. With some men a verbal agreement is as good as a bond, but if the agreement was considered binding A should have consulted with B before disposing of the land.

Fence Queries.

Can I compel my neighbor to build his line fence between us? Because he does not work his farm for about thirty rods from my fence he will neither build his half of fence nor pay for having it built. The land along the east side and about thirty rods between his working land and my fence is in commons, but is just as workable and level as what he works.

I might say I have taken the Advocate for 17 years, ever since I started farming on my own account and we value it very highly. R. T. J.

Ans.—As we understand your question your neighbor can be compelled to build a lawful fence between his property and your own on that half of the line allotted to him.

Mixing Wheat — Yeast Treatment.

1. Would it be all right to sow spring wheat with fall wheat that was damaged with the frost for marketable grain?

2. Will yeast bring cows around, if so what kind of yeast and how do you give it and how often? H. B. B.

Ans.—1. If your fall wheat is a late variety and your spring wheat fairly early it might work out all right to sow spring wheat in with the fall. While millers would rather buy the wheat separately no doubt in these times there would be a good market for it mixed.

2. No. The yeast treatment will not cause oestrus. It is only used in cases where cows fail to conceive due to excessive acidity in the reproductive organs. An ordinary yeast cake dissolved in water is used.

Build With "METALLIC"

EASTLAKE SHINGLE

EMPIRE CORRUGATED IRON



MAKE your buildings last a lifetime. Let us show you the savings made by using "Eastlake" Galvanized Shingles, "Empire" Corrugated Iron (for roofing and siding), "Metallic" Rock and Brick Faced and Clapboard Siding, "Halitus" Ventilators, "Acheson" Roof Lights, "Metallic" Ceilings, Eave-trough, etc. Write us for information and booklet based on years of experience in farm buildings. Metallic Roofing Co. Limited, Manufacturers, Toronto and Winnipeg

DISPERSION SALE OF

60 Pure-Bred Holsteins

AND A NUMBER OF YOUNG CALVES

at Highwood Stock Farm, Ingersoll, Ont., at 10.30 o'clock, on

Wednesday, April 10th, 1918

We are offering 8 choice young bulls of serviceable age. Included in this sale are sisters of two of the Canadian R.O.P. Champions, Calamity Snow Mechthilde 2nd, at three years, 23,274 lbs. milk and 1,053 lbs. butter in 1 year; and Duchess Wayne Calamity 2nd, at two years, 16,714 lbs. milk and 864 lbs. butter in 1 year. We are also offering a daughter, 3 granddaughters, and a number of great-granddaughters of Fairmont Wayne, who has a record of over 20,000 lbs. milk and over 800 lbs. butter two years in succession. Thirty head in this sale are the get of King Isabella Walker (imp.), whose dam has a record of over 22,000 lbs. of milk, and 987 lbs. butter in one year, also a grandson and granddaughter of Queen Butter Baroness, 33.17. Fully 90% of the entire herd carry blood of the Canadian R. O. P. Champions.

Conveyances will meet morning trains at Ingersoll, and the C. P. R. noon train from the south at Salford.

WRITE FOR CATALOGUE. LUNCH PROVIDED

T. G. GREGG, R. R. No. 5, INGERSOLL, ONTARIO

AUCTIONEERS:—MOORE & DEAN, WM. PULLIN

DAISY GERBEN VERBELLE

LOOK UP THIS COW IN YOUR BELLVILLE CATALOGUE

Her record is 31.94 lbs. of butter and 625 lbs. of milk in 7 days—and she's a show cow. Also note KING GERBEN ALCARTRA, a son of this great cow and sired by King Alcartra Walker, which is a son of the great 34-lb. 4-year-old cow, Keyes Walker Segis. The three nearest dams of this youngster average 33 lbs. of butter in 7 days. He is a beautiful calf, and sells with two heifers (full sisters), Lily Pietertje Echo and Lily Echo Pontiac, sired by Pontiac May Pietertje.

FOR CATALOGUES, SEE THE CLUB ADVERTISEMENT.

CARMAN BAKER

BRIGHTON, ONT.

CLOVER BAR HOLSTEINS

We are now offering a number of young bulls, sired by our senior herd header, Francy 3rd's Hartog 2nd, the noted son of the famous old Francy 3rd and Canary Mercedes Hartog; also a few females—all choice individuals. P. SMITH, PROPRIETOR, STRATFORD, 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

Here's a Top-notch!

Sire, King Segis Walker; dam, 30-lb. daughter of Pontiac Korndyke, who herself has a 30-lb. daughter. He is a youngster, but he'll grow.

A. A. FAREWELL, Oshawa, Ont.

LOW BANKS HIGH-RECORDS: SONS OF "FAIRVIEW KORNDYKE BOY"

who now has seven daughters out of a total of eleven, with records of from 20 to 23 lbs.—two have milked over 600 lbs. of milk in 7 days. Also some young bulls from these heifers sired by Sir Echo. Only one ready for service from 30.14 dam, with a 20-lb. two-year-old daughter. K. M. DALGLEISH, KENMORE, ONTARIO

WILLOWBANKS HOLSTEIN-FRIESIANS

Herd headed by King Walker Pride (C. H. B., 17362), (A. H. B., 207261) who is a son of the famous King Walker and the great show cow, Pride Hengerveld Lennox, 30.12, who is a granddaughter of Blanche Lyons De Kol, 33.31 and King Segis, who is a grandchild of world-champion cow, also of the two highest-priced bulls of the breed. Young stock for sale. C. V. Robbins, Bell Phone Wellandport, Ontario.

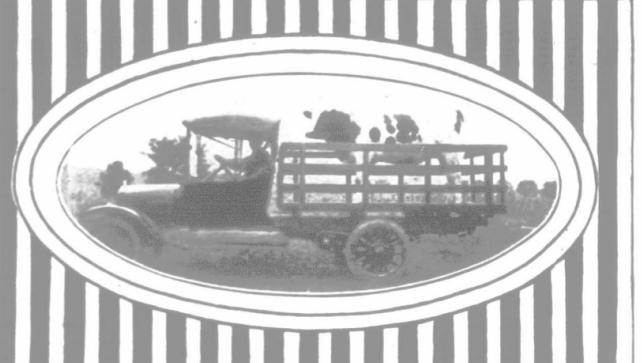
EVERGREEN STOCK FARM HOLSTEIN-FRIESIANS

Our unparalleled success at the Toronto and London Exhibitions during the past five years places Evergreen Holsteins in a class by themselves. The strong combination of size and type found in our individuals makes record producers. Your next herd bull should be carefully selected. See our offering before buying elsewhere. A. E. HULET, (Oxford County) NORWICH, ONT.

Riverside Holsteins

We still have some good bulls on hand, including two half-brothers of Toitilla of Riverside, former Canadian R.O.P. Champion. Write or phone your wants to—J. W. Richardson, Caledonia, Ont.

Pioneer Farm Holstein Herd With big yearly records and high average butter-fat test, and headed by Canary Hartog, grandson of Royalton Violet, at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29,963 lbs. milk, 1,309 lbs. butter in 1 year. Sire's dam, Royalton De Kol Fern, 34.60 lbs. butter in 7 days, 116 lbs. milk in 1 day. Bull calves for sale, born after Jan. 25th, 1917; dam over 11,000 lbs. milk up to nearly 16,000 lbs. milk in 1 year at 2 years old. Walburn Rivers, R. R. No. 5, Ingersoll, Ontario, Phone 343L, Ingersoll Independent Line



A 29-pound sire going to head the herd of W. T. Davidson & Son, Meadowvale, Ont.; 10 months old. Note the splendid development. Perhaps I have the one you want.

Gordon S. Gooderham
Manor Farm Clarkson, Ont.

RIDGEDALE STOCK FARM

Offers for sale several young bulls from high testing dams; one born in February, whose dam, LAKEVIEW DUTCHLAND WAYNE ROSE, is the highest producing cow of her age in the world. At 2 years and 8 months she made 3171 lbs. butter from 5109 lbs. milk, in 7 days. He is sired by King C. Segis, direct blood of King Segis and King of the Pontiacs. We also have a half dozen others of less value.

DR. F. A. HESLOP, PROP., R. R. No. 1, FREEMAN. Chas. Heslop, Manager.

Arthur Peas.

This variety stands to-day among field peas as the earliest in commerce that will give profitable yield. There are earlier field varieties and very early varieties among the garden sorts, but they will not return, when grown for general purposes, a commensurate profit on the labor expended. It has held true, as it does in practically all classes of grain, that the advance has been made at a slight sacrifice in yield, but as the Arthur matures some three to ten days in advance of the Golden Vine and Prussian Blue varieties, depending entirely on the district, this slight loss is a negligible factor in the parts of Canada where, if the Arthur variety were not grown, it would be practically impossible to grow peas with either satisfaction or profit.

The Arthur variety carries its flowers in a cluster or "crown" at the end of the vines, thus differing in habit from the other varieties, Golden Vine and Prussian Blue which bear their flowers distributed at various points over the stems. It is thought that this characteristic renders the Arthur variety somewhat susceptible to injury in districts where very dry heat prevails at time of flowering. The results from our southern prairie stations where it gives a slightly lower yield, especially at Lethbridge, Alta., tend to confirm this opinion.

This variety serves its best purpose in the northern districts, within the fifty-first and fifty-fourth parallels in Western Canada and all the northern districts of the eastern provinces extending up to the fifty-first parallel. Small districts lying within the defined territories, subject to both late spring and early fall frosts, may find even the Arthur variety too late for their peculiar conditions. It must not be assumed that this variety is only suitable where its early maturity offsets its slightly lower yield. In the eastern provinces, in many cases, it yields equally well with the Golden Vine and Prussian Blue varieties and, on account of its superior color and quality, frequently commands a higher price on

43
HEAD

THE DUNROBIN FARMS

Dispersion Sale of

REGISTERED HOLSTEINS

(THE PROPERTY OF COL. JOHN A. GUNN will be held on)

Friday, April 5th, 1918

At the Union Stock Yards, Toronto

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 now bred to Echo Segis Champion, whose sire is a full brother of May Echo Sylvia. For Catalogues (Ready March Fifteenth) Apply to:

THE DUNROBIN FARMS, BEAVERTON, ONT.

43
HEAD

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

DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.
S. G. & ERLE KITCHEN ST. GEORGE, ONT.

Brant County Holsteins

IN THE FIFTH ANNUAL CLUB SALE

THIRTY-SIX FEMALES — FOUR YOUNG BULLS

Selling at Hunt & Colter's Livery Barns, in the City of
Brantford, Ont., Tuesday, April 2, 1918

ONCE more the Holstein Breeders of Brant County and district ask your co-operation in making their annual sale the usual success, having consigned to this sale forty head of as choice cattle as were ever offered in the history of the club. The thirty-six cows catalogued are young, and mostly all freshen around sale time. The four young bulls are all real strong calves and extra well bred.

YOUR PRESENCE AT BRANTFORD IS AGAIN REQUESTED ON APRIL 2nd

For Catalogues Apply to:

N. P. SAGER, ST. GEORGE, ONTARIO

E. C. Chambers, President

W. Almas, Auctioneer

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 34.60. 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.

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.

the markets. The Golden Vine and Prussian Blue varieties are, however, old standard sorts which give high yields and wherever the grower has had success with either of these, untroubled by the problem of maturity, we would not recommend him to change for the Arthur. In the extreme southern parts of Alberta and Saskatchewan, we would recommend these varieties in preference to the earlier sort.

In peas, as in all other classes of grain in Canada, there is a keen need for early, productive varieties. Within certain limits the problem of securing the combination of earliness with a large yield can be solved by plant breeders, and it is not too much to expect that the Arthur variety may some day be replaced with an earlier-maturing field sort that will give an equally large yield. Until that time, the Arthur variety can be recommended universally in Canada to all farmers who find difficulty in ripening field peas before frost, or who are anxious to grow a fairly prolific sort that will produce seed of fine quality and high market value.—Experimental Farm Note.

Gossip.

Springhurst Shorthorns.

Of the four bulls advertised in these columns by Harry Smith of Springhurst Farm, Exeter, Ont., all are of serviceable age and all may be called herd sires. Like Mr. Smith's offerings at all times these youngsters have been well grown, but in no way forced, which should add greatly to their worth at the head of a herd. One is got by Blarney Stone consigned to be the best sire ever used at Springhurst, and one is got by his son, Vebuteer, the present herd sire at Springhurst. This young sire is following a close second to his sire with every prospect of being equally as famous at maturity. Another of the four calves referred to is also a thick, mellow fellow of the right sort and is got by the noted Roan Lady Bull, Reimer, while the fourth is somewhat of plainer breeding although a right good individual. Write at once for full particulars about these bulls and a very limited offering in females.

Land Sett

The develop of Canada, and ability which building up o dustries of the twenty years, o most remarka modern histor mous increase i ment of the V the years 1891 of a combin among which t were the devel tion system of ful organization ments. This matter to wha found that the and a more scie tlement might measure of succ development th

The defects i tlement in Cana dent or, at lea years. Even in a similar system a much longer lately that the recognize the fa development p tlement is esse economic struct

Whatever ma of the system Canada up to has come to ab placing people o organization and farmer is to be have the kind o ties provided fo make profitable

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To keep the fa they get there problem than th to the land. Th the land in th time, and we a acres of land, wh one time, are no present system o ductive of much p Whether these st or not, the fact responsible peop affairs that dema men now hesitate first place, and fi in the second stay away, wh quences to rural their absence? reasons are:

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Third, the lack adequate return farmer, because o rural credit and c tion of his produc

To secure any rural life and con bring tracts of la purposes into use schemes of the la ment, try to take social and educa cities into the r taneously, provi financial and dis that are necessary larger share of the Thomas Adams, Development, pul of Conservation.

Land Settlement in Canada

The development of the land resources of Canada, and the skill and constructive ability which have been applied to the building up of the population and industries of the country during the past twenty years, combine to make one of the most remarkable achievements in the modern history of nations. The enormous increase in population and the settlement of the Western provinces between the years 1891 and 1914 were the result of a combination of circumstances, among which two of the most important were the development of the transportation system of the country and the skillful organization of the Canadian governments. This has to be recognized no matter to what extent it may now be found that the absence of proper planning and a more scientific organization of settlement might have secured a greater measure of success in connection with the development that has taken place.

The defects in the system of land settlement in Canada have only become evident or, at least, pronounced in recent years. Even in the United States, where a similar system has been in operation for a much longer period of time, it is only lately that the people have begun to recognize the fact that a scientific plan of development prepared in advance of settlement is essential to enable a sound, economic structure to be built up.

Whatever may be said as to the success of the system of land settlement in Canada up to a certain point, the time has come to abandon careless methods of placing people on the land without proper organization and careful planning. If the farmer is to be kept on the land he must have the kind of organization and facilities provided for him to enable him to make profitable use of the land.

In other words, the farmer requires a stronger tie than what is provided by the "magic of property" to keep him on the land. He requires the facilities and means to live as well as to exist; the enjoyment of better social conditions for his wife and family as well as for himself; the use of capital at a reasonable rate of interest, and the satisfaction that the facilities for distributing his products and for utilizing the natural resources of the country are not controlled to the disadvantage of his class. We have relied too much on the magnet of ownership to attract the laboring farmer to the soil of Canada, and too little on the more enduring magnets of social amenities and efficient organization of the actual development of the land.

To keep the farmers on the land when they get there has become a greater problem than that of first attracting them to the land. They are said to be leaving the land in thousands at the present time, and we are told that millions of acres of land, which had been occupied at one time, are now deserted, and that the present system of land settlement is productive of much poverty and degradation. Whether these statements are exaggerated or not, the fact that they are made by responsible people indicates a state of affairs that demands a remedy. Why do men now hesitate to go on the land in the first place, and find it uncongenial to stay in the second place? Why do women stay away, with the injurious consequences to rural life which is caused by their absence? The three outstanding reasons are:

First, the numerous ills caused by the holding of large areas of the best and most accessible land by speculators, and the want of proper plans for the economic use and development of the land.

Second, the compelling social attractions and the educational facilities of the cities and towns, and,

Third, the lack of ready money and of adequate return for the labor of the farmer, because of want of co-operation, rural credit and of facilities for distribution of his products.

To secure any real improvement in rural life and conditions we must try to bring tracts of land held for speculative purposes into use, prepare development schemes of the land in advance of settlement, try to take part, at least, of the social and educational facilities of the cities into the rural areas, and, simultaneously, provide the co-operative financial and distributive conveniences that are necessary to give the farmer a larger share of the profits of production.—Thomas Adams, in Rural Planning and Development, published by Commission of Conservation.

This Book will help you Stop the Leaks in your Farm Profits

WE'VE called it "What the Farmer can do with Concrete"—a title that exactly describes it, but does not give any idea of how vital its help is to you. To realize this you've got to understand that Concrete is a big factor in successful farming. Just consider the common leaks your farm is subject to, and how Concrete stops those leaks. **Wooden Buildings** rot under the stress of time and weather. Repairs cost money. Concrete won't rot. **Rats** are another source of leakage—they gnaw their way through all kinds of buildings—except Concrete, which is rat proof.

Fire on a farm usually means total loss because of the lack of water-pressure. Concrete cannot burn—another leak stopped.

Disease among your stock is usually due to unsanitary conditions. These conditions can be entirely remedied by building the wells, water tanks, septic tanks and barn floors of Concrete.

There's a type of waste that is peculiar to the farm that is built of old-style materials. For instance, mud was never intended for the paving of a feeding lot. Build your feeding floor of Concrete, and there will not be a single kernel lost.



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On Concrete Roads

there is low haulage cost and free access for all types of vehicle—any hour, any day, any season. You are surely using Concrete on your farm—you find it makes for true economy, because it never needs repairs. The same notable feature of concrete makes it the only practical material for economical road-building. Only by having Permanent Highways of Concrete can the farmer run his motor car or drive his team where and when he please—in quick time and in all weather.

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 Touilla of Riverside.

(2) Born September and December, 1917, of A. I. R.O.P. dams.

APPLY TO SUPERINTENDENT.

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 Pietertje, 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 Alcatraz; 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

CHOICE BULLS READY FOR SERVICE

No. 1—By a son of MAY ECHO SYLVIA. His two nearest dams (both Canadian champions), average 35.62 lbs. butter in seven days. Price \$1,000.

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.

Some extra choice young bull calves from \$200 to \$1,000. We have sold 37 bulls this winter.

HIGHLAND LAKE FARMS

R. W. E. Burnaby, (Farm at Stop 55, Yonge Street Radial) Jefferson, Ont.

LYNDALE HOLSTEINS

One 13-months-old Bull—Son, Maj. Sylvia Pontiac Cornucopia (34 brother to Champion Echo Sylvia Pontiac) whose two grandams are K.P. Pontiac Lass, 41.18 lbs. butter in 7 days, and May Echo Sylvia, 41 lbs. in 7 days, 152 lbs. milk in 1 day. Dam of bull offered—Pattie Inka Pietertje, jr., 4-year-old; butter in 7 days, 29.77 lbs.; 491 lbs. 124.31 lbs. 2 milk in 1 day, 102½ lbs.; 7 days, 600 lbs.; 30 days, 2790 lbs.

BROWN BROS., LYN, ONTARIO

DAIRY CONFERENCE

To be held in the MASSEY HALL, O. A. C., GUELPH, April 4th and 5th, 1918.

The spring of the year is a good time to consider plans for greater efficiency in Dairying for the coming season. Speakers for this conference are: Hon. Mr. Crerar (conditional); Dr. Creelman; Dr. G. L. McKay, of Chicago; Dr. C. J. Hastings, Toronto; Messrs. Stonehouse and Doherty, representing Milk Producers; J. Blagham, Ottawa; W. H. Forster, Hamilton (Milk Dealers and Ice Cream); G. A. Putnam, R. J. McLean (Produce Dealers); F. Boyes (Cheese Mfr.); F. Hens, G. C. Publow, Mack Robertson, J. A. McFeeters (Creamery Assoc.); D. McMillan, S. B. Trainer, The Presidents of the Eastern and Western Dairymen's Associations, Messrs. Legget and Donaldson, will preside at two of the sessions, and Mr. S. Young, Pres. of the Guelph Milk Producers' Assoc. at the first session. This meeting will represent every phase of the Dairy Industry of Ontario. Every dairyman and dairywoman is invited. Music at evening session. For programmes, apply to

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

For Milk, Butter, Cheese, Veal, Holstein Cows Stand Supreme

If you try just one animal you will very soon want more.

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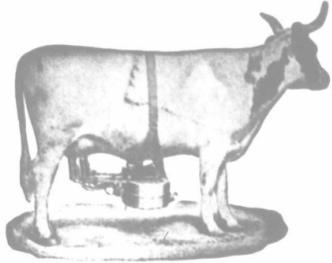
HOLSTEIN-FRIESIAN ASSOCIATION
W. A. Clemons, Sec'y, - St. George, Ont.

HOLSTEINS

1 bull 2 years old; 1 bull 18 mos. old, from a 23½ lb. 3-year-old dam. One bull 13 mos.; others young r.

R. M. Holtby, Port Perry, Ont.

The OMEGA Milking Machine



has been installed in the private dairy of H. M. King George V. at Windsor Castle and also at His Majesty's private estate at Sandringham. The OMEGA, in a 17-day test on ten cows, (against 17 previous days) at the O. A. C., Guelph, increased the milk flow 206 pounds, or 3 per cent.

Cleanly and Efficient

The OMEGA is the only machine that draws the milk from the teats through stiff, transparent celluloid tubes to the pail which is suspended from the cow. (See cut). The pail cannot be kicked over and the teal-cups cannot fall to the floor and suck up straw or manure. There are no rubber tubes in the OMEGA to crack and harbor germs. The OMEGA is simple in design and easily cleaned.

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for Free booklet describing the many exclusive and desirable features of the OMEGA.

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FULLY GUARANTEED
CREAM
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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.
Box 320, Bainbridge, N. Y.

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, Garclough May Mischieff and Jean Armour.

COLLIER BROS., Beachville, Ontario
(OXFORD COUNTY)

Ayrshire Cows

will make money on any farm
WRITE W.F. STEPHEN, Secretary
CANADIAN AYRSHIRE BREEDERS' ASS'N
Box 513, Huntingdon, Que.

Choice Offering in Ayrshires

At Special Prices. Several young bulls of serviceable ages. All from R. O. P. sires and dams. Come and see them.
John A. Morrison, Mount Elgin, Ontario

Glencairn Ayrshires

Herd established 40 years. Producing ability from 5,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont., Copetown Station, G. T. R.

CITY VIEW AYRSHIRES

One bull, ten months old, dam's R.O.P., 6,500 lbs. milk, 4.64% fat as a two-year-old. Several bull calves—might spare a few females. R.C. and S.-C. Reds, White Wyandottes—eggs for setting now ready.
James Begg & Son, St. Thomas, Ont.

Kelso Farm R. O. P. Ayrshires. Herd headed by Palmston Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our B.W.F.'S young bull are sure to please. D. A. MacFarlane, Cars Cross-Ing, G. T. R., Athelstan N. Y. C.; Kelso, Que.

PATENTS Trade Marks and Designs

Procured in all Countries. Special attention given to patent litigation. Pamphlet sent free on application.
RIDOUT & MAYBEE Toronto, Ont.

Why Northern Grown Seed Potatoes Increase Yields.

EDITOR "THE FARMER'S ADVOCATE":

The superiority of Northern Ontario for the production of seed potatoes is due, we believe, to three factors. The first of these is found in the peculiarly favorable climate that prevails in the north. The natural habitat of the potato was found in the high plateaus in Colorado and Peru. The characteristics of the climate prevailing in these districts are: Long-growing days of sunshine, cool nights, abundant moisture and heavy dews, without periods of drought. Under such conditions the potato has been proven to thrive best. In Northern Ontario these conditions are prevalent. Severe heat and drought which arrest the growth and lower the vitality of potatoes—are very uncommon, while abundant rains and heavy dews are the rule.

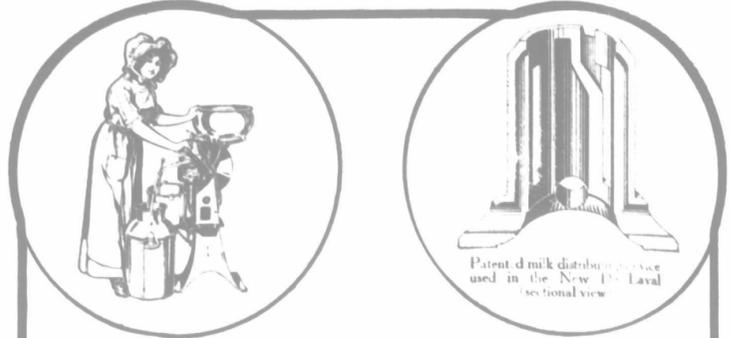
Physiological diseases which are becoming all too common in Old Ontario are hardly known in the north. Leaf Roll, the worst of these diseases was not found in a single case during a lengthy investigation conducted in Northern Ontario in the summer of 1917. Curly Dwarf was not noted either. Mosaic, a bad disease, but less serious than Leaf Roll, was encountered to a small extent, but in a very few cases was the percentage of diseased plants large. These diseases are all hereditary. Their action is to stunt the growth of the plants and reduce the size and number of the tubers. If tubers from plants affected with this disease are planted, the disease will exist in the resultant plants in a still more aggravated form until in the third or fourth generation, the plants will be very small and stunted, and the crop of marketable potatoes produced by them almost nil.

From experiments conducted by P. A. Murphy, who has charge of potato disease investigation work in Canada, it would appear that these diseases are also communicable. Just how they are communicated is not known, as no organism has been found which causes them. It is thought, however, that enzymes of the diseased plants contaminate healthy plants immediately adjacent to them. It is generally believed that the diseases are produced by prolonged drought or other unfavorable conditions which produce the degeneracy noted.

Whatever the cause, however, it has been abundantly proven that these diseases are about the most serious obstacle which the potato grower has to face. As an example, a number of experiments conducted in Nova Scotia may be cited. Several lots of potatoes were planted in this experiment, some from healthy and some from diseased stock. Where 100 per cent. leaf roll was present the plots yielded at the rate per acre of from 36 to 46 bushels of marketable potatoes. Where no leaf roll was present from 226 to 240 bushels of marketable potatoes were secured per acre. Intermediate percentages of leaf roll gave yields varying between these two extremes very nearly in direct proportion to the amount of leaf roll present. As a general result of these experiments it may be taken that for each per cent. of leaf roll present in the crop, the yield of marketable potatoes will be reduced one and two-third bushels per acre.

It is believed that these diseases can be communicated to healthy plants, and they are certainly inheritable. The best authorities both in Canada and United States agree that it is practically impossible to control these diseases, in a district where they are well established, by selection. The only safe remedy is to secure seed from a district where they have not become established. This district, so far as it affects potato growers in Old Ontario, would logically seem to be Northern Ontario. As has already been explained, physiological diseases have not yet become established to any extent in the north, and owing to climatic conditions which do not favor the development of such diseases, it is doubtful that they ever will become a menace to the potato industry in the north.

The third factor which makes Northern Ontario particularly adapted to the production of high-class quality of seed potato is the immaturity of the seed in these districts which is found. That immaturity increases yields can hardly be doubted in view of scientific experiment and practical experience which would seem



Some big advantages that you can obtain only in the

NEW DE LAVAL CREAM SEPARATOR

GREATER CAPACITY: Without increasing the size or weight of the new bowl, its capacity has been increased.

CLOSER SKIMMING: The improved bowl design, together with the patented milk distributor, gives greater skimming efficiency.

EASIER TO WASH: Simpler bowl construction and discs, caulked only on the upper side, make the bowl easier to wash.

HAS SPEED-INDICATOR: Every New De Laval is equipped with a Bell Speed-Indicator, the "Warning Signal" which insures full capacity, thorough separation, proper speed and uniform cream.

EASIER TO TURN: The low speed of the De Laval bowl, the short crank, its unusually large capacity for the size and weight of the bowl, and its automatic oiling throughout, make it the easiest and least tiring to the operator.

WEARS LONGER: Due to its much lower bowl speed, high grade of materials used, and careful and exacting workmanship, the De Laval outlasts and outwears other makes by far.

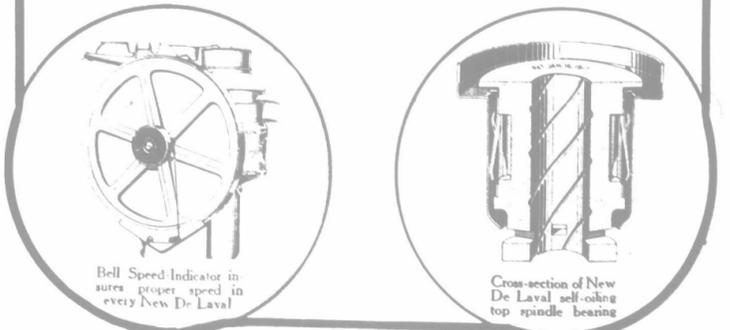
ASSURED SERVICE: In almost every locality there is a De Laval representative, able and ready to serve De Laval users.

If you haven't the spare cash right now, that need not stand in the way of your getting a New De Laval at once. We have an arrangement with De Laval agents which makes it possible for any reputable farmer to secure a De Laval on the partial payment plan—a small payment at the time of purchase and the balance in several instalments—so that your De Laval will actually pay for itself while you are using it and getting the benefit from it.

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 Butterworkers. Catalogues of any of our lines mailed upon request.

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SPRING BANK R. O. P. AYRSHIRES
Herd Sires: Netherthorpe King Theodore Imp. and Humeshaugh Invincible. Grand champion London, 1917. One lot of young bulls, including records for both milk and butter in the two-year and three-year and two-year classes. Also several heifers up to twelve months, and females all ages. If you are looking for a high-class R. O. P. line, visitors met at Hamilton by appointment.
A. S. TURNER & SON 3 miles from Hamilton. **RYCKMAN'S CORNERS, ONT.**

GLENHURST AYRSHIRES—ESTABLISHED 50 YEARS.
For a half-century Glenhurst Ayrshires have been noted for their depth and size, good teats and smoothness of constitution. In 1917, Glenhurst has produced dozens of 60 and 65-lb.-a-day cows, many on 18 lbs. of hay. We have some heifers up to twelve months, and females all ages. If you are looking for a high-class R. O. P. line, plus high butter-fat—write me or visit the farm. **JAS. BENNING** 8 miles from G. T. R., Williamstown, G. T. R., Williamstown, Ont.

RAVENSDALE AYRSHIRES
A few sires and heifers from the best R. O. P. and high-testing dams. January test averaged 4.67% fat, milk 12.5 lbs. per day. Also several heifers up to twelve months, and females all ages. If you are looking for a high-class R. O. P. line, please send Cleveland for sale, eight months old.
W. E. KAY, PHILIPSBURG, QUEBEC
3 miles south of Montreal. **St. Armand Station, G. T. R.**

to prove the practicality of the experimental Farm. Immaturity was clearly forcible. In 1916, Professor W. Horticulturist, with potatoes on soil—sand, clay and planted on the boundary of Macoun discovery. Workmen were seen to preserve uniformity. Had three lots of mature seed planting results, yielding mature seed of planted on the soil.

At a conference practical growers October, 1917, this was discussed, and by all present the very greatly increased meeting, Walter C. plained his method in July, after removed and planted provide his seed year. By the time the tops, the immature sufficiently to be these methods he obtained his yields in the bushels per acre.

In Northern Ontario conditions, the seed large size very factor of immaturity very important reason when planted in outstanding results.

In a series of for five years, Dr. Ontario Agriculture the relative merits in Northern Ontario Old Ontario. The ferent sources was on exactly the same yield last year was 200 bushels, results may be taken the five years' operation.

Practical growers factory results. T. Sarnia Vegetable in his annual report the members to plant in Northern Ontario report, that such members of his Association increased their yield G. A. Williams, secured an increase above the yield obtained. G. Bridger, Joak, Peterboro, O. Sarnia, and Henry have all written to planting of northern they have increased to 25 per cent. This in conjunction with experiments already conclusively that potatoes give for Ontario. In consideration an investigation was late summer of 1917 tages of encouraging in Northern Ontario McCubbin, the Chief ologist in Ontario, Commissioner visited Northern Ontario potatoes. Their method best potato growers generally and make several hundreds of From this inspection percentage of diseased 87 growers in the north.

But after they finally decided they had what they wanted. The condition in Northern Ontario the potato industry know accurately the Ontario, particularly of physiological disease after, they visited Ontario which special—Carleton Place, Middlesex, Erie, Town of Wellington, and G. in the County of Carleton Place.

In New Ontario the cent of serious disease physiological disease the three districts in found very small amount potato disease and an

to prove the point. On the Central Experimental Farm at Ottawa, the factor of immaturity was emphasized in a particularly forcible way last summer. In 1916, Professor W. T. Macoun, Dominion Horticulturist, conducted an experiment with potatoes on three different types of soil—sand, clay and muck. The potatoes planted on the muck happened to be near the boundary of the farm and Professor Macoun discovered, early in the fall, that workmen were stealing these potatoes. To preserve uniformity in his experiment he had three lots dug in August. This immature seed planted in 1917 gave astonishing results, yielding very much more than mature seed of the same variety and planted on the same soil.

At a conference of potato experts and practical growers held in Toronto in October, 1917, this question was thoroughly discussed, and it was generally agreed by all present that immaturity of seed very greatly increased yields. At that meeting, Walter Cook, of Cataraqui, explained his methods. He ploughed his sod in July, after a crop of hay had been removed and planted enough potatoes to provide his seed stock for the coming year. By the time frost had cut down the tops, the immature seed had developed sufficiently to be used next spring. By these methods he claims to have increased his yields in the neighborhood of 100 bushels per acre.

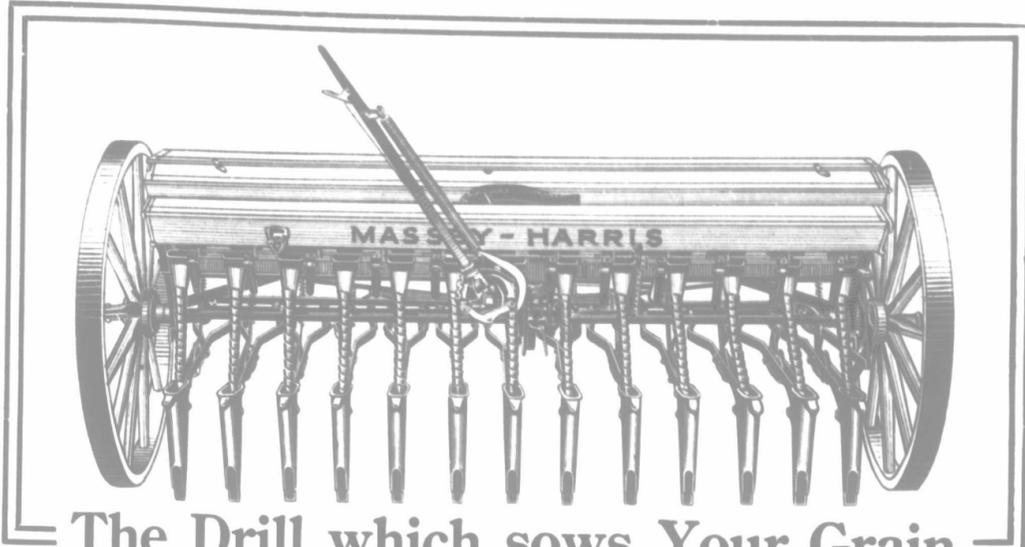
In Northern Ontario, owing to climatic conditions, the seed, while growing to large size very seldom matures. This factor of immaturity is thought to be one very important reason why northern seed, when planted in Old Ontario, gives such outstanding results.

In a series of experiments conducted for five years, Dr. C. A. Zavitz, of the Ontario Agricultural College, has proven the relative merits of seed potatoes grown in Northern Ontario, New Brunswick and Old Ontario. The seed from these different sources was planted side by side on exactly the same kind of soil. The yield last year was 350 bushels, 318 bushels and 200 bushels, respectively, and these results may be taken as representative of the five years' operation.

Practical growers have secured satisfactory results. The Manager of the Sarnia Vegetable Growers' Association, in his annual report in 1917, advises all the members to plant seed potatoes grown in Northern Ontario. He explains in this report, that such seed planted by members of his Association in the past has increased their yields at least 20 per cent. G. A. Williams, Peterboro, Ont., has secured an increase of 137 bushels per acre by planting northern grown seed above the yield obtained from home-grown seed. G. Bridger & Sons, Sarnia; W. Joak, Peterboro, Ontario; Guthrie Bros., Sarnia, and Henry Broughton, Sarnia, have all written to the effect that by the planting of northern-grown seed potatoes they have increased their yields from 20 to 25 per cent. This practical experience, in conjunction with the scientific experiments already explained, show conclusively that northern-grown seed potatoes give far better results in Old Ontario. In consideration of these facts, an investigation was undertaken in the late summer of 1917 regarding the advantages of encouraging the potato industry in Northern Ontario. Dr. Zavitz, W. A. McCubbin, the Chief Dominion Pathologist in Ontario, and the Assistant Commissioner visited every district in Northern Ontario where they grow potatoes. Their method was to visit the best potato growers, examine the crops generally and make minute inspection of several hundreds of hills in each field. From this inspection they calculated the percentage of disease, etc. They visited 87 growers in the north.

But after they finished the northern trip they decided they had not all the information they wanted. They had knowledge of the condition in New Ontario regarding the potato industry, but they did not know accurately the conditions in Old Ontario, particularly regarding conditions of physiological diseases. So immediately after, they visited three districts in Old Ontario which specialized in potato growing—Carleton Township in the County of Middlesex, Erie Township in the County of Wellington, and Gloucester Township in the County of Carleton.

In New Ontario they found but 6 per cent of serious disease, and practically no physiological disease at all. In each of the three districts in Old Ontario they found very great amounts of all kinds of potato diseases and an alarming amount of



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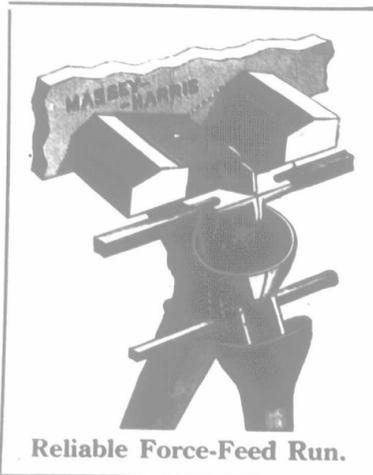
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Simple and easy control—one motion of a Lever lowers the Furrow Openers, applies pressure and starts the feed—the opposite motion raises the Furrow Openers and stops the feed.

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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, ONTARIO

THE WOODVIEW FARM JERSEYS

LONDON, ONTARIO
Jno. Pringle, Proprietor

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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.

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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

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 Write to-day for lowest prices.
 The Canada Linseed Oil Mills, Limited
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LABELS Live-stock Labels for cattle, sheep and hogs, manufactured by the Ketchum Manufacturing Co., Ltd., Box 601, Ottawa, Ont. Write for samples and prices

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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.

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.

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AVONHURST YORKSHIRES

We offer a few nice sows ready to breed. Choice young pigs, both sexes. One of our sows has farrowed 121 pigs in 7 litters. We guarantee satisfaction. B. Armstrong & Son, Codrington, 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.

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, Ontario

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.

DUROC JERSEYS

Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock, all ages for sale. Visitors welcome. For further particulars write:

CULBERT MALOTT, No. 3, Wheatley, Ont.

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If you want a broad sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me.

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Several young sows ready to breed and boars fit for service; young pigs, both sexes, ready to wean, by Smmy Mike—1897—first at Toronto in 1917. Satisfaction guaranteed, inspection invited.

Wm. Stevenson & Son, Science Hill, Ontario

physiological disease in each case. Altogether they discovered an average of 23 per cent. of serious diseases in these three older counties. Moreover, the northern crops were more vigorous and promised far larger yields.

While large districts in the north are not yet cleared, it is one of the great coming agricultural districts of America. Thunder Bay District alone has 40,000 acres of the very best potato soil, a considerable part of which is already under cultivation. Many thousands of acres of good soil of a heavier nature will be available for potato growing in the future. As an example of how the industry is developing, it may not be amiss to state that four years ago the cities of Fort William and Port Arthur in Thunder Bay District were importing potatoes, whereas the district immediately adjacent now supplies those cities and exports to Old Ontario in the neighborhood of 140 carloads a year.

If growers in Old Ontario become once convinced of the advisability of planting northern-grown seed and are willing, by their orders, to encourage seed production in the north, New Ontario can be organized very easily to supply all that the older portions of the Province will require.

In order to encourage the development of a strong potato industry in Northern Ontario and to encourage also the planting of northern-grown seed by growers in Old Ontario, the Ontario Department of Agriculture has made certain definite plans to be of assistance this spring. All seed potatoes to be used for departmental purposes are being purchased either from Northern Ontario or from New Brunswick—a total in the neighborhood of 1,700 bags. Seed grown in Northern Ontario is preferred, but at the present time it is not possible to secure the quantity we wish of a guaranteed quality. With this seed bought by the Department some thousand farmers will be given small lots under the auspices of the Experimental Union. Some 10,000 school children who are taking part in Rural School Fairs will also receive small quantities. In every county in Old Ontario, the district representative will conduct demonstrations showing the relative value of seed grown in New Brunswick, Northern Ontario and in Old Ontario. Besides this, some 40 acres of potatoes will be planted by the Ontario Department of Agriculture on Government owned farms in Northern Ontario in order to produce foundation stock of A-1 quality for northern growers.

Besides this, it is planned to assist, to some extent, farmers in securing northern-grown seed. A few carloads of seed potatoes from New Brunswick of the Irish Cobbler and Green Mountain varieties, certified as to freedom of disease by the Dominion Government, are to be secured for the growers in Northern Ontario. This seed will be distributed at cost to farmers in three or four of the best potato-producing sections in the north. The freight charges on these shipments will be paid by the Government, because freight rates between New Brunswick and Northern Ontario are high, and it is in the interest of the Province that a large potato industry become established as quickly as possible in Northern Ontario.

So far as Old Ontario is concerned, it has been arranged to put farmers who wish to buy seed of high-class quality of the Green Mountain and Irish Cobbler varieties in touch with New Brunswick sellers of the same. This seed was inspected last summer in the growing condition by Dominion inspectors, was inspected last December in the bin, and will be inspected in the spring before being loaded. Farmers and farmers' associations, therefore, who wish to purchase seed potatoes in carload lots may do so at a reasonable price and with a minimum of work on their part.

Next summer the Department of Agriculture has made arrangements to have a staff of inspectors who will make a survey of Old Ontario to determine the exact disease conditions as they exist. Other inspectors will work in the north, roguing the crops which result from first-class seed being shipped in this year, and roguing also other fields of first-class varieties reasonably free from disease and true to variety. By the fall of 1918 it should be definitely proven just how badly Old Ontario growers need a change of seed, and by that time provision will have been made for an ample supply of first-class seed grown in New Ontario to very largely meet this demand.—JUSTUS MILLER, Ass't. Commissioner of Agriculture.

"Kindling Fires in Cold Rooms"

ONE of the finest eulogies ever uttered referred to the late Earl Grey, once Governor-General of Canada:—

"He lit many Fires in Cold Rooms."



This expression summed up a life of exceptional beneficence. Any citizen might justly exert himself to deserve such a commendation.

No other expression could more aptly describe the work of a life insurance company, because it is devoted to the kindling of fires in homes that would otherwise be comfortless.

Take the Mutual Life of Canada. Since its organization in 1869, nearly twenty-three millions of dollars have been distributed among policyholders or their beneficiaries.

The hearth-fires still burn in many homes that to-day would be desolate were it not for the protection afforded by a policy in our Company.

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My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age.

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We have at present 12 choice 8 and 10 month sows, bred to farrow in April, as well as others younger. Also young boars up to 6 months. Prices reasonable. Ask about two grandsons of King Segis Pontiac Alcatraz. Show calves.

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Prospect Hill Berkshires

Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right.

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Belleville Holstein Sale

Wednesday, April 3rd, 1918

Cheer Up

30-lb. Cows

20-lb. Heifers

40 Young Cows

12 Bulls

Blood of Champions

Sires of Renown

100 Head

Sellers

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Have you attended SOME sale and been disappointed? If so, remember that many of the good ones are still at Belleville, and will be offered on April 3rd. Not worn-out, exhausted cows, but young, vigorous animals, eagerly awaiting a chance to become famous.

LOOK HERE.—We are selling some 30-lb. cows in this sale, young cows that one of our new breeders just gave a little extra feed and—they made considerably over 30 lbs. easy—well—Belleville Holsteins seem to have mastered that 30-lb. stunt—when they change hands—at some Belleville sale.

FUTURE CHAMPIONS.—About 50 per cent. Fresh, and 50 per cent. Heavy in Calf. Records to 26 lbs. at 3 years, and several 2-year-olds well over 20 lbs.

BARGAINS.—Because we have not had help enough, or because we have been too lazy, or because we have been too careless, we are selling 40 young cows without records. They will furnish many BARGAINS. Why? Because they are unproven and when they get a chance they will become famous. That's Belleville Past History.

ONLY A DOZEN OR A BAKER'S DOZEN.—Good bulls, from 30-lb. dams, 28-lb. dams. Well-bred, husky chaps. The Belleville kind. Bred in the purple. Sold cheap.

WHERE CAN YOU EQUAL?—Nearly the entire offering are descendants of the Belleville champions, May Echo, Daisy Pauline Pietertje, De Kol Plus, etc., in the yearly division; sisters and brothers of May Echo Sylvia, 41.00 (world's champion); Lulu Keyes, 36.05; Keyes Walker Segis, 34.65; Plus Pontiac Artis, 31.55; etc., in short test division.

Daughters of King Segis Alcartra Spofford, Inka Sylvia Beets Posch, Pontiac Hermes, Plus Burke, Choctau, Veltia Triumph, Korndyke Aaggie Lad, Count Segis Walker, Pietertje Francys 3rd, Admiral Ormsby, Sir Sadie Korndyke Segis, etc.

OF THE BELLEVILLE KIND.—To be sold absolutely without reserve on April 3rd. Our Club protects the buyer by imposing a \$50 forfeit on each animal for by-bidding.

THESE MEN ARE YOUR GUARANTEE:

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J. M. Branscombe.	J. MacCalpin.	Carmen Baker.
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For they sell the cows that fill the pail,
That pay for themselves this year—that's why
To Belleville I'll go,—and buy,—and buy."

STANDARD RELIANCE MORTGAGE CORPORATION

THERE was a fair attendance at the annual meeting of The Standard Reliance Mortgage Corporation held on Monday last, the 4th inst. The following were present: J. A. Walker, K.C., Chatham; S. G. Bartlett, New Hamburg; A. W. Hilborn, Galt; W. M. Behrens, Elmira; John Laing, Freeman; David Ratz, New Hamburg; Henry G. Ruppell, Elmira; Robert Moon, Orono; Geo. Hufner, Hawkesville; W. C. Bates, Sackville, N. B.; A. H. Arnold, Brockville; Thos. Nihan, St. Catharines; N. H. Stevens, Chatham; C. A. Annis, Port Union; H. Schlemmer, Woodstock; Dr. J. T. Gilmour, John Firstbrook, F. C. L. Jones, J. A. Jackson, W. Crackle, R. S. Stonehouse, Rev. W. P. Dyer, D. D. James, F. W. Micklethwaite, G. M. Wright, E. F. B. Johnston, K.C., R. H. Greene, W. T. Cowan, R. H. Cosbie, Fred. Walker, B. H. Boyd, W. J. Fawcett, J. W. McKay, Chas. Bauckham, Rev. G. I. Taylor, Geo. A. Young, Alex. Stewart, H. Waddington, R. E. Walker, Rev. B. R. Strangways, W. Vandusen, J. A. McEvoy, David Kemp, Mrs. L. Micklethwaite, H. W. Maw, O. S. James, E. P. Beatty, R. S. Weir, Toronto.

The President of the Corporation, Mr. N. H. Stevens, took the chair, and Mr. H. Waddington, the Managing Director, was requested to act as Secretary.

The annual statement, as set out below, was presented and read to the meeting by the Chairman, and after dealing with the business of the Company generally, he moved the adoption of the report.

The motion to adopt was seconded by Mr. John Firstbrook, the Vice-President, after which the Managing Director gave a detailed address, dealing in particular with the several items in the balance sheet, and giving comparisons with the years passed, from which he showed that, as compared with a year ago, the assets had increased \$1,046,804.88; that the deposits had increased \$314,289.67; that the debentures had increased \$686,554.10; that the net earnings had increased \$47,838.97, and that in liquid assets the increase had been \$360,650.70.

As compared with five years ago, the increases were as follows: Assets, \$3,326,222.27. Deposits, \$623,549.69. Debentures, \$1,690,672.28. Net earnings, \$82,979.70. Liquid Assets, \$560,290.00.

The Mortgage Loans by Provinces were shown to be as follows: Newfoundland, \$1,323.08. Nova Scotia, \$72,054.36. New Brunswick, \$1,875.62. Quebec, \$2,018.97. Ontario, \$5,565,091.69. Manitoba, \$140,392.94. Saskatchewan, \$645,324.74. Alberta, \$177,961.96. British Columbia, \$10,163.77. These mortgage loans, with accrued interest at the end of the year, made up a total of \$6,651,501.74. The valuation of the properties on which these loans were made and as taken from the records was shown to be \$13,201,954.

Several of the shareholders present expressed their pleasure at the fine showing made and at the information given, after which the motion to adopt the report was put to the meeting and declared carried unanimously.

Messrs. A. C. Neff, F.C.A., and J. F. Lawson, F.C.A. were re-elected the Auditors of the Company for the ensuing year. On motion the following were re-elected Directors: E. F. B. Johnston, K.C., John Firstbrook, Nathan H. Stevens, E. Jessop, M.D., J. A. McEvoy, Herbert Waddington, W. J. Fawcett, David Ratz, James Gunn, David Kemp, E. C. McNally, Rev. G. I. Taylor, M.A., R. H. Greene, J. T. Gilmour, M.D.

At a meeting of the Board of Directors held subsequent to the annual meeting, Mr. E. F. B. Johnston, K.C., was re-elected as Chairman of the Board, Mr. N. H. Stevens as President, and Mr. John Firstbrook as Vice-President.

BALANCE SHEET AS AT 31ST DECEMBER, 1917.

ASSETS		LIABILITIES	
Mortgage Loans and Accrued Interest	\$7,651,501.74	To the Public:	
Real Estate, acquired under foreclosure	241,840.51	Debentures with Accrued Interest	\$3,810,661.33
Stocks, Bonds and Debentures, owned	429,003.33	Deposits with Accrued Interest	1,031,700.15
Loans on Stocks, Bonds and Debentures	43,104.80	Deposit Receipts payable on certain fixed dates and upon ninety days' notice	104,727.12
Sundry Investments	27,517.99		
	\$7,392,968.37	Mortgages Assumed	35,000.88
Office Premises, Head Office and Branches	\$297,879.90	Dividend payable January 2nd, 1918	91,987.97
Office Furniture and Safes, Head Office and Branches	6,224.59		
Inspectors' Automobiles (9)	4,060.00		
	308,164.49	Total to the Public:	\$5,074,176.48
Agents' Balances and Accounts Receivable	\$12,091.90	To the Shareholders:	
Accrued Rentals	2,650.75	Capital Stock Subscribed	\$2,615,880.00
Municipal and War Loan Bonds with Accrued Interest	335,623.14	Less Unpaid thereon	39,135.32
Cash on Hand and in Banks	185,056.43		
	735,422.22	Surplus Funds:	
		Reserve Fund	\$850,000.00
		Contingent Funds	75,000.00
		Loss and Gain Balance forward	32,633.85
			757,633.85
		Total to the Shareholders	\$3,392,513.85
	\$8,436,555.08		\$8,436,555.08

LOSS AND GAIN ACCOUNT.

Interest on Debentures and Deposits	\$213,334.64	Balance forward from December 31st, 1916	\$ 4,743.75
Government and War Taxes	9,290.92	Net Earnings after deducting all expenses of management and making provision for all known losses	434,316.25
Contributions to Patriotic, Red Cross and Y.M.C.A. Funds	3,250.00		
Dividends	179,890.49		
Balance Carried Forward	32,633.95		
	\$439,060.00		

CHAS. BAUCKHAM, Secretary-Treasurer.

AUDITORS' CERTIFICATE

We have audited the books and accounts of the Standard Reliance Mortgage Corporation for the year ending 31st December, 1917, and have verified the Cash and Bank Balances and Securities, and we hereby certify that, in our opinion, the above Balance Sheet exhibits a true and correct view of the affairs of the Corporation as shown by its books as of that date. Our requirements as Auditors have been complied with.

Toronto, February 16th, 1918.

A. C. NEFF, F.C.A., J. F. LAWSON, F.C.A., Chartered Accountants.

H. WADDINGTON, Managing Director.

Branches—Chatham, Ayr, New Hamburg, Elmira, Brockville, Woodstock

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Gossip.

Riverside Holstein Herd Sales.

In reporting a few recent sales of well bred young bulls to various Ontario breeders, J. W. Richardson of Riverside Farm, Caledonia, Ont., advises us that he still has several of the best bred bulls on hand he has ever raised on the farm. There are, for instance, a pair of ten-months twin calves from the noted 29.42-lb. Toitilla of Riverside, dam of the former Canadian R. O. P. champion, and these are sired by King Johanna Pontiac Korndyke, a grandson of the great Pontiac Korndyke. There are also a number of other bulls up to 14 months of age and from daughters of King Johanna Pontiac Korndyke and sired by the herd sire at Riverside, Francy Bonerges Hartog. The former sire now has 26 R. O. M. daughters, all with records between 17.62-lb. senior yearlings to 23-lb. junior 3-year-olds. Francy Bonerges Hartog it will be remembered is a half brother to Bonerges Ormsby 4th, 24.15 lbs., second highest senior two-year-old in Canada, and his dam was a sister to Jennie Bonerges Ormsby, 33.01 lbs. and which made over 30 lbs. butter in 7 days for five consecutive years. On the sire's side he is a grandson of Royalton De Kol Fern, a 34.6-lb. cow. Several of the recent sales referred to were as follows: A 3-weeks-old calf out of Lady Aaggie Toitilla of Riverside, 30.49 lbs. and by the herd sire, to G. E. Wood of Cainsville; a son of Toitilla De Kol Sarcastic, the 29.42-lb. cow mentioned above, to Walburn Rivers of Ingersoll, and a son of Toitilla Sarcastic Rue, 28.88 lbs., to Geo. Ellacott, West Monkton.

Rabbits.

EDITOR "THE FARMER'S ADVOCATE":

I have recently become interested in the rabbit industry. I believe we in Canada need to be educated on the matter of rabbits as household economizers. What goes into the garbage pail in the average household would form the main part of the diet of half a dozen rabbits. It is extraordinary how many people shudder when rabbits are mentioned as food. And yet out of these very people nine out of ten would certainly not be able to distinguish any part of a properly-cooked rabbit from the breast of a chicken.

As a household economy during the war; as a new industry of a most worthy character; as an auxiliary to making little go a long way in town or on the farm, the rabbit deserves our best attention at the present time. Nowadays the pet stock show without a good rabbit exhibit is decidedly incomplete. The pet stock journal without a rabbit column does not exist. The time is coming when the rabbit, now with most Canadians a subject for jest, will be one of the growing industries of our country.

York, Co., Ont. ALLAN N. MCEVOY.

For Greater Production.

The following letter has been received from S. R. McVitty, Principal of Mt. Elgin Indian Industrial Institute, Muncey, Ont.

"With the most hearty co-operation of the Superintendent General of Indian Affairs, we have arranged to let our senior boys go out about the middle of April and assist farmers in 'Greater Production Campaign'. We purpose running the Institute farm this year with the assistance of senior girls. We could also spare a few girls to assist farmers' wives.

"These boys are well trained, and capable of handling horses, and all kinds of farm machinery. They can remain until midsummer, or even harvest. Wages 25.00, \$30.00 to 35 per month, according to age.

"It will be my duty to see that they render faithful service, and also to see that they get good, kind treatment.

Our object is three-fold: 1st. To assist farmers, and through them, our country.

2nd. To give the boys an opportunity of earning some money for themselves.

3rd. To demonstrate what girls can do on a farm if properly guided.

Those needing help should write Mr. McVitty.

E LE
Agents

It took nearly the manufacture the conclusion the Ideal Unit. 80% of the tractor are three plow tractors. Less Gears, Less make of Tractor the Hyatt make

Qu
is a r

Questions
Misc

Root Seed a

1. When should for seed? How far?
2. Do the agricultural bulletins regarding for seed?
3. Can a calf sire and dam are both being pure-bred?

Ans.—1. As soon enough to work well.
2. If you mean Agriculture we may could be obtained Department of Directions have be columns.

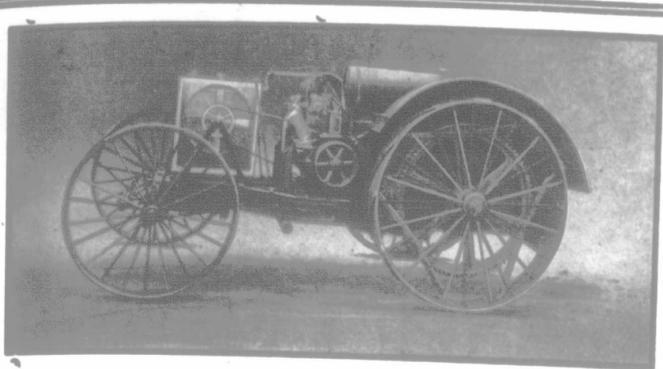
Seed Co

1. I placed my with a Toronto firm you think I will get
2. Would Teosinte what cultivation do
3. Would salt be and grain?

Ans.—1. We do get seed but it is un the varieties you at they will not likely b write the firm you o
2. Teosinte is a would not take the district.
3. If you mean c to corn; it might such crops as barley.

A Hors

I bought a mare and she was to be diseased. There was back and he told me a scratch and she w condition when I bou she had come from a she would soon pick u back is discharging a in different places a got the A. S. to see and off for 2 months



E LEONARD & SONS, LIMITED
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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.

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ACCO SPRAY

Acco Spray is the king of bug exterminators. Acco costs less than Paris Green or Arsenic poisoning and does the work more thoroughly. Where Acco is bugs cannot live.

The thrift habit is more important this year than ever before on account of war wastage. Food must be produced and the crops we have saved. Do your duty by safeguarding the yield of your orchard with Acco Spray.

A Sample of Acco Spray Sent Free on Request.

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Questions and Answers.
 Miscellaneous.

Root Seed and Calf Queries.

- When should turnips be planted for seed? How far apart?
 - Do the agricultural people publish bulletins regarding the growing of turnips for seed?
 - Can a calf be registered when his sire and dam are of different breeds, both being pure-bred. W. J. M.
- Ans.—1. As soon as the land is dry enough to work well.
 2. If you mean the Departments of Agriculture we may say that full directions could be obtained from the Seed-Branch Department of Agriculture, Ottawa. Directions have been published in these columns.
 3. No. Such a calf is a cross bred.

Seed Corn—Salt.

- I placed my order for seed corn with a Toronto firm on March 1st. Do you think I will get it?
 - Would Teosinte replace it, if so what cultivation does it require?
 - Would salt be of any benefit to corn and grain? J. R. H.
- Ans.—1. We do not know. You may get seed but it is unlikely that you will get the varieties you at first desired because they will not likely be available. However, write the firm you ordered through.
 2. Teosinte is a hot-climate crop and would not take the place of corn in your district.
 3. If you mean on the land, not much to corn; it might do a little good for such crops as barley.

A Horse Deal.

I bought a mare rising four from B, and she was to be sound and free from disease. There was a dry scab on her back and he told me that was nothing but a scratch and she was not in good condition when I bought her but he said she had come from a poor home and that she would soon pick up. The sore on her back is discharging and she is breaking out in different places and is very poor. I got the A. S. to see her and he came on and off for 2 months. She eats well and I

KEITH'S SEEDS
 THE FARMERS SEEDSMAN SEEDS FIFTY-TWO YEARS SERVICE
 1866 SEEDS WILL BE SCARCE 1918

The demand for seeds this year will be unparalleled, as every available acre must be put under cultivation to increase the food supply. Don't put off ordering your seed any longer. There is a big shortage already, and it will soon be a question to get any at all. If you have not received a catalogue, write to-day.

CORN
 On account of the severe shortage of seed corn this year, practically none being obtainable from Canada—we will accept orders NOW for seed corn (shelled), Southern grown, subject to our receiving delivery from United States War Board. This corn is of excellent quality and is on the way now. We quote the following varieties:

Red Cob	5.00
Early Prince Charlie (will do as a substitute for Wisconsin No. 7)	5.00
Leaming Improved	5.00
Fodder	5.00
Mammoth Southern	5.00

CLOVER and TIMOTHY
 Government Standard Bushel
 No. 1 Red Clover \$24.00

Bags for Clover and Timothy, 45c. extra. Bags for Grain Free.
 We pay railway freight to all points in Ontario and Quebec on order of \$25 or more

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IT'S EASY

to make them sound good on paper, but will you please come to the Belleville sale and study their breeding and look them over for yourself?

My consignment is small but high class, consisting of Count Alartra Segis, son of King Segis, Alartra Spotted and that wonderful cow, Lady Segis Walker, who, together with 5 of her sisters last spring, milked over 400 lbs. a day, and made over 80 lbs. butter in 7 days. He is a typical dairy bull, and fit to head any herd in Canada. His dam made her record with three-quarter udder. Countess Walker Segis, who has a 26.25-lb. three-year-old butter record, and is a full sister to Lady Segis Walker. Sylvia Segis Pouch, who has a 22.124-lb. two-year-old butter record, and made a Canadian milk record at two years old; her dam being Princess Segis Walker, who has nearly 31 lbs. and made a world's milk record at four years old. These are large heifers, in all to be kept and well fed, then with their working clothes on, having milked heavy all winter. They are tuberculin tested. I am leaving the nerve to consign them. Mr. B. will see you at the sale.

ED. B. PURTELLE - Bloomfield, Ontario

have been feeding bran, oats and good hay all winter but she doesn't seem to gain. Can I put her back on B's hands and get my money back? I paid \$125 for her and I have a witness, the manager of the bank. SUBSCRIBER.

Ans.—This is one of the questions which should be decided amicably between vendor and purchaser. A great deal depends upon the time you kept the mare without complaint to B that she was not as represented. We would advise that you get together and settle the matter. Of course if you can prove that B knew the mare was diseased and attempted to unload her on to you it is likely you could come on to him for damages or to accept the return of the mare. You had better get the advice of your veterinarian re the disease before taking action.

To Prevent Navel Ill.

I have a mare due to foal in May and I would like to know if there is anything I could give her to prevent foal from having navel disease. She lost two with this disease, one two, and one three years ago. She was not in foal last year. J. McN.

Ans.—Although some firms advertise a commercial preparation to be fed to mares before foaling claiming that it will prevent joint ill or navel ill we do not believe that veterinary practitioners have any faith in it. All you can do is to be ready to treat the navel when the foal arrives. Have a five to ten per cent. solution of carbolic acid ready. As soon as the foal is dropped put a little on the raw navel surface and continue to treat three or four times a day until the navel dries up. Have the mare foal in a clean stall.

Killing Noxious Weeds.

Will noxious weeds be killed by leaving manure in barnyard until needed for summer fallow, or would it need to be placed in another heap to heat again? R. B.

Ans.—If the manure heats sufficiently the weeds will practically all be killed. However as this is seldom the case it is advisable to fork the manure into another pile to thoroughly mix it and cause uniform heating.

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IN GERM PROOF TUBES

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THE DELICIOUS NUT LIKE
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Dairymen! Raise your calves on GROFAST Calf Meal and sell all your milk. Calves thrive on this scientific substitute for milk. It is easily mixed, and the calves LIKE it. It is a great money-maker for every dairyman and cattle raiser. Ask your dealer for GROFAST. Write for booklet, "How You Can Raise and Grow Calves at a Low Cost Without Milk."

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Questions and Answers. Miscellaneous.

Corn Queries.

I have several acres of sod land that I have manured during the winter and am going to plough the manure under as soon as possible in the spring and plant to corn, and as I have a lot of twitch grass am thinking of planting in check rows three feet each way, planting with a hand planter.

1. How many kernels should I plant in each hill?

2. Would I be likely to get as good crop as I would if planted closer together, say three feet by 18 inches?

3. Would commercial fertilizer injure the young sprouts if dropped directly on the top of the hill immediately after planting?

H. J. C.

Ans.—1. If the seed tests well four should be enough. Some plant only three.

2. Yes, on weedy land.

3. Put the commercial fertilizer on shortly before planting and cultivate in.

Piping Spring Water—Anchoring Fence Posts.

I have a spring flowing to my barn through 600 feet of one-inch pipe. It is choked somewhere in the upper section with rust. If I put three-quarter or half-inch pipe from the spring to about the centre and run it to the inch pipe, will it give satisfaction?

2. Will filling in around gate or anchor posts with cement prevent heaving by frost or strain of wire? How deep should posts be put in? What thickness of cement should be put around the posts?

3. How many cubic feet of good timothy hay are there in a ton? The hay has been well settled.

C. J.

Ans.—1. It depends on the amount of pressure from the spring. We believe you would have better results by putting the larger pipe first and the smaller last, if you desire to have two sizes of pipe through which to run the water.

2. Filling in around the posts with stone or cement will undoubtedly aid in holding them solid. The depth at which the posts should be placed will depend considerably on the nature of the land and the length of the wire to be attached to it. Anchor posts should be down about 5 feet, and six or eight inches of cement put around them should hold them in place.

3. It is generally considered that about 450 cubic feet of well settled hay will make a ton.

Lawn Rolling and Berry Planting.

1. I seeded lawn last spring and got a fine catch, used a mixture which you recommended. What time of the year would rolling a lawn give the best results? Any other suggestions in the way of improving the lawn will be much appreciated. While it looks quite level, it does not seem very smooth when running the mower over it. It was just graded before seeding.

2. Have an old strawberry bed which is a mass of weeds, mostly couch grass I believe. What would you suggest using the ground for this coming summer? Soil is sandy loam, clay subsoil.

3. What style roof is considered best for a hen house? What height walls and what kind of floor? What would you think of a concrete floor, said floor to be about a foot above the ground? Ground is very level so would likely be damp.

4. Give a few pointers on setting out raspberries, filling in, etc.

J. B.

Ans.—1. Roll with a heavy roller fairly early this spring or before the land gets too dry after a rain.

2. If you can work the twitch out early in the season why not plant to potatoes?

3. Either a shanty or double pitch roof is all right according to circumstances. Make the height to suit your convenience but, of course, it does not require to be higher than that height at which one can move about in it with ease. A concrete floor is all right.

4. Prepare the soil well. Manure heavily. Plant in rows 6 to 8 feet apart and from 3 to 4 feet apart in the rows. Put in as early as possible and cut back well.

Ewe has Discharge From Nostrils.

One of my ewes has difficulty in breathing and there is a discharge from her nostrils. She has been in this condition for over a month.

2. Will green cedar boughs fed to sheep kill the ticks on them?

C. G.

Ans.—If the sheep was suffering from catarrh there would be a discharge from the nostrils, a cough, and the eyes and lips would be sometimes gummed together with a yellow secretion. The patient becomes dull and uneasy. Keep the sheep in well ventilated quarters, give 4 to 6 ounces of raw linseed oil, and steam the nostrils. If the appetite is lost, drench with boiled flax seed or milk and eggs. Place one dram of nitrate of potash well back on the tongue four times daily. Grubs in the head will cause the patient to become dull and uneasy and there will be a discharge from the nostrils. We believe that your ewe has catarrh or a bad cold and keeping her in comfortable quarters and applying the treatment above mentioned will bring relief.

2. We cannot see how the cedar boughs would destroy the ticks, and besides the cedar leaves or needles would get into the wool.

Pigs Dying—Hens Eat Eggs—Crops for Hog Feed.

I have a bunch of pigs which did splendidly until a week ago when they seemed to have difficulty in breathing. Three of them have since died. I gave them two doses of castor oil. What would cause this trouble?

2. What can I do to prevent hens eating their eggs? They are running loose in the barn and have a good supply of feed and grit.

3. What is a recipe for adding color to butter?

4. What are the best kinds of roots to grow for hogs?

5. Would a mixture of oats, barley and peas be a good crop for feeding hogs? What quantity of each should be sown per acre?

P. J. C.

Ans.—1. The symptoms are something like those of pneumonia, which may result from a severe cold or be brought on by over-exertion. Prevention is about the only thing that can be done. Comfortable, well-ventilated quarters and a light, sloppy diet are important. Daily doses of castor oil would help keep the bowels right. Treatment is not very satisfactory.

2. This is a habit which is very difficult to remedy. Once the birds start eating their eggs, little can be done towards stopping them. Darkening the nests is believed to be about the best remedy.

3. There are special extracts on the market for coloring butter. The directions for using are on the bottle, the amount depending on the depth of color desired.

4. Mangels or sugar-beet mangels are considered better than turnips.

5. Oats, barley and peas make a very good mixture. A bushel of oats, one of barley and 2 pecks could be sown.

Veterinary.

Ringbone.

Six-year-old horse has sets on his hind feet. They are quite large all around the leg between the fetlock and the coronet. He is lame in one foot.

L. W. K.

Ans.—While we are not sure what you mean by "Sets on his hind feet", from the symptoms you give we conclude that they are ringbones. It will not be wise to interfere with the leg on which he is not lame. The ringbone of the lame leg should be fired and blistered by a veterinarian. This will probably remove the lameness, but no treatment will remove the enlargement.

It is very interesting to note the prices that have been paid for sugar beets throughout the American continent the past year. They are as follows: State of Utah, \$7.00; Idaho, \$7.00; Colorado, \$7.24; Ohio, \$7.27; California, \$7.52; Michigan, \$8.16. All of the other States in the United States \$7.28 per ton. In Canada the average price per ton paid for sugar beets in 1917 was \$8.73. It will thus be noted that the Canadian price for beets was 57c. per ton higher than the highest price paid in the United States and \$1.73 per ton higher than the lowest price paid in the United States for the past year.

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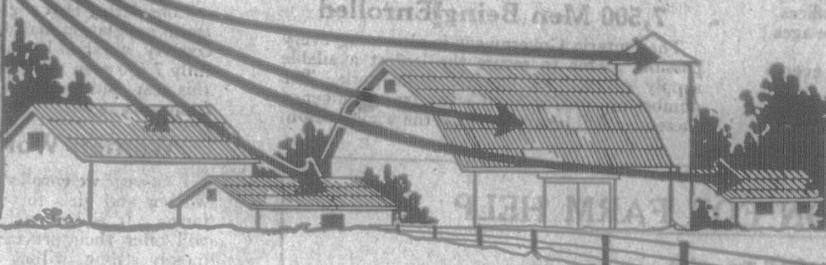
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Do all your roofing or roof-repairing this year with Paroid—made in Grey color—two weights; also with Red or Green crushed slate surface.

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Look for the Paroid roll as shown. Sold by hardware and lumber dealers.

We recommend Neponset Twin Shingles for Residences.



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LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

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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!



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Also Highest Grades of Clovers and Timothy

Ask for our prices on Mangels, Turnips, Onions, Potatoes, Beets, Corn and garden seeds of all kinds. If in need of feeds, write us. We can supply Cotton Seed Meal, Lined Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed (23% Protein), Bran, Shorts, Corn, Cracked Corn, Corn Meal, Re-Cleaned Standard Screenings, Ground Screenings, Beet and Bone Scrap, Poultry Grit, Oyster Shell, Alfalfa Meal etc.

We manufacture the well-known "Good Luck" Brands of Poultry Feeds and can supply any quantity. Try our Good Luck Baby Chick Feed. It gives results.

Long-Distance Phone: Day Junction 314 Night Junction 4534 Write or Phone for Prices.

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Dovercourt Road, Toronto, Ont.

Green Mountain Seed Potatoes for Sale. Won 1st prize in field competition in 1917. Grown in the best potato growing district in Ontario. Also Delaware variety, choice sample. Price \$2.50 per bag, sacks 10c each: to be shipped in April.
James Milloy, R.R. No. 1, Erin, Ont. Hillsburg Sta., C.P.R. Caledon Phone.

SWEET CLOVER

A farmer near Durham, Ont., realized \$2,500 for the seed from 15 acres of sweet clover. Another near Newmarket got \$800 for the seed from less than five acres. But that isn't all that they got. A big lot of good feed, some splendid pasture, and a great big access of fertility in their soil. Sweet clover is coming into its own, the place intended for it by Providence. Just now we must have bigger crops of feed, we must re-build our soil, and do it with less expense and labor than is possible by old methods. We are offering a limited quantity of our own select strain of Yellow Sweet Clover, and recommend it as possessing splendid wealth of foliage, superb quality of hay, finer, more succulent and higher in food values than the common White Blossom. It is a lower plant and therefore safer from damage to the second crop, through cutting the first crop too low. Canadian Albotrea costs a little bit more per bushel but less per acre, for its big and rapid germination means that 10 lbs. to 12 lbs. will seed an acre, while with common white clover 20 to 25 lbs. are recommended. Write us, placing your order at once. Prices are as follows:

Grade No. 1 per bushel.....	\$25.00
" " 2 " "	20.00
" " 3 " "	17.50
White Blossom "	18.00

Note: Grades No. 2 and 3 contain small amounts of Alsike. For growing seed we recommend our grade No. 1. Address:—

CANADIAN ALBOTREA CLOVER COMPANY, LIMITED
Shipping office and warehouse, Listowel, Ontario

NORTHERN ONTARIO

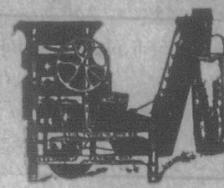
Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others free—are calling for cultivation. Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full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

M. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.
HON. G. H. FERGUSON, Minister of Lands, Forests and Mines.

PERFECTION Seed & Grain Separator (Patented 1901)

The best and latest mill for Cleaning and Grading all kinds of Seed and Grain.

See nearest Agent or write for Catalogue to THE TEMPLIN MFG. CO., FERGUS, ONTARIO



BEESWAX WANTED

WE PAY THE HIGHEST MARKET PRICE IN CASH OR TRADE
The Tillson Company, Ltd.
TILLSONBURG, ONT.

IMPROVED O.A.C. No. 72 Oats

Grown from strains of selected and carefully graded seed. Guaranteed true to variety. Free from smut and noxious weed seeds. Government germination test 100%. Price \$1.00 per bus. Small, white field beans, extra quality, \$10.00 per bus. Samples on request. Sacks free. Freight prepaid on orders of \$100 or more. If our grain is not as represented, same may be returned at our expense.

Ruthven Bros., R.R. No. 2, Alliston, Ont.

When writing please mention this paper

Farm Labor is Now Available



ONTARIO
Trades and Labour Branch
Dept. of Public Works
Province of Ontario

How to get it. Please act quickly.

The Ontario Government is keenly alive to the pressing need for labor on the farm — we realize that "farm labor is the keystone of greater production." If you need farm labor this season we urge you to fill out the Application Form below, clearly and carefully. To save time mail it to the nearest Ontario Government Employment Office (see list of addresses below), or to the office of the District Representative of the Department of Agriculture in your **OWN COUNTY**. Please be sure to state the kind of help you want, the wages you are willing to pay, the length of time the help is required, and the date on which you will want such help.

Get your application in early and make sure of getting the pick of the help.

15,000 Boys and Youths Coming

We are conducting a vigorous "S. O. S." ("Soldiers of the Soil") campaign which will reach every school boy, every high school boy and the working boys in factories and offices, the drivers for retail stores, etc., etc., of the ages from 15 to 19.

The mark set is 15,000, and there is every prospect that this number will be reached. Already 8,863 badges have been distributed to boys for last year's farm work. A large

proportion of these boys will be again available for farm work this year and, of course, they have gained quite a bit of experience. Farmers who had these boys last year know their value.

7,500 Men Being Enrolled

The Ontario Government is also using every possible means to secure the largest available supply of men for Ontario farm work. The number expected is 7,500, and a large number of these men will be available for the whole season,

from seeding to harvest. Strong efforts are being made to secure men with previous farm experience. Men will be recruited from factories and warehouses—from amongst teamsters and artisans.

Considering that a good third of our city and town population has been brought up in the country, we shall be surprised if we do not raise fully 7,500 men to help out the Ontario farmers this year, and such men readily take up ordinary farm work again.

Women Workers Available

Last year we enrolled between 1,200 and 1,300 women and girls for work on fruit and truck farms. It is believed that fully 5,000 women will offer their services this year. These are mostly strong, willing women and girls—many have come from farms. Their employers appreciated them very highly last season, in fact the Fruit Growers' Association of Ontario has already arranged for a much larger number of these women, so satisfactory were their services last year.

A number of the strongest and most experienced of this woman-help is anxious to work on mixed farms for the coming season.

These girls prefer, if possible, to go out to communities in groups of five to ten and they board themselves. Last season there were many instances where the girls assisted considerably in house work during bad weather.

If You Want Woman-Labor

do **NOT** use this Application Form but write to the Director of Women's Farm Work, Ontario Government Employment Bureau, 15 King St., East, Toronto.

Why Not To-day?

If you can use more farm labor this spring, fill in this Application Form, clip it out and mail it to the nearest Ontario Government Employment Office as follows:

- 15 King Street East, Toronto.
- 139 Queen Street, Ottawa.
- 83-85 James St., North, Hamilton.
- 108 Dundas Street, London.
- 300 Victoria Avenue, Fort William.
- 193 Park Street, Port Arthur.
- 136 Dalhousie Street, Brantford.

or to the Office of the District Representative of the Department of Agriculture in your own county.

The most experienced farm hands go to the farmers paying the best wages.

All you need to do now is to fill out the Form, state the best wages you can afford, and send the Form in as directed.

Do not say we cannot get you help until you give us the opportunity.

APPLICATION FOR FARM HELP

Ontario Government Public Employment Bureaux	 ONTARIO	Trades and Labor Branch Department of Public Works												
Date.....														
Fill in your telephone number here or the nearest neighbor's telephone number.....														
Signature of Farmer	Post Office	County												
How to reach place of employment	Acres in farm	What kind of farming practised? Mixed..... Fruit..... Dairy.....												
MARK (X) AFTER HELP REQUIRED														
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">Single Men.</td> <td style="width: 50%; text-align: center;">Married Man and Wife.</td> </tr> <tr> <td>Experienced (plough, milk, etc.).....</td> <td>Experienced.....</td> </tr> <tr> <td>Partly experienced (handle horses).....</td> <td>Partly experienced.....</td> </tr> <tr> <td>Inexperienced.....</td> <td>Inexperienced.....</td> </tr> <tr> <td>Boys (15-19).....</td> <td>WAGES—If wife works in your house.....</td> </tr> <tr> <td>WAGES—Including Board and Lodging \$.....</td> <td>If separate cottage is provided.....</td> </tr> </table>	Single Men.	Married Man and Wife.	Experienced (plough, milk, etc.).....	Experienced.....	Partly experienced (handle horses).....	Partly experienced.....	Inexperienced.....	Inexperienced.....	Boys (15-19).....	WAGES—If wife works in your house.....	WAGES—Including Board and Lodging \$.....	If separate cottage is provided.....	Age limit..... Length of time help is required..... months, from.....	
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Boys (15-19).....	WAGES—If wife works in your house.....													
WAGES—Including Board and Lodging \$.....	If separate cottage is provided.....													
All engagements subject to two weeks' trial with wages.														
<small>Ontario Government Public Employment Bureaux. Form 11.</small>														

Ontario Department of Agriculture
Parliament Buildings, Toronto

Sir WM. H. HEARST,
Minister of Agriculture

DR. G. C. CREELMAN
Commissioner of Agriculture