

11, 1918

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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE
SUCCEED
FOUNDED

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

Vol. LIII.

LONDON, ONTARIO, APRIL 18, 1918.

No. 1334

Economize
By Using
**PURITY
FLOUR**

(Government Standard)
For all Your Baking
MANUFACTURED BY
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PARTRIDGE TIRES

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PARTRIDGE Non-Skids for rear-wheel power, safety and service.

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Equipped with Partridge Tires your car can give its best service, as is proved by last year's adjustment record—less than 1/2 of 1 per cent.

Partridge Tubes are made to the same high standard. Sold by all Garages.

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THE F. E. PARTRIDGE RUBBER CO. LTD.
GUELPH : ONT.



GILSON TRACTOR



THE STANDARDIZED TRACTOR
—is a business machine designed along sound mechanical lines of proven worth, with no freak features. 11-22 and 15-30 h.p.

Write for free catalogue and rock bottom prices.
GILSON MFG. CO. LTD.
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Since 1914 the price of Hogs, of Cattle, of Wheat has more than doubled. The price of

MILTON BRICK

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

MILTON PRESSED BRICK CO., LIMITED
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Now is the time to place your order for a set of "COOKE" Steel Wheels. They are giving universal satisfaction in every province in the Dominion. The cost is small, and as a labor saver they are unequalled. A set of our wheels will make a new wagon out of your old one. Write to-day for illustrated circular and price list, together with free chart, showing how to take

measurements correctly, and testimonials from satisfied customers in all parts of Canada. Remember we quote price delivered to your nearest station, no matter where you live! The Cooke Metal Wheel Company, 19 West St., Orillia, Ontario



LONDON CONCRETE MIXER No. 4

Capacity, 40 cu. yards per day. Price, complete, with gasoline engine, \$240.00. Pays for itself in fifteen days' use. Built to last a lifetime.

Send for catalogue No. 1-K.
LONDON CONCRETE MACHINERY CO.
Dept. B., London, Ontario
World's Largest Mfrs. of Concrete Machinery.

"GOES LIKE SIXTY." WE WANT TO DEMONSTRATE ON YOUR FARM



We will send a Gilson Engine, any size, without charge, to any responsible farmer in Canada to try out on his own farm, at his own work. Write for further particulars of free trial offer, catalogue, and special introductory prices.

GILSON Mig. Co., Limited
269 York St., Guelph, Ont.

A SUPREME COURT JUDGE

writes as follows regarding his policy:
"Allow me to express my satisfaction with the result of this investment"

EXCELSIOR POLICIES YIELD SATISFACTORY RETURNS

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Seeds are Scarce Order Early

Good seed is scarce. At present we have good stocks of most varieties. Send to-day for our big new 1918 Seed Catalogue. Make an early selection. Your country needs the largest crop you can produce, and you will receive big prices for it.

McDonald's Seeds are thoroughly tested—true, vigorous, and reliable. 40 years reputation for quality. Don't delay. Write to-day.

KENNETH McDONALD & SONS, Limited

65 MARKET SQUARE
OTTAWA, CAN.

McDonald's
TESTED SEEDS

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.

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GILSON SILO FILLERS

THE GILSON SILO FILLER is the one blower which can be successfully operated with as little power as 4 h.p. There is a Gilson Silo Filler for every purpose—for the individual farmer, for the syndicate, and our large capacity machine for the custom blower.

We guarantee every Gilson Silo Filler to cut and elevate more ensilage with the same power than any other blower cutter.

Will Silo Filling Time find you ready?
Write for catalogue to-day.
Gilson Mig. Co. Ltd.
399 York St., Guelph, Ont. 39



The Wonderful Light-Running Gilson Thresher

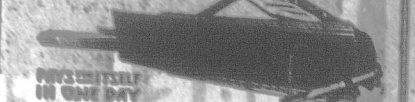
"Goes like Sixty"



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

THE MARTIN DITCHER AND GRADER DIGS YOUR DITCHES GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY



REVERSIBLE ADJUSTABLE
DOES THE WORK OF 50 MEN
SEND FOR FREE BOOKLET

THE FINEST CAR & COACH CO. LTD.
100 ROYAL ST. WILSON CANADA

100,000

IMMENSE WEALTH IN WESTERN CANADA

Send for FREE Book

"Home-Seekers' and Settlers' Guide"

Contains valuable and interesting information based on Government Reports

Unlike Any Other

Right at the beginning, please remember that FROST fence is unlike any other woven fence. FROST fence is exclusive in design. Its lock is different. Its wire is different. Its galvanizing is different. The weaving of the fence is different. It's the combination of all these that makes

Frost Fence First

The FROST lock is unique in construction. It doesn't look like any other fence lock—and most fence locks are similar as peas in a pod. The FROST lock will stand strains that will loosen and often pull other locks to pieces. Look at it yourself and see how much more substantial and secure the FROST lock is. Then look at that special FROST "wave" in the laterals. This long and deep wave gives a wonderful degree of spring and reserve power to FROST fence. It puts real backbone in the fence. The stays on the FROST fence are straight and stiff and the spacing is accurate. Our special looms weave FROST fence more slowly and consequently the fence looks neater and better in the rolls, and stretches up straight and true when putting it up. It is a fence the farmer is proud to show to his neighbors. By making FROST fence complete in our own mills we are able to produce a fence that will outlast all others. We put the quality in the wire, in the galvanizing and in the weaving that puts FROST fence in a different class as compared with the ordinary woven fences made of common commercial wire. You can see the difference by comparing FROST fence with others. You can prove it to the hilt by seeing FROST fences that have been defying wear and tear on Canadian farms for years. There must be some FROST fences in your locality, for we have dealers in almost every part of the wide Dominion. If you don't know the name of a nearby one, write us.

A style for every purpose.

Frost Steel and Wire Company, Limited
Hamilton Canada

104

Frost Neat Straight Rolls

Frost Straight Stays and even spacing

The Frost "Tight Lock"

The Frost "Waved" Laterals

100,000 FREE FARMS
OF 160 ACRES EACH

CANADIAN NORTHERN

IMMENSE WEALTH IN WESTERN CANADA

Send for **FREE Book**

"Home-Seekers' and Settlers' Guide"

Contains valuable and interesting information based on Government Reports

ENTERPRISE and ENERGY—One Alberta town reports at least 100,000 acres of new land in that vicinity plowed last fall for crop this year; has six elevators now and three new ones and a flour mill under way. The reason—1917 values for wheat, oats, barley and flax seed alone for the prairie provinces is \$613,885,700.00. Start now, share it this year.

THOUSANDS OF FREE FARMS—Whether you have capital or not, there is a farm for you along the Canadian Northern Ry.—160 acres of Government homestead lands, surveyed and ready for entry. First comers have the choice.

Improved Lands from \$15 UP PER ACRE

Thousands of acres of selected lands, close to the railway, can be purchased on easy terms, cash, or part cash and crop payments. This means schools, good roads, transportation and market facilities. Prices continually advancing; the values are there.

Low Fares **Comfortable Trains**
Interesting Features

By Canadian Northern, the logical route from Eastern to Western Canada. Through tickets everywhere. Get copy of the "Guide" to-day; any agent, or write General Passenger Dept., Montreal, Que.; Toronto, Ont., or Winnipeg, Man.

These tools do the work of 3 to 6 men

One man can cultivate 3 to 6 times the usual acreage with Planet Jr implements. They are so designed and constructed that with greatest ease they do thorough, rapid cultivation. You save time, labor, money, cut down living expenses, and increase the food supply.

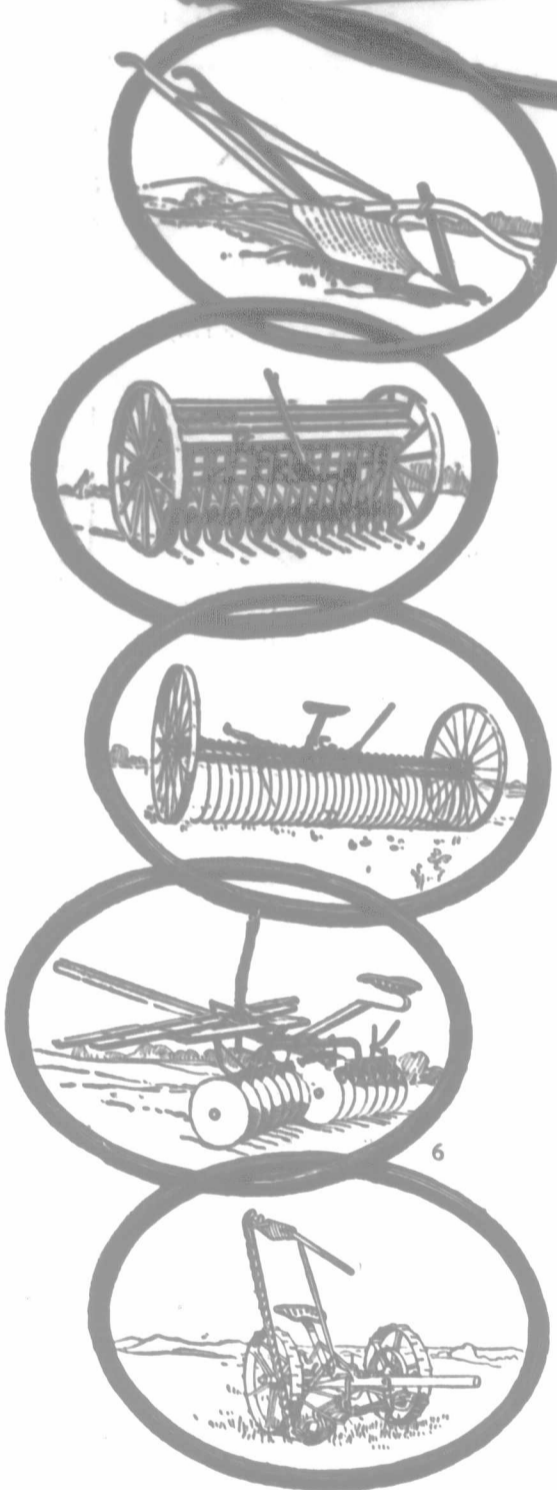
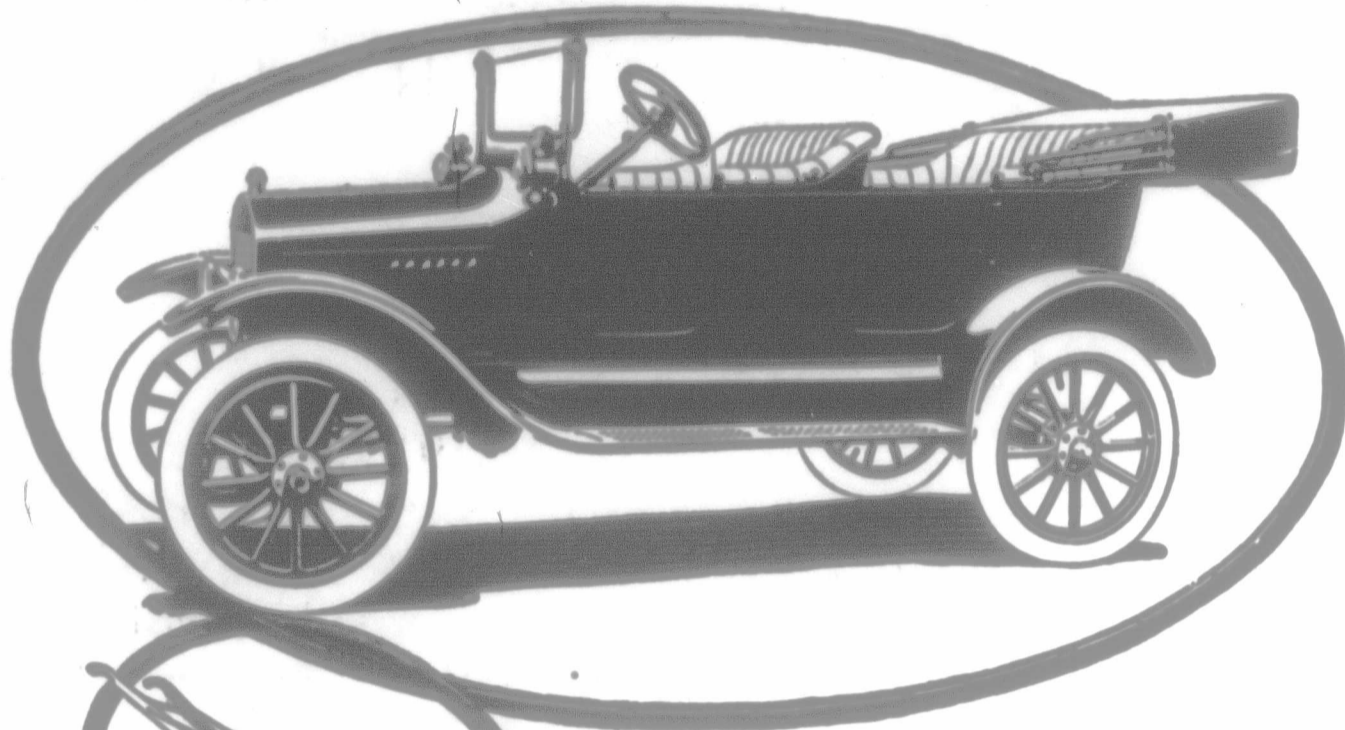
No. 25 Planet Jr Combined Hill and Drill Seeder, Double and Single Wheel Hoe, Cultivator and Plow sows all garden seeds from smallest up to peas and beans, in hills or in drills, rolls down and marks next row at one passage, and enables you to cultivate up to two acres a day all through the season. A double and single wheel hoe in one. Straddles crops till 20 inches high, then works between them. Steel frame and 14 inch steel wheels. A splendid combination for the family garden, onion grower, or large gardener.

No. 17 Planet Jr is the highest type of single-wheel hoe made. It is a hand-made machine whose light durable construction enables a man, woman, or boy to do the cultivation in a garden in the easiest, quickest and best way. We make 24 styles—various prices.

S. L. ALLEN & CO
Box 1108 F
Philadelphia

New 72-page Catalog, free!

Illustrates Planet Jr. in action and describes over 55 tools, including Seeders, Wheel Hoes, Horse Hoes, Harrows, Orchard, Beet and Plow Wheel Riding Cultivators. Write for it today, also name of nearest agency.



Necessary Farm Equipment

MORE and more the Ford car is looked upon by progressive farmers as necessary farm equipment, the same as the plow, the hay-rake, the drill, the mower, the harrow and other labor and time-saving machinery.

A farmer with a Ford car can dispense with one or two of his horses and make the trips to town, railway station, creamery, or to the neighbours in one-third the time. In fact there is no farm machine made that will save the busy farmer and his busy wife so much valuable time as a Ford. And it's so easy to take care of—far easier than a horse. No bed to make, or hay and oats to get, no harnessing and unharnessing, and no stables to clean. The Ford practically takes care of itself.

Ask any farmer who owns a Ford if he would ever again try to get along without it. His answer will hasten your decision to own one.

Ford

THE UNIVERSAL CAR

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

F. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited
Ford, Ontario

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

FISH NETS TRAPS GUNS

Gill, Hoop, Brook, Trammel, Pound and Dip Nets and Seines.

Traps for all animals—We carry in stock the largest assortment of animal traps in Canada—Guns and rifles of the popular makes—Tents, Camp Stoves, Canoes, Bicycles, Headlights and Sporting Goods.

FREE—Hallam's Sportsman's Supply Catalog—32 pages illustrated—write for your copy to-day.

John Hallam Limited
81 HALLAM BUILDING, TORONTO.



The exterior walls of this neat Ottawa garage were built with Bishopric Stucco Board, which was then stuccoed over. The result is shown above. Perfect interior dryness is assured, at lowest cost.

BISHOPRIC STUCCO BOARD

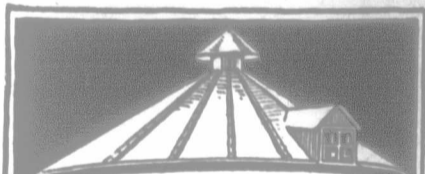
comes lower in cost than sheathing lumber, furring strips and lath, which it replaces. Also, it is simple to work with, saving labor and time.

Made of heavy sheets of sized sulphide fibre board, surfaced on one side with asphalt mastic, it is reinforced on the other side with bevel edged lath, which holds stucco or plaster firmly. It comes in panels 4' by 4', but if longer lengths are required, same will be run on request.

A happy combination—cheapest and best, simple, solid, permanent, sanitary.

The saving over ordinary stucco construction averages over 25%. Write for samples and full information to

BISHOPRIC WALL BOARD CO. LIMITED
529P Bank Street, Ottawa, Ont.



Wood Stave Silos Are Best

Wood meets the two chief requirements of a silo perfectly. Wood will keep in the heat of fermentation that is necessary for the ripening of the silage. And wood keeps out the excessive cold, reducing freezing to a minimum. Cement, tile or brick are all porous, consequently heat or cold will pass through quickly and the silage is partly spoiled.

BURLINGTON CABLE BAND SILO

is the product of 18 years' experience in silo-building and practical farming. Over three thousand are in use throughout Canada, and their owners are well satisfied.

The seven-strand Cable Band, which hoops this silo, is used exclusively by us. It gives and takes up as the silo expands or contracts when full or empty. It is stronger than iron and insures rigidity of construction.

These silos are easily erected, require no special skilled help, and may be put up in 10 to 15 hours. Buy Direct from the Maker. Get our price list. Everything supplied complete, with simple instructions for erection.

THE NICHOLSON LUMBER COMPANY, LIMITED
Burlington Ontario



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.

RIG...
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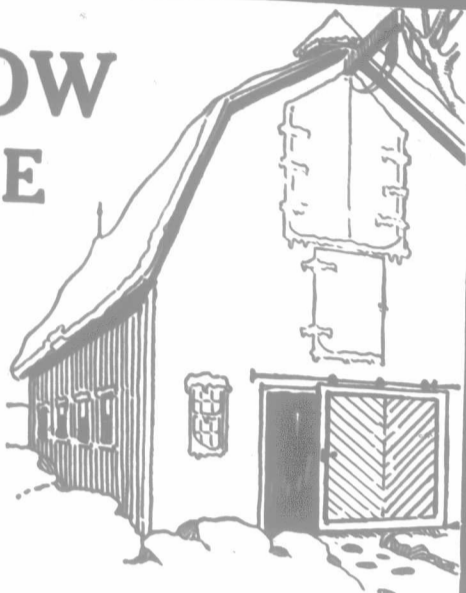
Made in Canada

MICHA...
Winner of t...
Cash Prize...
successful f...
period for...
to t...

The Second P...
of Mount S...
by W. J.

The W...

RIGHT NOW IS THE TIME When You Need a Silo and right now is the time to arrange for its erection



RIGHT now if you had a silo you would not only be getting 25% more milk, but you would be spending a great deal less for feed. With cream and milk at present prices, you must appreciate your need of a good silo more than ever, because there never was a time when good cows, properly fed, would return to their owner as great a profit as they do today.

Right now is the time when an Ideal Green Feed Silo, filled with rich, juicy, milk-producing silage, would save your worrying about feeding so much high-priced grain and would be putting more milk in the pail every day.

Right now is the time to prepare for bigger profits from your cows next winter. Our silo catalogue, which we will gladly send on request, contains a great deal of valuable information about silage and explains why the Ideal Green Feed Silo is the best to buy.

Write today for this catalogue.

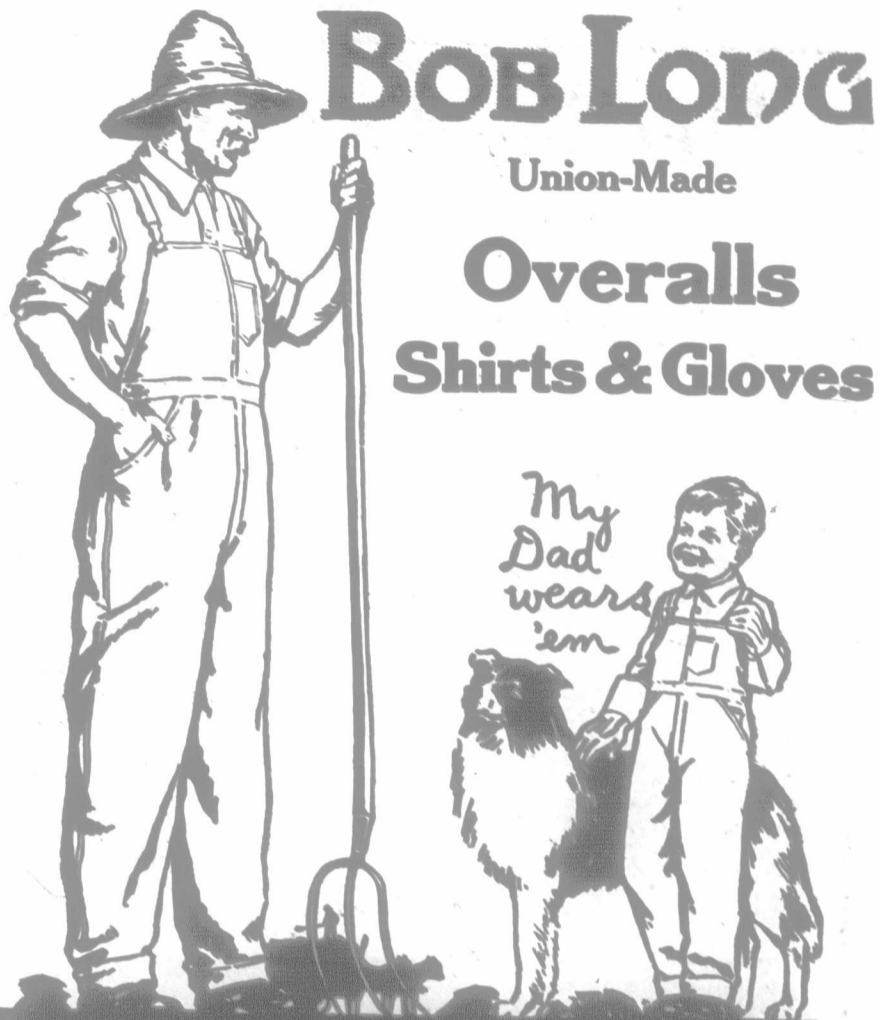
THE DE LAVAL COMPANY, Ltd.

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

MONTREAL PETERBORO WINNIPEG VANCOUVER



Made in Canada



BOB LONG

Union-Made

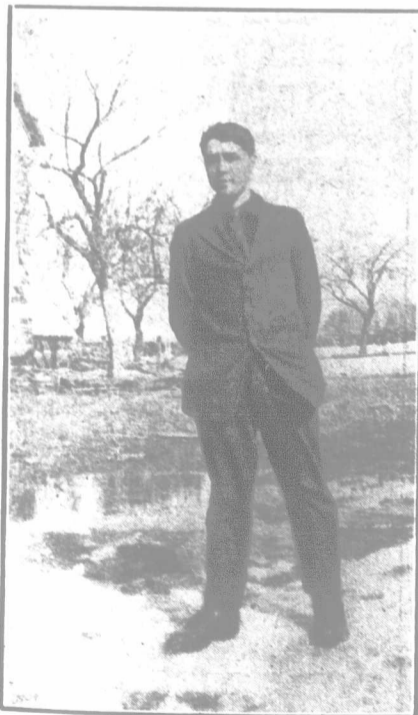
Overalls Shirts & Gloves

Bob Long says:

"My overalls and shirts are the best made, because they are roomy and comfortable. I designed them with the idea that you might want to stretch your arms and legs occasionally."

Insist on "Bob Long" brand. Ask your dealer for Big 11—the big grey overalls—the cloth with the test.

R. G. LONG & CO., LIMITED
TORONTO - CANADA



MICHAEL Unverzagt lives on a farm near Delhi and has plenty to do, but busy people are the ones who find time to do a little more, when extra effort means success.

We Want More Representatives Like the Three Mentioned

How about your odd moments? We can make them worth money!

You can have a weekly income of \$7.50 by sending us the names of ten new subscribers each week. If you want to be your own boss and devote all your time to the work, you can make more than three times as much.

If you are interested, and looking for an opportunity to make some extra money, or for an occupation which will keep you in the open air, write to:

MICHAEL UNVERZAGT
Winner of the Farmer's Advocate Cash Prize Competition and our most successful local representative in the period from January 1st, 1918, to the end of March.

The Second Prize was won by T. S. Miller, of Mount St. Louis and the Third Prize by W. J. Trebelco, of Woodville.

The William Weld Company, Limited
Circulation Dept.
LONDON, ONTARIO



Your After-Supper Job

When the big day's work is over, and the little odds and ends are cleared up—that's about the only time you have to look after your records—to attend to those matters of cost and expense keeping that are pointing the way to more profits in modern farming.

And when these papers and records are kept in a convenient place—a place where you know they'll be when you want them—won't it encourage you to keep them up-to-date instead of "putting the job off till another time?"

An "Office Specialty" Half Section Stack is ideal to put longside your desk, writing table or book case. In it there's a place for your letters; your machinery, seed and vegetable catalogs; a place for your milk and produce records, labor and expense sheets; there's a place for every thing and in such "get-at-able" form.

Half Section Stacks, built in sections to fit your needs, are furnished in rich, warm oak. So besides serving a useful purpose they fit appropriately into the furnishing scheme of your home. Simply return this ad with your name in the margin and we'll send descriptive folder with prices.

The Office Specialty Mfg. Co., Limited
Filing Equipment Stores at:
Toronto Montreal Ottawa Halifax Hamilton
Winnipeg Regina Edmonton Vancouver
Home Office Newmarket Canada

OFFICE SPECIALTY FILING SYSTEMS

Meeting Larger Markets

For years after the war, Europe will continue to require all the butter Canada can produce for export. With markets assured, farmers and dairymen demand a cream separator (1) that meets increasing demands without expense and delays of changing machines in order to get larger capacity; (2) that will get the greatest possible amount of first quality cream. A machine that meets both requirements is the

Renfrew

Interchangeable Capacity—When your herd increases you can enlarge the capacity of your Renfrew by simply changing the bowl and attachments. The Renfrew has but one size of frame and driving mechanism—suitable for the highest capacity. If you have a 350 pound capacity machine and later want to enlarge it to 450, 650, 800 or 1000 pound capacity, all you have to do is to order a bowl of the larger size with attachments—not the whole machine.

A large production of rich cream—Maximum production of firmer, sweeter butter-fat from the milk is accomplished by the Renfrew's exclusive curved wing center-piece. The Renfrew skims down to the last three ounces in every ton of milk skimmed. If you have eight cows or more, this means a saving of butter-fat over the results from ordinary machines that will soon pay for the Renfrew.

The Renfrew's close skimming records are fully explained in our latest illustrated booklet, also results of tests by Government Dairy Schools.



"To increase the capacity I do not have to change the whole machine — just this bowl!"

Write for illustrated booklet to-day. It explains also the Renfrew's self-oiling system, its easy-to-run, easy-to-clean features, its low supply tank and high crank; its milk-tight and dust proof neck bearing and other important features.

Other Lines: Renfrew Kerosene Engine, Happy Farmer Tractors, Farmers' 2000 lb. Truck Scale.

NOTICE: The Renfrew Separator illustrated here was formerly sold under the name "Standard," which identified it as a high efficiency cream separator. The name "Renfrew" has been used on the same machine for several years for our United States and foreign trade and under that name has become as popular in those markets as under the name "Standard" in Canada. Now the name "Renfrew" has been adopted for Canada so as to link the name more closely with that of our company and so that we can sell the machine under a uniform name throughout the world.

The Renfrew Machinery Company, Limited
Head Office and Works: Renfrew, Ont.

Eastern Branch: Sussex, N.B. Agencies Almost Everywhere in Canada.
 U.S.A. Branch, Milwaukee, Wis.

11

ONTARIO WIND ENGINE & PUMP CO. LIMITED

TORONTO

HIP ROOF SILOS

The capacity of most silos is deceptive, because the low roof stops you from tramping down four or five feet of ensilage at the top. That means money lost to you! Consider the importance of the **Toronto Hip Roof** which allows you to pack down the ensilage right to the top of the walls.

And that is not the only advantage of the Toronto. The selected spruce staves are **DOUBLE** tongued and grooved, so that the air—and cold—cannot penetrate—you get better ensilage and a longer lasting silo.

Write to-day for the Toronto Silo Book which gives so many hints on Ensilage invaluable to the Cattle Owner. Address—

ONTARIO WIND ENGINE & PUMP COMPANY, LIMITED
 Atlantic Ave., Toronto, Ont. 12 St. Antoine St., Montreal
 Winnipeg Regina Calgary
 Makers of Toronto Engines and Toronto Stable Equipment.

Steel Rails

for Reinforcing Bridges and Barn Driveways.

CUT ANY LENGTH

JNO. J. GARTSHORE
 58 Front Street West Toronto

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:

H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.
HON. G. H. FERGUSON, Minister of Lands, Forests and Mines.

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



Handy Scales for Farm Use

Convenience and service are the chief features of the

Fairbanks Farm Scales

The handle at the base of the weighing post permits of ready transportation on its own wheels to any part of the farm buildings. In house or barn or dairy it serves any purpose up to 2000 pounds capacity. Fairbanks Portable Farm Scales are compact and absolutely accurate. The platform is 34 x 25 1/2 inches and has a clearance of 11 3-8 inches above the ground. Write our nearest branch for full details of this and other types of scales.

The Canadian Fairbanks-Morse Co., Limited

St. John
 Quebec
 Montreal
 Ottawa
 Toronto
 Hamilton
 Windsor
 Winnipeg
 Calgary
 Saskatoon
 Vancouver
 Victoria



SILAGE MEANS SUCCESS

For years BISSSELL SILOS have been giving good service. They are built of the best selected Wood and thoroughly treated with wood preservative oils that prevent decay.

You Can Have A Bissell Silo

It saves the whole crop, preventing Waste. You can keep more Stock, utilize more roughage. You can have excellent feed for your stock Summer and Winter, tides you over the drouth period — and the Bissell Silo won't decay. It has strong, rigid walls, air tight. It's your Silent Money Maker. Write us for information as to your particular requirements, or ask the Bissell Agent.

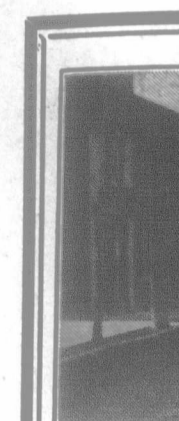
T. E. Bissell Co. Limited
 Dept. W Elora, Ont. 6

IRON AGE

GARDEN TOOLS
 Answer the farmer's big questions: How can I have a good garden with least expense? How can the wife have plenty of fresh vegetables for the home table with least labor?

IRON AGE Combined Hill and Drill Seeder solves the garden labor problem. Takes the place of many tools—stored in small space. Sows, covers, cultivates, weeds, ridges, etc., better than old-time tools. A woman, boy or girl can push it and do a day's hand-work in 60 minutes, 30 combinations, \$4.50 to \$30.00. Write for booklet.

THE BATEMAN-WILKINSON Co., Ltd.
 41 Symington Avenue, Toronto' Can.



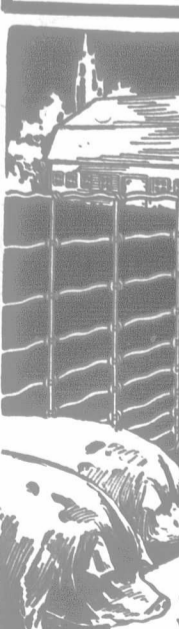
Tarvia

THE r small one. Pro cannot su pavemen coming from th surround ing cou trysid may b heavy.

The bes roads fo towns so macadam Tarvia is tion whic together, slightly p is autom and durab

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MONTREAL ST. J



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UNLESS UNLESS These and n Insurance, are ref THE GRE Dept. Z



Main Street, Picton, Ont., constructed with "Tarvia-X" in 1910.

Tarvia Roads for Towns and Villages—

THE road problem of a small town is an awkward one. Property values as a rule cannot sustain costly types of pavement, whereas the traffic from the surrounding countryside may be heavy.

The best roads for towns so situated are Tarvia macadam.

Tarvia is a coal-tar preparation which bonds the stone together, making a tough, slightly plastic surface which is automobile-proof, dustless and durable.

An old macadam road can be converted to Tarvia macadam at a slight cost and will thenceforth show a very low annual up-keep.

In fact, hundreds of miles of macadam are being converted

to Tarvia macadam every year in recognition of the lowered cost of maintenance and the net saving in taxation. When Tarvia roads are introduced, the business of the community usually increases greatly—more products going out and more money and goods coming in.

Statistics invariably prove that where good roads replace poor roads, the people of the community save enough in hauling expenses the first year or two to pay for the roads. And further, good roads will convert the most dismal, stuck-in-the-mud community into one that is up-and-doing, and throbbing with life and growth.

Numerous towns all over the Dominion now use Tarvia on a large scale in order to reduce maintenance expenses as well as to get durable, dustless and mudless roads.

There is a grade of Tarvia and a Tarvia method for most road problems.

Made in Canada
Tarvia
Preserves Roads
Prevents Dust—

Booklet on Request. Address our Nearest Office.

The **Barrett** Company

LIMITED

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



You will enjoy cooking that big meal on this family size oil stove. Everything so convenient. Each burner controllable to any desired heat. Equipped with the perfect baking "Success" oven. Booklet free.

McClary's FLORENCE

OIL COOK STOVES Wickless, Valveless, Blue Flame, Automatic

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER
ST. JOHN, N.B., HAMILTON, CALGARY, SASKATOON EDMONTON



The "Traction" or "Special" mark is on every pavement and road in every portion of Canada. Either mark is the sure sign that all is well ahead.

Your Garageman Stocks
Dunlop Tires.

A. 66

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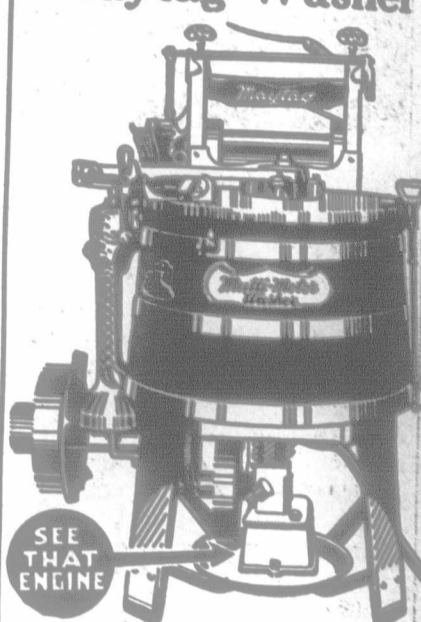
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The Farmer's Advocate

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Home Magazine

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ESTABLISHED
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LIII.

LONDON, ONTARIO, APRIL 18, 1918.

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EDITORIAL.

A farm without a garden is not complete. Now is the time to plant early vegetables.

Farmers are on the long spring hike, and every day counts more than in any previous spring.

Plan to grow more roughage this year than ever before in order to save concentrates for human consumption.

A comparatively low price set for wheat makes wheat feeding to live stock more profitable than the use of the coarse grains, and so it goes.

Meatless days have been abolished for the time in the United States, and the sun is causing us to forget the heatless days. Spring is a welcome visitor this year.

The road to Paris is still blocked, and the road to the channel ports is still impassable to the Kaiser's legions. We at home must not forget those who have made it so.

Judging from the personnel of the Canadian Parliament one might think agriculture in this country was a third-rate or even less important industry. Of the 235 members, 39 are farmers.

Those growing silage corn this year should get their seed supply as soon as it is available, and should test before planting. Some 500,000 bushels of Southern grown seed is to be available.

The breeder of pure-bred stock should always remember that stock "well brought out" always pays for the extra feed in the sale-ring. There is no use of expecting top prices for thin stock.

With over seventy lawyers holding seats in Canada's House of Commons this country should lack nothing so far as laws are concerned, but unfortunately such circumstances are not very likely to make for increased agricultural production.

Canada can change the clock, but not the amount of daylight the sun will bestow upon this fair Dominion this year. Strange, is it not, that the producers in a season when production is the talk on every hand should be obliged to take the very thing they did not want?

A fair square deal for everybody by everybody will do more to bring about the unity necessary in order that the country can put forth its maximum effort in this time of crisis than can ever be accomplished by narrow and selfish campaigns to set class against class.

The perils of importing pure-bred live stock from the Old Land are many. Just recently a prominent American importer, Peter G. Ross, lost a consignment of over 90 head at sea. This continent owes a great deal to the courage of the men who yearly bring to its shores some of the best animals in the world for the improvement of our live stock.

Some few people still persist in calling the farmer a food profiteer, but their numbers are growing smaller daily and when all but the incurable cases have learned from their backyard gardens or otherwise that there isn't a fortune in farming, perhaps the institutions prepared to take care of those not capable or safe to take care of themselves may have room for these incurables. For the good of the great cause they should either be shut up or made to shut up.

The Personnel of Parliament.

The Farmer's Advocate has long contended that farmers were lax in their duty when it comes to selecting men to represent them in Parliament, and they are still all too indifferent if we are to judge by the personnel of the present Parliament of Canada. This article does not refer to the Government or to the Opposition separately, but to both collectively. We understand that the members of the new House, some two hundred and thirty-five listed, give their occupations or professions as follows: Lawyers, 73; farmers, 39; physicians, 23; manufacturers, 23; merchants, 22; brokers and agents, 17; publishers and journalists, 11; lumber operators, 7; military officers, 4; notaries, 4; educationists, 2; veterinary surgeons, 2; contractors, 2; and land surveyors, railway conductors, plumbers, conveyancers, ranchers and dentists, 1 each. This makes quite an interesting and fairly comprehensive list but the most striking point is the ridiculously large number of lawyers in comparison to the number engaged in some other industries. Thirty-nine farmers out of two hundred and thirty-five representatives, and these divided into two political parties, shows just about how strongly or weakly agriculture as a calling is represented at Ottawa. Manufacturers, merchants, etc., are well represented but even farmers should rather see more business men elected than such a preponderance of men of the legal profession, many of whom are elected to represent distinctly rural districts. Men whose natural inclination is, through years of close connection with farming, toward a higher development of Canadian agriculture are not numerous enough in our parliaments. Where lies the fault? Certainly not with the M. P., no matter what his constituency, but rather with the elector. All classes should be fairly represented and if they are not it is their own fault very largely. Labor has had a meagre representation always. There should be more men in parliament who have, through experience, a deep sympathy with labor. The average layman in looking over the list will say there are too many lawyers and all too few laborers and farmers in our parliament. He will say this not as a criticism of the men the country has elected, but rather as a criticism of his own lack of interest in selecting men from his own occupation to represent his party. This is not a party affair at all. Canada spoke out for Union Government, but the local organizations should see to it that rural districts are represented by farmers of the highest type and that towns and cities send their due representation of manufacturers, business men, lawyers, professional men, etc. It is worth thinking over. You may have nothing against the present members. They may be good fellows, anxious to do all they can for Canada, but the interests of all the people demand that all the people be represented in proportion to their numbers and importance to the country. A little less law and a little more agriculture and labor might help.

The Customs Tax on Farm Machinery.

During the fiscal year 1916-17 Canadian farmers, according to a statement recently made by the Minister of Customs in the House of Commons, contributed \$2,117,267 to the Federal Treasury in customs duties on agricultural implements and machinery, divided as follows: Threshing machinery, \$477,895; traction engines, portable engines, etc., for farm purposes, \$896,356; harvesters, reapers, etc., \$89,257; plows and parts, \$373,504; other farm machinery, \$280,255. These figures are of interest to all at the present time, for it is likely that a lively debate dealing with the duty on agricultural implements and machinery will take place during the present session of parliament. Duty on imported machinery enables the home manufacturer to charge at a rate on a level with the sale price of the imported goods in this country. The great bulk of the seeding implements and harvesting machinery now used

in Canada is manufactured or assembled in this country and the manufacturer, of course, reaps the benefit of the duty. The two million one hundred thousand here stated does not by any means represent what the customs duty costs the farmer. It would be interesting to know the whole amount. We are living in a time when greater production is necessary. We have a Union Government. It is an opportune time to discuss the effect of this duty on the finances of the country, on the manufacturing industry, and on Canadian agricultural production. All that is in keeping with the general progress of our country should be done at the present time to remove any handicap under which the farmer labors in his great efforts to feed the people of Canada and the Allied countries. If farm implements and machinery are placed on the free list then all raw materials used in their manufacture should come in duty free. Surely a fair basis can be reached on this important subject which we claim is one worthy of fair and unbiased discussion at the present time.

A Regular Pay Day For the Hired Man.

We have recently published several articles written by hired men, in which the writers have cited some of the drawbacks connected with their work from their own viewpoints. All agree that the hired man should be hired by the year, and, for married men, a comfortable cottage should be provided. All complain that the hours on the farm are long, but most realize that with chores to do the ordinary farm does not lend itself to short hours, particularly in the busy seasons. A few mentioned the point which we wish to discuss briefly, viz., that there should be a regular pay day weekly or monthly, preferably the former, for the hired man. We are inclined to favor this scheme. When the situation is studied from all its angles it does seem rather unfair to expect the hired man to come begging a little money on account throughout the term of engagement. No other business but farming hires on such a basis. All others pay weekly, bi-monthly, or monthly, and nothing pleases the help more than regular pay days. This would work on the farms too. The most successful employer of farm labor we have yet met hired his men by the hour, paid every week-end in full, fired the men at a moment's notice when they did not give satisfaction, and increased the allowance per hour to those who did their work well and earned the recognition. Farmers in the past have said that such a system would not work, but it does and men would rather work where they get paid regularly than where they have to beg money on account from "the boss." In the past it was thought that if a man was so kept "paid up" he would be likely to leave. If he is that kind of man, let him go. The farmer would be as well without him. We know that labor is scarce, but good labor is still honest and always will be. In the past farmers have not paid weekly or monthly, because the business often did not permit of it, or they thought it didn't. It takes ready cash and the farmer had to wait till fall until a part of the crop was sold or some pigs turned off and the man's time was out. Times are changing, however. Many more farmers have a regular income now than was the case formerly and in a far larger percentage of cases a little money is on hand, which could be used to pay the help weekly or at least monthly. Give the "pay-day" system a trial and you'll never depart from it. You will put your business "in right" with the hired help and will get men more easily and the help will turn out better than by the old system of a dollar now and then for overalls, shirts, and "cow-hides," the remainder "coming to" the man at the end of his engagement period.

What April was it Hindenburg was going to be in Paris?

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DOMINION.

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London, Canada.

Something Not Yet Understood.

Agricultural Canada swallowed the pill, through which vehicle was administered the railway tariffs increase, without much ado, but it was felt all the time that it was not the proper medicine for the trouble. This pill was thinly candy-coated with a rider which deprived the prosperous Canadian Pacific Railway of somewhere between twelve and twenty millions of dollars, which the increase would add to their already handsome profits. Considerable credit for these few millions being obtained for the public treasury is taken by a small committee of agriculturists, who in turn publicly declare the valuable services of George Pepper in compiling some of the most startling information concerning the financing and operating of Canadian railways that has yet been revealed. In 1915 Mr. Pepper was engaged by the Dominion Government to assist the Department of Agriculture in matters pertaining to transportation. After the unpopular and unfair decision of the Dominion Railway Board, granting the railways a horizontal increase of fifteen per cent., was made public Mr. Pepper turned his attention to the operations of these institutions. He made an extensive study of reports and statistics and assisted the Solicitor, retained by the agricultural interests, in preparing a memorandum which the Government considered at length, and which, no doubt, delayed their final decision until the eleventh hour. Now, for some reason yet unannounced, Mr. Pepper's services have been dispensed with. In the absence of any definite statement the impression has been left with the agriculturists, in whose interests he has been working, that the hand of the railways has fallen and Mr. Pepper's presence in and about the Agricultural Department at Ottawa is objectionable to an element whose power in Canada has never yet been measured. We would not like to believe that a Government with such a mandate from the people as the present one enjoys, and a Minister of Agriculture, himself a farmer and a farmers' candidate, could be influenced thus. However, a man who has done

something has been "let out." A correct understanding of the impression this has made on the live-stock men of Canada can be gathered from the minutes of the recent annual meeting of the Record Board, held in Toronto. Surely there is a mistake somewhere.

In any case, if Mr. Pepper's public services in behalf of agriculture are no longer desired by the Government, his past efforts should be recognized, and the information concerning the railway question, which he compiled, should be printed and preserved against such time as the question again arises.

Feeding Calves Sometimes Vexes.

BY SANDY FRASER.

I've heard some people say that the mon in the country has a better chance to live a good life than those men who have to spend their days in the city, where one will be all the time runnin' intae chances tae get intae crooked deals an' where the temptation to go to the bad wi' the drink, or wi' something else, is always before ye. But I'm beginnin' to hae my doots about this. If there's ways o' gaein' wrang in the city that's no' to be found in the country there's also opportunities o' rinnin' off the track in the country that they ken naething aboot in the city.

What brings these things to my mind is some experiences I hae been havin' lately and which I have every year at this season, for the matter o' that. I had just been giein' the auld wumman a sort o' a lecture on patience. She's had bad luck wi' her baking, and it took sae muckle o' the conceit oot o' her that what wis left wis in pretty bad humor. "Hoot Jean", says I, "Ye shouldna be takin' on sae aboot a thing like yon in war-time. Even if yer bread did get chilled last night ye canna help it ony by gettin' sae hot aboot it. Dae ye no' remember the sermon we got last Sunday frae the meenister an' how he tauld us aboot the patience o' Job? Ye're a lang way frae havin' to stand what he came through."

Jean didna say onything an' after a while I went oot to the barn to milk the coos an' dae up the evening chores. Alang wi' ither things I had a bunch o' young calves to feed, an' twa or three among them hadna learned as yet the latest style in drinkin' milk. Sae onybody that has lived for a part o' their lives on the farm will ken what I meant, a while back, in speakin' aboot the temptations o' the country. There are times where it takes all the self-control ye've developed in the course o' a lifetime to prevent ye usin' language that ye wad be surprised to see in the children's school-books, for instance. I remember one time watchin' one o' my neebors tryin' to drive his horses oot o' a field o' oats that they had got into by breakin' doon the fence. He wad drive them doon to one end o' the field, where was a gate, but the horses pretended not to see it an' turned back on the auld chap and had a free-for-all race tae the ither end o' the field. He then tried tae pit them oot where they had come in, but there wisnae sae muckle inducement for them tae gae ower the fence in that direction, sae back they went again, ilka horse making a road for himsel' through the lang grain. There wis a friend o' mine wi' me that day, Duncan, his name was, an', as we watched the chap an' his horses, he turns tae me an' says he, "Weel Sandy, I dinna ken o' onything more vexener than that." I felt that Duncan was aboot right, even if he did hae tae mak' a new word to express his ideas. But by this time oor neebor friend wis walkin' up and doon through the field o' aits after the horses, talkin' to them in a way that would hae put fear intae them if they had had a better understanding o' the Gaelic language. He had his straw hat in his hands and it looked as though some cow had been tryin' to mak' her breakfast on it. "Duncan", I said, "We'd better gie him a hand or he'll hae a fit, to say naething o' his being pit oot o' the church if onybody comes along and hears him". So we helped him get the ponies rounded up and intae the stable, but he wis sae mad that he wouldna' speak to us, but went off tae fix the fence. Or maybe he wis thinkin' o' the pet names he had given his horses an' wonderin' if they would be suitable for all occasions.

However, this is no' what I wis intendin' to be tellin' ye. It wis thinkin' aboot those calves o' mine that reminded me o' the chap an' his horses. That night after I had got the coos milked an' the oldest o' the calves fed I went at the job o' teachin' the twa wee bossies, that were just a little mair than a day auld, the method whereby they wad be enabled tae grow up an' be o' some benefit tae their country. But they were stubborn little beggars an' it wisnae lang before I felt mysel' gettin' riled up a bit. The calf I wis feedin' wis willin' to hae its nose onywhere but in the pail, while the ither one cam' at me frae behind wi' a bunt that made me spill mair than half the milk. Wi' that I grabbed the calf by the back o' the neck and jammed his heid doon intae the pail an' says I "there noo, drink or droon, ye deil. Moral suasion is na guid for the likes o' ye." I might hae said mair or maybe drowned the calf but juist then someone says tae me "What aboot the patience o' Job? I'm thinkin' the meenister will need to go ower the story again for yer benefit." It wis Jean wha had come tae the barn to tell me I wis wanted at the telephone. She hadna forgotten what I had said aboot her troubles wi' the bread, an' the meenister's sermon. She had me pretty well cornered but I put the best face I could on it an' says I, "Oh, na doot Job wis a fine auld gentleman all right, an' what we hae been hearin' aboot him is probably true enough, but what I'm willin' tae bet on is that he never raised sic a fool calf as that one there in a' his life. They say Job had boils.

What is there aboot that to try a mon's temper along-side o' feedin' calves?"

Jean went back tae the hoose wi'oot sayin' onything mair but I'm thinkin' she thought she had the best o' it. And maybe she had in a way. The mon that undertakes to do ony preachin' has to be pretty careful aboot daein' the practicin' as weel. Tellin' ither what they should dae is a poor business unless ye're able to gie what oor teacher calls a 'practical demonstration' o' the doctrines ye are preachin'. All the same I dinna feel like takin' ower muckle blame to mysel' in the matter o' losin' my temper ower that calf. Because, as my friend Duncan would hae said if he had been there, "There's naething mair vexener."

Nature's Diary.

BY A. B. KLUGH, M. A.



Vesper Sparrow.

The Vesper Sparrow is with us once again and with its clear and beautiful refrain is joining the matutinal chorus of bird-song, and singing its vesper song in the waning twilight.

This species is very common in fields and along road-sides, and its favorite perch when singing is the top of a fence-post or picket. The official name, Vesper Sparrow, is well-chosen since it sings most continuously in the evening, but it has several other common names. It is termed Bay-winged Bunting, on account of the chestnut color of the bend of the wing, Grass Finch because of its preference for fields and open grassy places, and is frequently called "Gray-bird." This term "Gray-bird" is not the specific name of any species but is a general name which is often applied to any small grayish or brownish-streaked bird and the species to which it is most frequently applied are the Vesper Sparrow, Prairie Horned Lark, Savanna Sparrow, Chipping Sparrow, and Song Sparrow.

The Vesper Sparrow is about six inches in length. It is grayish-brown above, thickly streaked with dusty-brown; white beneath, usually tinged with buff, with brownish streaks on the breast and along the sides. The crown is like the back but the streaks are finer. The bend of the wing, that is the part which is often termed the "shoulder" in birds, is chestnut. The outer tail-feather is wholly or mainly white and the next one or two tail-feathers have white tips. These white outer tail-feathers, which are very conspicuous in flight, are the main identification mark of this species. It is such marks as this which the beginner in the study of birds should try to establish in his mind for every species, as when they are known a very brief glimpse of a bird is sufficient to allow of its recognition. I have frequently had lengthy descriptions of birds submitted to me by people who wished to ascertain their names, but because the observer had failed to record the main points which constitute the identification marks of the species I have been unable to recognize the bird described with certainty. The range of the Vesper Sparrow in Canada is from Prince Edward Island and Nova Scotia to the Eastern border of Manitoba. From Eastern Manitoba to the Pacific it is replaced by the Western Vesper Sparrow, a sub-species very similar to the Eastern bird but paler and with a more slender bill. On Vancouver Island the sub-species is the Oregon Vesper Sparrow, which is smaller, browner above, and with more buff beneath.

The Vesper Sparrow arrives in Ontario from March 24th to April 14th, depending upon the season, and leaves about October 20th.

The nest of the Vesper Sparrow is built in a depression in the ground, the brim of the nest being level with the soil. It is composed of grass and grass-rootlets, lined with finer grass and frequently with hair. The eggs are from four to six in number, and are grayish-white in color heavily clouded with chocolate-brown. The bird when incubating is a very close sitter and often does not flush until almost trodden upon.

The song of this species may be recognized by the opening phrase, which may be written as "Whee-oo-whee-oo-whee-ee" and in which there is a rising inflection in each of the three components. After this introductory phrase comes a complicated and beautiful trill.

During the time which the Vesper Sparrow spends in Canada its food consists of about eighty per cent. animal matter and twenty per cent. vegetable matter. Beetles and locusts make up the bulk of the animal food. As soon as the beetles begin to crawl and take wing this bird is on the alert to capture them, and in May they constitute one-third of the total food. As locusts become more and more abundant with the progress of the season they increase proportionately in the menu of the Vesper Sparrow until by mid-summer they are the chief constituent, and in July they make up forty-one per cent. of the total food. Cutworms, army worms and other smooth caterpillars are freely eaten and form a larger proportion of the food of this species than of that of any other sparrow.

Towards the end of August the Vesper Sparrow begins to eat seeds and during the late fall and throughout the winter they are its sole source of food-supply. Three-quarters of the Vesper's supply of seeds is derived from weeds, such as Rag-weed, Lamb's-quarters, Pig-weed, Purslane, Knotweed, Pigeon-grass and Crab-grass. The other seeds taken are those of the grains, the main one being oats. These are picked up on the stubble

fields after harvest and are also secured from horse-manure along the roads.

Since the Vesper Sparrow lives almost exclusively in cultivated country and because it feeds out in the open fields; since it does no damage to agricultural products but on the other hand feeds on insects and weed-seed, it is one of the farmer's allies in the cause of "greatest production".

THE HORSE.

Make and Shape in Hackney Brood Mares.

EDITOR "THE FARMER'S ADVOCATE":

A question that one often hears in horse-breeding circles in England is one that relates to the sort of mare which is, by appearance, best suited for Hackney breeding, and upon few subjects do opinions appear to be more divided. On pattern, probably judges would not differ nearly so much as they do when they are called upon to give practical expression to their opinions, as the types selected for the leading position in the showing often differ very greatly. As an illustration of this the early champions at the London Hackney Show may be referred to, for no mares could well have been more unlike than Mr. Moore's Princess and Primrose on the one hand, and Mr. Robinson's Apology on the other; and yet the first and second named were respectively champion of the first and fourth shows, while Apology won at the second and third. The two former mares were of the long, low, massive type, while Apology was all quality without much bone. All were excellent in their way, but the question that had to be answered was, which was the better stamp for breeding purposes?

Probably nine experienced breeders out of ten would prefer the "old-fashioned," i. e., short-legged, powerful mare, which covers a great deal of ground and, by comparison with her opponent, conveys an impression of being plain. In all probability she is nothing of the sort, the appearance referred to being generally nothing but the result of the extra amount of substance which she possesses. Naturally a mare which measures well below the knee, which is heavy in her muscle all over and especially about the forearms, thighs and gaskins, which is well let down behind the forearms and which carries a big, roomy middle, cannot compare with the smart and elegant animal so far as her quality is concerned; and at the same time she is sure to appear less good-looking. In fact, one cannot possess a maximum of both substance and quality in any mare; it is the correct combination of both these virtues that makes for perfection.

The long, low, roomy type of mare is undoubtedly the superior from a structural point of view, for breeding purposes, as she can adapt herself better to her maternity duties and has more room for the foal. The elegant mare is as often as not too short-ribbed and tucked up to carry her foal as she should; and according to prevalent belief, which in this instance is worthy of consideration as it is based on experience, she is not likely to throw stock which have substance to recommend them. The theory that, as a rule, the dam gives substance to the foal is no doubt true, but in breeding matters as in others there are exceptions which often make it very difficult to prove its correctness in the course of argument. It is more probable, when a light-built, elegant brood mare has established a reputation for herself at the stud, that she is throwing back to a good stamp of ancestor or ancestors, rather than relying upon her own intrinsic merits; and hence her pedigree should be inquired into. Why some animals, horses and mares alike, should be in the habit of throwing back whilst their own brothers and sisters do not do so, is a matter that requires clearing up, but it does not seem likely that it ever will be.

It appears, therefore, that when judges have to award prizes in the brood-mare classes they are acting on the safest grounds when they rely upon the so-called old-fashioned type as being the more likely to produce the class of animal that is required. Admitting that the fashion of the day demands a more good-looking or flashy stamp of harness horse than that in demand a few years ago, it does not necessarily follow that the popular type is as well calculated to produce a replica of itself as the sire and dam from which it is sprung. On the contrary, and particularly so in the case of mares, there is a tendency to produce stock even lighter than themselves, and consequently there is always a danger bordering on the probable of a line of such dams producing stock that is absolutely weedy. The possibility of losing the old-fashioned stamp of Hackney brood mare, which, whatever her imperfections may have been, has had a great deal to do with making the breed what it is, is being increased by the importance that is being attached to quality. Quality is an extremely difficult expression to define when applied to a harness horse, and more especially when the breed is allied to a Thoroughbred. The quality of the blood horse is self-evident, but the ultra refinement of the race horse is surely not what is sought for in the roadster, as it must of a necessity be associated with lightness and a corresponding inability for heavy work.

Hence the importance of conserving the old-fashioned type of long, low, heavy-boned, roomy mares, one of which for breeding purposes is worth a lane full of animals only a degree removed from the park hack. The latter may be well enough in their proper place, which is not a harness brood-mare class; and it is as certain as anything in connection with horse breeding can be, that if this class of mare is constantly encouraged, the true type of Hackney must inevitably become extinct.

ALBION.

Cost of Horse-power on the Farm.

Horse-power costs at least 50 per cent. less per hour than man power. For this reason more and heavier horses must be used to replace the shortage of man power. Nevertheless, many farmers in Eastern Canada have retained fewer horses than usual owing to high cost of feeds. This is false economy in any year, and especially under present conditions.

The actual cost of horse-power is affected by the following factors:

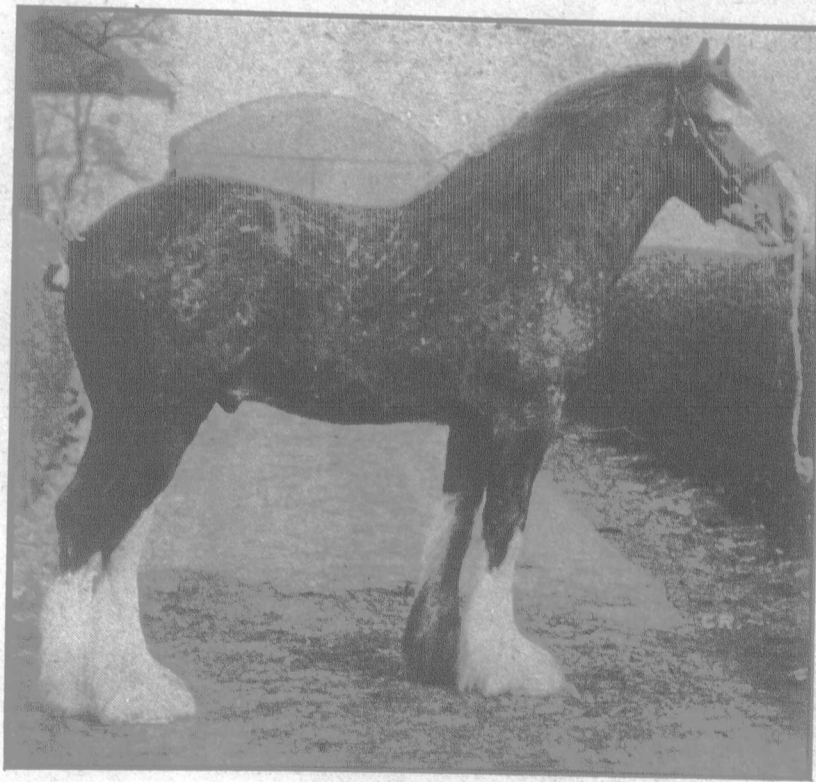
Weight, soundness and quality; distribution of labor over the year; condition and vitality; intelligent and careful handling; cost of feed; labor, interest on investment, etc.

The heavy horse of good quality gives the cheapest horse-power on the land. The horse properly fed and fitted for work will give much cheaper power than the underfed animal or one soft muscled and lacking in energy.

Although every farmer should have all the horse-power necessary, yet under existing conditions of feed and labor costs, horse labor should be so distributed and used to obtain maximum results at the lowest costs.

Every farmer should do a little careful figuring as to cost of horse-power, and consider well before allowing horses to run down in condition for want of feed and care or to unnecessarily stand idle in stable or field.

A large amount of data on cost of keeping horses has been collected on the Experimental Farms and from other sources in Eastern Canada, and the following statement may be considered as fairly representative for Eastern Canada, with such variations as are hereafter noted. This statement is for a horse weighing 1,600 pounds, working an average of 300 days per year. If the horses were idle during the winter months then the grain bill might be reduced 15 per cent. to 30 per cent., at present a saving of \$35 to \$60. Feeds are charged at about present market prices, but may be figured by the farmer to suit the local cost prices.



Craigie Litigant.

First prize three-year-old Clydesdale stallion and winner of the Cawdor Challenge Cup and Brydon shield, Glasgow, 1918.

Cost Maintaining 1,600-lb. Horse on Work for a Year.

I. Cost of feed:	
Oats, 6,050 lbs. at 90 cents per bus.....	\$160.20
Bran, 1,300 lbs. at \$35 per ton.....	22.75
Hay, 5,840 lbs. at \$12 per ton.....	33.04
II. Labor, including feeding, preparing feeds, cleaning harness, horse and stable.....	28.00
III. Interest on value of horse—5 per cent. on \$250.....	12.50
IV. Depreciation on value of horse per annum at 5 per cent.....	12.50
V. Interest and insurance on building (costing \$100 per horse) at 5 per cent. per annum	5.00
VI. Interest on harness and other equipment at 5 per cent.....	7.00
VII. Shoeing for average farm work.....	8.00
VIII. Veterinary, drugs, etc., per horse.....	5.10
Total cost maintenance on regular work.....	\$294.09

Whatever the reductions may be in cheap wintering of idle horses, there is no doubt that it will actually cost \$15 or more to maintain the horse during the six months starting May 1, 1918.

Cost of Horse-Power Per Hour.

The actual number of hours per year worked by the average draft horse on the farm in Eastern Canada varies from 1,500 to 2,500, depending on local conditions and the proper distribution of horse labor. The feed costs varying in the same proportion from \$155 per horse to \$216 per horse at present prices would show an

actual cost in feed along of 7½ to 10½ cents per hour or labor. The total maintenance cost in like proportion varying from \$230 to \$294 per horse would show an actual cost of 15½ to 10½ cents per hour of labor. In other words, the greater the number of hours worked per horse the cheaper is the horse labor per hour in spite of the greater feed and labor bills.

Cheapening Horse-Power on the Farm.

Briefly, the means of obtaining cheaper horse-power on the farm are:

- I. Heavier horses of better type and quality.
- II. Feeding carefully in proportion to work performed.
- III. Fitting for the extra heavy work of the year.
- IV. Working the farm with good brood mares and raising both spring and fall foals.

If this latter plan is carefully followed the mare may easily produce annually in foals the equivalent of 50 per cent. or more of her feed cost and still perform 1,500 hours or more of actual heavy labor, thus reducing by 15 to 40 per cent. the cost per hour of labor. The type and quality of the mare and, above all, the excellence of the stallion used, would determine the success or failure in this regard.—Experimental Farms Note.

Wounds—VII.

Frostbites—Burns—Scalds.

Frostbites.—The first effect of extreme cold is to diminish the vital action of the part with which it comes in contact. This state of depression when not too long continued, is succeeded by a more than ordinary activity, called a reaction, and if this alteration be often repeated the parts become permanently weakened, being slightly swollen, of a purple color, (which is well shown in horses with white skins) not so warm as usual, and afterwards becoming inflamed. The skin will now crack and discharge a semi-serous fluid. More intense cold not only weakens but entirely suspends vital action.

The parts become pale, insensible and shrivelled. The skin often sloughs from side to side, forming a strip of dead skin, underneath which is a deep chasm. The heels of the horse are more subject to frostbite than other parts. In some cases, especially during long-continued, snowy weather, with frequent thaws succeeded by sharp frosts, the deeper-seated tissues of the coronet lose their vitality, and deep and extensive sloughs are thrown off. The animal suffers acute pain, fever, and emaciation, and in rare cases succumbs or has to be destroyed.

Treatment consists in the application of hot poultices, but these must not be too long continued. As soon as the slough is thrown off, astringents as one ounce each of acetate of lead and sulphur of zinc to a pint of water should be freely and frequently applied. If the discharge be foetid, one-half ounce of carbolic acid should be added to the lotion. Constitutional treatment consists in administering a slight purgative, as six drams aloes and two drams ginger, good but easily digested food and, of course, rest.

Burns and Scalds.—These are divided into three classes, first, those producing mere redness; second, those causing the formation of small blisters; third, those causing death of the part. The first class is attended with mere superficial inflammation, usually terminating without loss of skin, though with temporary loss of hair. The second class is attended with a higher degree of inflammation, causing the skin to exude serum, and to form blisters, followed in some cases by suppuration and the formation of ulcers that are hard to heal. The third class is attended by mortification from disorganization of structure, the skin and underlying tissues being literally boiled or roasted, the blood coagulated in the vessels, hence the circulation in the part being completely arrested. In all cases of severe scalds or burns there is more or less supervening fever, manifested by shiverings, coldness of the skin and extremities, prostration and restlessness; frequent and feeble pulse, and heavy breathing. The surface of the scalded or burned part if destroyed will become pale, cold and leathery, the hair falling off in patches, leaving a denuded surface from which issues a thin, serous discharge. The parts now swell, and, in a few days a line of demarcation surrounds the dead part by the division of the healthy and the dead tissues; the chasm widens, the burned part contracts and dries, leaving a granulating surface exposed; the granulations are whitish, springy and moist. There is no discharge of pus, but of a thinnish matter, usually of a dirty, whitish color. The slough falls off, leaving a wound of greater or less magnitude (according to the extent of the burn) which is very slow to heal. It usually leaves a scar of a hard, dense, cartilagenous nature, which gradually contracts

more or less, pulling the surrounding tissue into puckered folds which make an unsightly blemish. The most intractable cases are those which occur in the neighborhood of a joint, where the continued action of the part retards healing. If the accident be so severe as to destroy the muscles and expose the tendons and ligaments, and also destroy the tissues protecting the articulations, the patient should be destroyed. When the seat of the accident is in muscular tissue, or does not immediately involve a joint, recovery will usually take place.

Treatment.—In cases of severe scalds or burns, the parts become very painful and sensitive to the action of the air. If the air be excluded without the application of pressure, as from bandages, etc., great relief from pain is at once rendered. Hence, local treatment should consist in the application of a soothing dressing that will form a coating to exclude the air. For this purpose, *carron oil* may be said to be a specific. This consists in equal parts of raw linseed oil, or sweet oil and lime water. Lime water is made by slacking a lump of quick lime, then adding a quantity of water and stirring it briskly, then allowing it to stand. The undissolved lime will settle to the bottom of the vessel, and the clear water on top is *lime water*, which, when mixed with equal parts of either raw linseed or sweet oil forms *carron oil*. This should be applied freely and often, and it is good practice to dust flour over the oil, as it assists in forming a coating. In the course of a few days, pus will form and the wound must now be treated as an ordinary suppurating sore, viz., kept clean, and a good antiseptic, as a five per cent. solution of one of the coal-tar antiseptics or carbolic acid applied regularly. Constitutional treatment consists in acting gently upon the bowels by the administration of a pint of raw linseed oil or four to six drams of aloes. If pain be severe, it should be allayed by the administration of an anodyne, as one and one-half ounces of the tincture of belladonna in a pint of cold water as a drench every few hours as indicated. The patient must have rest, good care, and light, easily-digested food, as bran, carrots and good hay. If the burn or scald be slight and the skin merely inflamed, it will not prove serious and a few applications of *carron oil*, or carbolic acid, as one part carbolic acid to thirty-five parts sweet or raw linseed oil is all that is necessary. WHIP.

LIVE STOCK.

Organizing a Co-operative Live-Stock Marketing Association.

In districts poorly equipped for marketing live stock and in certain localities where it is felt that the existing marketing machinery exacts a heavy toll, the co-operative method of selling is frequently suggested and attempted. Such organizations have sometimes been successful, remarkably so, while others have fallen to the ground. Much depends on the manner in which the new selling agency is built up and its methods of operating. With this in mind we publish, in the following paragraphs, an article by W. W. Thomson, Superintendent of Co-operative Associations in Saskatchewan. The ideas are practical and capable of a wide application.

The primary object of a co-operative live-stock marketing association is to effect economies in the marketing of live stock. Unless the returns realized from the sale of the live stock in any particular district can be increased by selling co-operatively, there is little to be gained by organizing a stock shipping association there. The first step, therefore, is to make certain that conditions can be improved by organization. A number of those interested should gather data concerning the neighboring markets, the cost of conveying animals to them, the shrinkage entailed by the journey and the cost of weighing, yardage, feed and selling. If such an investigation reveals an undue spread between the prices paid on the central market and those offered by the local dealer, it is reasonable to conclude that the organization of a stock marketing association would be of benefit and steps to that end should be taken. The usual procedure is to call a meeting of the stock producers of the district, explain the situation fully and organize for marketing co-operatively.

Stock marketing associations act only as a collecting, forwarding and selling agency for stock producers. They do not buy and sell stock, consequently no working capital is required, and it is not essential, although desirable, that they should be incorporated. If incorporation is desired particulars regarding the procedure necessary can be obtained on request from the Provincial Registrar of co-operative associations. Whether or not incorporation is deemed necessary is for the individuals concerned to decide. Railway companies and others with whom it would be necessary to do business, prefer to deal with incorporated organizations and when this precaution is taken the individual members enjoy limited liability, but the actual work of marketing stock will be the same in registered and unregistered associations. At the organization meeting a set of bylaws should be drawn up for regulation of the business and these should be signed by all members. The following bylaws, with perhaps a few alterations to meet local requirements, will be found suitable for any stock marketing association.

Suggested Bylaws.

1. Manager to be notified re stock ready for shipment. All members who desire to market stock through the association shall report to the manager the kinds of stock and the number of each kind which he intends marketing, and approximately when the animals will be ready to be marketed.

2. Ordering Car and Loading.—When a sufficient

amount of live stock to make a full carload has been reported as being ready for market the manager shall order a car and notify each member having stock listed, stating the date and the hours at which the stock is to be delivered for loading.

3. Special Duties of Manager.—In addition to performing the duties assigned him by the constitution and other bylaws of this association, the manager shall be at the stock yard on the dates and at the hours set for the delivery of stock, and shall receive, weigh, mark and load the animals on the cars. He shall have charge of and direct the sale of all shipments and receive all money therefor, and pay the same to the shippers, less his commission and all other expenses incurred in making the shipment, or when so directed send the money by mail to the shippers. He shall furnish a statement to every shipper showing the net weight, price received and expenses incurred in marketing his consignment. He shall keep on file all statements received from the commission firm selling the stock, and shall keep a record showing the number of cars shipped and the amount of stock in such cars.

4. Manager's Remuneration.—The manager shall receive as compensation for his services a commission of — cents per hundred pounds on the net weight at the final market of all stock marketed through the association, from which commission he shall pay for all extra help employed to assist in handling or loading the stock, and also defray any traveling expenses incurred in marketing the shipments; he shall, however, have the right to charge for any outlay for feed, bedding, materials needed to make partitions to separate the stock in the cars, etc., said amounts to be charged against the consignments on whose account they were incurred.

5. Insurance and Sinking Fund.—Out of the receipts from the sale of every shipment there shall be deducted — cents (three cents suggested) on every

Having launched the enterprise, it is essential that every member should patronize it to the full extent of his abilities. This is particularly important during the early stages of the association's development, as it is at that time it will meet the greatest opposition from stock buyers and others who wish to perpetuate the present marketing system. Price cutting, the circulation of misleading information and every other device that is likely to induce members to leave the association may be expected, for if the association once has a chance to demonstrate its usefulness, its opponents know that they will have little prospects of defeating it later. The importance of holding the association together during its early stages, cannot, therefore, be overestimated.

To inspire confidence in the organization, only well-known and capable stockmen should be selected as directors, and as their duties will not be such as to occupy a great deal of their time, the directors should serve without remuneration. The selection of a capable manager is essential to success. If possible, some one thoroughly acquainted with all matters pertaining to the marketing of stock, should be secured and he should be given such remuneration as will induce him to make the stock marketing work one of his most important activities. The suggested bylaws provide for the manager's remuneration by way of a commission at a set rate on the net weight of the stock at the final market, thereby making it to the manager's interest as well as that of the producer that the stock should reach the market quickly and in the best possible condition. Some associations prefer to pay a commission on the net returns. Either system would be satisfactory. It should, however, be remembered that the object of the association is to effect economies and consequently the manager's remuneration should not be so large as to nearly approach the profit usually taken by the drover. The exact amount paid the manager will vary with the



Counting Out the Sheep on an English Farm.

hundred pounds in weight of hogs or sheep and — cents (two cents suggested) on every hundred pounds of cattle and the amounts so deducted shall be placed in such chartered bank as the directors may direct and shall constitute a fund which shall be used for paying losses that may occur through injury to stock, while in the association's hands, or to purchase office supplies, postage stamps, or such equipment as the association may require.

6. Payment for Stock Injured in Transit.—Any shipper whose stock has been accidentally injured while in the hands of the association shall receive the full amount for the same as though it had not been injured, and shall be subject to the regular rates of expense on the shipment. The payment of damages shall be based on a statement made by the commission firm having charge of the sale of the shipment, which statement shall show the amount received for the injured animal and the amount, in their opinion, which it would have brought had it not been injured. This statement shall be the final basis for the settlement. No damage shall be paid for an animal that was not in a healthy condition when received at the local yards by the manager.

7. Sale of Stock for Non-members.—Animals will be accepted from and sold for non-members upon the same conditions as if supplied by members, except that double insurance fees will be charged on all such animals.

8. Dates of Shipment.—Sufficient stock being available, shipments shall be made at regular intervals.

Success Depends on Loyalty.

Organization is, however, but the first step towards the establishment of a successful marketing association.

distance from the marketing point and the volume of business to be handled.

Another essential to success is simple, plain and accurate accounts, open at all times to all members and showing clear and concise statements of results. The Saskatchewan Department of Agriculture has arranged to supply stock marketing associations throughout that province with a set of account forms sufficient to record one year's stock marketing transactions without expense to the associations, and organizations in other provinces can obtain sample forms from the same source. Promptness in forwarding settlement for all stock marketed is required if the continued support of the members is to be secured, and the fullest possible information in regard to all matters connected with the marketing of the stock should be available to every member. The confidence of its members is the association's great asset, and it is only by retaining same that the organization can become a permanent factor in the life of the community.

How Stock is Sold.

The method of procedure in marketing stock co-operatively is quite simple. The manager takes charge of each consignment as it is delivered at the stock yard and gives a detailed receipt to the producer which specifies the number and kind of animals, their weight and the distinctive marks assigned to them. The stock is then marked, loaded and shipped to market, the manager or some one acting for him, accompanying the shipment. When the car reaches the stock yards it is unloaded, the animals are fed, watered and turned over to a commission firm to be graded and sold. The manager makes no payment until the returns for the

carload are ready then compiles what his stock and the expense and sale of a cheque for the

A Few Pr

To have the farrowed it is she will be usually the least and proper feed and sufficient to make a satisfactory is likely to be and the pigs must that is very strong, thrifty barnyard and ideal system. pen may be ere A few days pre her into a farrow customed to he ferable to ceme or cut straw. more danger of Eight or ten-in eight inches fro protection. If there would be them.

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EDITOR "THE I Having kept a of hogs, I thought readers to know v present price of fo ber last a sow ha feed this sow con was on the 23rd by the 10 hogs u On that date they is a list of feed st

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The 10 pigs w I received \$20.10 of feed deducted f

For the feed, v pigs left and \$215. warm feed all wint three months old, about a month b were fed three tim Middlesex Co., C

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I had a cow with udder, and the ve for it. I decided and although the lu oil. I simply oiled times and the cur to cure poll-evil o softens the tissues should state, howev oil was applied be glad to hear of a remedy with success Brant Co., Ontar

carload are received from the commission firm. He then compiles for each member a statement showing what his stock weighed and was sold for on the market and the expenses incurred in connection with the shipment and sale of it. Along with this statement he mails a cheque for the balance due the producer.

A Few Precautions That May Save Young Pigs.

To have the young pigs active and healthy when farrowed it is necessary to care for the sow so that she will be healthy at time of farrowing. There is usually the least trouble if the sow has plenty of exercise and proper feed during the gestation period. Roots and sufficient grain to keep her in thrifty condition make a satisfactory ration. If the sow is over fat there is likely to be more or less trouble at farrowing time, and the pigs may be weak. On the other hand a sow that is very thin cannot be expected to give birth to strong, thrifty pigs. Giving the sow the run of the barnyard and feeding her reasonably well is about the ideal system. If the yard is open a small, inexpensive pen may be erected in one corner to afford her shelter. A few days previous to farrowing it is advisable to get her into a farrowing pen so that she will become accustomed to her new quarters. A plank floor is preferable to cement, and it should be covered with chaff or cut straw. If too much bedding is used there is more danger of the sow burying or tramping the pigs. Eight or ten-inch planks placed around the pen about eight inches from the floor give the pigs considerable protection. If all pens were provided with a guard rail there would be fewer pigs killed by the sow lying on them.

It is advisable to be on hand at farrowing time. Some of the pigs may wander away from the sow and become chilled or they may smother. Loss from these sources is preventable. A pig that is chilled and appears lifeless may be revived by giving it a hot bath and then rubbing it thoroughly dry. Before leaving the pen see that each pig is sucking. Some stockmen have hot bricks in the bottom of a box or basket and place the pigs in the receptacle as they arrive. This keeps them warm and the sow is not bothered with them until she finishes farrowing. By taking this extra trouble many pigs may frequently be saved, especially in chilly weather. There is not the same need of this precaution during the summer. However, it is worth the effort even if only one or two pigs are saved. It is good practice to examine the mouths of the pigs, and if sharp teeth are present to break them off. If the sharp teeth are left there is danger of the pigs injuring themselves and also the sow's udder.

Profits From Pigs.

EDITOR "THE FARMER'S ADVOCATE":
Having kept an account of feed consumed by a bunch of hogs, I thought it might be of some interest to your readers to know what profit can be made on pigs at the present price of feed and hogs. On the 11th of September last a sow had 10 pigs. I kept an account of the feed this sow consumed until she had pigs again, which was on the 23rd of March, 1918, and of the feed eaten by the 10 hogs until they were shipped April 4, 1918. On that date they weighed out at 2,010 lbs. Following is a list of feed stuffs used and price of same:

2,400 lbs. shorts at \$2.30 per cwt.....	\$55.20
1,020 lbs. shorts at \$2.35 per cwt.....	23.97
400 lbs. feed flour at \$3.70 per cwt.....	14.80
600 lbs. corn feed at \$3.50 per cwt.....	21.00
2,530 lbs. oats at 60 cents per bushel.....	44.64
986 lbs. barley at \$1.25 per bushel.....	25.67
Grinding 32 bags of chop.....	2.95
	<hr/>
	\$188.23

The 10 pigs weighed out at 2,010 lbs., and for them I received \$20.10 per cwt., bringing \$404.01. The cost of feed deducted from this leaves a profit of \$215.78.

For the feed, valued at \$188.23, I have a sow and 11 pigs left and \$215.78 in cash. The litter referred to got warm feed all winter, three times a day, until they were three months old, then they were fed twice a day until about a month before they were finished when they were fed three times a day again.

Middlesex Co., Ontario DAN MULLINS.

Homemade Cures for Live-stock Troubles.

For the benefit of those making enquiry in regard to different remedies, I wish to mention several curative agents which I have found effective.

One remedy for diarrhoea which I have never known to fail is as follows: Steep two or three yellow dock roots, and, if the diseased animal can eat, mix the liquid with the feed; if not, give as a drench.

I had a cow with a lump in her teat, up close to her udder, and the veterinarian said he could do nothing for it. I decided to do some experimenting with it, and although the lump was very hard all I used was hen oil. I simply oiled the outside of the teat five or six times and the cure was perfect. I also used hen oil to cure poll-evil on one of my horses. The hen oil softens the tissues and thereby effects the cure. I should state, however, that in the case of poll-evil the oil was applied before any pus formed. I should be glad to hear of anyone using the above-mentioned remedy with success.

Brant Co., Ontario. FRANK ROBINSON.

The Superiority of the Pure-bred.

The question of pure-bred versus grade is viewed in the following manner by Raymond Pearl, of the Maine Agricultural Experiment Station, who is a recognized authority on the laws of breeding:

The necessary, intrinsic expense involved in breeding and rearing a pure-bred animal is no more than that involved in breeding and rearing a grade or scrub. The end product is worth a great deal more in the former case than in the latter, on the average. These considerations being true, and I think they cannot be successfully controverted, it would seem to be the most obvious of sound business principles to keep and breed only pure-bred, registered live stock. Yet the proportionate number of farm animals which are pure-bred must be very small indeed.

The chief reason for the relatively small proportion of pure-bred animals is fairly evident. Most farmers keep animals solely for their immediately productive or useful qualities. They are in no true sense breeders, and make no attempt to realize the additional profits which would accrue from combining a breeding business, on however small a scale, with a producing business. The farmer of the sort mentioned is prone to compare in his mind the productive qualities of the best of his grades with the poorest pure-breds he has ever seen or knows about, to the detriment of pure-bred animals in general. He is then apt to take the general position that it would not pay to buy pure-bred animals for a foundation stock to breed from.

The argument on which this extremely prevalent point of view is based is essentially a fallacious one, because it overlooks certain very pertinent considerations. In the first place, while it is true that the best grades are much better than the poorest pure-breds in productive qualities, and indeed may in some cases rank with the best, it is also true that the general average productivity of pure-bred animals is higher than that of non pure-breds.

In the second place there can be no comparison between pure-bred animals and none pure-bred animals, considered as groups or on the average, in regard to extent to which they transmit good qualities to their offspring. The pure-bred animal is on the average,

THE FARM.

The Great Defensive.

EDITOR "THE FARMER'S ADVOCATE":

We are living at the greatest moment of world history. Heroism and self-sacrifice, are no longer rare occurrences; they are traits of everyday life of our Boys at the front. Their superhuman accomplishments are the result of clear thinking and determined intelligent endeavor in a just cause, backed by implements of warfare "up to the minute" in perfection.

The word from military headquarters is "back us with food." From Government bureaux comes the same call. Over a quarter of a billion people must be fed, and America must assume a large share of the task. The last opportunity to increase Canadian wheat production this year is at hand. Spring wheat production can yet be increased. Possibly it is too late to effect much increase in spring-wheat acreage, but measures can yet be taken to increase the yield of wheat now being prepared for planting. The story of the "means to the end" is old, but age has more firmly established the truth. It is told in few words—choose a good variety (Marquis is one of the leaders); sift and fan out shrivelled, broken and very small seed; prepare a good mellow seedbed; manure and fertilize sufficiently. These are the big points!

This is what the grower of the wheat, illustrated herewith, did last year. He grew 325 bushels on 8 acres, —a little over 40 bushels per acre. This excellent field of spring wheat was grown in 1917 by Arch. Greer, Dufferin Co., Ontario. Oats in 1916 followed potatoes grown on this field in 1915. The potatoes received 20 loads of manure per acre. In 1917 the field was seeded to wheat. The wheat was drilled on May 11, 1917, with 200 lbs. of fertilizer carrying 2 per cent. ammonia, 9 per cent. phosphoric acid, and 1 per cent. potash.

If Ontario produced such a yield on her spring wheat area this summer, she would have close to 6½ million bushels of spring wheat to add to her twenty million winter wheat production for next year's food supply. Enough spring wheat to feed 1,600,000 men for a year! Twenty acres of wheat on a hundred-acre farm—yielding



A Field of Wheat Grown in Dufferin County in 1917.

narrow-bred or line-bred to a much greater extent than the grade or scrub. This means that the likelihood of any particular individual transmitting good qualities which it may possess to its progeny is by so much enhanced.

In the third place, the breeder of pure-bred animals is not depending, as is the breeder of grades, solely on their productive qualities as a source of income. If he is handling pure-breds the offspring are a standard commodity to which a more or less definite rating as to value attaches automatically. If he is breeding scrubs or grades the offspring are apt to be more or less troublesome and unprofitable by-products of his manufacturing business. The dairyman, for example, who keeps only grade cows has no market whatever for his bull calves except as meat. When sold for this purpose he is sure to get small returns for them. On the other hand, the dairyman whose herd is made up of pure-bred animals at once has opened out before him the possibility of an additional and better market for his bull calves. He can sell them for breeding purposes and in this way realize much more than meat prices for them.

Finally, the breeder of pure-bred, registered live stock at once identifies himself with a large and powerful organization, namely, that of the registered live-stock interests of the country.

Hoarding hides is now the crime laid against the large meat packers of the United States. The general public may not know the reason for it, but the fact remains that the price of hides has touched a very low level lately, while prices for boots, harness, and all leather goods have soared and are still soaring. Hoarding hides, or whatever has brought about these conditions, may be profitable to some but not to the producer and the consumer.

40 bushels per acre—would produce food enough for 200 men for a year! Such a crop would be worth good money at present prices; such a production would be real service to the Empire and to the Great Cause.

HENRY G. BELL.

Hide and Leather Prices.

EDITOR "THE FARMER'S ADVOCATE":

To-day happened to be too stormy to do more than the smallest possible amount of work outside or about the stables. I sat me down beside a brisk coal fire to meditate upon spring requirements. I thought about harness. I needed a new set of team lines. The local harness dealer asked, a few days ago, \$7.50 for a set of lines 1 inch by 21 feet in length; mail order catalogue quoted lower and higher prices. Lines of this description would weigh in the neighborhood of five pounds.

The farmer receives for his beef hides, perhaps twelve cents a pound. If you want to do some mathematical calculating, here is a chance to begin. What is the spread between the raw hide and the finished leather article? In the Farmer's Advocate the other week leather was being offered at prices ranging from 75 to 90 cents a pound, accompanied by the cheerful advice that prices were going higher on account of the war. We are not aware that an advance in prices being offered for hides has preceded such an announcement. We suppose the farmer may receive a cent or so more for his hides, while the price of tanned leather is put up five or ten cents. Where does the difference go? But, anyway, that part of it is not concerning me very much just now. What I cannot account for by any means is as to the great spread between the price the farmer receives for his hides and the price which users of leather have to pay tanners. We are not aware that hides shrink a half in the tanning

process. If one were to judge by the spread in price the shrinkage would need to be several hundred per cent. The hide which leaves the farm-raised animal is an article of commerce which is indispensable to ultimate farm use. Leather is necessary for harness, collars, boots and shoes, etc., or has been considered so up to the present time. That being so, the road which that hide travels from the farm to the tannery and back to the farm ought to be under the observation and control of the farmer or his agents all the time. As it is, at the present time he appears to be paying for some one's abnormal profits.

We have to pay for the privilege of buying a set of harness, or any part of a set. The local dealer or maker is careful to charge a good margin of profit, especially on small parts. Without in any way relieving him of his responsibility in high prices for leather goods, we are bound to admit that the original and greater fault lies somewhere in the road the leather travels before it reaches his hands.

Go into the local store and buy a pair of heavy work boots and you will likely pay from six to eight dollars. I recently bought a pair of what promised to be good boots. The price was six dollars. To-day, out of curiosity, I weighed those boots and find they tip the scales at four pounds, counting the cotton shoelaces. Estimating the weight of the laces, eyelets, hooks, sole pegs, filler, etc., at one pound, and I suppose I have three pounds of leather, although of that I am not certain. Here is another chance for a mathematical wizard or a truth prevaricator to justify the spread in price between my recently sold beef hide and my new pair of boots. Allow every man in the process of manufacture and sale a fair profit, and tell us what we ought to do with the balance. Should it go to the man who sold the hide or the one who bought the boots?

This just reminds me that there is a good stiff duty

of thirty per cent., plus seven and a half per cent. war tax on boots, shoes and harness coming from the United States, so that we are prevented from enjoying lower prices on these, in so far as Government regulation has gone.

Ever since the war began there has been a steadily increasing clamor for increased production. I do not doubt the necessity for a minute. In fact, I believe it is highly necessary. But it is just about time for the clamorers to recognize the fact that many hindrances

to greater production are economic hindrances. Certainly the farmer can always be learning better ways of farming, but I believe he has really less to learn along that line right at the present time, than have some of his critics and advisers a need to learn the disastrous effect of economic hindrances. Keep the spread on all articles used in production down to a fair margin, and one of the greatest bars to successful and greater production will have been removed.

Sask.

"FARMER".



Oxen Used to Increase Acreage in Britain.

Canada's Young Farmers and Future Leaders.

The Boy and His Father.

The wise father will discuss the problem with his sons, and will not be adverse to considering suggestions made by his boys. Of course it is not advisable for a boy to be too dictatorial to his elders, but many young men have ideas, and excellent ones too, which if put into practice on the home farm would improve conditions materially. Because of a father's neglect to take his boys into his confidence many a young man has left the old home and sought his life work elsewhere. It was not the nature of the work so much as the feeling that he was not being given an opportunity to exercise his ability to the fullest extent that led him to make the decision. Many men who have jobs in towns and cities prefer the farm life and are planning to return to the land some day, when they have sufficient capital. Fathers should remember that the boys must be given responsibility and a chance to make good if they would retain them on the farm. We are reminded of a father who would allow his twenty-year-old son to take a load of grain to the mill to be ground, but if a load was to be sold, or if hogs or cattle were to be marketed, father always went along and took the money, while the son drove the team but did not have a chance of holding the cash from the sale even for the shortest space of time. While there are fathers of this disposition, we believe their number to be small. There are more who remember that they were boys once and try to give their sons every opportunity. However, a boy must show that he is capable of shouldering a responsibility before it is proffered him. It is the boy

and not the father who is oftentimes to blame for the boy being kept at the small jobs and chores; they may be all he is capable of handling. If a boy or young man can prove that his methods are better than those being practiced or that he can do certain work as well as or better than his father or others are doing it, his opportunity for displaying his ability will not be long in coming. "Show me" is what many fathers are wanting of their sons and so soon as that is done they are only too willing to divide the responsibility of running the farm or business. Are you proving that you are capable or are you grumbling because father does not give you more privileges?

We recently heard of a young man who wanted a horse and rig of his own. After some hesitancy the wish was granted and the recipient was happy. For a time all went well and the work was up to normal. However, as months passed, chores were neglected, or hurriedly done, in order that more time might be spent on the road or in the nearby town. Then late hours began to make the boy less efficient and regular work was slighted. Was it any wonder the father lost confidence in his son's ability to take responsibility? The boy had been given a chance but failed to make good, and we regret that there are many in his class. Boys, think the matter over and see if you are not somewhat to blame for existing conditions at home.

There are different ways of getting your wishes granted. A boy in his early teens took great interest in the work on the place. He would return from school

and faithfully perform the work of doing chores, etc. His principal aim appeared to be to do things right, no matter if his recreation hour was encroached upon. He had certain ideas regarding the feeding of cows and pigs which did not altogether comply with those of his father. He did not get cross but continued doing his work well, and as time went on he gradually proved to his father that some at least of the things he was advocating were to be preferred to the old methods.

The father never could see any advantage in keeping individual cow records. It was a waste of time in his estimation. However, the boy procured a pair of scales and commenced weighing and marking down the weights of the milk from the cows he was milking. The father watched this record sheet closely and, while he was inclined to ridicule the idea at first, it was not long before he was slyly slipping a pail on the scales. Now, records are kept of the entire herd and there is considerable competition between father and son, as to which gets the most from the cows they milk. The boy got what he wanted and won his father to his way of thinking, but it was necessary to prove he was right first. There are many ways in which a boy might introduce new and approved methods on the old farm. Take an interest in the work and do it as well as you can your reward will come sooner or later. It is a good plan for father and son to be pals; to talk over the work on hand, or to take a trip occasionally. If father and son would work together and plan together there would be fewer boys leaving the farms of Old Ontario.

Automobiles, Farm Machinery and Farm Motors.

War Time Importance of the Tractor.

EDITOR "THE FARMER'S ADVOCATE":

The tractor industry has the largest graveyard of monumental failures behind it of any industry that has been established in modern times, but out of it has come success.

The tractor is distinctly a better-formed machine. It is so evidenced by the fact that it is used by a large number of farmers who are not machinery cranks but who are wide-awake to the advantages of adopting methods that will enable them to produce better crops and more of them.

I am not here to promote any particular tractor. Tractors in general is to be the centre of thought, and what tractors will do to win the war.

I have heard a lot and read some in the way of speculation on what the ultimate tractor is to be. Let us pay no attention to that. We have no time, neither has the farmer. What the world needs is bread and they need it now. Let the ultimate tractor take care of things at the ultimate time.

The man that farms during the year 1918 must pick for his use from the tractors that are now available and there are a lot of them and they will do good work if properly handled and all the farmer has to do is to make his selection wisely, purchase through the local dealer that is in a position to supply him with a machine made by an established and reliable company and who can and will give him necessary service and instructions. And here I want to press the idea that it is the farmer who stays at home and farms that must run the tractor and not the young fellow who has gone to war.

For he is the fellow who is really required by govern-

ment request to meet the world's food requirements, to double or more than double his output, and in doing so he has got to contend with the shortage of farm labor. His inability to drive and handle more than a limited number of horses makes it necessary for him to turn to mechanical means in performing his work. The tractor is the most important machine, because one man can handle a greater amount of power and accomplish more than double the amount of work in the same length of time, do it with less expense and do it on a character of fuel that will leave the feed necessary to maintain horses available for feeding meat-producing animals and thereby increase the quantity of human food. Neither man nor beast can exist on the fuel the tractor uses and there are not enough horses in the country to meet the power requirements.

A man with a medium size tractor and a double row motor cultivator can raise and cultivate more than twice as much corn as the same man could do with horses, and the same equipment will enable the same man to raise three to four times as much small grain.

I claim the patriotic farmer is the one who sees the advantage of adopting the tractor and utilizing it to meet the country's needs through its crisis and at the same time gets the profits and advantages of early adoption. The farmer who waits until the time arrives when he is forced to buy a tractor is not only losing sight of his own best interests and greatest opportunities, but is not heeding his country's call for greater food production.

Doing work at the right time is of greatest importance to the successful farmer.

With the tractor he can not only plow deeper and cheaper but he can wait until the conditions are most favorable and then rush the work through faster be-

cause he has greater capacity. The average farmer without a tractor is like a factory without sufficient power to run it—it is under powered.

Power is the great requirement to the accomplishment of larger things. The farmer with a good powerful tractor can keep ahead of the seasons in the matter of seeding; he can do all his heavy work with a tractor, reducing the horses required to a minimum.

I do not wish to be misunderstood as advocating the horseless farm, but there are many kinds of farm work for which the tractor is proving to be practical and economical; plowing, disking, harrowing, seeding, pulling harvesting and haying machinery; then comes the belt power, running a thresher, a silo filler, a corn sheller, corn shredder, pulling hedge and trees, moving buildings, grading roads and making roadways, pulling ditching machinery, filling ditches, raising buildings, sawing wood, feed grinding and general hauling. There are many other kinds of work, of course, but the advantages of the tractor are largely due to the fact the tractor does not get tired, works better in hot weather. The operator is enthusiastic and eager to get his work performed, therefore he puts in greater hours in the field with the tractor than he would with horses, because he does not have to do the same amount of work in caring for the tractor as he does caring for horses and then if he wants to, he can double the capacity of the tractor by putting on headlights and another man and running it at night during the rush season. This is equal to practically quadrupling the amount of power on the farm, because the horses could not work continuously night and day.

With the price of wheat fixed at \$2.21 a bushel and other farm products soaring at an equally high price, the farmer's ability to buy has been very materially increased. At the present steadily advancing rate of

labor cost, the in fact, they be were it not of each other

Kerosene fuel. The farm to burn keros only that, but cause gasoline be restricted in that are guar economically

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My advice take it carefull ing or rattling to stop and de serious damag attention to th and remedy th knows that if encounter seri stand these un of the machine understand his bolts or make bearing, he wo

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To car any distance equipped with t become indispen can always step farmer must dep that you have be or over a large on the road, bu will find it neces proper instrumen to suffer inconv Every new aut price. It consists useful. There is a punch, a tire repair outfit, bu plug wrench, valv oil can, oil funn

labor cost, the prices of tractors are bound to advance, in fact, they should be sold higher right now and would be were it not for the fact that manufacturers are afraid of each other's competition.

Kerosene is the most logical and most economical fuel. The farmer who buys a tractor that is guaranteed to burn kerosene is showing a spirit of patriotism not only that, but he is showing a streak of wisdom, because gasoline is liable to be needed for the war and may be restricted in its use. There are tractors on the market that are guaranteed to handle kerosene successfully, economically and satisfactorily.

When the farmer makes a purchase of a tractor he should immediately receive the manufacturer's instruction book and study it carefully. He should avail himself of the opportunity of attending the tractor schools. Then when his tractor arrives at the railway station, during the time it is being delivered to him and run to his farm, it should be carefully handled, watched and studied; no bearings should be allowed to wear; careful examination should be made at short periods to see that everything is running properly; after it is delivered to the farmer, he should continue to familiarize himself with every piece and part, both design of construction and mode of operation. Tractors will stand an overload of 20 to 25 per cent. for a few minutes, covering such conditions as plowing through a hard spot, disking over a hill, or pulling a tree or stump. It should not be expected to work at the utmost capacity continuously.

My advice to the beginner in running a tractor is to take it carefully; any unusual sound, knocking, pounding or rattling should be the signal for the wise operator to stop and determine what is the matter before causing serious damage to his tractor. The wise operator pays attention to these signals and if he is unable to locate and remedy the difficulty, he calls for assistance for he knows that if he should persist indefinitely he will encounter serious trouble. If the operator could understand these unusual noises to be the scolding and cussing of the machine because it had an operator who did not understand his business or was neglecting to tighten up bolts or make adjustments or put some oil in a certain bearing, he would be more prompt to act.

Tractors should not be forced to work a certain way because that work has heretofore been accomplished by horses in such a manner. Do work with a tractor the tractor way. Use care in laying out the field that is to be plowed, for instance. Leave a margin of 30 to 40 feet around the edge for turning space. After the center is plowed out, then plow around the field and plow out this margin that was left for turning space. Study the science of laying out the field and the art of plowing it with a tractor in a booklet furnished by the company from which you purchase the tractor.

The operation of a tractor is very simple and easy to understand; it is simply a matter of study and practice. Ingersoll became a great orator by careful study and practice; that is true of any undertaking in life. The man who gives study and practice to attain an undertaking is the man who makes the greatest success. The tractor is an agricultural implement and it performs efficiently just in proportion to the amount of efficient handling it receives from the operator. The ignition apparatus is perhaps the most delicate part of a tractor's construction. My advice to a tractor owner is first to carefully examine the ignition apparatus; do it intelligently, it only takes a few seconds. Don't go to making adjustments of carburetor, governor, air tension valve and various other things before you are sure you have located the trouble. Any farmer with ordinary intelligence can take the direction book and in thirty minutes familiarize himself with the essential elements of a magneto. There is nothing hard or complicated to understand about a modern tractor.

They have a slogan down in some county in Missouri which goes something like this: "Make an effort to get acquainted with your neighbor—you might like him." I think this applies to the tractor—the farmer should make an effort to get acquainted with it—he might like it.

The country is calling for more food production. The prices are ranging high. The farmer is being offered through the tractor the means of more than doubling his output and the boys are going to the war. The boys are compelled to take a course of strenuous training for the job they have in hand. Is it asking too much, under the circumstances, that the farmer study the advantages of the tractor and when he adopts it, that he give a little time and attention to the matter of learning how to operate it in the most successful and efficient manner, being assured that if he does he will receive a handsome reward in the form of profits.

G. E. BARTHOLOMEW.

Tools For The Road.

It is perfect folly to attempt to operate a motor car any distance from your home if you are not properly equipped with those tools and accessories which may become indispensable at any moment. City people can always step to a telephone and call a garage, but the farmer must depend upon himself. It is all right to say that you have been motoring for a certain length of time or over a large mileage without having any difficulty on the road, but the time is bound to come when you will find it necessary to open up your tool-kit. If the proper instrument is not ready to hand you are going to suffer inconvenience.

Every new automobile carries a kit with the purchase price. It consists of those things which are most generally useful. There is always a small set of nut wrenches and a punch, a tire pump, an auto jack and handle, tire repair outfit, hub cap wrench, starting crank, spark plug wrench, valve cage wrench, demountable rim wrench, oil can, oil funnel, oil gun, extra spark plug, trouble

lamp cord assembly, and instruction books. This collection will encompass nearly all your requirements but there are other important ones which they cannot handle. We would suggest that you also carry some socket wrenches. Files are likewise very valuable for a number of different uses, and do not forget a cotter pin puller. Nothing is more exasperating than to have to devise some awkward way in which to remove a cotter pin. You will find a hundred or more opportunities for the use of a brace and screwdriver bit. A valve lifter frequently comes in handy and a blow-torch is not only valuable for mechanical purposes but useful in drying out wood for a fire on a wet night or after a rain storm and for heating water, tea, milk, etc. The purposes to which an offset screw driver and a rivet hole punch may be put do not require a great deal of emphasis. Perhaps you will fail to find it necessary to carry a spring leaf spreader but it is just as well to have one along as it does not take up much room. A hydrometer syringe is not an essential on a short trip because if your battery is properly looked after at regular intervals the specific gravity should not drop to any danger point in a short time. If you are going on a long tour, however, the hydrometer will relieve you of a lot of worry. Wheel pullers are carried by some motorists but we cannot see their value. In other words we do not believe that the trouble of packing them around is ever repaid. We would recommend a goodly supply of cotter pins, washers and nuts and some pieces of sand and emery paper. They will prove advantageous and almost indispensable in many instances. Do not forget some grease, clean oil, and also distilled water for the battery. A small ball of string and some wire are good things to have about. With a short length of soft wire you can often overcome a difficulty that nothing else will alleviate, and electric tape is valuable on many occasions.

Very few motorists ever go out in the winter without at least a pair of chains for the rear wheels. Their idea is to prevent skidding and to make travel as safe as possible. You should not forget, however, that certain country roads contain mud holes that remain wet and sloppy throughout most of the summer. If you should slip into one of these, chains are about the best life-savers you can have. There are a number of devices that will take their place, however, should you get into a boggy spot and find yourself without them. Pieces of rope tied around the tires, or an old sweater coat generally provide the wheel with enough gripping power to pull it up on to hard land. We always advise automobile people to carry a small hatchet. With it boughs and pieces of wood can be cut and put under the tires and across soft places in the highway. A hatchet is also indispensable for making a fire. Most good accessory houses now carry a short handled spade that fits very neatly into your tool box under the front seat. It is bent only slightly and consequently requires a very small amount of space. You will find it invaluable in digging your rear wheels out of difficulty. Another contrivance that is practically indispensable is a spot light, not one of those expensive windshield rigs but just a little hand flash light. If you have difficulty with your motor at night it is madness to strike matches and it also takes a certain amount of time to have your trouble light cord assembled. With a little flash you can quickly make any preliminary investigation that may be necessary. These small electric lights are also handy in locating signs, notices, etc., along the road. This is a time in the world's history when expenses should be kept down but we do not think that you will ever regret the few dollars spent on extra tool kit equipment for they will repay themselves many times over if you happen to be one of those individuals who occasionally have small troubles while touring.

AUTO.

THE DAIRY.

Eastern Dairy School Examination Results.

In order to obtain a pass and thus qualify for a diploma by successfully managing a creamery or cheese factory for the six months following, students are required to obtain a minimum of 33% on each subject with a total of 45% on the whole. Those obtaining a total of over 60% and under 75% are granted 2nd Class and those obtaining 75% and over 1st Class.

Ranked in order of merit the successful students are as follows:

1st Class.—W. O. Gardiner, Kemptville; C. Chambers, Hoards; H. Derby, Etyville; H. Green, Queensboro; E. Trueax, Bonville; L. A. Lindsay, Osgoode Station.

2nd Class.—A. Sauve, St. Raphael West; F. Lesarge, Arnprior; D. A. Harris, Russell; L. E. Davis, Bellamys; A. McConnell, Merrickville; J. C. Davis, Bellamys; F. Wright, Westport; Thos. M. Johnston, Campbellford; G. D. Dier, Westport.

Pass.—C. Buro, Mille Roches; J. Cross, Harold; Fred Schinnik, Bancroft.

Noted Ayrshire Cow Died Recently.

The Ayrshire breed has lost one of its greatest representatives in the death of Jean Armour 3rd, a daughter of that famous cow, Jean Armour, whose death was reported some months ago. Jean Armour 3rd early showed signs of having inherited her mother's ability to produce the lacteic fluid. On official test, as a two-year-old, she gave 14,987 lbs. of milk and 599.91 lbs. of fat; as a senior three-year-old she made a world's record of 21,938 lbs. of milk and 859.35 lbs. of fat.

Ayrshire breeders were looking forward to this particular cow making still greater records and possibly holding the world's record for all breeds.

O. A. C. Dairy School Examinations.

There were two new features in the Dairy School work for 1918,—the Farm Dairy Course was one of four weeks, instead of twelve weeks as formerly, and there were no examinations at the close of the term for Farm Dairy Students; the second new feature was that of prizes given for judging dairy cattle, for the manufacture of butter and cheese, and bottling milk for city trade; and prizes for proficiency standing in the factory class.

There was no course this year for Dairy Instructors its place being taken by the Dairy Conference.

The registration by Courses was as follows: Factory Course, 24, of whom 21 wrote on the final examinations; Farm Dairy, 8; Cow-testing, 26; Ice-Cream and Soft Cheese, 3. Total, 61.

The Proficiency List for Factory Class is as follows:

(Maximum 1,200.)

1. Muma, 996; 2. Stothers, 988; 3. Richards, 946; 4. Smith, 935; 5. Kerslake, 885; 6. Sinclair, 876; 7. Fairweather, 873; 8. Armstrong, 856; 9. Kauffman, 842; 10. Coombs, 802; 11. Helmuth, 787; 12. Lown, 784; 13. Scott, 759; 14. Roth, 745; 15. Gilbert, 696; 16. Pearson, 654; 17. Quirrie, 641; 18. Brown, 635; 19. Coon, 629; 20. Mott, 591; 21. Hicknell, 529*.

* Will be required to pass supplemental examinations in Miscellaneous and Bacteriology.

The Proficiency List for Cow-testing is as follows:

(Maximum 200.)

1. G. E. Raithby, 184; 2. A. B. Browne, 181; 3. M. G. Gibson, 178; 4. T. C. Richards, 167; 5. E. G. Kerslake, 162; 6. S. A. Stewart, 162; 7. J. C. Barrigar, 162; 8. W. Craddock, 156; 9. W. Matthews, 152; 10. A. Gray, 149; 11. H. G. Jones, 147; 12. S. G. Collier, 147; 13. L. Holliday, 147; 14. A. E. Gilbert, 145; 15. J. Finegan, 143; 16. L. Hemingway, 142; 17. R. Peel, 141; 18. H. W. Lennox, 141; 19. R. Davis, 134; 20. W. Penny, 131; 21. G. G. Holmes, 127; 22. C. J. Coon, 126; 23. J. H. Adams, 123; 24. K. Slacer, 122; 25. W. E. Mott, 121; 26. J. H. Marshall, 115.

The following is list of prize-winners in judging: Ayrshire Cattle.—1, E. Armstrong, Tavistock; 2, E. G. Kerslake, Hampton; 3, P. Pearson, Belton.

Holsteins.—1, W. Scott, Wiarton; 2, T. J. Brown, Mimico; 3, W. J. Fairweather, Guelph.

Jerseys.—1, A. B. Browne, Milton; 2, E. Raithby, Auburn; 3, B. Quirrie, Delaware.

Making Butter.—1, C. Lown, Port Dover; 2, A. H. Coombs, Simcoe; 3, W. Scott, Wiarton.

Making Cheese.—1, C. Sinclair, Bright; 2, M. Muma, and E. E. Armstrong; 3, P. Pearson, Belton.

Bottling Milk.—1, W. Roth, New Hamburg; 2, W. Smith, Kitchener; 3, I. F. Stothers, Lucknow.

Proficiency.—1, M. Muma; 2, I. E. Stothers; 3, T. C. Richards, Glencairn.

Why Not Oleo?

The following open letter was recently addressed to Sir Geo. Foster, Hon. T. A. Crerar, and also to some of our leading agricultural papers:

We note that the Government is concerned, and rightly so, at the present time, with the trade balance against us in the U. S. A. and the high rate of exchange. If our daily newspapers are correct, it is proposed to adjust, or at least partially adjust, this trade balance, by prohibiting the importation of automobiles, boots and shoes, patent medicines, rubber tires, etc. Might we suggest that you add to this list Oleomargarine? If our town people spent their money in buying real Canadian butter instead of sending across the lines for an imitation it would surely help this trade balance. Every pound of Oleo bought from our good neighbors to the south means that money must be sent there to pay for this. Even if that pound of Oleo is manufactured in Canada money must be sent to the U. S. A. to buy a large portion of the ingredients that go to make up the pound of Oleo. If our citizens would buy real Canadian butter this money would be sent to the rural parts of Canada. This looks like good patriotic business.

Might I ask permission to publish your reply in the same agricultural papers in which this letter is published?

Thanking you for this courtesy,

I am,
Yours respectfully,
(Signed) MACK ROBERTSON,
Pres. Belleville Creamery Limited.

The Dairy Produce Commission Starts Work.

The Initial meeting of the Dairy Produce Commission was held recently at the offices of the old Cheese Commission, which organization the new Commission is to replace. Both the personnel and the scope of the Commission for 1918 are as follows:

The Chair of the Allied Provisions Export Commission, New York, or his Deputy, A. J. Mills; Jas. Alexander of Montreal; J. A. Ruddick, Dairy Commissioner, Ottawa; Jas. W. Robertson, Representing the Canada Food Board; Jas. Donaldson, President, Dairymen's Association of Western Ontario, Atwood, Ont., and A. Gerin, of Coaticook, Que., representing the producers.

In 1917 the Cheese Commission represented the

Imperial Board of Trade. Under the new arrangement the Commission represents the British Ministry of Food through the Allied Provisions Export Commission, located in New York. The Ministry of Food is prepared, through these channels, to purchase the exportable surplus of Canadian cheese, butter and condensed milk, of the crop of 1918. By an arrangement with the United

States Food Administrator, it will be possible to deal with these articles in such a manner as to insure some parity of prices.

The price of cheese for 1918 was the subject of discussion at the meeting. Mr. Owen Smith, Chairman of the Allied Provisions Export Commission and Mr. Mills of the same Commission, who were present, heard what the

producers' representatives and other members of the Commission had to say on that point and have cabled these views to the Ministry of Food in order to secure the necessary authority to make a definite arrangement to purchase all the cheese for 1918. It is expected that an understanding will be reached in the course of a few days, when further announcement will be made.

Representatives of the Dairy Interests Meet in Conference.

Representatives of the various branches of dairying met at Guelph on April 4 and 5 to consider the advisability of forming a Provincial Dairy Association and to discuss matters of importance to all interested in this great industry. The conference was called by Prof. Dean, of the Ontario Agricultural College. At the present time dairying is passing through a critical stage and the need of a Provincial Organization to champion the cause of dairying has long been felt by those interested. To Prof. Dean must be given the credit of taking the initial step. While the attendance was not large several problems were discussed, and the representatives of the various branches of dairying had an opportunity to become better acquainted. In the past there has not been enough unity of the branches for the good of the industry. It has been a case of a family divided against itself, which lessened the strength when an enemy was at the door.

The following recommendation was drafted by a committee and adopted by the meeting: "That a Provincial Dairy Council be formed, composed of two members from each existing dairy association or any dairy association which may be formed, and departmental representatives to be named by the Minister of Agriculture for the purpose of making definite recommendation for creating a permanent Provincial Dairy Council and request that the Minister of Agriculture take action in accordance with the above at the earliest date possible."

The first session of the Conference was devoted largely to milk and cream producers' problems. E. H. Stonehouse, President of the Ontario Milk and Cream Producers' Association, outlined conditions as they existed for the man behind the cow, and pointed out that they were far from satisfactory. At the present wholesale price of milk there is not sufficient revenue from the herds to make the business attractive. The cost of production had been investigated the past year and the results showed that dairymen would have been justified in asking even a higher price than they did for this essential food product. Mr. Stonehouse claimed that he and many others would have been better off financially had they disposed of their herds and marketed their surplus grain. A one cent raise in price of milk is usually resented by consumers who freely spend their money for substances of less actual food value. With the price of concentrates and labor as high as at present there was believed to be little relief in sight for dairymen.

G. A. Putnam, Director of Dairy Instruction, delivered a brief address in which he criticized the condition of the retail milk trade in small towns and villages. It was believed that in many instances the milk was not produced nor handled in the most approved manner. In discussing the matter of increased production the speaker believed that much could be done by more careful breeding, feeding and weeding of the herds.

A representative of the Acme Dairy of Toronto believed that farmers had the whip hand in setting the price of milk. The Farmer's Dairy representative of Toronto, backed up the farmers' position by claiming that the producer was in the best position to know what milk cost at the dairy, and unless there was a profit the producer could not be expected to stay in the business. A standardization of milk prices was believed to be in the interests of the industry as a whole.

Clean Milk is a Safe Food.

The milk problem in towns and cities was the subject of an address delivered by Dr. C. J. Hastings, of Toronto. It was claimed that investigations had shown milk to be the cause of high infant mortality. It is a carrier of a number of diseases, should it once come in contact with them, consequently the milk supply for all, children in particular, should be carefully guarded. Dr. Hastings stated "that market milk uninspected and unprotected was responsible for more deaths than any other one article of diet." The speaker contended that the man more than the barn was responsible for the high bacterial content of milk, and, in his opinion, careful sterilization of milk utensils and chilling the milk immediately after it was drawn would go a long way towards the production of clean milk. Certified milk, produced under special conditions regarding cleanliness of stables, utensils, animals, milkers and the dairy was the best on the market, but the cost of production made the price to the consumer almost prohibitive. Milk is a universal food and should be carefully handled. Pasteurization at 140 to 145 degrees and held for 25 minutes destroys most germs and does not change the digestibility, taste or quality of the milk. The Doctor advised all to take no chances on the milk supply and to pasteurize to make clean milk safe rather than merely to destroy barnyard flavors. That bovine tuberculosis was transmitted to humans was brought out in a certain investigation where it was found that 25 per cent. of tuberculosis occurring in children under 16 years of age was of the bovine type and transmitted through the milk supply. While care is taken to make nature's best food safe for dwellers in towns and cities, many dairymen are careless about the milk supply for their own families. The character of the bacteria in the milk determines the danger, for instance, epidemics of typhoid

have resulted from a convalescent of the disease handling the milk. If properly cared for, milk is a safe and one of the cheapest articles of diet. One quart of milk and one pound of steak compare in nutritive value, yet, milk retails at less than half the price of steak.

The Oleo Problem.

The address of Dr. G. L. McKay, of Chicago, on the question of oleomargarine was followed with interest. Creamerymen and producers do not look with favor on the introduction of this butter substitute into Canada. The speaker related the history of butter and margarine manufacture. The Scandinavians were mentioned as the first people to engage in butter trading, and as early as the 13th century Norway was exporting butter. The fat of milk contains substances essential to growth and development of the human body that cannot be obtained from other fats. Dr. McKay stated "that other fats were all right as lubricants but lacked certain vital nutrients found in butter." Experiments in which vegetable fats were fed to rats were cited. The result was that growth ceased, but on milk fats being resumed growth commenced. Another case was mentioned of forty-five children fed on skim-milk and vegetables becoming affected with swollen eyes and gums and deranged digestion, but became normal again when given milk fat. Dr. Harvey Wiley was quoted as saying, "I should never give children nut or oleo margarine, nor would I give children or grown persons food products containing preservatives." The speaker claimed that comparing butter and oleo was like comparing gold and brass. The oleo manufacturers camouflage their product by stating the amount of milk and cream used in making the butter substitute. There is considerable profit in mixing oleo fats and milk and cream, and the Doctor advised those wanting to use other fats to do their own mixing.

There has been considerable difficulty experienced in controlling the margarine trade in countries where the manufacture has been permitted. The laws relating to it in Canada should be rigid and strictly enforced in order that both producer of milk fats and consumer of fats be protected. France was claimed to have the most rigid law against oleo of any country, but in countries where there is laxity there has been considerable fraud and the substitute is frequently sold as the genuine article. Dairymen were advised to fight oleo at every turn as it was a substance that would hurt the butter trade, and it was a product which could not take the place of butter or milk fats for children. All branches of dairying should unite as one body to enforce the control of the margarine trade.

Dairy Industry Not Declining.

J. A. Ruddick, Dairy Commissioner, gave figures to show that dairying was not declining in Canada. The value of dairy products in Canada in 1917 was given as \$191,000,000. Since the Cheese Commission was formed 157,679,966 pounds cheese were exported, and the home consumption the past year was estimated at 20,000,000 pounds. While there had been a falling off in cheese manufacture in some districts there had been increases in others. The ice cream and cream trade was valued at \$50,000,000, and condensed products at \$8,000,000; creamery butter at \$31,080,000 and dairy butter at \$60,000,000. The cheese industry is increasing in the Western Provinces, and the home consumption of cheese is increasing. The organization of each branch of the industry leading up to a national organization was favorably spoke of.

R. J. McLean, representing the Produce Dealers' Association, believed it was a good idea for producers, manufacturers and distributors to get together to discuss problems in which all were interested. The speaker favored the butter grading system, and believed that waste and expense could be reduced by better methods of handling products such as butter and eggs.

The Cheese Factory Has Furnished Valuable Market for Milk.

Jas. Donaldson, President of the Western Ontario Dairymen's Association, presided over the cheese and butter manufacturer's session, held on Friday morning. In his opening address he regretted that the bars had been let down permitting the manufacture and sale of oleo in Canada, and urged an organization of dairy industries for protection of the industry which has meant so much to this new country. Information obtainable goes to show that oleo, while a butter substitute, does not contain the nutrients found in butter, which are essential to life. The speaker contended that dairymen should not relax their vigilance in regard to the oleo question. Regulations should be strict and then be enforced in order to protect the dairy industry as well as the consumer. Mr. Donaldson contended that the cheese business was in a critical position at the present time, owing to the price for that commodity being such as to prevent so high a price being paid for cheese milk as is being paid for milk by cities and condenseries. The speaker claimed that the cheese factory had furnished a valuable market for milk in years past and had enabled many dairymen to reduce the mortgage on their farms and to place themselves on their feet

financially. The cheese factory still furnishes a valuable market for whole milk and should receive support.

Cheese-Makers' Problems.

In discussing the question of cheese-makers' problems, F. Boyes, of Dorchester, believed that while some of the old problems had disappeared, owing to the adoption of modern methods of manufacture, there were still problems for experimenters, dairy schools and instructors to work on. Experiments to find out if it were possible to increase the quantity of cheese from a given quantity of milk and if it were feasible to incorporate a little more moisture without impairing the keeping quality of the product, were advocated. The speaker maintained that whey was worth 25 cents per hundredweight for feeding hogs, and deplored the fact that especially in the spring of the year large quantities were poured into the drains because the patrons did not have a sufficient number of hogs to consume it. The extension of the instruction service to winter months where factories made the year round was advocated.

Frank Hens, Chief Dairy Instructor for Western Ontario, led the discussion and considered that the calling together of the representatives of the various dairy industries was a splendid idea, and believed that it might advantageously be made an annual event. In the whole of Western Ontario about 29,000,000 pounds of cheese were manufactured in 1916. In 1907 five and one-half million pounds of creamery butter were made in the same district but the quantity increased to 21,000,000 pounds in 1916, consequently the amount of milk produced must have increased considerably, as the quantity of cheese produced has fallen off but little and condenseries and city trade have drawn heavily on the supply. Cheese-makers are finding difficulty in securing satisfactory help in their factories. One remedy suggested by the speaker was to make the salary more attractive, as other businesses were able to outbid the cheese business on the labor market at the present time. It is but natural for a man to offer his services to the highest bidder. With the rise in price of every commodity patrons must realize the necessity of paying more for the manufacture of their milk into cheese. In regard to moisture content of cheese, Mr. Hens doubted the advisability of making any material changes one way or another at the present time, owing to the fact that cheese may be held a long or short time. While some cheese may be a little too dry for some trades, if it were too moist it might not hold up in storage.

G. G. Publow, Chief Dairy Instructor for Eastern Ontario, continued the discussion relating to cheese manufacturers' problems. In Eastern Ontario the yield of cheese per 100 pounds of milk, as well as the percentage fat in the milk, is falling off slightly. The speaker advised care in setting the milk with the coagulants used as substitutes for rennet, but believed that there need be no more loss when using pepsin, provided milk was properly handled. The manufacture of whey butter is carried on in some factories, and the saving and utilizing of fat in whey is strongly advocated in other factories. Mr. Publow contended that if whey butter were manufactured to help supply the demand for fat, the maker be paid so much for doing the work rather than instal the machinery with the idea of making a profit. If care is taken in cheese manufacture there should be but small loss of fat in the whey.

Manufacture of Creamery Butter.

Butter-making in the creamery was the subject discussed by Dr. G. L. McKay, Secretary of an American Association of Creamery Butter Manufacturers, which manufacturers more than one-quarter of the amount of butter made in U.S. Dr. McKay dwelt chiefly upon the quality of the product turned out by creameries, and contended that yeasts and molds or other defects would largely be controlled by pasteurization of cream. Butter-makers that are really competent were considered to be very scarce. Uniformity of product depended upon the ability of the maker. One creamery was mentioned where moisture content of butter turned out seldom varied from 15 to 16 per cent.; salt was always around 3.5 per cent., and casein content around one per cent. These results were compared with another creamery where moisture varied from 10 to 17 per cent., and salt 2 to 6 per cent. The quality of the butter depends on the skill of the operator. It was contended that one of the best methods of combating oleo was with good quality butter.

To make good butter the raw material must be delivered in proper condition, but in order to secure the right quality cream it was considered necessary to pay a premium for quality. Cream should be cooled and kept cool until delivered. To do this allowing the water for the live stock to pass through the cream-cooling tank was suggested as an economical and practicable system. If cream becomes too sour it makes a tallowy undesirable quality product. Where only a few cows are kept it sometimes takes considerable time to fill a can, and unless proper precaution is taken cream becomes rancid before it is delivered to the creamery.

Dr. McKay explained how a variance in moisture test and faulty grain or texture of butter could be attributed to the method of working the butter. Crowding

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Eggs are selli time of year. Ac report for the w at country point lowest price was the price given. retail trade is aski Ottawa and Vanc With the approach on free range, it will increase rapi

the butter worker resulted in lack of uniformity in moisture. Having rollers out of alignment also resulted in improper working. When butter is in small granules it is washed to remove casein and enough water is used to float the butter in the churn. Butter is worked thoroughly and tested for moisture. If butter when first gathered is broken open it will show large drops of moisture. After more working the drops or tears will be small. If working is continued after moisture drops are about size of pin heads there is a tendency for butter to become pasty. Butter can be worked to death. Over-working was believed to be one cause of fishy or off-flavor butter. Good cream and proper working are essential to the making of high-quality butter. Many makers might well pay more attention to the working of their product so as to get greater uniformity of the moisture and salt content, and thus improve quality.

The discussion following Dr. McKay's address was led by Mack Robertson, President of Canadian Creamery Association. The speaker emphasized the importance of creamerymen exercising great care in taking samples and making tests. Using the scales in place of pipette for measuring samples was strongly advocated. The scales give a more accurate sample than can be secured by a measuring pipette. When but a small sample is taken from a can of cream it is important that accuracy be maintained. Control of salt and moisture content of butter were considered as points which should be carefully studied by creamerymen. It is not so much the amount of salt used as the percentage incorporated and retained in the butter which is important. Lack of uniformity of salting impairs the keeping quality of butter.

The Canadian Milk Products Co. of Toronto was represented by S. B. Trainer, who explained some of the processes through which milk passes in being reduced to a powder. Milk powder is a product in condensed form which can be stored and held and readily returned to its normal state. According to the speaker condensed milk has 28 per cent. of milk solids including fat, with 42 per cent. sugar added. Evaporated milk has 28 per cent. milk solids with no added sugar. The milk is put in containers and run into big retorts and steam cooked at a high temperature to destroy bacteria. The manufacture of milk powder is a continuation of evaporation until only solids remain. Milk contains around 87½ per cent. solids, the remainder being water. Milk powder is raw milk which has been pasteurized. The product is dried, and so long as it is kept dry bacteria cannot grow or multiply. If the milk is pure at the commencement of the process it is pure when placed in containers and remains pure if dry.

The first system of drying milk was the roller process. Two steel steam-heated rollers run together and the milk passing between them was pressed into a thin film and the moisture is turned into vapor, the dry material sticking to the slowly-revolving rollers from which it was scraped. This heating cooked the milk and changed its composition so that it could not be returned to normal condition. By the modern method of evaporating the water from milk, in the process of making milk powder no change in the milk nutrients takes place, so that by adding water to the powder the product is returned to practically its normal state. The milk must be up to certain specifications and is paid for on percentage fat basis. The milk is filtered and then flows into the pasteurizing and drying vats. Everything possible is done to turn out a clean product.

Ice Cream Considered a Food.

W. H. Foster, President of the Ice-Cream Association, went into the history of the ice-cream trade and outlined the method of manufacture of this product, which is termed a luxury by many. Improvement in methods of manufacture has tended to greatly improve the product, which in turn has increased the demand. While ice cream was sparingly eaten in years past it is now considered as a food, and medical men frequently prescribe it to convalescent patients.

J. Bingham, of Ottawa, speaking on the same subject, termed the ice-cream trade as the "safety valve for the city milk trade," as the demand for ice cream during the warm weather when the milk flow is greatest has furnished a market for the surplus milk and kept the price to the producer stationary.

D. McMillan, Instructor in Ice Cream Manufacture at the O. A. C., also discussed the ice-cream trade, and outlined formulas for manufacture of the product. The speaker claimed that there was difficulty in making an ice-cream of high fat content that would keep. This was the first time representatives of various dairy interests had met in conference, and the general opinion of the meeting was that similar conferences might advantageously be held. While a provincial organization was not formed the machinery was set in motion, and in the near future it is believed that the organization will be effected.

POULTRY.

Egg Prices Firm.

Eggs are selling at an unprecedented price for this time of year. According to the Egg and Poultry Markets report for the week ending April 9, eggs were selling at country points for 38 to 40 cents per dozen. The lowest price was in Manitoba, where 32 to 34 cents was the price given. At the above mentioned price the retail trade is asking around 50 cents; in fact, in Montreal, Ottawa and Vancouver as high as 55 cents was secured. With the approach of warm weather and the hens getting on free range, it is but natural to expect that receipts will increase rapidly which will no doubt cause prices

to drop somewhat. There has been no surplus so far for storage purchase, but it is expected that some will go into the coolers in the near future. The export outlook is giving the trade some concern, as they do not know whether they will be allowed to ship direct to their customers in Great Britain or if they will be compelled to sell to the Allied provisions buying Commission, and if so what will be the price paid for Canadian eggs as they are more favorably thought of by the British trade than the American eggs. The receipts of live and fresh-killed poultry have never been known to be lighter for the season. The market is firm and everything is picked up on arrival.

The Egg and Poultry Markets report also gives the gist of the regulations respecting the inter-Provincial and export shipments of eggs, which are as follows: "Regulations have been passed by Order-in-Council to become operated under the provisions of the Live Stock and Produce Act" respecting the grading and marketing of eggs. These will apply to all eggs for export for which they become operative immediately, and eggs for domestic consumption intended for shipment from one province to another in lots of 100 cases or more, on and after May 1, 1918. Provision is made in the regulations for fresh eggs with the grades, specials, extras, pullet extras, No. 1's or firsts, and No. 2's or seconds; for storage and preserved eggs with the grades, extras, extra firsts, No. 1 and No. 2, and for cracked and dirty. The marking of export cases in accordance with the class and grade of the eggs is provided for; also the packing and material to be used in the cases. Inspection will take place at point of shipment, but before the Government mark is placed on any case. Inspectors charged with the enforcement of these regulations will draw samples from at least five per cent. of the cases to be marked and examine at least one-half of the eggs in each case.

HORTICULTURE.

Study the Spray Calendar carefully (it appeared in the issue of April 11) and follow instructions closely.

A good vegetable garden will help wonderfully in the conservation of those foodstuffs badly needed overseas.

In spite of the cost of labor and material, it will pay to spray all orchards or plantations that are operated for commercial purposes.

Don't plant scabby potatoes without first treating them. Before cutting immerse the potatoes for two hours in a solution of one pint formalin to thirty gallons of water, then dry and handle as usual, being careful not to allow the sets to come in contact with infected barrels, bags or baskets.

Arsenate of lead paste purchased last season, but unused, should be all right this spring. If the moisture has evaporated from it, mix to a paste again with water and use in slightly larger quantities than usual. For instance, where 2 pounds are ordinarily used put in 2½ pounds of the held-over material.

Trees that have been ruined by mice or rabbits should be replaced and all gaps filled in. An orchard of any kind to be profitable must be complete. There is an under-current of feeling that better times are coming for the enterprising fruit grower, and to share in this we must be prepared.

Aphids on the Apple.

Aphids do considerable damage in apple orchards, and preparations should be made to combat them from the very first. Because they are so small, they are frequently overlooked early in the season, but after the leaves are out and the young insects have multiplied to enormous proportions it is then usually too late to do anything with them. They curl the leaves around them, and it is very difficult to strike them with the spray, which must be done in order to destroy them. Most of the damage is done on bearing trees on the lower branches. The tender twigs and fruit are attacked, the leaves are made to curl, turn yellow and often die. The fruit becomes dwarfed, woody and pitted. Little clusters of small, deformed apples are frequently seen attached to the lower branches. Such fruit is the work of aphids, and is altogether unfitted for sale. Young trees and nursery stock often suffer severely since the foliage is very tender. When badly infested the growth of the tree is retarded and little preparation is made for the next season.

The eggs are laid on the bark of small branches and water sprouts. The hatching of these is usually completed in the spring, usually about the time the leaf buds have begun to burst. An examination of the buds just as they are bursting will often reveal these minute insects making their way towards the green tip of the bud. They multiply in enormous proportions, and to combat them effectively it must be done before any great amount of leaf development is shown. In some orchards they are seldom abundant enough to do much injury, while in orchards in different situations the loss is considerable every year and should not be minimized.

As a means of control it is recommended that the regular dormant spray be postponed until the buds are beginning to burst, and then add to the mixture a tobacco extract, either Black Leaf 40, or Nicotine-sulphate 40 per cent. This material is purchased in cans, with instructions as regard to quantity to be used printed thereon. The spraying, of course, must be thoroughly done, and every bud must be covered. These tobacco

extracts seem to be the most effective, and it is possible to control the aphid with them.

Some Different Opinions.

Some difference of opinion seems to exist in regard to spraying operations in Ontario and Nova Scotia. There has been a feeling in the Annapolis Valley for a few years that many crops, or a part of many crops, have been sprayed off with lime-sulphur and now Bordeaux is coming back. The growers there are manipulating their sprays so as to overcome the russetting that Bordeaux causes, and at the same time they will attempt to conserve what set of fruit they get and not endanger it with lime-sulphur sprays late in the season. Ontario growers have been pretty successful with lime-sulphur, and see little danger in it similar to that experienced in Nova Scotia.

Again, in regard to insecticides, the Annapolis Valley growers are quite successful with arsenate of lime and are using it extensively. Experimentalists in Ontario do not consider it safe as yet, and will not take the responsibility of recommending it without certain limitations. It is undoubtedly a cheaper insecticide than arsenate of lead, but if it is not thoroughly reliable and trustworthy in Ontario the growers would be wise to use it more in an experimental way.

These differences are, no doubt, due to conditions, which vary considerably, even within one province. Ontario and Nova Scotia are widely separated, and what applies in one place may not in another. Growers, however, should take an interest in such matters and do some experimenting on their own account.

FARM BULLETIN.

Successful Seed Fair and Short Course.

EDITOR "THE FARMER'S ADVOCATE":

A very successful Short Course and Seed Fair has just been concluded at New Liskeard, Temiskaming District, and it is thought that a brief account of the proceedings might prove of interest to many. The seed exhibits included several varieties of oats, including O. A. C. 3 and 72; Banner and Abundance. There were also shown Marquis and Red Fife wheat; O. A. C. 21 barley, and some splendid samples of peas, potatoes and clover. Many of the grain exhibits would be a credit to any agricultural district, and demonstrate in a practical manner the possibilities of the Northland. The course of instruction lasted three days, covered a wide variety of subjects, was well attended and appreciated. Part of the first day was occupied in the judging of the various exhibits; this was performed by Dr. C. A. Zavitz of the Ontario Agricultural College, and following the judging Dr. Zavitz delivered a lecture in which he enumerated his reasons for so placing the awards, pointing out the defects of some grain, and the merits of others.

Mr. Nixon, Superintendent of the Monteith Demonstration Farm, lectured upon Soils, and stated what was in his experience the most expedient methods of working the soil of the North.

The second day was occupied in part by an extremely interesting lecture and demonstration on the Judging of Horses and Cattle.

The speaker was W. J. Bell, B. S. A., and he gave a practical, instructive address; suggested the type of horse that the farmer should aim to secure; explained the proper conformation of the true dairy cow, and showed wherein she differed from the true beef animal.

On the evening of the second day, a well attended meeting was held, addressed by A. H. McLennan, B. S. A., his subject being "Backyard Gardening". His lecture was illustrated by means of the cinematograph, a feature that was highly appreciated and one that should prove of real assistance to agricultural lecturers, a feature worthy of further development.

A picture was also shown illustrating the process to which cream is subjected at the Ontario Creamery, New Liskeard. This creamery is meeting with great success, as it satisfies a long-felt want of the farmers here. The institution presents an outlet for dairy produce, and offers an incentive to engage more extensively in the dairy business.

Mr. Bell, again interested a large audience on the morning of the third and last day. His subjects this time were sheep and hogs, and a very profitable time was spent listening to the description of what constituted a good brood sow, and observing the method to be followed when judging sheep.

I would like to say in passing that I consider Mr. Bell to be an ideal type of lecturer, whilst pointing out all the desirable features that should accompany the perfect type of animal, he realizes the difficulties that attend such an attainment; he presents his points in an interesting manner, devoid of technicalities, and adds the convincing testimony of practical experience, either his own or gleaned from prominent breeders of the best type of stock. The Department could utilize more lecturers of the type of Mr. Bell.

The balance of the last day was occupied by a lecture by L. A. Zufelt of Kingston, his subject being Dairying. Mr. Zufelt showed the advisability of encouraging the growth of the cream industry, explained some of the causes for variations of the cream test, and enlarged upon the advantages of centralized buttermaking.

The management expressed themselves as well satisfied with the exhibits and attendance, and propose to stage a larger and longer course next year.

New Ont.

NORTHERN SCRIBE.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending April 11.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	5,035	3,773	4,830	\$13.00	\$12.00	\$12.75	2,296	1,531	2,023	\$16.75	\$15.00	\$17.25
Montreal (Pt. St. Charles)	647	112	226	13.00	10.85	12.70	2,431	2,874	1,432	12.50	12.00	12.60
Montreal (East End)	380	254	156	13.00	10.88	12.70	2,357	2,171	1,200	12.50	12.00	12.60
Winnipeg	1,575	2,960	1,582	12.50	11.00	12.00	58	72	1,620	15.00	12.50	15.00
Calgary	1,397	1,291	1,615	12.25	9.25	11.50						

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	6,075	10,098	8,408	\$21.00	\$16.75	\$21.25	178	167	185	\$20.50	\$15.25	\$20.75
Montreal (Pt. St. Charles)	1,465	951	1,588	21.50	17.00	21.75	18	19	8	14.75	14.75	
Montreal (East End)	670	843	355	21.50	17.00	21.75	31	32	24	14.75	14.75	
Winnipeg	5,589	5,382	5,275	20.35	15.50	21.00	5	360	53	10.75	20.00	
Calgary	2,102	3,351	3,117	20.85	15.10	17.25	31	134				

Market Comments.

Toronto (Union Stock Yards).

Receipts of cattle slightly exceeded those of the previous week, about fifty-two hundred being offered for sale, of which number three thousand were on the Monday market. An active demand prevailed throughout the week and, on the whole, prices ruled higher than at any period during the past winter. Outside buyers were operating, and about three hundred cattle were purchased for a Montreal abattoir, while farmers were liberal buyers of stockers and feeders, of which class fully seven hundred head were returned to the country for further feeding; in addition there exists a considerable demand for frozen and boned meats for overseas; these conditions were all factors in stimulating trade and enhancing values. There was a slight advance in prices from day to day, and by mid-week, quotations were from 10 to 25 cents higher than those of Monday; the market closed with a steady undertone on Thursday. The quality of the cattle was, on the whole, fairly good, a fair percentage of choice killers being included in the offerings. Receipts of heavy cattle were, however, rather meagre and of no exceptional quality, although the majority of those on sale realized from \$12 to \$12.75 per hundred, while a few head reached \$13. Most of the steers weighing from one thousand to twelve hundred pounds sold at \$11.75 and over, one choice load of twenty-four head averaging eleven hundred and forty pounds selling on Tuesday at \$13, while a number of small lots were also sold at this level during the week. Other good sales included twenty-two head of ten hundred and eighty pounds at \$12.75, twenty-five head at \$12.60, and twenty-seven head at \$12.40, while quite a number of loads sold from \$11.75 to \$12.25. Of steers and heifers weighing from eight hundred to one thousand pounds, one bullock of eight hundred pounds sold at \$15 per hundred; this latter price, however, was above the ruling quotations. A number of head weighing nine hundred pounds sold at \$12.50, nineteen head at \$12, and twenty-five at \$11.75, while other sales were made from \$11.25 to \$11.75; medium cattle of these weights sold from \$10.25 to \$10.75. Cows and bulls were a trifle firmer in sympathy with other grades; one choice cow sold at \$11.25 and others of choice quality from \$10 to \$10.75; good cows brought from \$9.25 to \$9.75, and common from \$7 to \$8. The bull market was steady, and choice animals sold up to \$10.75. Considerable demand prevailed for stockers and feeders; choice feeders selling as high as \$11; most of the sales of this quality ranging from \$10.50 to \$11, while from \$10 to \$10.50 was paid for those of good quality. Choice stockers sold from \$9.50 to \$10.25, one load of thirty averaging eight hundred pounds selling at the latter price, while a heavier load, but of inferior quality, sold at \$9.65. Calf receipts continue heavy in volume, twenty-three hundred being on sale during the week. Prices on the whole, ruled lower and only calves of extra choice quality realized \$16.50 per hundred; most of the good veal selling from \$11 to \$16. A number of calves under two weeks of age are being shipped back to the country at prices ranging from \$8 to \$10 per head.

CLASSIFICATION	No.	TORONTO (Union Stock Yards)		Top Price	No.	MONTREAL (Pt. St. Charles)		Top Price
		Avg. Price	Price Range Bulk Sales			Avg. Price	Price Range Bulk Sales	
STEERS								
heavy finished	151	\$12.47	\$11.75-\$12.75	\$13.00				
STEERS								
1,000-1,200 good	677	12.00	11.50-12.35	13.00	132	\$12.85	\$12.60-\$13.00	\$13.00
common	14	10.53	10.00-11.00	11.25	7			
STEERS								
700-1,000 good	1,140	11.70	11.25-12.00	12.50	109	12.60	11.75-13.00	13.00
common	340	10.25	9.75-10.50	10.50	103	10.85	10.50-11.50	11.50
HEIFERS								
good	419	11.81	11.50-12.25	12.75	47	12.50	12.60-12.75	13.00
fair	415	10.25	9.70-10.50	10.50	31	11.00	10.50-11.50	11.50
common	17	9.25	8.75-9.50	9.50	22	9.75	9.50-10.00	10.00
COWS								
good	271	9.76	9.50-10.25	11.00	33	10.75	10.50-11.50	11.50
common	607	8.25	7.75-8.75	8.75	66	8.50	8.00-9.75	10.00
BULLS								
good	109	9.75	9.00-10.00	11.00	11	10.25	10.00-10.50	10.50
common	84	8.25	7.75-8.75	10.00	13	9.25	8.50-9.50	9.50
CANNERS & CUTTERS	250	6.75	6.50-7.00	7.00	31	6.25	5.50-6.75	6.75
OXEN								
CALVES								
veal	2,294	15.00	14.00-16.50	16.75	2,431	10.85	10.50-11.00	12.50
grass								
STOCKERS								
450-800 good	97	9.75	9.50-10.25	10.25				
fair	131	8.71	8.00-9.25	9.50				
FEEDERS								
800-1,000 good	221	10.81	10.25-11.25	11.25				
fair	92	10.10	9.75-10.50	10.50				
HOGS								
selects	5,796	20.81	20.50-21.00	21.00	1,277	21.35	21.25-21.50	21.50
heavies								
(fed and watered) lights	103	19.38	18.50-20.00	20.00	80	20.60	20.50-20.75	20.75
sows	169	19.24	18.00-20.00	20.00	40	19.35	19.25-19.50	19.50
stags	7	16.93	16.50-17.00	17.00	8			
LAMBS								
good	142	20.00	19.50-20.50	20.50	4			
common	3	17.00	16.00-18.00	18.00				
heavy	16	12.00	11.00-13.00	13.00				
SHEEP								
light	11	14.00	13.00-15.00	15.00	14	13.75	13.50-14.00	14.00
common	6			10.00				

Scarcely two hundred lambs and sheep were offered, and there was little change in prices. Choice yearling lambs sold as high as \$20.50 per hundred, and light sheep sold at \$15 per hundred. Hogs were somewhat fewer in number than during the previous week, the lower quotations sent out to country buyers curtailing shipments. Prices ruled very unsteady, and accurate quotations were hard to obtain. On Monday, select hogs sold at \$21 per hundred, fed and watered. The following day the quotation given out was \$20, although \$21 was paid by one buyer, and it is doubtful if any hogs were bought under that figure. On Wednesday the market seemed to settle at \$20.50 per hundred for selects, fed and watered, and closed at this level on Thursday. Of the disposition from the Yards for the week ending April 4th, Canadian packing houses bought 890 calves, 55 bulls, 50 heavy steers, 3,292 butcher cattle, 8,842 hogs and 98 sheep. Local butchers purchased, 687 calves, 380 butcher cattle, 24 hogs and 57 sheep. Canadian shipments were made up of 101 calves, 87 milch cows, 160 butcher cattle, 318 stockers and 142 feeders. Shipments to United States' points during the week consisted of 364 calves. The total receipts from January 1st to April 4th, inclusive, were 62,972 cattle, 109,533 calves, 108,356 hogs and 10,112 sheep, compared to 59,895 cattle,

11,441 calves, 138,021 hogs and 11,739 sheep, received during the corresponding period of 1917. **Montreal.** Receipts of cattle for the week totalled ten hundred and twenty-seven head, an increase of more than seven hundred compared with the offerings of the previous week. Although such an increase was not anticipated by the trade, everything was bought up by the close of the market, on account of the local demand at this season of the year, being far in excess of the supply available at the Montreal Yards. The market opened strong and active and continued so throughout the week at the highest prices, quality considered, that have yet been paid at the local yards. On Monday, twenty head of choice young cattle averaging about ten hundred and seventy-five pounds, were weighed up at \$13 per hundred, while another lot, consisting of seventeen mixed steers and heifers of slightly heavier weights, sold at a similar price; these latter were, however, of slightly inferior quality. The top sale of the week was that of two steers, averaging slightly over ten hundred pounds at \$13.50. Butcher cows sold well, one choice animal realizing \$12 per hundred, and numerous sales of good quality animals being made from \$11 to \$11.50. A few choice heifers of good weights sold in mixed lots with steers at \$13, while other heifers of equal quality

but of lesser weights, sold from \$1 to \$1.50 per hundred lower. Bulls were light in number and under a keen demand, sold at strong prices, those of good weight and quality realizing from \$10 to \$10.50, while the majority of the offerings sold from \$9 to \$9.50. The market for canners and cutters was unchanged from the previous week at prices ranging from \$5.50 to \$6.75. The supply of calves was liberal and of a much improved quality as compared with recent offerings. The market was active, and selling was brisk at prices ranging from \$8 to \$12.50 per hundred. Only forty-nine sheep and lambs were received during the week. Sheep sold from \$12.75 to \$14 per hundred, while no market was established for lambs, very few being offered. The market for hogs opened steady and unchanged at the previous week's closing quotations, and closed in this condition without evidence of any immediate change. Long-run selects sold at \$21.75 per hundred, off-car weights, and short-run selects at \$21.50. Sows of good quality sold at \$2 per hundred below the price for selects. **PT. ST. CHARLES.**—Of the disposition for the week ending April 4th, Canadian packing houses and local butchers purchased 1,432 calves, 48 canners and cutters, 29 bulls, 145 butcher cattle, 1,629 hogs and 8 sheep. Canadian shipments were made up of 10 milch cows,

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The Molsons Bank

is always glad to assist farmers in any legitimate financial way to make their farms more productive.

State your requirements to our local manager and he will be glad to advise and assist you.

and 26 butcher cattle. No shipments were made to United States' points during the week.

The total receipts from January 1st to April 4th, inclusive, were: 8,324 cattle, 8,211 calves, 17,278 hogs and 5,047 sheep; compared to 10,419 cattle, 13,435 calves, 18,979 hogs and 4,650 sheep, received during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending April 4th, Canadian packing houses and local butchers purchased 1,206 calves, 156 butcher cattle, 355 hogs, and 24 sheep and lambs. There were no Canadian shipments nor shipments to the United States during the week.

The total receipts from January 1st to April 4th, inclusive, were: 8,065 cattle, 7,419 calves, 10,206 hogs and 4,792 sheep, compared to 11,421 cattle, 9,284 calves, 13,871 hogs and 5,923 sheep, received during the corresponding period of 1917.

Buffalo.

Cattle.—Steer prices are jumping every day. Values have advanced very materially within the past two weeks, and strictly choice, prime, good weight steers are quotable up to sixteen cents at Buffalo. Demand last week was especially strong for anything in the steer line, and good, fat heifers and cows sold readily at a substantial advance. Good steers were quotable a-half dollar to seventy-five cents higher, while the general run of butchering cattle were a full quarter above the preceding week's level. Stockers and feeders sold a quarter higher, bulls were stronger and a good, firm market was had on milk cows and springers. Demand for any class of cattle proved strong and the full needs were not met last week. Offerings for the week totaled 4,225 head, as against 3,900 for the previous week, and as against 3,875 head for the corresponding week last year. Quotations:

Shipping Steers.—Natives, choice to prime, \$14.50 to \$16; fair to good, \$13.50 to \$14; plain, \$12.50 to \$12.75; very coarse and common, \$11.50 to \$12.
Shipping Steers.—Canadians, best, \$12.75 to \$13.50; fair to good, \$12.25 to \$12.50; common and plain, \$11.75 to \$12.
Butchering Steers.—Choice, heavy, \$13.50 to \$14.50; fair to good, \$12.50 to \$13; best handy, \$13.25 to \$14; fair to good, \$12.50 to \$13; light and common, \$11 to \$11.50; yearlings, choice to prime, \$13 to \$14; fair to good, \$12.50 to \$12.75.
Cows and Heifers.—Best heavy heifers, \$12 to \$13; good butchering heifers, \$10.50 to \$11; fair butchering heifers, \$9.50 to \$10.25; common, \$7.50 to \$8.25; very fancy fat cows, \$12 to \$13; best heavy fat cows, \$10.50 to \$11.50; good butchering cows, \$9.50 to \$10; medium to fair, \$8.50 to \$9; cutters, \$7.25 to \$8; canners, \$6.75 to \$7.25.
Bulls.—Best heavy, \$10.50 to \$11; 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), \$100 to \$140; in car loads, \$80 to \$100; medium to fair, (small lots), \$75 to \$85.
Hogs.—Last week started with liberal receipts and a lower trade. Monday's run reached 12,000 head, and values went off 25 to 35 cents from the previous week's close. Bulk of the light hogs sold at \$18.50, heavies ranged on down

to \$18.25, and most of the pigs landed at \$18. Tuesday's market was slow, with prices steady to a dime lower, and Wednesday's market was about the same as Monday on light hogs, and heavies brought up to \$18.35 to \$18.40. Thursday values jumped a quarter to thirty-five cents, range being from \$18.65 to \$18.75, with pigs selling at \$18.25, and Friday light hogs sold from \$18.60 to \$18.75, heavies moved at \$18.50 to \$18.60, and pigs generally \$18.25. Roughs ranged from \$16.00 to \$16.50, and stags \$14 down. Last week receipts totaled 21,400 head, as against 22,926 head for the week before, and 17,500 head for the same week a year ago.

Sheep and Lambs.—Buffalo broke all previous records last week. Monday wool lambs sold up to \$20.75, unshorn yearlings reached \$18.75, top shorn lambs brought \$17.85, and clipped sheep went from \$15 down. Prices on lambs were still higher as the week advanced and sheep ruled about steady. Friday, which was the high day, wool lambs scored \$22, cull lambs with fleece sold up to \$21, best shorn lambs reached \$18.50, and cull clipped lambs went from \$16 down. Last week's receipts totaled 13,300 head, as against 14,966 head for the week before, and 13,000 head for the same week a year ago.

Calves.—Prices the first half of last week, under heavy receipts, showed a big decline. Monday top veals sold at \$17, and culls went from \$12 down. These prices were from \$2 to \$5 per cwt. lower than the closing day of the week before. Tuesday most of the top veals had to take \$16.50, and the next two days the bulk landed at \$16.25. Friday's market was considerably improved, choice lots going at \$17, and culls went from \$12.50 down. Receipts for the week numbered 5,600 head, being against 4,042 head for the week before, and 4,675 head for the same week a year ago.

Toronto Produce.

Live-stock receipts at the Union Stock Yards, West Toronto, on Monday, April 15, consisted of 170 cars, 3,179 cattle, 874 calves, 1,446 hogs, 21 sheep and lambs. The market was strong. All classes of butcher cattle 25 cents higher than last week's close. One load, nineteen steers, twelve hundred and forty pounds each, realized \$14.50. Sheep, lambs and calves steady. Hogs, \$20.50, fed and watered.

Breadstuffs.

Wheat.—Ontario (basis in store Montreal) No. 2 winter, per car lot, \$2.22. Manitoba wheat (in store, Fort William, including 2½c. tax)—No. 1 northern, \$2.23½; No. 2 northern, \$2.20½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.10½.
Oats.—Manitoba (in store, Fort William)—No. 2 C. W., 96½c.; No. 3 C. W., 92½c.; extra No. 1 feed, 91½c.; No. 1 feed, 89½c.
Oats.—Ontario, No. 2 white, 93c. to 94c.; No. 3 white, 92c. to 93c., (according to freights outside.)
Peas (according to freights outside)—No. 2, \$3.60 to \$3.70.
Barley (according to freights outside)—malting, \$1.68 to \$1.70.
Buckwheat (according to freights outside)—\$1.83 to \$1.85.
Rye (according to freights outside)—No. 2, \$2.60.
American corn (U. S. A. War Board prohibit importation).
Flour.—Ontario (Montreal prompt shipment, new bags). War quality, \$10.70, Montreal; \$10.70, Toronto; Manitoba flour, (Toronto, new bags) war quality, \$11.10.

Hay and Millfeed.

Hay.—No. 1, per ton, car lots, \$17 to \$18, mixed, \$14 to \$16.
Straw.—Car lots, per ton, \$8.50 to \$9.
Bran.—Per ton, \$35.40; shorts, per ton, \$40.40.

Hides and Wool.

Prices delivered, Toronto:
City Hides.—City butcher hides, green, flat, 10½c.; calf skins, green, flat, 20c.; veal kip, 18c.; horse hides, city take off, \$6 to \$7; sheep, \$3.50 to \$5.50.
Country Markets.—Beef hides, flat, cured, 11c. to 12c.; green, 10c. to 11c.; deacon or bob calf, \$1.75 to \$2.50; 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 solid, in barrels, No. 1, 15c. to 16c.; cakes, No. 1, 18c. to 19c.

Sending Money to Soldiers

Those who have friends or relatives at the front, may wish to send money, but possibly do not know the best way to do so.

If time permits, the safest and most convenient method of making remittances abroad is the Bank Money Order or Draft, as issued by The Merchants Bank.

If, however, it is necessary to send money without delay, the Bank will arrange this by Cable Transfer.



THE MERCHANTS BANK

Head Office: Montreal, OF CANADA. Established 1864.
with its 102 Branches in Ontario, 32 Branches in Quebec, 19 Branches in Manitoba, 21 Branches in Saskatchewan, 53 Branches in Alberta, and 8 Branches in British Columbia serves Rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.

Wool.—Unwashed fleece wool, as to quality, fine, 60c. to 65c.; washed wool, fine, 80c. to 85c.

Country Produce.

Butter.—Butter of all classes kept practically stationary in price, wholesale, selling as follows: Creamery, fresh-made pound squares, 51c. to 52c. per lb.; creamery solids, 48c. to 49c. per lb.; dairy, 38c. to 45c. per lb.

Oleomargarine, 30c. to 32c. per lb.
Eggs.—New-laid eggs declined slightly, selling as follows, wholesale: new laid No. 1, 41c. to 42c. per dozen; selects at 43c. per dozen.

Cheese.—Old, 30c. per lb.; new, 24c. per lb.; new twins, 24½c. per lb.

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

Maple Syrup.—Maple syrup continues to come in in small quantities, selling at \$1.50 per 8½-lb. tin, and \$2.50 per 13½-lb. tin.

Beans.—Beans are still scarce and prices quite firm at \$6.75 per bushel for the Japanese hand-picked white variety (wholesale).

Poultry.—Receipts continued to be light, but prices kept practically stationary as there has not been a very heavy demand. Chickens, milk-fed, 30c. per lb.; chickens, ordinary fed, 27c. per lb.; fowl, 3½ lbs. and under, 22c. per lb.; fowl 3½ lbs. to 5 lbs. 28c. per lb.; fowl, 5 lbs. and over, 30c. per lb.; ducklings, 27c. per lb.; turkeys, young, 25c. per lb.; turkeys, old 22c. per lb. (These are the live-weight prices now being paid to the producer.)

Potatoes.—Potatoes again declined on the wholesales, Ontarios selling at \$1.70 to \$1.75 per bag, and N. B. Delawares at \$1.75 per bag. Cobbler seed potatoes selling at \$2.25 per bag.

Montreal.

Horses.—During last week, a very fair demand for horses has sprung up from various carting concerns who are making preparations for the season's work, which becomes more active following the opening of navigation, around the end of the present month. There have also been quite a few horses taken by farmers. Prices held steady. Heavy draft horses weighing 1,500 to 1,700 lbs., \$250 to \$300; light draft, weighing 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls, \$50 to \$75; fine saddle and carriage, \$175 to \$250.

Dressed Hogs.—The market for dressed hogs during last week has not been particularly active, but prices have shown practically no change, and still range from 29c. to 29½c. per lb.

Potatoes.—Receipts of potatoes have been liberal lately, and the tendency of the market has been downward. Green Mountains were offered in a retail way at \$1.75 per bag of 90 lbs. Wholesale quotations are \$1.55 to \$1.60 per bag of 80 lbs., ex-store, while car lots were quoted at \$1.50 per 80 lbs., ex-track.

Honey and Maple Syrup.—The market

for maple syrup was very firm, and higher prices were paid than for many years. Both Canadian and American buyers are in the market, and as high as \$1.90 per gal. f. o. b. shipping points. Some report that \$2 was paid. Locally, gallon tins were quoted at \$2.10 to \$2.15, while the 8½ lb. tins sold at around \$1.40 to \$1.50. Maple sugar was still quoted in vicinity of 20c. per lb.

Eggs.—The market for eggs was at the lowest point of the season, as would naturally be expected from the fact that the season is advancing and production constantly increasing. Quotations were 43c. per doz. for fresh-gathered, either American or Canadian. Demand at these prices was quite active.

Butter.—During the week, the price advanced several cents, owing to scarcity of supply. Finest fall makes were quoted at 52c. to 52½c., and where choice, it was said that new makes would bring this figure also. Fine was 1c. less. Dairies were 43c. to 46c.

Grain.—The market for oats was slightly firmer during last week and No. 3 Canadian Western, and extra No. 1 feed oats sold at \$1.07; tough, extra No. 1 feed, at \$1.06; No. 1 feed, \$1.05½; No. 2 feed, \$1.03; tough No. 2 feed, \$1.02; Ontario No. 3 white, \$1.03½ per bushel, ex-store.

Flour.—Rye flour advanced in price, going to \$7.75 per bag. Corn flour was quoted at \$6.50 per bag; Manitoba standard flour \$11.10 per barrel, in bags, f. o. b. cars, and \$11.20 delivered to bakers. Ontario flour \$11.40 to \$11.50 per barrel, in bags, ex-store. Graham flour, \$11.20 per barrel, in bags.

Millfeeds.—No change took place. Bran, \$35.40 per ton, in bags; shorts, \$40.40; mixed mouille, \$60 to \$62; pure grain mouille, \$75.

Hay.—Prices were steady at \$17 per ton for No. 2; \$15.50 for No. 3; \$12 to \$14 for clover mixed, ex-track.

Hay Seed.—Dealers report a good demand for timothy at 9c. to 14c. per lb., red clover being 38c. to 40c., and alsike 23c. to 29c. f. o. b., Montreal.

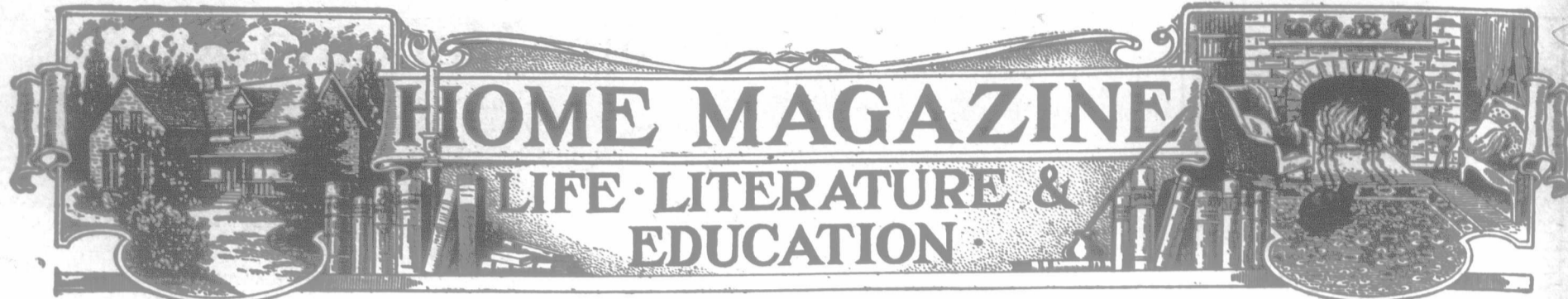
Hides.—Veal skins were up to 38c. and 40c. per lb., and spring lambs to 45c. Sheep skins were \$4.50 to \$4.60, and horse hides \$5 to \$6 each. Steers were 18c., cows, 13c., and bulls, 12c. per lb., flat, and 13c., 16c. and 17c., Montreal inspection. Tallow 3½c. for scrap fat; 8c. or abattoir fat, and 15c. to 16½c. for rendered.

Chicago.

Cattle.—Texas steers, \$10.60 to \$16.40; stockers and feeders, \$8.70 to \$17.50; cows and heifers, \$7.25 to \$13.50; calves, \$10 to \$15.
Hogs.—Light, \$17.35 to \$18; mixed, \$17.25 to \$17.95; heavy, \$16.40 to \$17.85; rough, \$16.40 to \$16.85; pigs, \$13 to \$17.
Sheep.—Native, \$13 to \$17.85; lambs, native, \$16.50 to \$21.

Cheese Markets.

Finest westerns, 21½c.; finest easterns, 21¼c.; New York, specials, 24c. to 25¼c.; average run, 23c. to 24¼c.



The Mud of Flanders.

It isn't the foe that we fear;
It isn't the bullets that whine;
It isn't the business career
Of a shell, or the bust of a mine;
It isn't the snipers who seek
To nip our young hopes in the bud;
No, it isn't the guns,
And it isn't the Huns—
It's the MUD,
MUD,
MUD.

It isn't the meleé we mind,
That often is rather good fun,
It isn't the shrapnel we find
Obtrusive when rained by the ton;
It isn't the bounce of the bombs
That gives us a positive pain:
It's the strafing we get
When the weather is wet—
It's the RAIN,
RAIN,
RAIN.

It isn't because we lack grit
Or shrink from the horrors of war.
We don't mind the battle a bit;
In fact that is what we are for;
It isn't the rum-jars and things
Make us wish we were back in the fold;
It's the fingers that freeze
In the boreal breeze—
It's the COLD,
COLD,
COLD.

Oh, the rain, the mud and the cold,
The cold, the mud and the rain;
With weather at zero it's hard for a hero
From language that's rude to refrain.
With porridgy muck to the knees,
With sky that's a-pouring a flood,
Sure the worst of our foes
Are the pains and the woes
Of the RAIN,
the COLD,
and the MUD.

Among the Books.

"More Letters From Billy."

More Letters From Billy, By the author of *A Sunny Subaltern*. McClelland, Goodchild & Stewart, Publishers, Toronto, \$1.00 net.]

BILLY" is a Toronto boy. We have not permission to divulge his name further than that it is, really, "Billy". Just now he is in France once more, after having had the coveted privilege of a "Blighty", but his second volume *More Letters From Billy* reveal a somewhat different lad from the one who appeared first as a "Sunny Subaltern". Wounds and sufferings have taken away much of the sunny joyousness, but the pluck and will are still there, the Canadian spirit that will not be downed.

This second volume, like the first, is made up of a series of letters sent to the writer's mother. *Before A Sunny Subaltern* existed as a book even in thought, she had read the letters to friends. They declared there was genius in them and urged that they be published, hence the first volume at least came as a surprise to the young author. *More Letters* is but a continuation, and those who already know the "Subaltern" will be glad, in this volume, to follow his fortunes still further.

The portion we have chosen to quote for you to-day describes a "field of mud" in Northern France, which evidently differs little from those fields of mud in Flanders of which we have heard so much

It is not necessary to say that the passage describes soldier life in the mud region before the big drive began. "Billy" is now too busy, probably, to write letters at such length. He will have a new and more terrible story to tell if he survives.

In the Field (of Mud).

Dear Mother.— . . . As you will know from my last letter, I'm back with the Battalion again, and the Hun right here is our least worry. He is a quiet, unobtrusive, war-wearied Bosche, who holds the line opposite us and apparently is content to remain so. He heaves over practically no shells save a number of trench mortar-bombs, and his most detestable minenwarfers or minnies. These are not, of course, what you could call life-saving objects, but they travel



General Foch.

Who is in supreme command of the allied armies on the West front.

very slowly, and one can see them coming quite distinctly, so learns to dodge them with great speed and precision. They make a hole about five feet deep and five by nine feet wide, so if they hit you, it's good-bye, boys!

However, as I say, he, the Bosche, is our least worry, but we have one of giant proportions. By the way it seems to be one of a soldier's necessities—if it isn't one thing it's another. This time it is mud,—and what mud—genuine, thick, gluey mud, with excellent body and bouquet—Phew!! Some bouquet. Also, I may add, that there's no lack of it. You see, it has rained incessantly for aeons, it seems, and I give you my word, the trenches actually dissolved before my sceptical eyes, until now they are really "in solution" as a chemist would say. I can assure you that never in my wildest dreams did I picture such a state as we are in—I'm sure you would never recognise me should you behold me now. I'm caked in mud, juicy and wet to the hips, while above are liberal applications, until I resemble a bride's first effort at a half-iced caramel cake.

C'est la vie! The trenches are a mellow (see Webster for definition) mass, nowhere shallower than knee deep, ranging from that to your hips. . . If it was thin consommé-like stuff one would not care, but it is about the consistency of good, long-boiled porridge, and if memory serves me aright, Le Page—he of glue fame—was a Frenchman, but he surely overlooked a bit when he didn't patent this muck. I was wading through it hip deep this evening—or rather last—and was absolutely mired. I could move neither way and the N. C. O. with me was in the same fix. Just as we wrenched and tugged we heard the peculiar "swish—swish—swish" which one of Fritz's rifle grenades makes, and I must admit rather timorously awaited the outcome. She fell pretty close, going well into the mixture and splashing

my left optic with a juicy cupful as she detonated. I had laughingly remarked to the Corporal that we needed a derrick to get out and that was the instrument—I mean the grenade. The mud wasn't nearly as bad as I thought, and I slashed along as fast—well, if there had been a rabbit around I'd have said, "Get out of the way and let some one run who can", for Fritz has no sentiment, and his projectiles no discrimination.

Albeit after dragging through a stretch of this stuff every half hour for a period of time that always seems interminable, I decided to venture overland, taking a chance on machine guns, etc. Well, I did, and evidently failed to observe the best lessons as laid down in "Infantry Training", for a machine gun opened fire, whistling very close, so I deduced I was on the sky line. I may add by this time I was even wetter and muddier than I had been for the four previous days, also chilled to the marrow. Of course I flopped into a shell hole comfortably filled with an admixture resembling the Scotch broth one pays for on the C. P. R. diner, while a few yards distant the bullets went Phut—phut. Just then I heard the "swish—swish" anthem again, and I really believe I breathed a prayer that a chunk of the grenade would hit me below the water-line—I mean legs, so that I could holler for help and have some stretcher bearers pry me out. Needless to say, they didn't, so I'm still left here in misery. By taking deep soundings and heaving the anchor I was able to navigate to Company Headquarters. I am sitting her now in a nice, deep hole, awaiting "Stand to," so thought I'd employ my time in writing you.



Field Marshal Haig.

Chief Commander of the British forces.

The School Garden.

By "THE OWL."

Paper XII.

THIS is a letter to teachers.
Dear Teacher:

Perhaps you tried a school garden last year and it failed. The children lost interest in it. Boys ran over it, when and how you did not know. When holidays began "the end" came; weeds grew up, the ground was neither cultivated nor watered, and when school opened again the garden was only a patch of thistles and pigweed with a few spindling flowers and vegetables half smothered among them.

Discouraging?—Yes, so it was. But have you thought out just where mistakes were made?

Did you let each child, of those old enough to work, have a plot of his or her very own, with the name of the owner on a placard in the centre of it, so that he or she could have personal pride in it?

Did you use the garden as the material for interesting object lessons? For instance, did you require Willie and Jamie and Mary and Ethel to identify the plants as they grew? To tell you why tillage is necessary? To notice the destructive bugs and find out how to get rid of them? To know the use of bees among the flowers, and birds as insect-killers?

Did you choose plants that grow quickly and easily—such as beets, carrots, lettuce, cress, Swiss chard, nasturtiums, candy-tuft, cornflowers and marigolds?—Or did your ill luck lead you to others that grow slowly and make less show, so that the little gardeners got discouraged? (Note.—Children, like savages, *love show*.)

Did you forget to make arrangements to have the garden looked after while you were away on your holidays?

Well, don't be discouraged.

Try it again this year, and let the children feel that they are doing war work.

Make your school-yard beautiful as well as useful. The children will take more pride in their vegetable gardens if the whole place looks attractive.

Get some of "the men" interested, and plant out some trees on May Day. At the same time you and the older children can plant roots of shrubs and perennials in a border which will not be trampled. Ask the children to bring roots from home.

When the garden beds are ready (and *don't* have them where they will interfere with play) have them planted with seeds of things that are hardy, so that they will not blacken up at the first frost.

Later on, about corn-planting time, put in lots of scarlet runner beans wherever vines can be safely trusted. They are beautiful, and useful too.

If you are very ambitious encourage the children to have a school fair—in which case it will be necessary for them to have secondary—perhaps larger—plots at home. Tell them the school garden must be kept in good condition in readiness for the Fair. Make the Fair a big event, to which all the vegetable and flower operations of the summer must lead. Have the children keep note-books in which they must enter notes on their work, and, before the Fair comes off, have them write compositions on their gardening and kindred subjects. Have the best essays read at the Fair, and prizes presented for them. Make a charge of 5 cents per head for all parents and visitors who come to the Fair. That will provide prize money. Also have the "section" bring cakes and pies; make a picnic of the event, and have a field "programme." This will mean that the Fair must be held early, to be sure of fine weather—say towards the end of September at latest.

Dear teacher, all this means that you yourself must give a little extra of your time and energy, but think of the cause for which you are giving it. There is no greater work in the world than this that you are doing,—not for the sake of effect, but for the sake of the future men and women who will have to build up this war-torn world. Incidentally every mouthful of food that you and your pupils raise in the garden, will add just so much to the world's food supply.

At the recent Convention of the Ontario Educational Association in Toronto, Dr. Harold W. Foght of the United States Bureau of Education delivered an address which was full of interest and suggestion to everyone interested in rural development. He told of the wonderful results in scientific agriculture which have been obtained in the little country of Denmark, which now leads the world in that respect,—

and here come you: All this, plished because the best rural s

What Denmark can do, but teacher must c are books on bulletins which from cost, an at the Colleg can be taken. advantage of teacher, and w sections value her for the ext is where the But if you, d you can do w can invent, su opening the wa What do you worth trying?

A School i

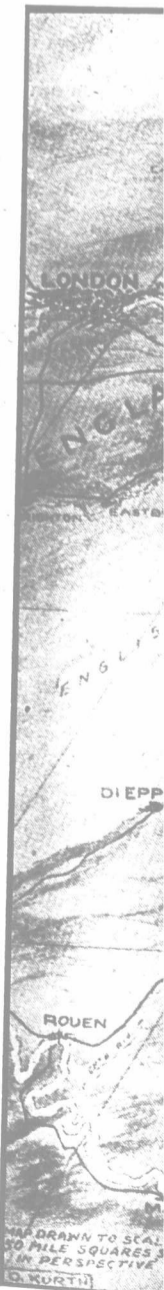
The following by one of our s evidently, has i on education. that might be school. Dougl Jones realizes m fore the necessi every part to g to what we call

EDITOR "THE F

I wish to tell was tried in a school was in a

Shortly before year 1916 severa to canvass the p Part of the mon for school sports for playground a gave their servic setting up of the

When Victoria yard had a teeteer a pair of rings. were well used at hour, at night an I think that co



and here comes the interesting part for you: All this, he said, has been accomplished because Denmark has established the best rural school system in the world.

What Denmark has done, Canada can do, but to the great work each teacher must contribute her share. There are books on agriculture to be bought, bulletins which may be obtained free from cost, and short summer courses at the Colleges of Agriculture which can be taken. All this should be taken advantage of by the really enthusiastic teacher, and will be just as soon as the sections value her work enough to pay her for the extra expense involved.

A School in a Mining Camp.

The following letter has been sent us by one of our soldiers in England, who, evidently, has been following our letters on education. It contains a suggestion that might be carried out in any rural school. Doubtless, as a soldier, Pte. Jones realizes more strongly than ever before the necessity of a body developed in every part to give the balance necessary to what we call a "fine physique."

EDITOR "THE FARMER'S ADVOCATE":

Witley Camp, England.

I wish to tell of an experiment which was tried in a one-roomed school. The school was in a mining camp.

Shortly before the 24th of May in the year 1916 several children were sent out to canvass the people of the community. Part of the money was spent on prizes for school sports, and the balance used for playground apparatus. Carpenters gave their services in the construction and setting up of the apparatus.

When Victoria Day came the school yard had a teeter, a swing, a trapeze and a pair of rings. Needless to say, these were well used at recess, during the noon hour, at night and on Saturday.

I think that country schools would do

well to have a large yard and plenty of playground apparatus. If the money couldn't be raised by a canvass of the people, it might be done by a series of concerts. With proper supervision, each child would learn to take his turn and to be fair to the others. Of course, this apparatus should not be placed where it will interfere with ball games. It does not require very much space.

Yours respectfully,
No. 1003599 (PTE.) C. D. JONES.
D. Company.
119th Battalion.

Hope's Quiet Hour.

Marvellous Things.

O sing unto the LORD a new song; for He hath done marvellous things: His right hand, and His holy arm, hath gotten Him the victory.—Ps. 98:1.

Jesus saith unto them, Did ye never read in the scriptures, the stone which the builders rejected, the same is become the head of the corner: this is the Lord's doing, and it is marvellous in our eyes.—S. Matt. 21:42.

We grow used to marvels and almost forget they are beyond our comprehension. Fifty years ago men would have been amazed if anyone had suggested the possibility of conquering natural laws in the way which is such a commonplace with us. We accept as a matter of course the telephone and the electric car, the "wireless", the automobile, the moving-picture and even the aeroplane.

But, long before these modern feats of magic were thought of, God was quietly doing marvellous things. Can anyone understand the miracle of the increase? How does an apple-blossom change into an apple? How does a chicken form in an egg? How does one grain of corn turn into many grains?

Last summer I tried to grow corn, and utterly failed. The buried seed showed no sign of life. At least, only one forlorn

stalk came up and tried to make a cob, but it was a dismal failure. That marvellous thing—the increase—did not happen; and it seemed more marvellous and incomprehensible to me that the buried grain did not change into big cobs of corn. Miracles are so common that we expect them. Long ago Luther declared that he had seen a great sign in the sky. It was nothing new, and yet none the less marvellous. "I was looking out of my window", he wrote, "and beheld the stars and the whole majestic vault of heaven, without being able to see the pillars on which the Lord has caused it to rest."

We are so accustomed to miracles that we forget to wonder how God "hatheth the earth upon nothing," and keeps the stars spinning dizzily through space—upheld by invisible power. There are people who say that "miracles don't happen". It seems to me that miracles are everywhere. Every blade of grass, every flower, every growing child is marvellous beyond our powers of understanding.—Eccles. 11:5.

But the prophecy which our Lord quoted was not one of God's everyday miracles, therefore its fulfilment was marvellous even in the eyes of men. We are so used to the miracles of nature that we forget to wonder over them; but, when a stone which was tossed aside as useless by the builders is elevated to the grandest position in the building, we are convinced that something wonderful has happened.

Our Lord knew that the rulers of the people intended to torture and kill Him. He told them so, quite calmly, and then warned them that the "Stone" which they—the nation's builders—"rejected" should become the head corner-stone. It was a dangerous thing to torture and kill a defenceless—seemingly defenceless—man; He said, "Whosoever shall fall on this stone shall be broken: but on whomsoever it shall fall, it will grind him to powder."

They perceived that He was speaking of them, but instead of fearing to take the risk—the risk of making God their enemy—they sought to lay hands on Him. The only reason for delay was because they feared to anger of the people, who

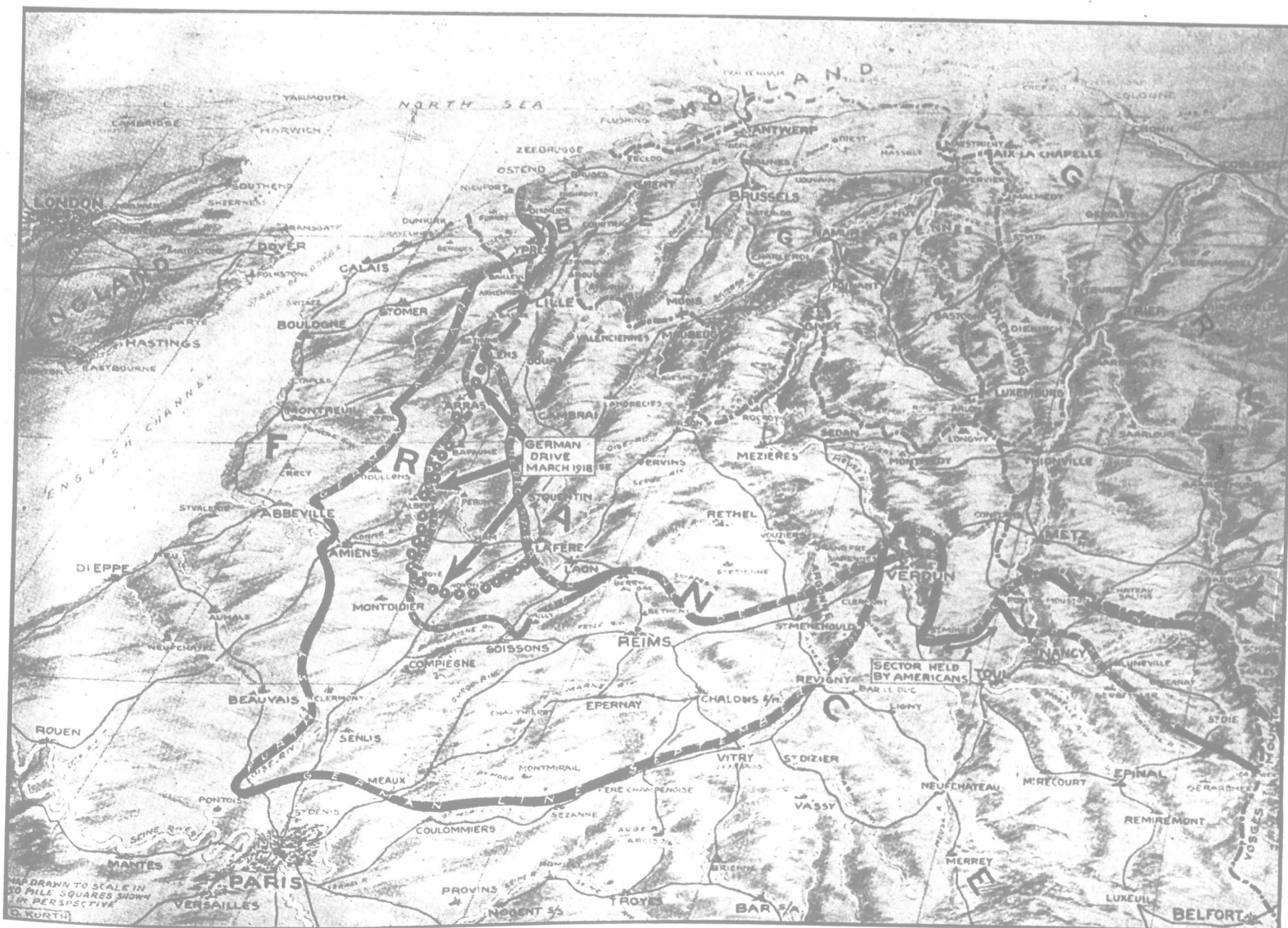
took Him for a prophet. Sternly yet tenderly He warned them of the danger of their mad wickedness, and they recklessly took the risk.

How amazed those men would have been if they could have looked ahead a thousand years or two. Why are all these steeples pointing to heaven in thousands of towns and villages? Why are people crowding into churches in many lands, and singing praises in many languages? They are worshipping Him whom the builders rejected long ago. He is the Stone which is becoming a mountain and filling the whole earth. "But we killed Jesus of Nazareth", they might say, "and surely that ended His pretensions". He was rejected by the builders, yet now God had made Him the Head of the Corner. It is not possible to win the victory if one is venturing to fight against God.

Read Ezekiel 38, and you will see how foolish it is to raise great armies and go out to do wicked acts of cruelty. The chief prince of Meshech and Tubal gathered together a mighty host of warriors, and rushed like a stormy cloud over his neighbor's land. The plan was carefully thought out. The wicked plot was expressed in these bold words: "I will go up to the land of unwalled villages; I will go to them that are at rest, that dwell safely, all of them dwelling without walls, and having neither bars nor gates; to take a spoil, and to take a prey". It seemed so easy and safe to attack undefended towns, to "carry away silver and gold, cattle and goods, to take a great spoil."

It seemed easy, but it was far from safe. It is never safe to fight against God. "Behold, I am against thee," He said, "And I will call for a sword against him throughout all my mountains, saith the Lord God: every man's sword shall be against his brother. And I will plead against him with pestilence and with blood. . . and great hailstones, fire and brimstone."

Then the declaration of judgment goes on: "I will turn thee back, and leave but the sixth part of thee. . . and I will smite thy bow out of thy left hand, and will cause thine arrows to fall out of



Where the Great Drive is Taking Place. The Scene of the Present Fighting Extends from Ypres to Montdidier, and Eastward to Reims.

thy right hand." The cruel invaders should be spoiled by those they had spoiled, and robbed by those they had robbed. The only place they should possess in the country they had invaded should be a place of graves, and the "great burying" should take seven months. All the people of the invaded land should become grave-diggers that the land might be cleansed of their enemies. That is a terrible picture which the prophet has painted of the doom of a mighty prince, intoxicated with ambition and power, rushing madly to his own ruin. Righteousness exalteth a nation, but wicked and cruel injustice towards the helpless is fighting against the All-Holy, All-Just Ruler of kings and kingdoms.

Germany made a terrible blunder when Belgium's rights were contemptuously and ruthlessly trampled under foot. It is a fearful thing to rouse the mighty wrath of outraged nations. That was what Ezekiel said: "Sheba, and Dedan, and the merchants of Tarshish, with all the young lions thereof, shall say unto thee, Art thou come to take a spoil? hast thou gathered thy company to take a prey? to carry away silver and gold, to take away cattle and goods, to take a great spoil?"

History repeats itself, and Germany must answer before the bar of the nations for that easy—and dangerous—conquest of Belgium.

But that is not all. "It is a fearful thing to fall into the hands of the living God". Heb. 10:31. We have heard so much about the love of God for men, that we have perhaps glossed over the sterner messages of the Bible. It is because He loves His children that He can be trusted to punish us for our sins. An easy, goodnatured father, who allows his children to sin unchecked, does not really love them. An indulgent mother, who coddles and spoils her children, is most unloving.

We look at the ruin war has wrought and, half-doubtfully, we ask:

"Lord, dost Thou care?"

This is His answer: "Yea, for thy gain or loss.

So much I cared, it brought Me to the cross".

He died to save us from our sins—not only from the punishment of sin. It is from sin itself—that deadly enemy of our souls—that He came to deliver us. When we fight against God we are allying ourselves with a cruel foe and attacking our faithful Friend.

Sin is disease, and holiness is wholeness, or health. It is madness to cherish any secret sin, fancying that it will bring prosperity or happiness. The wages of sin is death, and God—the wise and kind Physician of souls—does not hesitate to cut out the cancerous spot. Let us trust the sick and troubled world—and our own lives also—in His hands.

"There is no wrong but growing years shall right it

In God's eternal reign;

There is no evil seen but hath to fight it

An unseen angel-train.

To all who strive for good the crown is given;

So patience, and endure;

To those who fight—for them the hosts of heaven

Shall make the victory sure!

What though the prophet hath his day of sorrow,

And suffer for awhile?

God's host is there, and His eternal morrow

Is lighted with His smile.

Then let us hope and pray, and love and labor,

Cheered by that promise bright,

Trusting through darkness, working for our neighbor—

For God and for the right!"

DORA FARNCOMB.

Easter Gifts.

After an Easter holiday I returned to find a pile of letters, cards and parcels on my desk. Many of these were from readers of the "Advocate", and I wish to thank those who sent Easter greetings of various kinds—not forgetting the packet containing real maple sugar.

I must also thank those who sent gifts for the needy—ten dollars from S. G. C. ("A friend of Jesus"), two dollars from "A Puslinch friend", and a dollar from M. A. McD. and S. McN., (50 cents from each). The S. S. papers went yesterday to the hospital, and some of the

money has already gone to five sick and needy families.

DORA FARNCOMB,
52 Victor Ave., Toronto.

P. S.—An Easter card and personal message have been entrusted to me to pass on to "Doris". But how can I reach you, Doris? Won't you tell me your name and address?

D. F.

The Beaver Circle

Held-over Letters.

Dear Beavers:

You wrote a letter to the Beaver Circle weeks and weeks ago, didn't you? And it has not appeared yet. No wonder you are discouraged, but if you could peep into the Beaver Circle baskets you would know the reason for the delay. I think half the Beavers in Canada must have taken a notion to write during February and March, for the letters are piled in great heaps, and will have to be for some time yet, because, as you know we have not very much space for the Beaver Circle.

But you will have patience, won't you? By and by your turn will come.

PUCK.

Prize Essay.

A Pig.

One July morning in 1917 my father came into the house and said there were twelve little pigs at the barn. Of course, we children all wished to see the new arrivals

it was time for his meal. He would hurry up from the barn, and run squealing to his dish, or try to force his way into the milk-house.

He lived entirely outside, sleeping beside his mother in the yard. He seemed discontented in a pen. But the mischievous Gruffy was declared to be a "perfect nuisance," so was put in the pen with his brothers and sisters. They knew he was a stranger but appeared friendly at first. My father thought he would be all right and went to the house for supper.

Shortly after supper we heard a great commotion in the pig-pen and hurried down. The other pigs had attacked Gruffy and bitten him seriously. We took him outside and, on close examination, found the bites though many were not deep. They healed quickly, but Gruffy was never put in that pen again.

On cold or stormy days Gruffy has a pen of his own, but on mild days he lives outside, sleeping in a hole in the straw-stack at night. On warm, mild days he usually comes to the house, and waits in the woodshed till someone feeds him.

Pigs in general are not clever, but Gruffy knows as well as a horse if he is being praised or scolded. When it is the latter he hangs his head and walks slowly away. But if he is praised he seems very proud.

Gruffy is my very own pig. At the present time he weighs about one hundred and eighty pounds, so I fear he will soon be sold. Yours sincerely,

ESSIE GRAHAM.

(Class Jr. IV, Age 11.)

R. R. No. 1 Fenelon Falls, Ont.



Women of North Italy Who Were Driven from Their Homes by the Teuton Attack in the North.

The Austrians are again preparing for an attack on this region. Underwood & Underwood.

Sure enough we found twelve tiny white pigs lying beside their mother, a fine black pig, who is known about the farm as Mrs. Black.

Time went on, and all the pigs appeared equally healthy. But one day it was noticed one pig was not as strong or large as the rest. My father said perhaps it had black teeth. So my brother and I undertook to catch it. As the pigs were weaned we had no fear of being attacked by the mother pig.

We had supposed it would be an easy task to catch a sick pig, but we soon found it was not. How that pig did run! But at last he became exhausted. We caught him and carried him out of the pen. My father examined his mouth and said he had black teeth, adding we would pull them at once. Six teeth were extracted.

I placed piggie (who appeared more dead than alive) in a separate pen. For a time he would eat nothing, but lay moaning in the straw all day. When he began to eat, his meals consisted of Royal Purple calf meal and new milk. We called him Gruffy, and he soon learned to know his name.

Slowly he regained strength. He now received skimmed instead of new milk. About this time I went on a visit of two weeks. When I returned I was glad to find Gruffy well again. He grew very fond of us and would follow one anywhere.

In a short time he would recognize the hum of the separator. Then he knew

A Splendid Idea.

The following letter has just come in, but it is printed "out of its turn" because of its real value just now when we are being asked to substitute all other kinds of meat so that beef and bacon can be sent to our soldiers. "Miss Bunny Raiser" to be congratulated both on her success in war-work and her ability to write a good letter about it.

Of course, Beavers, if you all take to rabbit-raising you will have to see that the bunnies are kept penned up, as if not they may become a pest as they have been in Australia. But this matter can be trusted with you can it not? Now for the letter:

EDITOR "THE FARMER'S ADVOCATE": Having seen a letter, in a recent issue of your valuable paper, concerning the raising of rabbits for meat, may I be permitted to relate my experience with them. As Mr. McEvoy states, rabbits might well be looked upon as an easy and economical alleviation of the meat shortage, if all who are able, would undertake to raise a few. Many people could keep a pair of rabbits, where accommodation for a pig could not be found.

For three years I have kept rabbits, as pets at first, but since the meat shortage, with an eye to their possibilities as an occasional pork or beef dinner substitute. During the first two years I kept my old pair penned up, selling the young ones,

to surrounding neighbors, who after awhile become sufficiently stocked.

Having more last spring than the pen would hold, I turned them loose in the chicken house, and say didn't they multiply quickly! Several young ones I tamed enough to eat from my hand, bearing in mind, that as they grew older, they would have to be caught and killed. Just how many young ones I had I never knew, for several disappeared; either the hawks or Mr. Fox, made away with them. However, in the fall I sold four pairs of good-sized rabbits, and had five besides the old ones. When killed, around freezeup, these five made three tasty dinners, for seven full grown people. During the winter months I do not breed any at all, as there is considerable danger of the young ones freezing, so having to feed only the two old rabbits, the cost of keeping is very small. Twice a day I give them a handful of grain, and a few potato parings, and at noon, they are fed some of the chickens' mash, about a saucerful. I also keep them well supplied with milk which they drink greedily. Their bedding is wheat straw and of this they eat considerable.

This year my first young rabbits are due about the beginning of May and I intend to breed all I can so that during the summer we shall be able to have an occasional rabbit dinner, and freeze a few for winter.

Personally I think the fifteen or twenty young rabbits one can obtain during the spring and summer months, amply repay for the amount of food given.

Now Mr. Editor, boost the bunny through your paper; and you Beavers see what you can do to raise them, and help out even a little, to avert a serious food shortage.

MISS BUNNY RAISER.

Englehart, Ont.

Home Cured Hams and Bacon.

We are sure The Globe will pardon us for appropriating the following, in the first place because the problem of food conservation at the present time justifies the passing on of any information concerning food, and in the second because the fact that the recipe comes from Nellie McClung gives it especial interest to many people.

"You would never guess if I did not tell you to whom I am indebted for the accompanying rules for the curing of pork—to no less a person than our own Nellie McClung," writes a Winnipeg lady. I have tested them, and found them excellent, as are most practical or poetical which come from her clever brain.

To sugar cure pork, after it is cut and cooled rub each piece with salt and let drain over night. Pack in a barrel, with hams and shoulders at the bottom, using the strips of bacon to fill in between. For each hundred pounds of meat (to even think of that much meat in these days takes our breath—but thinking costs nothing) weigh out eight pounds of salt, two pounds of brown sugar and two ounces of saltpetre. Dissolve in four gallons of water, bring to a boil, skim, cool thoroughly and pour over the meat. Hams need eight weeks in the pickle, bacon but five or six. Drain and allow to soak in clear water half a day, then wash with clean brush and hang up to dry for three days. Next comes the smoking. Hang the pieces with spaces between; allow the smoke to penetrate, and keep up low fire (hickory or maple wood is best) for three or four days, or longer if the fire is allowed to go out nights.

I should have said in the beginning that no housekeeper can work the miracle of making first-class meat out of meat which isn't first-class to begin with. The quality of the pork is determined by its breed and the way it has been fed and cared for.

First catch your frog, eh? Here have scores of us been foolish enough to think "pigs is pigs", and let the butcher get any old kind of pork off on us. We'll know better next time. Danny is not the only one who has had seeds sown in him. Dear me! not a bit poetical, you say. It is all in the way you look at it. Whether the pink of the wild rose is prettier than the pink of a real sugar-cured, home-cured ham depends, quite a bit, on how hungry you happen to be.

K. K.

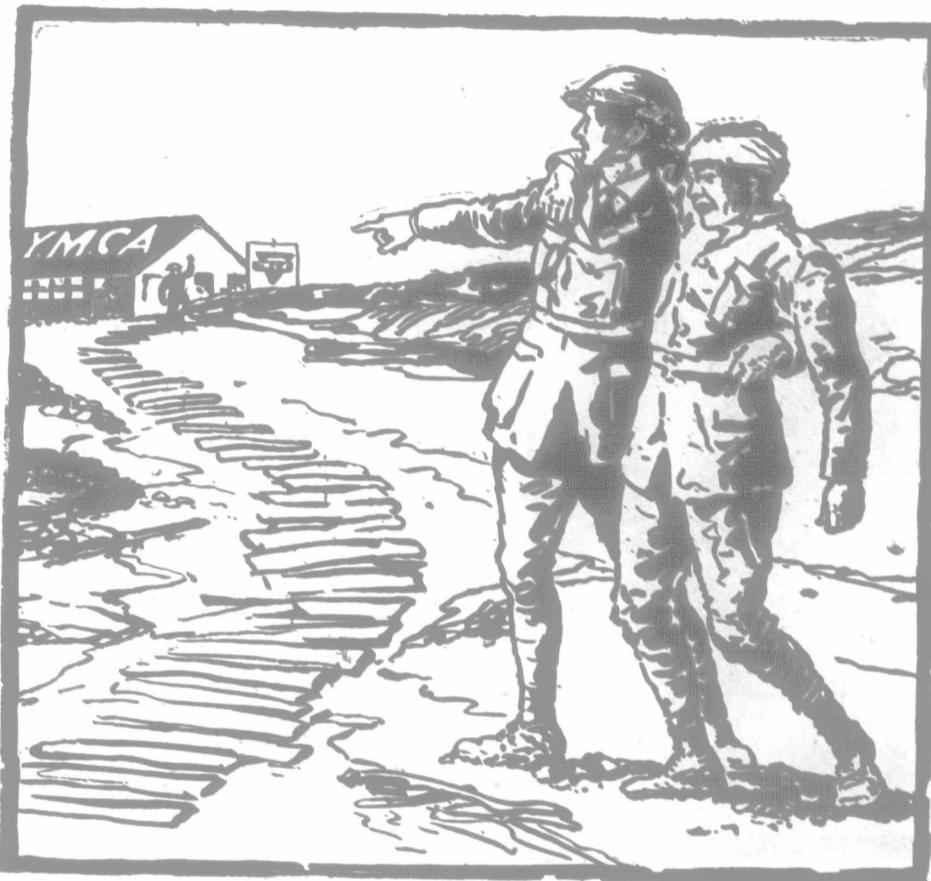
Vast Issues Depend Upon the Welfare of Our Boys

TRY to picture yourself in the muddy cold trenches after exciting days and long nights of mortal danger and intense nervous strain. Rushing "whiz-bangs" and screaming "coal boxes" are no respecters of persons. You are hit! But despite shock and pain you still can face the long weary trudge back to dressing station. Weary, overwrought and depressed you are prey to wild imaginings of that other coming ordeal with the surgeon. There are other "walking wounded," too! You must wait, wait, wait. And then—

Up comes a cheery Y.M.C.A. man, the ever present big brother to the soldier, with words of manly encouragement. Close beside the dressing station the good, generous folks at home have enabled him to set up a canteen. He hands you biscuits, and chocolate or coffee.

"In thousands of cases," writes an officer, "it was that first hot cup of coffee that dragged the man back to life and sanity!"

The tremendous helpfulness of the Y.M.C.A. as an aid to the "morale," or fighting spirit, of the soldiers is everywhere praised. No wonder the Germans make every effort to smash the Y.M.C.A. huts out of existence.



Cheer Up, and Thank God for the Y.M.C.A.!

Y.M.C.A.
Red Triangle Fund
\$2,250,000, May 7, 8, 9
Canada Wide Appeal

The Y.M.C.A. is **everywhere**. You first met the helpful manly Y.M.C.A. worker in camp, then on train and boat, at camp in England and in France, close to the firing line. Often he risks his life to reach you in the trenches. He has won the warmest praise from military authorities, statesmen—the King!

Have you a precious boy at the front? You cannot be "over there" to guide him away from fierce temptations of camp and city. You cannot comfort him in his supreme hour of trial. Your parcels to him are necessarily few. But the Y.M.C.A., thank God, is "over there," going where you cannot go—doing the very things you long to do—doing it **for you and for him**.

Will you help? This vast organization of helpfulness needs at least \$2,250,000 from Canada for 1918. For your boy's sake be **GENEROUS!!**

Brief Survey of Y.M.C.A. Service to Soldiers

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Y.M.C.A. nightly under fire in many places.

300,000 letters a day written in Y.M.C.A. buildings.

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Entertainments, Bible classes, sing-songs, good night services and personal interviews conducted by Y.M.C.A. workers.

Y.M.C.A. Red Triangle Clubs in Toronto, St. John, Montreal

and other cities for returned soldiers and enlisted men.

Y.M.C.A. service extends from Vancouver to the firing line and then back to patients in hospitals until men are discharged.

Y.M.C.A. Secretaries accompany troop trains.

Between 400 and 500 millions of letters and cards written and posted in Y.M.C.A. tents, huts and dugouts since war began.

Splendid service to boys in Canadian Camp hospitals. Regular sing-songs and inspirational addresses with distributions of magazines, fruit, chocolates, gum, books and smokes.

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Headquarters: 120 Bay Street, Toronto

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G. A. WARBURTON (Toronto)
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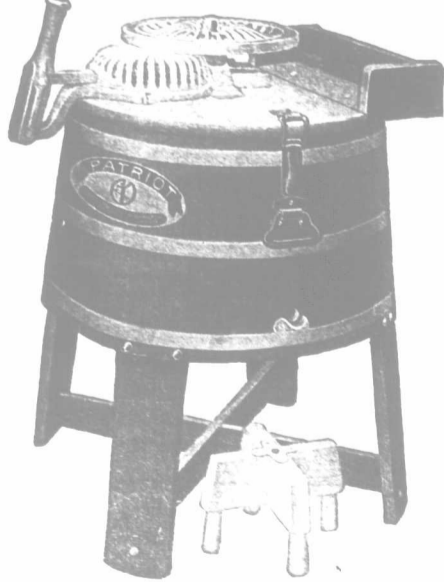
A-101

TIME AND LABOR SAVED MEANS MONEY EARNED

Every minute counts on the farm these days. More money could be earned if the days were longer. One way to spend more time on profitable work is to spend less on drudgery. Washing is very necessary, but it's drudgery just the same. It can be reduced to almost nothing, however, with the

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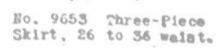
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[Rules for correspondence in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen name is also given, the real name will not be published. (3) When enclosing a letter to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

The Woman's Part.

EDITOR "THE FARMER'S ADVOCATE":

There has been much written and much said re the part that Canadian country women must play in the campaign for increased production. That we have an important part to play and that we are willing to play it we know, but the scene and manner of our activities do not seem to be so clear to us. Far be it from me to belittle the efforts of back-yard gardeners or organizations which aim at providing female help for the farms. These are all necessary and are doing good work but the greater part of the real work done on the farms by women and girls this year will be that done by our own farm women on their own farms. Every farmer knows that it is the constant regular worker on the farm who really counts; the worker who is experienced and interested in the successful performance of the work. This experience and interest can only be largely found in country-bred women on their own farms. The city girls will do their part no doubt and do it well but theirs will necessarily be a minor part. On the already over-burdened shoulders of our country women then this burden must fall. And if it is to receive fair treatment other less essential duties or pleasures must be dropped to provide time and energy for the new enterprise. And this is the problem that confronts us farmer women. "What are we doing that we can safely leave undone and what more can we do to help that we are not already doing?" And the problem each woman must solve for herself, as one woman's solution will not solve another's problem.

For instance, one woman who has never milked may assert with righteous pride that she is learning to milk in order that her husband may not have to leave the fields early this summer to milk. This will be a real assistance on that woman's farm. She may not herself secure any more milk than would the husband, but the additional work which he does in that extra hour each day for six months may rightly be credited to her account. But another woman exclaims, "Why, I always do the milking in the summer when the men are busy, so that would be no increased aid from me." Well that woman will just have to think it out for herself and determine just what help she can give which was never given before. After all every odd job we do this summer which releases a man for even a half hour's extra work will be an aid, for the men must in the end do the greater part of the farm work and all the women can do is help, very efficiently too. And the woman who is really anxious to work and do her part won't be worried whether she is equipped with the latest thing in overalls or is in her ordinary working apparel, as she sallies forth to put on her own screen doors and windows that her husband may not be called from his work, or, armed with pruning shears and hoe, essays to trim and clean the berry patch as efficiently as she once trimmed and cared for her rose bushes. We can safely trust our Canadian farmer women to do their part in the production campaign this summer and still "look well to the ways of their household."

"ONE OF THEM."

Dear "One of Them", you are quite right in thinking that in the matter of helping to feed the world in this crisis a greater burden will fall on the country woman than on the city woman, taking them on the whole. The country woman has the greater opportunity and the better training; all her life she has been doing more or less to add to the world's food-supply, whether by caring for poultry, making butter, or gardening, or all three combined. Now, as you say, a greater field than ever has been opened before her, for, by doing odds and ends that she never did before, she can save the time of her men for the more direct work of production.

Yes, it is all a matter which each must think out for herself—just how she can help most, while keeping, at the same time, her health and efficiency for all

the work that s have to do to-n

At the same that the city g the sum total small extent, fo and parsnips ra yards would ma if all bulked tog of the market- a little, and ma in the future, vegetable raising are still left ope and poultry-rai ever be done to in the town.

Last evening there was a part Most of them w their services t practically all gardening this yards of their "community ga of this city.

Their enthus Practically half was on growing should be prepa things to plant, not hard to see the task in the v that they must experience of o to lose time, th unturned which the right way ha have attended O. A. C. man", on gardening, a the public library for bulletins on this, on the pa girls who are not can forsee at le results. Already about canning so raise, so the worl the wedding is ov

It seemed so od ful—to hear all th and beets, and their values as war such talk, a the city, would and out of place. all its horror, ha in many ways. divider, it is also and one of the drawing people t together in intere folk. Henceforth many of them hav that work on the l knowledge, that delight in it wh out, in short, that stupid plodding b fession.—Indeed it indicate at presen rush "back to the as has never befo as soon as the too will be done.

Of one thing both city and almost everyone to do the most sh is truly a question out for herself.

Another E

Dear Junia.—Se a suggestion from extend the life of befo by sewing on new fe suggestion about —as I have used th first I sewed them washed a few time rusty so now I sew stitching the edge so the stitches will stockings are put seam flat and overs stocking; also overs will be no gaps b It takes a little mo neater job when do I take pieces from mere stockings and of the soles of the so that when turne will be no creases put another piece o heel and up the ba the seam where the makes them warmer repaired in this wa a long time, and lo I paid one dollar a ago.

the work that she has to do now and will have to do to-morrow.

At the same time we are glad to know that the city gardens are also adding to the sum total of the food supply to no small extent, for the beets, carrots, beans and parsnips raised in all the city backyards would make a pretty fine showing if all bulked together. True, the business of the market-gardeners has been hurt a little, and may be to a certain extent in the future, in the mere matter of vegetable raising; but two great channels are still left open to them—fruit-growing and poultry-raising, neither of which can ever be done to any appreciable extent in the town.

Last evening I was at a house where there was a party of girls, twelve of them. Most of them worked at munitions while their services there were required, and practically all of them are taking up gardening this year, some in the backyards of their homes, others on the "community gardens" in various parts of this city.

Their enthusiasm was good to see. Practically half the talk of the evening was on growing things,—how the soil should be prepared, what are the best things to plant, and so on—and it was not hard to see that they are going at the task in the very right way. Knowing that they must avail themselves of the experience of others if they are not to lose time, they are leaving no stone unturned which will indicate to them the right way of doing things. They have attended lectures given by "an O. A. C. man", they have bought books on gardening, and they have besieged the public library and agricultural stations for bulletins on the subject. Given all this, on the part of alert, intelligent girls who are not afraid to work, and one can foresee at least some worth while results. Already, too, they are talking about canning some of the things they raise, so the work will not stop when all the weeding is over.

It seemed so odd—and yet very delightful—to hear all the chatter about potatoes and beets, and beans, and celery, and their values as foodstuffs. Before the war such talk, at an evening party in the city, would have seemed "queer" and out of place. But the big war, with all its horror, has opened people's eyes in many ways. Apparently the great divider, it is also proving a great mixer, and one of the ways in which it is drawing people together is the drawing together in interest of country and city folk. Henceforth city folk must see, as many of them have never seen heretofore, that work on the land needs "brains" and knowledge, that there may be a great delight in it when successfully carried out, in short, that "good" farming is not a stupid plodding but an interesting profession.—Indeed if things go on as they indicate at present, one may foretell a rush "back to the land" before long such as has never before been known. For as soon as the women are won the thing will be done.

Of one thing I am sure—for I know both city and country people—that almost everyone is anxious just now, to do the most she can possibly do. It is truly a question that each must think out for herself. JUNIA.

Another Economy Hint.

Dear Junia.—Seeing in the Advocate a suggestion from Polycarp, "How to extend the life of before-the-war stockings," by sewing on new feet, may I add another suggestion about sewing the feet on?—as I have used them for some time. At first I sewed them with cotton but when washed a few times the stitches became rusty so now I sew them with black silk, stitching the edges well while sewing so the stitches will not break when the stockings are put on; then open the seam flat and oversew the edges to the stocking; also oversew the seam so there will be no gaps between the stitches. It takes a little more time, but makes a neater job when done. For winter wear I take pieces from the legs of old cashmere stockings and sew on the inside of the soles of the feet stitching it well so that when turned right side out there will be no creases under the feet, and put another piece over the inside of the heel and up the back of the ankle past the seam where the foot is sewn, which makes them warmer and stronger. When repaired in this way they will last for a long time, and look better than those I paid one dollar a pair for a short time ago. BETH.



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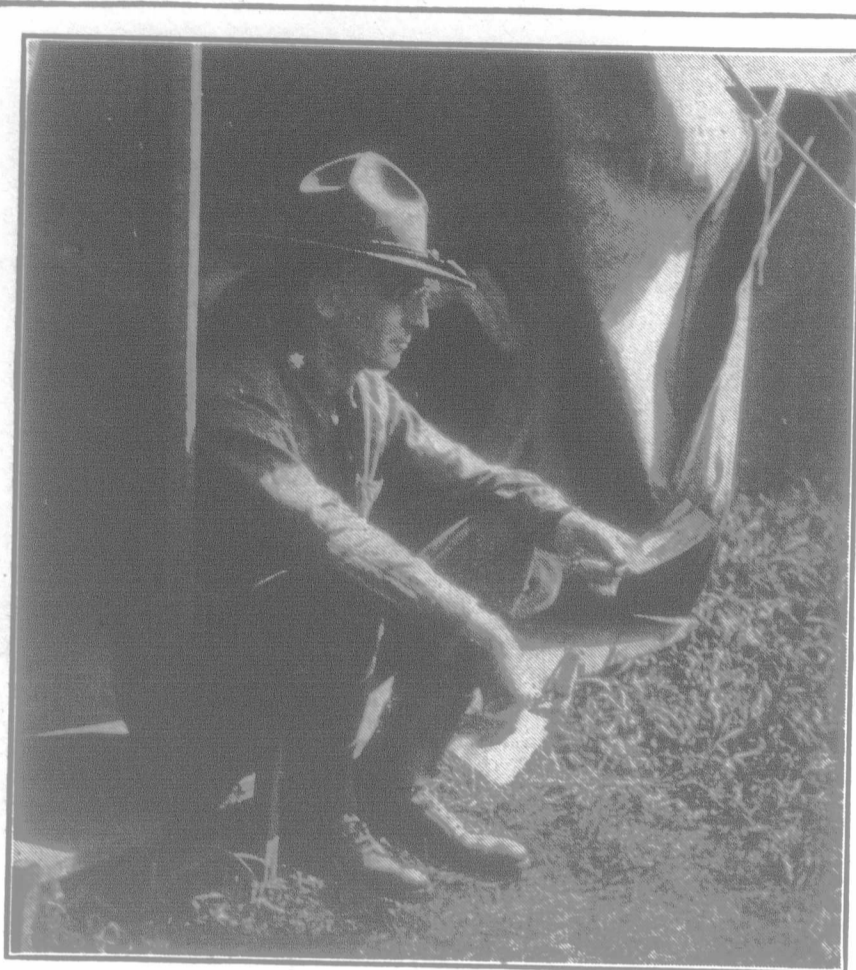
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The Uniform Question.
 Dear Junia.—I know you have never heard of me before, but after reading the letters by "A Hired Man Problem" and "Yours for Aprons", I want to give you my idea about these questions of which we hear so much, (1) girls working on farms and helping take the soldier boys' places, and the accompanying question—(2) what to wear when working in the fields.

Now I know what I am telling about because I worked on the farm four months last summer and did my best to take a boy's place. I started work on the first of May and worked till the first of September, and had a share in most everything that was 'doing' on the farm during those four months. Among the numerous things I helped with were harrowing, planting potatoes and beans, hoeing potatoes, beans, corn and turnips, mowing, raking and pitching hay, stooking and pitching sheaves, milking and weeding. Every morning I took the milk to the cheese factory in the village a few miles distant.

Now, as to what I wore. My 'uniform' so far as I know was entirely original. It consisted of a boy-scout shirt, bloomers and short kilted skirt, all of khaki drill; a pair of low canvas running shoes and an old cotton hat. (I have always worn running shoes in summer, thistles being not too abundant here, and always wear a cotton hat for outdoor work as any other is sure to blow away from me.) When I read in the letter from "Yours

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for Aprons" that she forked 75 tons of hay, while wearing a bungalow apron, I felt like asking her why she did not fork the hay with a table fork. To my mind one would be just as sensible as the other.

Now I am not very big (5' 1½") and my skirts are not very long but I could not fork hay, very well, with a skirt on.

I think if our friend of the aprons will try this year while forking hay to put her false ideas of modesty in her pocket and don a sensible pair of bloomers or overalls, she will find it a great deal easier to fork hay than while wearing a cumbersome apron. She seems to think one would not wish to be seen by field callers in such a garb. Well, we had many, many callers last year (as we live very close to a main road) and not one ever hinted at my looking immodest in bloomers. Why I even forked grain with the Minister (yes, a good Presbyterian Minister). Did he think me immodest? I don't think so. He told me I was doing good work. Anyone who thinks girls are immodest who wear bloomers or overalls while doing men's work, well—I think there is something wrong with their ideas—seem to be looking for an evil motive for everything we girls do nowadays.

One thing in closing—Girls who go to summer resorts and strut about in overalls with their watches on their ankles, etc., are not the girls whose cause I am upholding (they are the ones who cause a great deal of the slander, and are the ones who never did any real farm work.) But girls who don boys clothes and go out to work on the farms to do all they can to produce food and who do not go about looking for praise, for these girls I would ask all those who have anything to say on this subject to "think before they speak" and when they do speak, to have something good to say. We girls know what we should and can do and we are trying to do it, but oh, let us dress as we see fit!

ROSABELLE (A FARMER'S SON?)
Carleton Co., Ont.

It is hard for us all to see alike, is it not? Personally I think a woman should wear exactly the garb that she finds safest and most convenient for her work. Efficiency is the great thing, after all,—for there is so much work to be done in the world. Some very great women, too, have actually worn the garb of men for working—Rosa Bonheur, for instance, and certain explorers and scientists. I have never heard that the charge of immodesty was ever brought up against them. But possibly it was. Prejudices die hard, and to some of us anything different from the thing we have always been used to savors of calamity. Speaking again, for myself, I cannot see the least immodesty in wearing bloomers, or overalls either, providing that the bearing of the one who wears them is sensible and natural. Modesty is, after all, rather a matter of deportment than of dress; a femininely dressed woman may be very immodest indeed in her actions.—However, I do not wish to impose my opinion on anyone. Each has a perfect right to think as she sees.

Cooking For April.

Parsnip Oysters.—Boil 4 parsnips until tender, then mash and add 4 tablespoons flour mixed with 2 beaten eggs, also 1 cup of boiled rice and 1 cup chopped nuts if one has time. Season with pepper and salt, brush with melted fat or butter and brown in a hot oven. Serve very hot for supper.

Cheese Salad.—Cook a small red cabbage in boiling salted water, then drain. Arrange on lettuce leaves on a platter, put small balls of cream cheese in the center, pour good salad dressing over the cheese, and serve with cold meat.

Onion Soup.—Take 1 good sized onion for each person. Cut them small and fry in a little butter. Mix a little flour in a little water and add, stirring until it thickens. Add also a dash of powdered sugar. Pour in the amount of milk required, let boil up once, season with salt and pepper and serve hot with bits of toast or biscuit. Water may be used instead of the milk and the soup left to simmer 2 hours before serving.

Dandelion Greens.—While dandelions are young, before the flowers appear, they make delicious greens. Cut out with a knife to save the "crown" which is the best. Take off the roots, wash

well, cook in boiling salted water, drain very dry. Finally season to taste with butter, pepper and salt, chopping fine with a knife over the fire until thoroughly hot. Serve on hot buttered toast for supper.

Banana Compote.—Make a syrup by boiling together 1 cup sugar and ¾ cup water for 10 minutes. Add grated rind and juice of half a lemon, ¼ teaspoon vanilla. Let stand until cold, then pour over 4 bananas, cut in thick slices. Sprinkle with chopped nuts and serve with whipped cream.

Grape Fruit Marmalade.—Take 6 grape-fruit, 4 lemons, 3 pints cold water for each pint prepared fruit, 1 lb. sugar for each pound fruit, 1 lb. sugar for each pound fruit. Cut each fruit in quarters, and slice as thin as possible, discarding the first slice from the end and the seeds. Weigh, and to each pound add 3 pints cold water. Set aside for 24 hours, then boil gently until the rind is tender. Set away until next day, then weigh again and to each pound add 1 pound sugar. Let cook very slowly until it thickens slightly on a cold dish.

Candied Peel.—Save the skins of oranges and lemons, scraping off as much as possible of the inner white skin. Boil the rind 20 minutes in water, then strain. Make a thick syrup of clear water and sugar and simmer the peel slowly in this, watching it closely and stirring often to prevent burning. When done take from the syrup and roll in powdered sugar. Cherries, slices of pineapple, segments of oranges, and strawberries may be candied in the same way. They are especially nice to put away to box at Christmas time for gifts.

Dumplings for Pot-Pie.—Sift together 2 cups flour, ½ teaspoon salt, and 4 level teaspoons baking-powder. Rub in 3 level tablespoons shortening, then mix to a soft dough with a beaten egg diluted with half a cup of sweet milk. A little more milk may be needed, as the dough should be just soft enough to take up with a tablespoon. Put it in rounds on top of the meat (veal, mutton, beef or chicken) which has been simmered until tender and the gravy slightly thickened and nicely seasoned. Cover and let cook undisturbed for 15 minutes.

Buttermilk Pie.—1 cup raisins, 1 cup sugar, 1 cup buttermilk, yolks of 2 eggs. Bake it as you would custard pie. Beat the whites of eggs with 1 spoon sugar and add as the pie is about done.

Banana Cream.—Heat 2 cups milk. Mix 4 tablespoons sugar with 2 tablespoons flour; moisten with a little cold milk and stir into the hot milk, cooking until creamy. Add 2 well-beaten eggs, cook a little longer, flavoring to taste. Cool and pour over sliced bananas.

Prune Mould.—Wash 1½ lbs. prunes in warm water, then put in fresh water and soak over night. In the morning cook slowly in the same water, adding ¼ lb. sugar and the finely cut peel and juice of one lemon or orange. When soft squeeze through a ricer. Mix in 1 oz. clear gelatine melted in 1 tablespoon warm water. Stir well and pour into a wet mould. When firm (in several hours or next day) turn out and pour over it soft custard, made with milk, eggs, and a little cornstarch.

Prune Pudding.—Take ½ lb. prunes cooked as above until soft. Remove stones and cut in bits. Put 3 eggs in a basin with 4 dessertspoons sugar and beat well. Add one tablespoon of flour, some chopped nuts if you have them, a teaspoon of lemon juice, and the prunes. Pour into a butter dish placed in a dish with a little hot water, and bake in a hot oven 30 minutes.

Jellied Veal.—Take a shank of veal which has had the bone sawed across a couple of times, and put it on to stew with cold water enough to cover. When the water begins to boil skim it and set the pot back to simmer gently for 4 hours. Now take out the veal and cut the meat off the bones. Put the bones back in the stock to simmer longer. Cut the meat in small bits meanwhile and place in a mould. You may put slices of hard-boiled egg about the bottom of the mould first if you wish. Strain the stock to fill up the mould and set away to stiffen. Turn out on a platter so that the egg slices will show, and garnish with parsley or cress.

Lemon and Orange Marmalade.—To 12 lemons allow 2 oranges. Wash the fruit, then cut in quarters and slice very fine with a very sharp knife, discarding the seed. Add 7 pints water and let stand over night. In the morning boil 1 hour, then add 7 lbs. of sugar and boil until it jellies.

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To Clean a W

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The Decor

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Curative Prop

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We get the mir vegetable kingdom growth and repair it not be for a proper proportion dentists and orth ways a cause to Therefore study c only vegetable mi digestive tract. I phur from the onio carrot and beet, c from the tomato corn, oats, wheat parsnips and radish

The Scrap Bag.

Parsnips.

Parsnips left in the ground over winter should not be used after they begin to grow as they develop a dangerous poison.

To Clean Silver Easily.

A very easy way to clean silver is the following: To each quart water allow 1 teaspoon salt and 1 teaspoon baking soda. Put over the fire and let boil. Immerse the silver in this and wash well with a dish-mop, then rinse and dry.

Hint for Motorists.

The many farm folk who now have motor-cars will appreciate the following: To keep rain drops off the windshield rub the surface of the glass with coal oil. The raindrops will roll off instead of staying on and obstructing the view.

To Pare a Pineapple.

Hold the pineapple with the crown end away from you and with a sharp knife shave off the sharp ends of the crown. This gives you a handle to hold the pine butt-end up. With a knife cut off the bottom of the pine and then peel downward toward the crown. Afterwards dig out the eyes with the knife. Pineapples are of great value to digestion, but should not be served with cake or anything sweet, or following anything sweet.

Making Summer Dresses.

Shrink all material before making it up, else you cannot be sure of a good fit after the dresses are washed. To "set" the color in ginghams, etc., add a few tablespoonfuls of turpentine to enough water to soak the materials in, then let dry. It is a good plan also to wash some spare pieces of the material with each dress at each washing, then when mending time comes, as it does so soon in children's clothes, the patches will scarcely be noticed.

Ready-Made Cotton Dresses.

Nearly all ready-made dresses, in which the material has not been shrunk before making, creep up with the washing and need letting down in the skirt. Before the dress goes to the tub take out the hem and turn it again at half the width. This brings the edge of the new hem to the crease in the bottom of the skirt which gives a straight guide for basting. The skirt will almost invariably come out of the wash the right length, with no streak to mark the old line.

To Clean a White Woolen Dress at Home.

Spread the dress out on the kitchen table over a white cloth and cover it with a mixture of white cornmeal and salt. Let stand an hour or so, then with a brush covered with clean cloth go over the entire surface of the garment vigorously. Finally shake well and hang in the open air. If the dress has not been too much soiled it will be quite clean. The same process is good for white doeskin gloves.

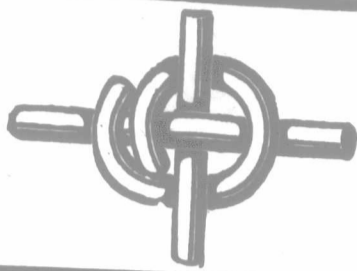
The Decorative Wild Grape.

When one is looking for a decorative vine to cover any unsightly spot, such as an old fence, outhouse or dead tree, the wild grape vine should not be forgotten, as it grows fast and seems to thrive in almost any soil, keeping its leaves until late in the fall. It is also excellent for a verandah or summer-house.

Curative Properties of Vegetables.

As rheumatism is the result of dietetic errors it can be cured by discarding foods causing same and substituting those corrective of it. One physician claims he can cure rheumatism with cabbage—I am sure it can be greatly alleviated by making onions, cabbage and celery prominent in the diet of one so afflicted.

We get the mineral elements from the vegetable kingdom that we need in the growth and repair of our bodies, and may it not be for a lack of these foods in proper proportion that we need so many dentists and orthopedists? There is always a cause to produce every effect. Therefore study causes. It is said that only vegetable minerals should enter the digestive tract. If so, let us get our sulphur from the onion, our iron from spinach carrot and beet, our calomel or mercury from the tomato, our phosphate from corn, oats, wheat, cabbage, cauliflower, parsnips and radishes.



The Fence For Farmers Is The Kind That Lasts

THE fact that PAGE FENCES do last, is sufficient reason for their choice by practical, careful farmers.

Page Fences BUILT TO LAST

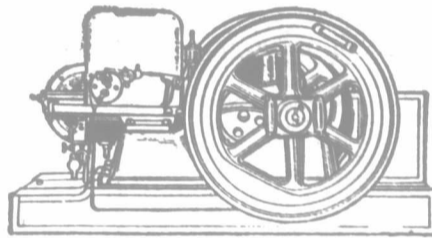
We have seen, and maybe you have too, some Page Fences, that were put up over 25 years ago. They were the first fences we made—yet they are still giving good fence service. Consider the satisfaction that those Page Fence buyers, of over a quarter of a century ago, have received from the money they spent. And Page Wire Fence is made the same way to-day, and of the same material as it was then.

Actual No. 9 gauge wire is used throughout—in locks and all. It is subjected to an extra coat of galvanizing to give it added life and appearance. Quality and value are apparent in Page Fence to every farmer who really studies the wire fence problem. A Page Fence saves its owner money, because the one he puts up to-day will last his lifetime. No money spent on fixing it up.

In these times you cannot afford to erect a fence of inferior quality, that will not last. Thrift is the watchword of the day—and the best way to be thrifty is to spend your money on only the best equipment, that needs no replacing.

Page Fence is well worth looking into now. Ask any authorized Page dealer, or write direct to us for catalogue and price list. For your convenience, we have placed a coupon below. Simply mark a cross opposite the Page product you are most interested in. Send it now, while you think of it.

Remember, we allow shipping charges on all orders of 200 pounds or over, to any place in Old Ontario or Quebec, when payment is made within 30 days. Address to your nearest branch.



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make light work of countless chores around the farm. The Page Farm Engine is a real help, because it does its work quickly; with never a "hitch." Yet its first cost is low, and its upkeep is almost nothing—2c. an hour for fuel.

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Name
Address

Advertisement for Maxwell Power Bench Washer, featuring an illustration of the machine and descriptive text about its benefits for farm work.

Current Events.

Sir R. Borden announced an Order in Council looking to the abolition of hereditary titles in Canada, and the limitation of other titles.

Registration of Canada's man and woman power will take place in June.

The Federal Government and Govern-

ments of Saskatchewan and Manitoba are joining in establishing a plant at Estevan to make briquettes of lignite.

Canada's expenditure on the war so far has been \$835,950,019, and the estimates for the present year involve further expenditure of \$516,000,000.

United States coastwise lines of steamers are to be used for transporting supplies overseas.

The United States, with the consent of Portugal, has established a naval base on the Azores Islands.

The French Government has published a private letter written by Emperor Charles of Austria, which practically admits the righteousness of the Allies' cause.

United States marines have landed at Vladivostok to co-operate with the troops of Japan and Great Britain already there to guard the stores sent for the use of the Russians while Russia was an ally.

It is reported that Japan has proposed to send 200,000 troops to China to co-operate with 200,000 Chinese troops offered by Japanese, to restore order and protect the borders; also that Japan

2 Days' Work in 1

Mr. Farmer:

We sell a farm tractor attachment for use with the Ford car. We guarantee that the Staude Mak-a-Tractor will do any 4-horse job on your farm. It will pull a double bottom plow and blacken up 5 acres a day. On the disc and cultivator it makes a quick and satisfactory job. You cannot beat it on the binder or hayloader. It gives you the cheapest power available. Any boy can drive it.

This machine sells for \$246, cash, and is made to fit any year model Ford car, either roadster or touring. The equipment includes a first-class, honey-combed radiator that replaces the old one, and also water and oil pump and special fan and pulley. These become a permanent part of your Ford equipment. They keep your engine cool and oiled under all conditions. The appearance of car is not altered, save for the better.

The tractor attachment proper can be put on and taken off by any person, anytime, in a few minutes. It does not put any unusual strain on the engine and chassis of the Ford car, and any farmer who asks for it can have a guarantee from us respecting repairs that are occasioned by the use of the car for tractor purposes.

You really should not "potter about" this season, trying to do three men's work with farm equipment that was good enough when labor and food for man and beast were cheap—a day's work these days should really amount to something.

You can be working with the Staude Mak-a-Tractor on your farm in 3 days' time if you do your part now.

There is no question about this machine doing good work on your farm. We will gladly take it off your hands if it does not reasonably meet your expectations. We instal.

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Entry Blanks may be had on application to the Secretary, Sherlock Bldg., Lethbridge, Alberta.

practically demands control of China's finances. The alternative is that Japan will send troops to Sheng Tung and Fukien provinces to protect Japanese interests.

Premier Lloyd-George announced that owing to the present crises conscription is to be applied to Ireland, Home Rule to come later.

Prof. Rausenberger, Manager of the Krupp works, was the inventor of the giant long range gun which is being used against Paris. French aviators have discovered its location. It has been announced in the British House of Commons that steps are being taken in Great Britain to construct a gun that will throw shells 80 miles.

On April 12th the Germans made air raids on Paris and on the Midland Counties of England.

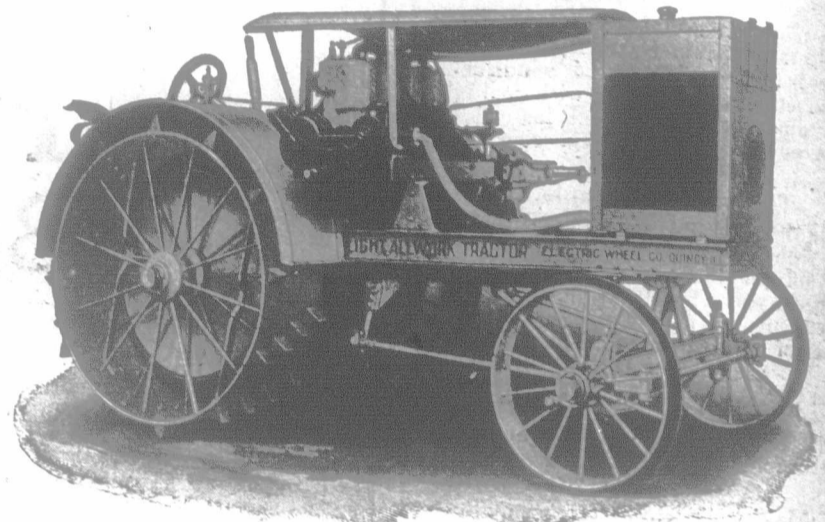
At time of going to press the war news from the Allied armies is distinctly encouraging, since, in the face of the most terrific fighting of the war, all the most important places, including Messines Ridge, are still in possession of our forces. In the north Field Marshal Haig's men have beaten off the enemy from Bailleul, one of the chief immediate objectives of the Germans since, had it been captured, they would not only have gained important railway connections, but would have left to the British only one main high road to Ypres. Bailleul is almost directly south of that city, at a distance of 10 miles. A little to the west of it is Hazebrouck, towards which, after taking Armentieres, the Germans made way, but from which they have been held back. In this region the heaviest fighting has taken place about the little village of Neuve Eglise, where the Germans under Gen. Eberhardt launched a terrific attack but without success. During the week, also, hard fighting took place at Givenchy, which is firmly in the hands of the British. In all of this struggle in the North, which will be known as "The Battle of the Lys", the fighting has been continuous, day after day, and night after night, with the whole sky lighted up with the flashes of guns and the blaze of burning farms. Again and again the wearied British men have been forced to face fresh divisions of the enemy, but again and again have arisen to the needs of the hour, winning immortal glory in the annals of warfare. In the dispatches especial mention has been made of the 51st and 9th Divisions, also of the Durham Light Infantry, East Yorkshires and Northumberland Fusiliers. Great credit is also given to the Portuguese troops, who were assisting in the center and who made a most gallant resistance, refusing to give way although they were almost cut to pieces. At the southern end of the scene of the great drive, where the new Battle of the Somme is in progress, the French have also been acquitting themselves as brilliantly as usual and have succeeded in keeping the Germans from the objective in that district, the city of Amiens, whose possession would give the enemy his coveted chance to divide the British and French armies, and so facilitate him in his drive toward the Channel ports. Here the American troops are assisting the French at the Brule wood, and on Sunday the French succeeded in driving the Germans out of Hangard. Midway between these two great battle grounds are the Canadians, holding Vimy Ridge and Hill 70, which up to time of going to press the enemy has not attacked, choosing rather to try to isolate these strong positions by driving to the north and south of them. Some eighty miles to the southeast of Amiens the city of Rheims has again been subjected to a terrific bombardment and part of the city set in flames. It is too soon to say that the crisis is over, but the fight must now be fought to a finish. Field Marshal Haig has given his order that every position must be held, to the last man; reinforcements are being hurried to both British and French lines, and Gen. Foch has his "Army of Manoeuvre" ready to use where necessary. During the past few days unusual activity has been reported from the Kiel Canal, and it is thought that the German fleet may come out. It is interesting to note that in this great and final offensive the center of the German army is under the immediate command of the Kaiser, who is at St. Quentin with Field Marshal von Hinden-

GAS TRACTORS

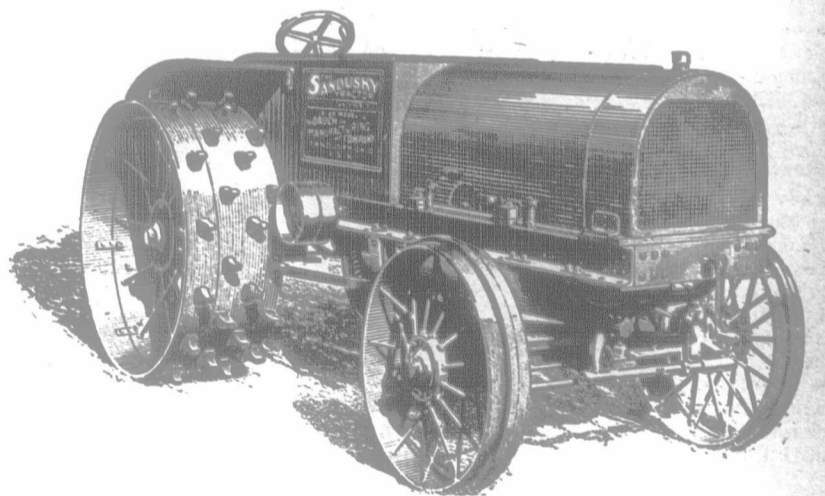
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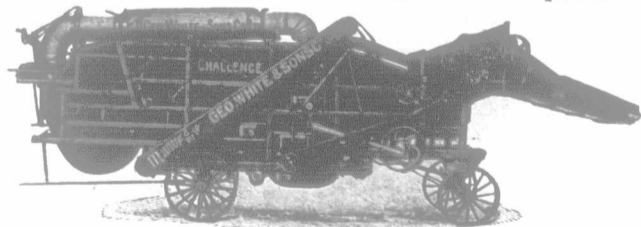


AND
THE SANDUSKY 10-20
4 cylinders 4 1/4 x 5 1/4

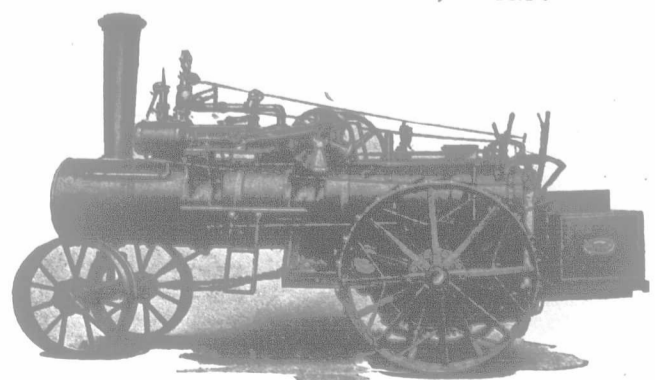


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For the soldieri ing because of th Contributions f F. Palmer, Shet J. Mitchell, Na J. A. H., Ravenna Teacher and P Willoughby, Well Heeny, \$5.00. Previously acknow

Total to April 12t Kindly address Farmer's Advocat London, Ont.

Serial

An Alab

BY MARY E. WILKINS MOORE

By arrangement with Stewart, Public

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Fanny Dodge sa window of the kitch those aimless shrec which usually mak of the weekly r not possibly feel in the fact that M Snider of West Sch ing a daughter, w reported to be nir pounds; to that Mi of Eltingville had engraved invitatio which was to take tenth day of Octo reading. Everybo Sometimes they ta read. Anyway, her day—all except tea, so she went on, suppressing a yawr the new water-wo speedily brought to neighboring enterpr ville."

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burg and Gen. von Ludendorf; the right or northern wing being under the Bavarian Crown Prince Rupprecht and Generals von Bulow and von der Marwitz; and the left or southern wing under the German Crown Prince with Gen. von Hutier.

The Dollar Chain

For the soldiers and all who are suffering because of the war:
 Contributions from April 5 to April 12:
 F. Palmer, Shetland, Ont., \$15.00;
 J. Mitchell, Nashville, Ont., \$10.00;
 J. A. H., Ravenna, Ont., \$5.00; X, \$3.00;
 Teacher and Pupils of S. S. No. 1,
 Willoughby, Welland Co., Ont., per Nora
 Heaney, \$5.00.
 Previously acknowledged.....\$5,399.30
 Total to April 12th.....\$5,437.30
 Kindly address contributions to The
 Farmer's Advocate and Home Magazine,
 London, Ont.

Serial Story.

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE
 MORSE KINGSLEY.
 By arrangement with McClelland, Goodchild &
 Stewart, Publishers, Toronto, Ont.
 Chapter XXIII.

Fanny Dodge sat by the pleasant west window of the kitchen, engaged in reading those aimless shreds of local information which usually make up the outside pages of the weekly newspaper. She could not possibly feel the slightest interest in the fact that Mr. and Mrs. James M. Snider of West Schofield were entertaining a daughter, whose net weight was reported to be nine and three quarters pounds; to that Miss Elizabeth Wardwell of Eltingville had just issued beautifully engraved invitations to her wedding, which was to take place on the seventeenth day of October—yet she went on reading. Everybody read the paper. Sometimes they talked about what they read. Anyway, her work was over for the day—all except tea, which was negligible; so she went on, somewhat drowsily suppressing a yawn, to a description of the new water-works, which were being speedily brought to completion in "our neighboring enterprising town of Brookville."

Fanny already knew all there was to tell concerning the concrete reservoir on the mountain, the big conduit leading to the village and the smaller pipes laid wherever there were householders desiring water. These were surprisingly few, considering the fact that there would be no annual charge for the water, beyond the insignificant sum required for its upkeep. People said their wells were good enough for them; and that spring water wasn't as good as cistern water, when it came to washing. Some were of the opinion that Lydia Orr was in a fool's hurry to get rid of her money; others that she couldn't stand it to be out of the limelight; and still other sagacious individuals felt confident there was something in it for "that girl." Fanny had heard these various views of Miss Orr's conduct. She was still striving with indifferent success to rise above her jealousy, and to this end she never failed to champion Lydia's cause against all comers. Curiously enough, this course had finally brought her tranquillity of a sort and an utter unprotesting acquiescence.

Mrs. Whittle had been overheard saying to Mrs. Fulsom that she guessed, after all, Fanny Dodge didn't care so much about the minister.

Fanny, deep once more in the absorbing consideration of the question which had once been too poignant to consider calmly, and the answer to which she was never to know, permitted the paper to slide off her knee to the floor: Why had Wesley Elliot so suddenly deserted her? Surely, he could not have fallen in love with another woman; she was sure he had been in love with her. However, to kiss and forget might be one of the inscrutable ways of men. She was really afraid it was. But Wesley Elliot had never kissed her; had never even held her hand for more than a minute at a time. But those minutes loomed large in retrospect.

Get a Frost & Wood Mower

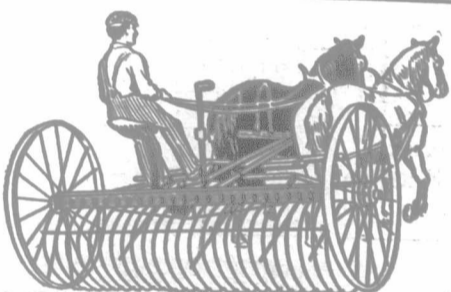
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"When anything goes wrong in our home or stables this excellent liniment is always called for, and never fails to give instant relief. Robert Harkness, Tamworth, Ont."

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WANTED TO SALE

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.

COLLIE PUPS FROM PURE-BRED STOCK. four months old, born heelers, \$3. Walker S. Scott, Belgrave, Ontario.

COLLIE PUPS, REGISTERED, TWO females, well marked, from imported stock. A. E. Gilbert, Mount Elgin, Ont.

FOR SALE—YOUNG BELGIAN HARE AND cross-bred rabbits, will be ready by the end of April; \$1.00 and 75c. the pair. M. S., R.R. No. 1, Campbellville, Ontario.

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—BY A PRACTICAL MAN WITH good help, a furnished farm to work on shares, or a yearly engagement. A. Miller, R.R. 1, Pickering.

The clock struck five and Fanny, roused from her reverie by the sudden sound, glanced out of the window. At the gate she saw Elliot. He stood there, gazing at the house as if uncertain whether to enter or not. Fanny put up a tremulous hand to her hair, which was pinned fast in its accustomed crisp coils; then she glanced down at her blue gown. Yes; he was coming in! The bell hanging over the passage door jangled shrilly. Fanny stood stock-still in the middle of the floor, staring at it. There was no fire in the parlor. She would be forced to bring him out to the kitchen. She thought of the wide, luxuriously furnished rooms of Bolton house and unconsciously her face hardened. She might pretend she did not hear the bell. She might allow him to go away, thinking none of the family were at home. She pictured him, standing there on the doorstep facing the closed door; and a perverse spirit held her silent, while the clock ticked resoundingly. Then all at once with a smothered cry she hurried through the hall, letting the door fall to behind her with a loud slam. He was waiting patiently on the doorstep, as she had pictured him; and before

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 50 cents.

ANCONAS, SINGLE-COMB, STRONG, vigorous, yearling hens, genuine egg machines, mated to Sheppard strain cockerels. Eggs, \$1.25 per fifteen, \$4.00 per hundred. W. E. Williams, Clandeboye, Ont.

AFRICAN GESE, INDIAN RUNNER AND Muscovy ducks, Barred Rocks, Rhode Island Reds, Black Spanish, Guineas, Campines, Hamburgs, Wyandottes. Eggs only. Mating list free. Fox Terrier puppies. John Annesser, Tilbury, Ont.

ANNESSER'S INDIAN RUNNERS, LAY MORE eggs, eat less, and are more profitable than chickens. John Annesser, Tilbury, Ont.

BRED-TO-LAY WHITE WYANDOTTES. Eggs during hatching season, \$2.50 per 15. Hugh A. Carmichael, R. R. No. 1, Erin, Ontario.

BRED-TO-LAY SINGLE COMB WHITE LEGHORN eggs for hatching, fifteen for \$1.50, forty-five, \$3.75; one hundred \$7.00; carefully packed, safe delivery guaranteed, broken eggs replaced. Addison H. Baird, R. R. 1, New Hamburg, Ont.

BUFF ORPINGTONS, EGGS FROM THE 3rd Ontario cock and Guelph winning females, \$3 setting; other pens \$2 and \$1.25 per 15; cockerels \$5 and \$10. Geo. Hawkins, Tavistock, Ont.

BEAUTIFUL BRED-TO-LAY WHITE Wyandottes and S.-C. White Leghorns. Eggs, \$1.25 per 15. Satisfaction guaranteed. Jack Buttery, Strathroy, Ont.

BARRED AND WHITE ROCKS. GOOD IN type, color, size and laying qualities. Three small, select exhibition matings. Eggs, \$3. M. A. Gee, Selkirk, Ontario.

BARRED ROCK EGGS. WE HAVE BRED for large size and egg production and we think we have succeeded. John Annesser, Tilbury, Ont.

BARRED ROCK EGGS, PURE-BRED, HEAVY winter laying strain. \$1.50 per fifteen. Mrs. C. Newell, Campbellville, Ont.

BRED-TO-LAY BARRED ROCK EGGS, O.A.C. strain, \$1.25 per fifteen. Fowls are healthy and have free range. Russell Ballantyne, St. Paul's Stn., Ontario.

BRED TO LAY A FULL BASKET OF EGGS. Try a few settings of my Single-Comb White Leghorns, \$2-15 eggs, \$3-30 eggs, \$5-100 eggs. David G. Houston, 52 Ellsworth Ave., Toronto, Ont.

BARRED ROCKS - PURE-BRED, GRAND laying strain; \$1.50 per 15 eggs, \$3.75 per 45. L. S. Cressman, Hillcrest Farm, R. R. 1, New Hamburg, Ont.

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 MINORCA EGGS - BOTH COMBS, two dollars for fifteen; good layers. Write: Fred. Reekie, Camperdown, Ont.

CHANTRY FARM BLACK LEGHORNS. Winners at all principal shows, including Silver Cup, London Winter Show. Eggs, Coop No. 1, \$3.00; No. 2, \$1.50, per fifteen. Ed. de Gex, Kerwood, Ont.

CANADIAN RINGLET BARRED ROCKS; trapped; heavy winter laying strain. Eggs, \$2.50 setting - guaranteed. F. Coldham, Box 12, Kingston, Ont.

EGGS, \$2.00 FOR 15. S.-C. BLACK MINORCA, S.-C. Ancona, Mammoth Dark Cornish. Hugh McKay, 33 Curry Ave., Windsor P.O., Ontario.

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

"FAIRVIEW" S.-C. BROWN LEGHORNS. Eggs \$1 per 15. Wm. Bunn, Denfield, Ont.

GOLDEN AND SILVER WYANDOTTES. Good Silver cock for sale. Eggs from both varieties—three dollars setting of fifteen, two settings for five dollars. From winning stock. Peter Daley, Box 12, Seaford, Ont.

HATCHING EGGS - BABY CHICKS - UTILITY laying strains. Eggs, \$1.50 per setting. Barred Rocks, Rhode Island Reds, White Leghorns, White Wyandottes, Golden Wyandottes, White Rocks, Non-Bearded Golden Polish. Write for price list. Satisfaction guaranteed. Tay Poultry Farm, Perth, Ont.

HEDGE ROW FARM S.-C. BROWN LEGHORN eggs for hatching, \$1.50 for 15; out of a beautiful flock of extra heavy layers. Order now. H. W. Thur, Flora, Ont.

LAYING LEGHORNS, S.-C. W. TRAP-mated. Last year's best pullets mated to a pure Barred Rock, \$2.50 per 15. Eggs \$2.50 the setting. T. A. B. M. D., Newville, Ont.

PLYMOUTH ROCK EGGS, O.A.C. LAYING strain, \$1.50 per setting. Mrs. Berry, 32 Queen's St., Guelph, Ont.

"REGAL" WHITE WYANDOTTES, \$1.50 per 15. Hatching from Guelph, Ontario, 1st and 2nd prize winners. \$1 to \$5 settings. M. J. G. O'Connell, Newmarket, Ont.

ROSE-COMB RHODE ISLAND REDS, MARETTINS, White Wyandottes, \$1.50 per 15. Eggs \$1.50. Special pen Reds, \$4.00 per 15. Wm. Slanklin, Ilderton, Ont.

S.-C. WHITE LEGHORN, GOLDEN WYANDOTTES, \$2.50 per fifteen eggs, \$1.50 per 15. Last year's pullets at \$3.00 per 15. J. G. O'Connell, Newmarket, Ont.

TWENTY-FIVE YEARS A BREEDER OF Barred Rocks that are barred and bred right, and from first-class laying hens. Eggs \$3 for 15, \$8 for 50, \$15 per 100. Order direct from this advt. Satisfaction guaranteed. Walter Bennett, R.R. 1, Cottam, Ont.

TURKEY EGGS—WE HAVE 50 HEALTHY Bronze Turkey Hens, mated to strong, husky, young and old toms; eggs ready in season at \$4.50 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.

TILT STRAIN PURE-BRED ROUEN DUCK eggs, \$1.50 per eleven. A. F. Thornton, Thamesford, Ont.

WINNERS—SILVER CUPS, GOLD MEDAL—Eggs, Single-Comb White Leghorns, \$1.50 and \$3 setting; Barred Rocks, \$1.50. Nine chicks guaranteed. H. Berscht, Caledonia, Ont.

WHITE WYANDOTTES; IMPORTED, bred-to-lay. Cocks dams' records over two hundred eggs per year. Barred Rocks, bred-to-lay; excellent layers. Prices—eggs, chicks on application. A. W. Hamilton, Parkhill, Ontario.

WHITE WYANDOTTES FROM WELL-BRED stock, Martin strain, \$1.50 per fifteen. Esra Stock, Woodstock, 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, Ontario.

Choice Eggs for hatching from free range flocks—S.-C. White Leghorns (Barron's 282-egg strain), Bred-to-lay S.-C. Brown Leghorns (O. A. C. and Guild strains), Barred Rocks—\$2 per 15, \$10 per 100. Fawn I. R. Duck eggs, \$3 per 10; Mammoth Bronze Turkey eggs, \$5 per 9 (show stock). Also choice Yorkshire Hogs, all ages. T. A. KING, Milton, Ont.

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

a single word had passed between them she knew that the stone had been rolled away. His eyes met hers, not indeed with the old look, but with another, incomprehensible, yet wonderfully soul-satisfying.

"I wanted to tell you about it, before it came to you from the outside," he said, when they had settled themselves in the warm, silent kitchen.

His words startled Fanny. Was he going to tell her of his approaching marriage to Lydia? Her color faded, and a look of almost piteous resignation drooped the corners of her mouth. She strove to collect her scattered wits, to frame words of congratulation with which to meet the dreaded avowal.

He appeared in no hurry to begin; but bent forward, his eyes upon her changing face.

"Perhaps you know, already," he reflected. "She may have told your brother."

"Are you speaking of Miss Orr?" Her voice sounded strange in her own ears.

"Yes," he said slowly. "But I suppose one should give her her rightful name, from now on."

"I—I hadn't heard," said Fanny, feeling her hard-won courage slipping from her. "Jim didn't tell me. But of course I am not—surprised."

He evidently experienced something of the emotion she had just denied.

"No one seemed to have guessed it," he said. "But now everything is plain. Poor girl!"

He fell into a fit of musing, which he finally broke to say:

Columbia Dry Batteries

To ring a bell, buzz a buzzer, run a truck or tractor, the simplest source of power is COLUMBIA Batteries.

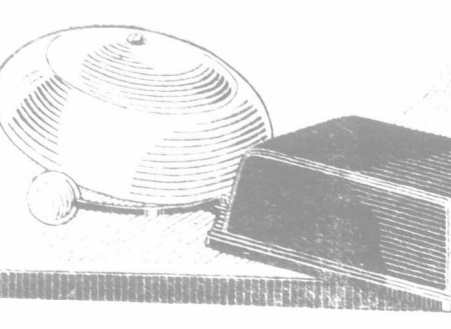
They're so free from complications, and are so easily and quickly wired up.

And once the contact's made, you needn't adjust them, or look at them, or think about them until the last spurt of energy is drained from the cells.

To run a gas engine, to operate phones and signals, to light a lantern or set off a blast, use time-tried COLUMBIA—the battery built with more than a quarter-century of expert knowledge, by the biggest battery works.

Buy them Anywhere Easily and Quickly Wired up

CANADIAN NATIONAL CARBON CO., Limited Toronto, Ontario



"I thought you would go to see her. She sorely needs friends."

"She has—you," said Fanny in a smothered voice.

For the life of her she could not withhold that one lightning flash out of her enveloping cloud.

He disclaimed her words with a swift gesture.

"I'm not worthy to claim her friendship, nor yours," he said humbly; "but I hope you—sometime you may be able to forgive me, Fanny."

"I don't think I understand what you have come to tell me," she said with difficulty.

"The village is ringing with the news. She wanted every one to know; her father has come home."

"Her father!"

"Ah, you didn't guess, after all. I think we were all blind. Andrew Bolton has come back to Brookville, a miserable, broken man."

"But you said—her father. Do you mean that Lydia Orr—"

"It wasn't a deliberate deception on her part," he interrupted quickly. "She has always been known as Lydia Orr. It was her mother's name."

Fanny despised herself for the unreasoning tumult of joy which surged up within her. He could not possibly marry Andrew Bolton's daughter!

He was watching her closely.

"I thought perhaps, if she consented, I would marry Lydia Orr," he forced himself to tell her. "I want you to know this from me, now. I decided that her money and her position would help me."

"I admired her; I even thought at one time I—loved her. I tried to love her."

"I am not quite so base as to marry without love. . . . But she knew. She tried to save me. . . . Then her father—that wretched, ruined man came to me. He told me everything. . . . Fanny, t at girl is a saint!"

His eyes were inscrutable under their somber brows. The girl sitting stiffly erect, every particle of color drained from her young face, watched him with something like terror. Why was he telling her this?—Why? Why?

His next words answered her:

"I can conceive of no worse punishment than having you think ill of me."

And after a pause: "I deserve everything you may be telling yourself."

But coherent thought had become impossible for Fanny.

"Why don't you marry her?" she asked clearly.

"Oh, I asked her. I knew I had been a cad to both of you. I asked her all right."

Fanny's fingers, locked rigidly in her lap, did not quiver. Her blue eyes were wide and strange, but she tried to smile.

His voice, harsh and hesitating, went on: "She refused me, of course. She had known all along what I was. She said she did not love me; that I did not love her—which was God's truth. I wanted to atone. You see that, don't you?"

He looked at Fanny and started.

"My God, Fanny!" he cried. "I have made you suffer too!"

"Never mind me."

"Fanny, can you love me and be my wife after all this?"

"I am a woman," said Fanny. Her eyes blazed angrily at him. Then she laughed and put up her mouth to be kissed.

"Men will make fools of women till the Day of Judgment," said she, and laughed again.

(To be continued.)

The sergeant-major had trouble in finding an accountant for his captain, but at last brought in a private for trial.

"Are you a clerk?" demanded the captain.

"No, sir," replied the man.

"Do you know anything about figures?" asked the captain.

"I can do a bit," replied the man, modestly.

"Is this the best man you can find?" asked the officer.

"Yes, sir."

"Well," growled the captain, "I suppose I'll have to put up with him!"

Turning to the private, he snapped, "What were you in civilian life?"

The Cost

The unprec the past sever the consumer the rise is leg cost of produ by the much producer hims as to the actu the various fac been accounte against young where the ma properly char feed prices ap product or ref ticularly where per sow is rais swine growers

The followi from swine br Experimental where on the E and may thro To arrive at th feeding costs o also the granda words the full young sow tog period charges, arrive at the co succeeding litte each individual made of feedi incurred while t later suckling ti time.

Feed cost to rais rowing..... Breeding charges suckling litte

Total cost of first Cost per pig (litter).....

If the cost we value of the yo litter per pig higher—\$8.24.

If sold after n might be expecte or to nearly pay venture.

If retained as a after weaning, a second litter of pig would be in the average co figured at \$3.00. sow is a high avera cases to the contr

A Comparison o Several years Agricultural Col that where all in tenance and bree sidered, young pig weeks at a cost average litter of Meal was charged ton; skim-milk, \$2.00. Present, \$50.00; \$4.00 at the lowest estim the fact that the much higher than which were practi shown at the Cent at that time.

The cost to pro young pigs agains at the average ra be levied at six w widely with the Figures from the records would indi of meal, or the equ of feed, per pound basis. In the case would amount at \$13.00 to \$15.00 p the \$3.00 charge u total feeding charg to \$18.00. Where were both availa \$15.00 might be ta charge.

While the aver is relatively small farmer who keeps capable of wide, entirely upon the ing of the owner co of swine husbandr 20% to 60% of the be allowed. In n figure might fairl

The foregoing es feeding and breedi exclusive of labor

The Cost of Pork Production.

The unprecedented price of pork for the past several months naturally causes the consumer to question whether or not the rise is legitimately due to increased cost of production or to manipulation by the much abused middleman. The producer himself is frequently uncertain as to the actual cost of production when the various factors influencing costs have been accounted for. Indeed the charges against young pigs at six weeks of age, where the maintenance of the dam is properly charged and where present feed prices apply, where no cheap by-product or refuse is available, and particularly where only one litter per year per sow is raised, are greater than many swine growers suppose.

The following figures are available from swine breeding operations at the Experimental Farm, Ottawa, and elsewhere on the Experimental Farm System and may throw some light on the question. To arrive at the cost of young pigs the feeding costs of not only the dam but also the grandam are necessary. In other words the full maintenance cost of the young sow together with her milking period charges, should be figured to arrive at the cost of the first litter. For succeeding litters a pro rata charge for each individual of the litter, should be made of feeding and breeding charges incurred while the sow was carrying and later suckling the litters up to weaning time.

Feed cost to raise a gilt to first farrowing.....	\$28.37
Breeding charges, cost to feed while suckling litter.....	10.00
Total cost of first litter.....	\$38.37
Cost per pig at weaning (7 in a litter).....	\$ 5.48

If the cost were figured on the market value of the young sow the cost of the litter per pig would be considerably higher—\$8.24.

If sold after raising one litter the sow might be expected to bring about \$35.00 or to nearly pay the total cost of her first venture.

If retained as a brood sow, bred shortly after weaning, and subsequently raising a second litter of seven pigs, the cost per pig would be in the vicinity of \$2.82.

The average cost per pig may be safely figured at \$3.00. Seven raised pigs per sow is a high average, numerous individual cases to the contrary.

A Comparison of Costs Then and Now.

Several years ago at the Ontario Agricultural College it was estimated that where all incidental feeding, maintenance and breeding charges were considered, young pigs could be raised to six weeks at a cost of \$1.27 each with an average litter of six and one half pigs. Meal was charged at the rate of \$20 per ton; skim-milk, \$3.00 per ton; and roots, \$2.00. Present day prices would be \$50.00; \$4.00 and \$3.00, respectively, at the lowest estimate and would explain the fact that the foregoing figures are so much higher than the Guelph findings which were practically similar to those shown at the Central Experimental Farm at that time.

The cost to produce pork from these young pigs against which feeding charges at the average rate of \$3.00 each must be levied at six weeks of age, will vary widely with the methods of feeding. Figures from the Experimental Farms records would indicate that four pounds of meal, or the equivalent in other forms of feed, per pound gain would be a safe basis. In the case of the bacon hog this would amount at present feed prices to \$13.00 to \$15.00 per pig. Adding to this the \$3.00 charge up to weaning time the total feeding charge would be from \$16.00 to \$18.00. Where skim-milk and pasture were both available to replace meal, \$15.00 might be taken as a fair feeding charge.

While the average overhead charge is relatively small in the case of the farmer who keeps but a few pigs, it is capable of wide variation depending entirely upon the intelligent understanding of the owner concerning the principles of swine husbandry. A range of from 20% to 60% of the feeding charges might be allowed. In most cases the lower figure might fairly be applied.

The foregoing estimates include only feeding and breeding charges and are exclusive of labor, depreciation, and

CROWN BRAND CORN SYRUP

will do more than satisfy children's craving for "something sweet" — it will supply them with a wholesome food.



Dealers everywhere have "Crown Syrup" in 2, 5, 10 and 20 pound tins and "Perfect Seal" Quart Jars.

Write for free Cook Book.

THE CANADA STARCH CO. LIMITED, MONTREAL.



50 Egg-Incubator \$7.50. Incubator and Brooder Combined \$9.50

Here's Your Opportunity to Aid Production

Hatch your own chicks. It costs very little time or money, and is an interesting and profitable business. These wonderful Cycle Hatchers will pay for themselves with the one hatch. One gallon of oil will hatch 50 eggs. Get a catalogue on my system of poultry raising.

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

overhead charges generally. The element of risk, much in evidence in swine raising is also omitted.

Under proper management there is a fair profit in hogs. To the consumer and the prospective swine grower the foregoing figures, however, would indicate certainly that such profits are not excessive.

A Scotchman was once at a race meeting in the Old Country in the company of a friend. Before the races the friend asked Sandy if he would like to try his luck.

After a great deal of explanation and persuasion, Sandy backed his fancy for a very small amount, being in a very down-hearted mood over the transaction.

Sandy's horse won at ten to one, and the friend hurried off to collect his winnings.

When he received his money, he turned to the friend and exclaimed: "Lord mon, how long has this been going on?"

Questions and Answers.

Miscellaneous.

Oyster Shell for Hens.

1. Do you consider it necessary to give hens oyster shell during the summer months to keep them laying, when they get access to everything outdoors?

H. H. G.

Ans.—1. It may not be absolutely necessary where hens have free range. In fact it is not, but it costs very little to keep a supply in a hopper where the hens have access to it at all times. If they do not require it they will not take it; if they do need a little it is there for them.

Make the Dealer Show You What the Fence Weighs



Heavy American Fence

Costs No More Than Lighter Fences.

Its Big Wires Mean More Strength
Its Heavy Galvanizing Means Longer Life

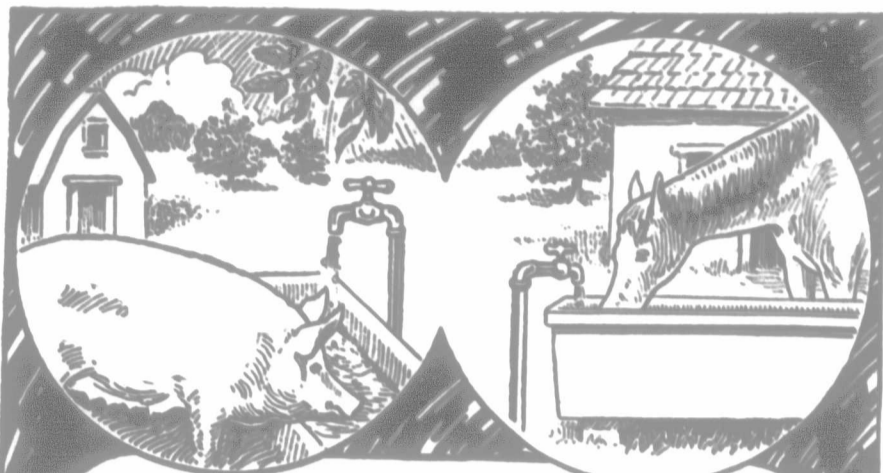
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AMERICAN ORIGINAL AND GENUINE FENCE

Agent in Every Town. Manufactured by:

The Canadian Steel and Wire Co., Limited
HAMILTON, ONT. WINNIPEG, MAN.



PURE WATER CHEAPENS FEEDING

—helps fatten your horses, cattle and hogs; makes cows produce more milk, and keeps them healthy. But stock will not drink freely of ice cold water nor of warm stale water. With

Empire WATER SUPPLY System

you can have an unfailing supply of pure, fresh water anywhere about the barn, and it will be of an even temperature—just as it comes from the well, cistern or spring.

Just what you have been looking for. Costs little to install. Makes farm work easier.

WRITE FOR OUR 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 us to-day.

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119 Adelaide St., W., Toronto, Ont.



ALWAYS READY - NEVER FREEZES



Club Feet

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

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

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

For Crippled Children

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

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

Gossip.

Lakeview Cow Makes 38-lb. Record.

Just as we are going to press we are advised by Lakeview Farms, Bronte, Ont., that for the second time in almost as many weeks Holsteins of Lakeview Farm breeding have been making real history for the Holstein cow in Canada. In the case of the former it was the new Canadian champion senior two-year-old Lakeview Dutchland Calamity Rose, a heifer of Lakeview breeding, but now owned by Dr. Heslop of Freeman, Ont., while in the latter case, the record was made at Lakeview and the cow is still owned by them. We refer to the mature cow, Lakeview Lestrage, a daughter of Count Hengerveld Fayne De Kol, which has just completed a 7-day record with 735.1 lbs. of milk and 38.06 lbs. of butter, her highest day's milk being 111.8 lbs. This places her second in Canada, only to May Echo Sylvia, the champion milk producer of the world. In the same letter they also report a 33.40-lb. butter record just completed on Lakeview Dutchland Artis. Her milk for the 7 days being 706.8 lbs. and 108.9 lbs. for her best day. She is got by Dutchland Colantha Sir Mona, the senior sire at Lakeview, and is therefore a half sister to Lakeview Dutchland Calamity Rose, the new senior two-year-old Canadian champion mentioned above as well as Lakeview Dutchland Artis, 34.66 lbs. of butter in 7 days, Canada's champion senior three-year-old heifer, which is also owned at Lakeview.

South Africa as a Stock Breeding Country.

It is not generally known that the Union-Castle Company of liners carry free of freight to South Africa any pedigree stock that may be dispatched out there. Since September 17th, 1912, this contract has been in vogue, and between that day and January 1st, 1913, 3,826 head of stock have left Great Britain for South Africa at an estimated value of £203,312. The 2,770 head of cattle were worth £156,762; the 212 pigs, £2,592; the 515 sheep, £4,557, and the 333 horses go down at a valuation of £30,401. Analyzed more closely the 921 bulls were worth £63,754; the 1,536 heifers £75,807, and the 313 cows, £17,201. The 71 boars were worth £845, and the 141 sows, £1,747, while the 157 rams are said to have been worth £2,023 and the 354 ewes, £2,534. These figures show that South African agents and exporters are buying wisely and well. The export industry has made rapid strides in little or no time. We are now receiving back from the Colony imports of beef and mutton, some 22,400 tons leaving that country and going mainly to feed the Army. In 1916 the total was only 7,928 tons and in 1915, 2,324 tons—surely a rapidly growing industry. According to Weddell, the London frozen meat expert, the condition in which the meat is received in northern hemispheres shows no real improvement, but the African Union Government is reported to be sending to Australasian ports for the purpose of studying more closely the methods of meat production and preparation followed "down under".

Canada's Trade.

According also to Weddell's report, a further satisfactory development of the export trade from the Dominion of Canada took place in 1917 when shipments to the United Kingdom and France, amounted to £5,000,000, as compared with 15,200,000 in 1916 and 16,250,000 in 1915. The total value of exports in the 1917 total consisted of the United States but 1,000,000, as compared with 1,500,000 in 1916 and 1,500,000 in 1915. The Canadian trade shows signs of healthy expansion, with the agricultural and mining industries becoming well established industries, after the present general depression, have disappeared. With the exception of the Argentine, all the exporting countries of meat and mutton to Great Britain increased their output in 1917.

H.P. SAUCE
continues to arrive from England.
Has a new and delicious flavour, no sauce just like it.
Wouldn't it be worth your while to try a bottle now?

Clover Seeds

GOVERNMENT STANDARD

	Per Bus.
No. 1 Red Clover	\$23.00
No. 2 Red Clover	22.00
No. 1 Alsike	18.00
No. 2 Alsike	15.00
No. 1 Northern Grown Alfalfa	18.00
Ontario Variegated Alfalfa No. 2	24.00
No. 2 Timothy (This seed grades No. 1 for purity)	5.00
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	3.00
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 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, Ont.

Send to-day for a free copy of our handsome catalogue, which illustrates and describes the celebrated

SHERLOCK-MANNING

20th Century Piano—known as
"Canada's Biggest Piano Value"
Write Dept. 18 for catalogue "T"

THE SHERLOCK - MANNING PIANO CO.
London, Canada. (No street address necessary)

Seth Woodbury was a tight-fisted old farmer. When his brother William died it was said that Seth had even grudged the money for proper medical care. Seth hitched up and drove to town to have a notice of his brother's death inserted in the local paper.
"There ain't no charges, be there?" he asked anxiously.
"Oh, yes, indeed," answered the editor; "our rate is a dollar an inch."
"Cracky!" muttered the old man; "an' Bill six foot two!"

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

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More Holsteins
R. W. E. B
Highland Lake F
"Wherever the
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Lake Farms, so
offspring of their
Mr. Leach is only
time in the dairy
that he owes his

Protect Your War Garden

Give your war garden a chance to produce the crops that are so essential to the welfare of the nation and the cause of the Allies by protecting the growing plants from parasites and other destroyers.

Bugs Kill the Young Plants! and ACCO SPRAY Kills the Bugs

Acco Spray is chief of staff on the bug exterminating corps. It costs less than Paris Green or Arsenic poisoning, and does the work more thoroughly.

For sure death to potato bugs, Acco Spray has no equal. Its action is swift, sure and complete. Where Acco Spray is used no bugs can survive.

Save your potato and other crops by using Acco Spray.

A Sample sent on request.

Acco Chemical Co., Limited
TORONTO, ONT.

HAROLD F. RITCHIE & CO., Limited
Sole Agents for Canada
10-12-14 McCaul Street



In the seven fat years

the wise farmer prepares for the lean years that are sure to follow. Seven fat years for farmers are here. May the "good times" continue for seven times seven years.

An increasing number of farmers are investing their surplus money in Imperial Endowment Policies. They are taking no chances on the future. We think they are wise. Don't you?

Would you like to make sure that, come what may, you will be independent in your old age? Then fill up and mail the coupon below and we'll tell you how to do it.

Name _____ Age _____
Address _____
Occupation _____ Married or Single _____

THE IMPERIAL LIFE
Assurance Company of Canada
HEAD OFFICE - TORONTO

Branches and Agents in all important centres

Gossip.

More Holsteins for Northern Ontario.

R. W. E. Burnaby, proprietor of Highland Lake Farms, writes:

"Wherever there is feed grown suitable to give the dairy cow a chance there is a place for the Holstein to prove her qualities and superiority above other dairy breeds. Mr. Leach of Verner, Ont., is satisfied with that as he has just been at Highland Lake Farms for the third time within two years to select stock for his excellent Holstein herd. There had been Holsteins in his locality before, but only animals of the just registered kind, and when he brought Holsteins to his farm, true to their name as to type and production his neighbors were at a loss to believe they were of the same breed as those they used to know by that name.

Mr. Leach chose the Black and Whites two years ago and it must be said that he undertakes his proposition from the right direction. First of all he selects only first-class animals, large, typey Holsteins with R. O. M. and R. O. P. records and with the same kind of backing. One of his foundation cows, secured from Highland Lake Farms, is a sister of the \$1,400 cow sold at West Toronto a few days ago. In the next place he gives the cows a chance to do their best by feeding judiciously, and keeps account of their work by weighing every milking, and he does not omit, as it is sometimes done, to add the week's milk and to enter the total in books kept for that purpose. Each cow is credited there with her produce and the cost of feed entered against her. In that way Mr. Leach is in a position to tell day by day what profit each cow in his herd is making for him. He told us that when he left 3 cows had made in the last 56 days a profit of \$40 each, a very creditable showing indeed. The milk is sold at \$2.50 a hundred to a dairy in North Bay. But he does not stop half way in his work to build up a first-class Holstein herd, as he has also purchased a bull with excellent breeding and of good type from Highland Lake Farms, so he may improve the offspring of their money-making dams. Mr. Leach is only a comparatively short time in the dairy business and admits that he owes his success to no small

degree to the faithful work of his Holsteins.

"Mr. Leach is coming back for more stock to Highland Lake Farms, which take especial pleasure in dealing with customers of Mr. Leach's class and endeavor to fill the demands to best satisfaction of the purchasers."

Herd Sire Material at Maple Hall.

There has been advertised in our live stock columns for the past two weeks a select offering in Shorthorn bulls from the Maple Hall Stock Farm, the property of David Birrell & Son, R. R. No. 2, Claremont, Ont. Messrs. Birrell & Son and the Maple Hall herd are already well known to most Advocate readers. Being one of Ontario's older herds and founded with only the "best" from early importations, it seems almost needless to say that thirty-five years of careful breeding and selecting has to-day given them a herd that for quality and breeding stands second to none in the Dominion. In all of the thirty breeding cows, only four families are represented. These are Duchess of Gloster, Rosemary, Butterfly and Crimson Flower, all straight Scotch, in both character and breeding. The offering in bulls, referred to above, are all from these dams. Six are of serviceable age and all are sired by the present herd sire, Flower King. He is got by Prince of Orange and dam Flower Girl 13th (imp.). Notwithstanding that he is the first Canadian-bred sire that has ever stood at service in the herd his six bulls of serviceable age, now in the stables, and mentioned above, are of the stamp, which if they could be seen, would make any further remarks quite unnecessary. Personally we have not seen a stronger lot in any one stable this year. The oldest, a 14-months roan, is a Duchess of Gloster; the youngest, a 10-months youngster, is a solid red and of the Rosemary family, while the four 12-months bulls (two reds and two roans) are all Butterflies and all of the six, at present, are real promising prospects for the coming shows. Those who are in need of a young sire, just ready for service, should write at once for further particulars regarding these, addressing all correspondence to D. Birrell & Son, Claremont, R. R. 2, Ont., and plan to see them before buying elsewhere.

RENNIE'S Win the SEEDS War

EVERY man, woman and child must help make the home garden produce vegetable food this year—for food is scarce and labor scarcer. The earlier your crop is ready the better for yourself and also the nation. We have carefully considered this condition, and assembled a special collection of Rennie's Seeds—to meet it. Our "Early Collection" will give you rapid production in volume.

Early Collection

This Collection is made up Specially for those Desiring an Early Supply of Vegetables.

BEEF, Early Extra Blood.	ONION, Early Slicing.
CABBAGE, Extra Early.	ONION, Large, Boiling.
CARROT, Early Scarlet.	PARSLEY, Curled.
CAULIFLOWER, Snowball.	PARSNIP, Long White.
CUCUMBER, Slicing.	RADISH, Early Round Red.
LETTUCE, Early Crisp.	TOMATO, Earliest Scarlet.
	TURNIP, Round, White Table.

50c Prepaid

A Word About the Stars

Referring to our 1918 catalogue. Wherever you see items marked with a border of stars similar to the one surrounding this paragraph—you will find extraordinary bargains in seeds. Choose your seeds carefully and read the star marked items especially.

Flower Seed Collection

Alyssum, Sweet.	Morning Glory.
Asters, Mixed.	Nasturtium, Tall.
Balsam, Mixed.	Poppy.
Candytuft.	Pansy, Mixed.
Dianthus (Chinese Pinks).	Phlox, Drummond's, Mixed.
Mignonette, Sweet.	Sweet Peas, Mixed.
	Zinnia, Mixed.

50c Prepaid

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

RENNIE'S PURE SEEDS

Ensure Success

HEAVY crops of Beans and Corn are a sure tip for this year. These necessities will bring big profits to the farmer who is foresighted enough to have planted the seeds that bring bumper yields—Rennie's Seeds.

Examine the list below and send your order right away, or owing to the shortage of seeds (especially corn) you may miss the opportunity of making the most money out of this year's crop.

Seed Corn

Customers can always depend on our Seed Corn being the best obtainable and highest germination.

SEED CORN	Bush.
Gold Mine (Yellow)	4.85
Improved Leaming (Yellow)	4.85
Pride of the North	4.85
Select Red Cob (White)	4.85
Giant White Ensilage	4.85
SEED CORN—FODDER	Bush.
Leaming Fodder (Yellow)	4.70
Red Cob Fodder	4.70
Southern White Fodder	4.70

Lots of 5 bushels or over, 10c per bushel less.

BEANS	Peck	9.75
White Field (Medium)	2.85	9.75
White Marrowfat (Large)	3.60	11.25

Freight prepaid on orders of \$10.00 and over in Ontario.

The Stars Mean Bargains

When turning the pages of our 1918 catalogue you will notice little paragraphs with stars at the corners. These denote extra special values that defy competition. Read your catalogue closely.

When buying from dealers insist on Rennie's Seeds.

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

"Please, Mother



may I have some more Jersey Cream Sodas? They're awfully good."

No wonder the little tots like these delicious biscuits—they're made from rich creamery butter, sweet milk, high-grade flour and pure shortening. You'll like their delicious, appetizing flavor, too.

Always Fresh and Crisp

Sold Everywhere in Different Sized Packages



McCormick's

JERSEY CREAM Sodas

ARE YOU BUILDING OR REPAIRING?

OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. WRITE FOR FREE COPY.

THE HALLIDAY COMPANY, LIMITED, HAMILTON, CANADA

STAMMERING

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

THE ARNOTT INSTITUTE
KITCHENER, CANADA

Please mention The Farmer's Advocate

Gossip.

Welland District Shorthorn Club.

Although organized only a little over one year ago the Welland District Shorthorn Breeders' Club, appears to be a healthy organization from which the members are obtaining good results. Aside from creating a feeling of good fellowship among the breeders of the district the object of the club was to give the district sufficient publicity to make it become one of the best known Shorthorn centres in the province of Ontario. For the success of the organization, much credit is due the secretary of the club, Chas. Gainer of Welland, whose monthly sales lists have gone out at all times in good form, showing no favoritism to any member's offering, but justice to all. In spending a day among the members recently our representative reports very favorably on those that are listed in the present offering. The number catalogued is in the neighborhood of thirty, head, and, while the majority are females of breeding age there are also eight or ten good young bulls that are worthy of the consideration of those in search of a herd sire. W. H. Crowther, whose farm lies just outside of the city of Welland, has the largest herd of any member of the club, and also the largest offering. His herd at present numbers twenty-five head, and at the head of which is a magnificent bull, the well known "Red King" sire, bred by Ford by Ford Ford Ford, a son of Ford Ford Duchess 7th by King, a son of the great Conjuror. A complete list of the most noted sire of English Shorthorns to-day, while the sire of the "Rupert" has four consecutive years of eight, nine, eleven and thirteen thousand pounds of milk in each of the four years. Mr. Crowther has five young bulls from this sire as well as two 18-months, and one 11-months bulls all


DISPERSION SALE OF 70 HEAD SHORTHORNS

The Property of J. J. Merner, M. P.
2 miles from Zurich, Ont., on

WEDNESDAY, MAY 1st, 1918

Commencing 1 o'clock sharp

Comprising 60 females and 10 bulls, including such popular families as Rosemary, Corelli, Princess Alice, Carrie C, Miss Rosebud, Butterfly, Duchess of Gloster, Crims in Flower and others. A number of the cows have calves at foot, others of breeding age in calf to service of such bulls as Meadow Signet and Village Marquis, son of Gainford Marquis, Angus.



The three-year old Clydesdale stallion, King's Glory, of King Thomas and Cumberland Glory breeding will also be sold.

Trains will be met at Hensall Station, on London, Huron and Bruce on sale day.

For further particulars apply to

J. J. Merner, M. P.
Seaford, Ont.

AUCTIONEERS:
C. W. Robinson
Frank Taylor
I. Brossenberry
Robt. Luker

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

of which are from his own good milking dams in which are represented such families as Missies, Butterflies, Mayflowers, Kilblean and Cranberry Beautys, Countesses, Dalmeny Duchesses, Scottish Roses, etc. A. E. Howell, Fenwick, President of the Club, has some exceptionally nice things of the Rosemary, Pansy and Rollas tribes; with the Red Missie bull, Prince of Cluny, by Nero of Cluny as the chief sire in service. The present offering includes only one bull, a 20-month's son of the former sire, O. A. C. Augusta. Irvindale Newbury by Gainford Select, a son of Gainford Marquis and dam by Royal Hope, is the chief sire in the stables of R. G. Vandenberg of Font Hill. He is following a son of the noted Right Sort (imp.), and his get, while they remain in the Vandenberg stables will always have the advantage of being well fed and naturally well grown. There is at present one choice January bull, a straight Mysie and a herd sire in the making. C. T. Ware & Son of Niagara Falls South, are now using a son of Earl Derby, but their offering is by the former herd sire, Village Bridegroom. J. H. Bradshaw, Marshville, has a strong offering in females all of which trace to the two noted cows, Beauty 30 (imp.), and Lily 302 (imp.), while his two bulls advertised are both by Red King. Emanuel Beam, Welland, also has a few females listed, nearly all of which trace to Louisa 304 (imp.), Daphne 106 (imp.), and Beauty 30 (imp.). Mr. Gainer, the Secretary, just for the present, is offering very little for sale, but his herd of breeding females if space permitted are well deserving of note as is also his herd sire, Lavender Sultan 2nd, a show bull by Lavender Sultan, out of a dam by Gladiator (imp.). See the club advertisement and write for further particulars. Address, Chas. Gainer, Box 607, Welland, Ont.

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The and Eff for Pro from

Cutter's Bl tively pro leg.

Cutter's B made direct ion a for Pure

Neither the gressin c Blackleg c ceptible are germ

Both have g wherever

Prices— 10 dose pk 50 " 100 " 10 dose pk gressin

N. B.—Cult tural produc 5 cc. to the that smaller centred or tection.

Write for b germ free wherein "e gressin c Aggressin tissues.

While these "eases" have should be stockraisers for a quick by stockra satisfactory use of

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Year in and given bette any other as far as lence of concerned, advantage

Prices: 10 dose pkg 50 " 10 dose pkg 50 " Cutter's Pli

Insist on Cutt obtainable, pay shipping

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Clydesdale

STALLION, rising conformation and action Also

HOLSTEINS. Female two brood cows (grade May 5.

Warren Stringer, FOR

Perchero

HARRIS France, 74902; U. S. Enrollment No. 1483. dapple-grey; foaled 19 successful years on one 80 per cent. of a foal-german Strith, R. R.



TEAM BREECHING HARNESS
With Three-Ply Traces, Steel Hames, and "Perfect Fit" Collars Complete **\$55.00**
Guaranteed Five Years
Made throughout of selected Union Oak Leather, with best Malleable trimmings. Every strap and buckle guaranteed for five years. Offered at our low price because sold direct to you.
WRITE FOR FREE CATALOGUE
An invaluable Guide to Price of Farm Supplies
Our new catalogue shows other sets of harness, also Repair Parts, Farm Supplies, Tools and Building Materials. A post-card brings the catalogue by return mail. Write to-day.

THE HOLIDAY COMPANY
SOLE DISTRIBUTORS
MILTON, CANADA

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use **Fleming's Spavin and Ringbone Paste**
Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of **Fleming's Vest-Pocket Veterinary Adviser**
Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.
FLEMING BROS., Chemists
75 Church Street Toronto, Ont.

MESSRS. A. J. HICKMAN & CO. (Late Hickman & Scruby) Court Lodge, Egerton, Kent, England. Exporters of **PEDIGREED LIVE STOCK** of all descriptions. Specially made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

CLYDESDALES AND SHORTHORNS for sale. Shawano King Imp. No. 15708; Baron Knight No. 14176. 4 Shorthorn bulls, over 15 months and under 2 years. Some young cows and heifers, bred to King Dora Imp., No. 107291, and with calves at foot.
Socket Brothers, R.R. No. 5, Rockwood, Ont.

Dr. Bell's Veterinary Medical Wonder, 10,000 \$1.00 bottles FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys, Fevers and Distempers, etc. Send 25c for mailing, packing, etc. Agents wanted. Write address plainly.
DR. BELL, V.S. Kingston, Ontario

SUNNY ACRES ABERDEEN-ANGUS
Bulls of serviceable age and females not akin.
WM. CHANNON & SON
P.O. and Phone Oakwood, Ont.
Stations—Lindsay, G.T.R. and C.P.R.

SUNNYSIDE HEREFORDS
We are offering special values in heifers and bulls with size, quality and breeding; will promise not to disappoint you if you want good cattle.
Arthur F. O'Neill & Sons, R. No. 2, Denfield, Ont.

Alloway Lodge Stock Farm
Angus - Southdowns - Collies
SHOW FLOCKS
Rams and ewes Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.
Robt. McEwen, R. R. 4, London, Ont.

The American Jersey Cattle Club to Celebrate Golden Anniversary.

The fiftieth annual meeting of the American Jersey Cattle Club will be held in New York City on May first, 1918.

This golden anniversary of the Club marks fifty years of success in breed improvement, the object for which the Club was organized in 1868. The original number of 40 members has been increased to 722, and new members are now being admitted at the rate of 100 per year. The fiscal year just ended on March 31, 1918, shows that the Club has not been marking time in the first year of the country's part in the great war. The registrations and records of transfer have shown a marked increase over all previous years, and the present yearly registration of pure-bred Jerseys is 40,000 as compared with 400 in the first year of the Club's existence. To date ninety-three Volumes of the Herd Register have been published, and they include the names of 543,500 animals.

The Register of Merit work, which was commenced in 1903, has proved the value of year's tests of butter-fat, and the progress of the work in this Department has not yet been greatly hampered by the labor shortage or the high cost of feed. Breeders seem more determined than ever to select their breeding animals by production standards. A change effected in the 1917 Register of Merit Volume makes this valuable information more accessible than ever. The total number of cows now having completed year's tests is 8,900. Their average production is 7,842 pounds of milk and 421 pounds of butter-fat. The average percentage of fat in these tests is 5.37. While there is need in these times for close co-operation among all branches of the dairy industry, the outlook from the viewpoint of Jersey breeders is deemed very satisfactory.

Another Hired Man's Views.

EDITOR "THE FARMER'S ADVOCATE":

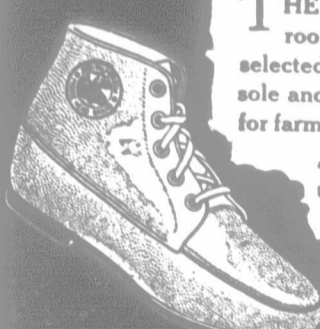
I have read the letter, under the title "What the Hired Man Thinks", in your issue of April 4, from John Emery, of Halton County, Ontario, and a more eloquent letter from the hired man's point of view it would be hard to find. As a hired man myself, I quite concur with every particular. Quite agree that the hiring term should be for the year, while the wages should be paid by the week or month. To my mind it is simply childish for any self-respecting man, and the hired help—whether male or otherwise—have or should have their full share of it, to have to ask the boss for money when it is required. Then, too, the hours are by far too long. My average working day is fourteen hours, and with haying, harvesting and feeding, frequently sixteen hours, taking chores and all. Farmers may say that they work the same hours, but this is rarely correct, as, being in their own homes, they have the privilege of resting their weary bones, while the only chance the hired help has for a rest is when he is in bed and a few short hours on Sundays, between chores. Not infrequently the hired man foregoes his holidays, and then farmers say they cannot afford to pay the higher wages. One has only to look at the numerous sales of pedigreed stock and see the prices paid for same to realize that those farmers who can afford to pay an exceedingly high price for an animal can, if they choose pay higher wages. If they have to pay high for their feed, they get a high price for their produce. There always was a difference between employer and employee and there always will be, but, as "an old pioneer" recently said in his letter, "give the hired man his due," which by far he doesn't get.
Oxford Co., Ont. HIRED MAN.

Gossip.

John Elder & Sons, of Hensall, write that they have had a number of good sales of dual-purpose cattle. J. T. Maynard, who purchased several head, recently stated when writing to Messrs. Elder that the cattle he had secured from them gave the best of satisfaction, and believed that he made a good choice when he purchased what he did and may return for more.

Caldwell's Molasses Hog Feed
You cannot mix or buy a feed that will force your hogs to maturity faster—and cost you less per pound gain than Caldwell's Molasses Hog Feed. The secret is in the balancing and blending. Order from your feedman today.
The Caldwell Feed & Cereal Co. Limited
DUNDAS, ONTARIO

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

Aberdeen-Angus
We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire Boars and Sows.
LARKIN FARMS (MENTION FARMER'S ADVOCATE) QUEENSTON, ONTARIO

BROOKDALE FARM HEREFORDS
Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords
W. READHEAD Brookdale Farm MILTON, ONT.

KNIGHTON LODGE STOCK FARM
Offers for sale one Aberdeen-Angus bull, 15 months old, in the pink of condition, and a show animal. Cheap, quality considered.
C. C. KETTLE, Wilsonville, Ont.

Kennelworth Farm ABERDEEN-ANGUS
Young bulls of serviceable age, got by Victor of Glencairn Imp.
PETER A. THOMSON, HILLSBURG, ONT.

ABERDEEN-ANGUS
Alonso Matthews, Manager, Forest, Ontario
H. Fraleigh, Proprietor, Meadowdale Farm, Forest, Ont.

30 Shorthorns for Sale—Eight bulls and a lot of good breeding, registered females, in all conditions. Buyers from this herd in past years want more of the same kind. As breeders, feeders and milkers they satisfy the people. Only selected bulls have headed this herd from the first. Price of bulls from \$125 to \$250; females, \$150 to \$400. One choice milk strain bull near two years old, \$185. **JOHN ELDER & SONS, Hensall, Ont.**

For Sale—Dual-Purpose Shorthorn Bull
Two years old; a sure stock getter, with size and quality combined. Dam, officially tested, gave 11,636 lbs. milk in 327 days. Also Berkshires, all ages, from Imp. stock.
Frank Teasdale, Concord, Ont.

Questions

Feeding
Does it injure a pig, to feed it badly frozen?
Ans.—1. They have the same as the sows.

We have a question from the community Club have to do with this hall?
Ans.—It depends on the regulations of the hall, as is made.

Using Oil
1. Would purchased last year's water have evaporated spraying this?
Ans.—Prof. Ontario Agricultural Experiment Station commended to be mixed again slightly larger quantity recommended re-mixed product enough.

Register
1. Is there a draft of a weight required for load?
Ans.—1. We commercial draught Special apparatus for physicists for apparatus and are, too, seven modify draft road-bed, rigid of tire, diameter of the load on the line of draft, rig

Un
I have a young I notice a number are very sharp, thriving and healthy?
Ans.—Very occur in young feeding as they indications is injuring each teeth. It may interfering with but if so it is a would lacerate They may be It may be that some other trouble set back it some to get them thr

V
L
Colt went lame ligaments of the last fall. I used cess. I then blis all winter, but h

Ans.—If your
are doing all that of this nature is treat, also very there is also some It will be well again by your ve

La
While driving mare stumbled on right fore leg. days she appeared knee, showing syn she is quite sore

Ans.—She spr
when she stumbled of 2 oz. each of t of arnica and o extract of witch h a pint. Bathe th and fletlock with daily and after ba liniment. In abe ling apply a w swelling and sorer present, treat the

Questions and Answers.

Miscellaneous.

Feeding Frozen Turnips.

Does it injure brood sows, heavy in pig, to feed them turnips that have been badly frozen? C. W. T.

Ans.—1. Fed in moderation after they have thawed, they should not injure the sows.

Use of Hall.

We have a hall in our village built by the community. Does the Patriotic Club have to pay rental for the use of this hall? D. K.

Ans.—It depends on the rules and regulations formulated by those in charge of the hall, as to whether or not a charge is made.

Using Old Arsenate of Lead.

1. Would arsenate of lead (paste), purchased last year and from which the water has evaporated be of any use for spraying this spring? D. C.

Ans.—Professor L. Caesar, of the Ontario Agricultural College, has recommended that such arsenate of lead be mixed again with water and used in slightly larger quantities than is commonly recommended, such as 2½ lbs. of this re-mixed product where 2 lbs. is ordinarily enough.

Registering Draft of Wagon.

1. Is there a device to be had to test the draft of a wagon, that is, tell the weight required to move the wagon or load? J. S. C.

Ans.—1. We do not know of a commercial device for such a purpose. Special apparatus has been designed by physicists for estimating draft. Special apparatus and scales are necessary. There are, too, seven different factors which modify draft viz., smoothness of the road-bed, rigidity of the road-bed, width of tire, diameter of wheel, distribution of the load on the wagon, direction of the line of draft, rigidity of the carriage.

Unthrifty Pigs.

I have a young pig that is not thriving. I notice a number of black teeth which are very sharp. Would these prevent her thriving and how can they be gotten rid of? T. K.

Ans.—Very sharp teeth frequently occur in young pigs and prevent them feeding as they should. One of the first indications is the pigs fighting and injuring each other with these sharp teeth. It may be that the teeth are interfering with the pig taking its feed, but if so it is altogether likely that they would lacerate its tongue or checks. They may be broken off with pincers. It may be that the pig is suffering from some other trouble. If pigs once get a set back it sometimes takes a long time to get them thriving again.

Veterinary.

Lame Colt.

Colt went lame from stretching of the ligaments of the stifle, before being weaned last fall. I used a liniment without success. I then blistered the joint repeatedly all winter, but he is not better. F. C.

Ans.—If your diagnosis is correct you are doing all that can be done. Lameness of this nature is generally very hard to treat, also very tedious. It is possible there is also some other cause of lameness. It will be well to have him examined again by your veterinarian. V.

Lame Mare.

While driving down a stony hill my mare stumbled and then went very lame on right fore leg. After standing for a few days she appeared sore between ankle and knee, showing symptoms of splint. Now she is quite sore on top of shoulder. G. E. F.

Ans.—She sprained the flexor tendons when she stumbled. Get a liniment made of ½ oz. each of tincture of iodine, tincture of arnica and oil of turpentine, 6 oz. extract of witch hazel and alcohol to make a pint. Bathe the tendons between knee and fetlock with hot water three times daily and after bathing rub well with the liniment. In about ½ hour after rubbing apply a woolen bandage. If the swelling and soreness on shoulder are still present, treat the same, less the bandage. V.

Shingle Your Barn This Spring With

PEDLAR'S "GEORGE" SHINGLES

and you will not have to shingle it again for a lifetime. Because, Pedlar's "George" Shingles are

Rainproof, Windproof, Lightning Proof, Fireproof, Rotproof and Rustproof

They are made of the best quality of heavily galvanized steel and, when in place on your barn roof, each shingle is locked on all four sides, making the roof absolutely tight against all the elements. No matter what kind of weather comes along, a roof shingled with Pedlar's "George" Shingles will give full protection.

These shingles are 24 x 24 inches in size, so that it takes only 25 shingles to cover 100 square feet of roof. They require less time and labor to lay than any other shingle.

And they last a lifetime. There is no wearing them out. When properly grounded these shingles are also an effective lightning conductor. Shingle your barn with them and you can rest easy no matter how fierce the lightning may be—for it won't hurt your barn.

You really can't afford inferior barn roofing. Write us for full particulars and prices. Ask for Barn Shingle Booklet. L.F.

THE PEDLAR PEOPLE LIMITED

Executive Office and Factories—OSHAWA, Ont.

Branches:

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Cheapest
Because
Best and
Most
Durable

WRITE FOR FREE PUBLICATIONS
Size, quick growth, rapid fattening on pasture or in stable, high dressing percentage, prepotency, hardiness, docility, popularity, superior milking qualities, are characteristic of

SHORTHORNS

THE BREED FOR FARM OR RANCH
DOMINION SHORTHORN BREEDERS' ASSOCIATION
W. A. DRYDEN, Pres., Brooklin, Ont. G. E. DAY, Sec., Guelph, Ont.

SALEM SHORTHORNS

Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times. J. A. WATT, ELORA, ONTARIO

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.

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 some thing 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

SEVENTY-THREE HEAD OF SHORTHORNS

Four good young bulls of serviceable age; Nonpareil Ramsden =101081= and Royal Red Blood =77521=, 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

Brooklin, Ontario County
Myrtle, C.P.R. Brooklin, G.T.R.
Brooklin, C.N.R.

SHORTHORNS—T. L. Mercer, Markdale, Ont.

ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords.

Compare the SANITARY KING with all other Cream Separators

Then you will understand why so many farmers are using the

"Sanitary King"

Built of the very best material, which insures long life. Stands solid, turns easy, close skimmer, splash oiling system, solid or detachable spindle. Capacities for from one cow to a large herd—operated by hand gasoline or electricity. Sold on easy terms if desired. Write for local agent's address. Try it before you buy.

King Separator Works of Canada
Bridgeburg, Ontario

HAY

SHIPPERS! Consign your carloads to
The E. L. RICHMOND CO.
DETROIT

The Old Reliable Firm. In business a quarter of a century
References—Any Bank.

Shorthorns for Sale

Right Sort son =96282= (guaranteed) \$500. A choice lot of young heifers and bulls. Special price for next 30 days. Sound Shire mare, registered, 4 years old. Radial every hour from Hamilton.

C. N. Blanchard, R. 2, Freeman, Ontario

Bulls all sold. One extra good roan bull calf by an R.O.P. dam with an average test of 4.5; he would work by July. Also a few females bred to the herd sire, Royal Choice 79864. Leicester rams and Yorkshire sows. C.P.R., G.T.R. ALLAN B. MANN, "The Hawthornes," Peterboro, R.R. 4.

Spruce Lodge Shorthorns and Leicesters

Herd headed by the Butterfly-bred bull, Roan Chief Imp. =60865=. Young bulls, cows, and heifers of all ages, of good breeding and quality. W. A. DOUGLAS, CALEDONIA, ONTARIO

Plaster Hill Herd

Dual-Purpose Shorthorns. Six young bulls from four to thirteen months. Size, quality and good milking strains. F. Martindale & Son, R.R. 3, Caledonia, Ont.

LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Freezone, and it now can be had in tiny bottles as hereshown for a few cents from any drug store.



You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin. Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!

Flintstone Farm

Breeders of—

Milking Shorthorn Cattle
Belgian Draft Horses
Berkshire Swine
Rhode Island Red Poultry

Buying animals backed by a real guarantee of your satisfaction—from an efficiently organized, carefully run farm—where accurate records are kept—periodic testing done—and only one quality, the best, is shipped—is a form of insurance you cannot afford to overlook.

Dalton

Massachusetts

Dual-Purpose Shorthorns

Herd headed by Dominator No. 10624, whose grandam on his mother's side has an R. O. P. record of 13,535 lbs. of milk, testing 3.99, and whose dam has an R. O. P. record of 10,689 lbs. of milk, testing 3.88. We have several choice bulls, about ready for service, from this sire, and out of dams with records running from 8,000 to 11,000 lbs. in one lactation period.

WELWOOD FARM,
Farmer's Advocate London, Ontario.

BULLS — SHORTHORNS

No. 1.—An extra well-bred Roan Lady, and an extra good calf; red; 10 months.
No. 2.—A Cruickshank Victoria, out of 1st prize cow at 1917 Toronto Exhibition, and by Royal Silver, one of the best show and breeding bulls in U. S. Dark roan; 14 months.
No. 3.—An Imp. Flora. Roan—and a great calf; 12 months.
No. 4.—An Imp. Roan Lady; red; bred by Wm. Anderson. 12 months.
I am badly in need of stable space and will sell worth the money.

A. G. FARROW OAKVILLE, ONTARIO

Mardella Shorthorns

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size, type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head.

Thomas Graham, Port Perry, R. 3, Ont.

Newcastle Herd of Shorthorns and Tamworths For Sale:—2 bears 8 and 12 months old, several boars and sows 2 to 6 months old. Young sows bred and 2 show sows 2 years old, safe in farrow. All descendants of Godwill's choice, champions at Toronto Industrial 3 years in succession, and Imp. Choldington Golden Secret. Long-distance Phone: A. A. Colwill, Prop., R.R. No. 2, Newcastle, Ont.

Evergreen Hill R. O. P. Shorthorns

Offering a 13-months son of the R. O. P. bull, St. Clare. Dam has record of 7,000 lbs., test 4.5%. S. W. JACKSON, WOODSTOCK, R.R. 4, 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.

Gossip.

All those interested in the automobile as a means of travel should see the advertisement of the Michigan State Auto School, Detroit, Michigan, in this paper and write for their 200-page illustrated booklet.

A Son of Right Sort for Sale.

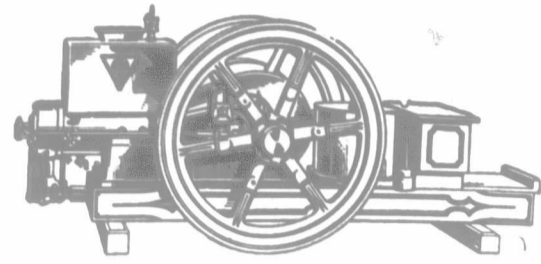
C. N. Blanshard, Freeman, Ont., who is advertising Shorthorns in these columns, is the possessor of a herd established seventy years ago. The present stock bull is a son of Right Sort (imp.), and is leaving a lot of beautifully developed animals. A glimpse at the herd will show that every attention is being given to the building up of a healthy herd. Some of the sires which have done service on the farm were Royal Kitchener (imp.), War Eagle Derby (imp.), Spicy Broadhooks (imp.), Scottish Primrose, Prince Louis (imp.), and Scottish Pride (imp.). The present stock bull is for sale, priced at \$500 for a quick turn-over. He is a red bull, kind and active and guaranteed. He is four years old and carries a wealth of flesh. Some choice young bulls are priced right for quick sale. The young females are mostly bred to Messrs. Pettit's imported bulls. Oxford sheep are also bred on the farm, and Mr. Blanshard would be pleased if prospective purchasers would come and inspect his stock. The farm is two and a half miles east of Burlington Junction G. T. R., near the cement highway.

The Merner Shorthorn Sale.

In the sale of Shorthorns, advertised by J. J. Merner in these columns, are several animals particularly worthy of note. In heifer calves there is a choice roan Rosemary, as well as a good red Princess Alice calf bred in the purple. A nice roan Duchess of Gloster cow sells with a red heifer calf at foot. The cows are all a good lot individually, in splendid breeding condition. They are of good type, with plenty of substance. Included in the offering is a roan son of Gainford Marquis. He is nineteen months old and out of a Village Girl dam. Many of the females have been bred to him. Meadow Signet, a prize-winning son of Scottish Signet, and out of an imported Kilblean Beauty cow, is the sire of many of the calves in the sale and some of the females are bred to him. His get is uniformly good. In heifers there are a nice roan show heifer by Bandsman (imp.), and Miss Corday, which is out of the imported cow Carrie C. and sired by Collynie America, a prize-winning bull. A number of other good ones are included. Two attractive young bulls, a white smooth youngster and a particularly good roan, by Meadow Signet, are worth looking after for herd headers. See the advertisement and write Mr. Merner for a catalogue and full particulars.

Lloyd-Jones' Great Sheep Sale.

J. Lloyd-Jones, breeder and importer of Shropshire and Southdown sheep, Welsh ponies and Jersey cattle, Burford, Ont., writes that his sheep sale recently held was, in spite of bad weather, a record breaker for Canada, and brought over \$6,000. C. W. Chandler of Iowa, secured 97 head of the sheep at \$3,200, and J. G. Hammer, Manager of the College Farm, Ames, Iowa, bought three sheep and fifteen lambs for some of the best breeders in the U. S. at \$1,553. The Buttar ram went to Hammer at \$315, a record price for a ram at a Canadian auction. Mr. Chandler took the highest priced ram lamb at \$200, and Mr. Hammer the ewes at \$78 each. The four best ewe lambs sired by the Buttar Ram went to Hammer at \$112.50 each and \$102 each or \$429 for the four, and eight rams and ewe lambs by the Buttar Ram brought \$769. The average for 50 ewe lambs was \$41 and for ewes \$40. The highest price for a pair of lambs from one ewe was \$212.50. The Southdowns were a choice lot also and brought high prices. One shearing ram sold for \$75 to an Indiana buyer who also took 4 ewe lambs at \$50 each. This was a mail bid and the buyer wrote that he was well pleased with his purchase. One ewe lamb brought \$100 (a Canadian record) and the mate, a ram lamb \$52, or \$152 from one ewe. Mr. Hammer secured these. Only twelve Southdowns and five Shropshires stayed in Canada and Mr. Hammer said that the offering was as good as the average lot of imported sheep. Mr. Lloyd-Jones is still in the sheep business.



Alpha Gas Engines SAVE

Work No more operating your pump, turning your cream separator, running your churn or washing machine by hand.

Time and Money No more hauling your feed to the mill to be cut or ground, or hiring someone to come to your place and grind it for you. A small cutter or grinder and your Alpha would always be ready.

Fuel The Alpha uses gasoline or kerosene, and much less of either than any other make of engine.

An Alpha Gas Engine will soon pay for itself on your farm

Write today for our catalogue which describes in detail all the twelve sizes of Alpha Gas Engines and shows why the farmer who buys the Alpha gets the most for his money.

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.

MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

For Sale:

1 reg. Dairy Shorthorn bull, sired by Robin; 15 months old.
1 reg. " " calf, sired by Ashley H.; 7 months old.
1 reg. Ayrshire bull, sired by Auchenbrain Pride; 2 years old.
1 pure-bred Ayrshire bull calf, three months old.
1 " " Dairy Shorthorn bull calf, three months old.
1 heavy Draft Gelding, 7 years old, weight 1,600 lbs.

APPLY: F. M. PASSOW, Eustis, P. Que.

HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hur for sale or exchange.
GEO. MORDEN & SON, OAKVILLE, ONT.

THE MANOR STOCK FARM---SHORTHORNS

Bulls all sold. Have Wimples, Rosemarys, Minas, Roan Ladys, etc., for inspection.
JOHN T. GIBSON DENFIELD, ONTARIO.

BURNFOOT STOCK FARM

Breeders of high record, dual-purpose Shorthorns with splendid conformation for beef. Have a number of bulls calved last fall and early in winter.
S. A. MOORE, PROP. (Farm one mile north of Caledonia) CALEDONIA, ONTARIO

WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

New sales list out: cows, heifers bred, young bulls, also stock bull Morrison Pride =102330 =.
Chas. Gainer, Secretary, Box 607, Welland, Ontario. A. E. Howell, President, Fenwick, Ont.

GERRIE BROS.' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladys, Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer.
GERRIE BROS., ELORA, ONT

MAPLE HALL SHORTHORNS

Present offering, 7 yearling bulls:
One Cruickshank Duchess Gloster Five Cruickshank Butterflys. One Shepherd Rosemary
All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers.
D. BIRRELL & SON, CLAREMONT, ONT.

BLAIRGOWRIE SHORTHORNS

I have females all ages and bulls of serviceable age. Worth while to come and see or write.
JOHN MILLER Myrtle Station, C.P.R., G.T.R. ASHBURN, ONTARIO

FLETCHER'S SHORTHORNS


Our herd of Scotch Shorthorns represents Orange Blossom, Kilbean Beauties, Matchlesses, Myxies, Missies, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford =95050 =, a Toronto winner. Present offering—two young (show animals); also several heifers and cows.
GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C. P. R. L.-D. Phone

FAIRVIEW SHORTHORNS AND CLYDESDALES

In Shorthorns we can offer you a choice from 60 head, including both bulls and females, of Lavender, Missie, Augusta, Duchess of Gloster, Village Girl, Miss Rambden and Clara breeding—the best of cattle and the best of pedigrees. In Clydesdales, write for our list of winners 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

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.



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.

SELL YOUR MILK

Raise Your Calves At a Big Profit

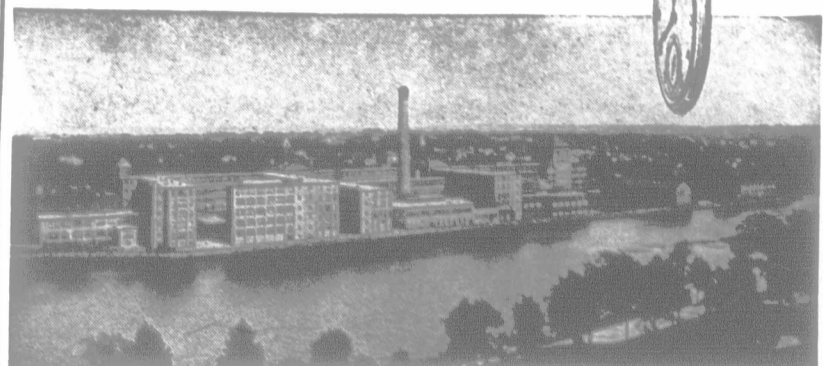


Dairymen! Raise your calves on GROFAST Calf Meal and sell all your milk. Calves thrive on this scientific substitute for milk. It is easily mixed, and the calves LIKE it. It is a great money-maker for every dairyman and cattle raiser. Ask your dealer for GROFAST. Write for booklet, "How You Can Raise and Grow Calves at a Low Cost Without Milk."

INTERNATIONAL STOCK FOOD CO., LIMITED
Ask Your Dealer TORONTO

INTERNATIONAL GROFAST CALF MEAL

A Waltham Colonial "A"
Thin at no sacrifice
of accuracy.



WALTHAM

BEFORE the establishment of the Waltham Watch Company in 1854, there was not a single factory in the world where a watch movement was made in its entirety.

The plates were fashioned in one place, the wheels elsewhere, and so forth. All the parts thus made by disconnected and non-standardized methods were finally assembled and cased somewhere else.

But with the advent of the Waltham Watch Company a revolution in watch making took place.

One of the first results of this Company's establishment was to produce better watches at a lower cost than were ever possible before. Watches ceased to be a luxury of the rich and became a convenience that all might possess.

Throughout the past sixty years, every gold medal awarded for watch merit has been awarded to Waltham.

So that there is a meaning full of significance in the name "Waltham" for any person who desires the most dependable timepiece that money can buy.

"Your Jeweler Will Show You."

WALTHAM WATCH COMPANY, LIMITED
MONTREAL

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 Alcartra; and one other, same age, by Dutchland Colantha Sir Mona. See them at once or write early.

W. L. SHAW - ROYCROFT FARM - NEWMARKET, ONTARIO.
Take Yonge Street Radial Cars from N. Toronto

CLOVERLEA FARM HOLSTEINS
Special offering for this month is a nice, straight heifer due to freshen in May.
For price and particulars, apply to

GRIESBACH BROS. COLLINGWOOD, ONT.

Questions and Answers.
Miscellaneous.

Buying Sow.

1. A buys a sow from B. B says he bred her to a hog owned by C. B says he knows the sow will have at least ten pigs and they would be worth, at six weeks old, \$75. The time is up for the sow to have her litter. She has gone her full time, but she has no pigs at all and no signs of having any. A pays \$50 for sow. C says B never bred his sow to C's hog at all. Could I make B give me back part of the money or would I have to keep the sow and be the loser? This deal is by word of mouth, no agreement drawn up.

W. J.
Ans.—1. If A has proof that what you say is correct he is in a position to enter action against B for damages due to misrepresentation of the sow and would likely collect.

Eggs By Weight.

I noticed in your last issue where Sir George Foster wishes all eggs to weigh 1 1/2 lbs. to the dozen. Do not you think that will be a rather knotty problem? I am afraid he will have to give us a recipe to make the hens lay them an exact weight unless it is another scheme like the pound prints of butter. They want a little more than weight for we may not sell light weight. Can you tell us why butter in prints cannot be sold as a pound when packed, the same

Do You Want to Lease a Bull with 30-lb. Breeding?

Then consider LYONS HENGERVELD CHAMPION, whose dam is a 25.83-lb. junior 3-year-old daughter of Baroness Madoline. Reason for leasing — we want to make his dam a 30-lb. cow before selling him. His sire's dam and grandams average 32.19. Write at once, or better, come and see him.

WM. STOCK & SONS, Sovereign Stock Farm, TAVISTOCK, ONT., R.R. No. 1
Long-distance Phone, 3 on Line 25, Innerkip

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.

DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.
S. G. & ERLE KITCHEN ST. GEORGE, ONT

RIDGEDALE STOCK FARM

offers for sale young bulls from high-testing dams, such as Lakeview Dutchland Wayne Rose, the highest producing cow of her age in the world. It will pay you to inspect these before buying

DR. F. A. HESLOP, Prop., R. R. No. 1, FREEMAN, ONTARIO. CHAS. HESLOP, Manager

Choice Grandson of Queen Butter Baroness

I am offering a choice 14-months bull from a 21-lb. junior two-year-old daughter of Louis Prilly Roubie Hartog, and sired by Baron Colantha Fayne, a son of Queen Butter Baroness, the former 33-lb. Canadian champion cow. Also have others younger.

T. W. McQUEEN (Oxford Co.) TILLSONBURG, ONT.

WALNUT GROVE HOLSTEINS

I am offering a choice lot of bull calves, all sired by May Echo Champion, who is a full brother to the world's champion, May Echo Sylvia. All are from R.O.M. dams and good individuals. Also have the usual offering in Tamworth swine.

C. R. JAMES. (Take Radial Cars from North Toronto) RICHMOND HILL, ONTARIO

When writing Advertisers please mention Advocate

as bran and other food products which go at the weight when packed? I heard a merchant tell of some prints he had weighed when bought and were all right, when he got an order for them they were slightly light weight so he dare not ship them and had to sell at a reduced figure to the biscuit factory. Why should not they be able to sell them at the weight that is in them? A SUBSCRIBER'S WIFE.

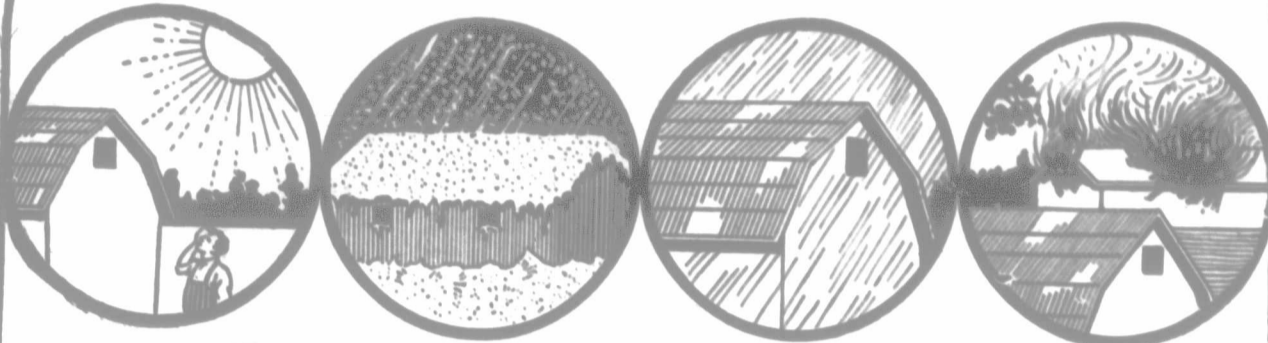
Ans.—1. We think it is right that butter should sell by the pound and that a pound should mean a pound. We also believe that all products going through the trade to the consumer whether that consumer be city purchaser or farmer should, in so far as possible, be sold by weight and good honest weight given. In goods sold by measure, honest and full measure should always be given. There has been considerable agitation re selling eggs by weight and no doubt the practice will come in vogue in time. Fair sized eggs should weigh 1 1/2 lbs. per dozen. As a matter of fact many weigh twenty-two ounces or less per dozen and others twenty-six ounces or more. Why should they not go by weight? Then the man who had big eggs would get the same price per lb. as the man who had small eggs provided all were the same quality. It looks fair.

We buy bananas by the pound now and have no trouble—why should we with eggs? You do not need to sell a dozen or to buy a dozen. You can buy a pound or sell a pound or a pound and any number of ounces. Quite simple.

NEPONSET ROOFS

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1 bull 2 years old; 1 bull 18 mos. old, from a 23½ lb. 3-year-old dam. One bull 13 mos.; others younger.

R. M. Holtby, Port Perry, 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, Secretary - St. George, Ont.

KING SEGIS PONTIAC DUPLICATE

A ½ brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write also for females.

R. W. Walker & Sons, Manchester Station,
G.T.R., Port Perry, Ontario

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 \$1,900.
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—Sire, May Sylvia Pontiac Cornucopia (¾ brother to Champion Echo Sylvia Pontiac) whose two grandams are K.P. Pontiac Lass, 44.18 lbs. butter in 7 days, and May Echo Sylvia, 41 lbs. in 7 days, 132 lbs. milk in 1 day. Dam of bull offered—Pietje Inka Pietertje, Jr. 4-year-old; butter in 7 days, 30.77 lbs.; 30 days, 124.34 lbs.; milk in 1 day, 102½ lbs.; 7 days, 696 lbs., 30 days, 2796 lbs.

BROWN BROS., LYN, ONTARIO

Hospital for Insane, Hamilton, Ont.

ONLY THREE BULLS LEFT

(1) A splendid fellow, more white than black, born May 1917. He is a grandson of Dutchland Sir Mona, and his dam is a half sister of the famous Totilla of Riverside.
(2) Born September and December, 1917, of A. 1, R.O.P. dams.

APPLY TO SUPERINTENDENT.

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.

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

Questions and Answers. Miscellaneous.

Planting Cedar Hedge.

What is the proper time to plant green cedar trees for hedging? Give information as to the height of trees, spacing, pruning, etc.

T. G.

Ans.—Any time from early spring up to early June, preferably early spring. We have planted successfully in June, however. If your land is fairly dry try to select trees from land of almost the same kind. Usually trees taken from swampy land will not do well if transplanted on dry or fairly dry land and vice versa. Choose small trees about two feet high and plant thickly in a double row. A good plan is to alternate the trees in the rows planting the two rows less than a foot apart and the trees in the rows about ten inches or a foot apart. No pruning is required when set.

Hens Stop Laying.

What would cause a flock of young hens which about two weeks ago were laying as many as five dozen eggs a day to dwindle down to two and three eggs a day in one week's time, they are all young hens and appear to be all right, occasionally we will find one dead, no sign of disease just drop off roost. Please give cause and treatment through your valuable paper. Hens are well fed and cared for; lots of yard for run. E. A. W.

Ans.—1. Are you quite sure the hens are not eating their eggs? We have had very many complaints this spring of this trouble. Watch them carefully and if you find them eating the eggs try to pull out a few of the chief offenders, darken the nests and give the hens plenty of oyster shell and meat food. It is possible that a few of the hens are too fat and are dying of apoplexy, but it is impossible for us to diagnose definitely from the information given.

Sowing Oats—Lime and Ashes.

1. Would it be advisable to sow oats two or three years old if they were kept dry and clean?

2. Would it do any harm to sow ashes and lime mixed together sown with a fertilizer drill with grain, and how many pounds would be advisable to the acre?

A. W.

Ans.—1. Yes, provided a germination test shows them to be good virile seed.

2. This is a rather difficult question to answer. The ashes and lime would do all right mixed and should be sown preferably a short time before the seed was put in. Lime may be used in any quantity from 1,000 lbs. to 2,500 lbs. per acre according to the need of the soil and the kind of lime used. Ground limestone is generally preferred. This mixture would be best for legumes or root crops. We would not advise using ashes heavily with cereal grains. They are more profitable on garden crops, fruits, legumes and roots. However, if you wish to try the mixture you might put on 1,000 lbs. of lime and 25 to 50 bushels of ashes per acre.

Sugar Beet Seed.

1. What is the proper method of planting sugar-beets for seed?

2. How deep and how far apart should they be planted? R. A. D.

Ans.—1 and 2. Set the roots down in the ground firmly with just the crowns above ground. Set in rows three feet apart and eighteen inches apart in the rows.

Hours and "Days Off" for Hired Man.

1. Is it legal for a hired man to have every other Sunday off if there is no mention of it in agreement?

2. Can his employer compel him to work more than ten hours a day?

A SUBSCRIBER.

Ans.—1. A hired man is supposed to do necessary chores on Sundays. However, a quite general practice is to allow every other Sunday off according to agreement. Of course, if nothing is agreed upon the man would have to do necessary chores all Sundays.

2. The hours worked on a farm are generally eight to ten in the fields with chores extra. No hard and fast rule can be laid down. It is necessary to get teams ready and feed stock early in the morning, at noon, and again at night. The man who is a "sticker" for hours will find plenty of room to quibble on the average farm. There must be a little give and take on the part of both sides to the contract.

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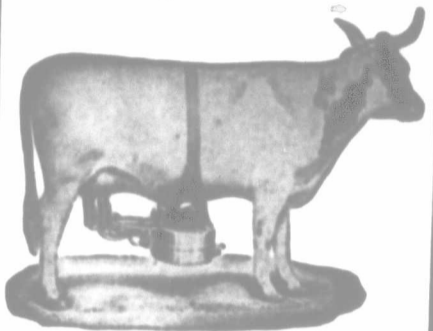
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SUNNYSIDE AYRSHIRES We have, at present, the strongest lot of young bulls we ever offered—1 by Hobland Masterpiece, 1 by Sunnyside Matchless—and the others by our present herd sire, Sunnyside Masterpiece.
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Kelso 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 1917-1918 young bulls are sure to please. D. A. MacFarlane, Cars Cross-Ing, G. T. R., Athelstan N. Y. C.; Kelso, Que.

Gossip.

Penrith Shorthorn Sale.

Messrs. John Thornborrow & Co. had the distinction at his year's Spring Sale held under the auspices of the Penrith Association of Shorthorn Breeders, of making not only the top price for an auction sale of a bull, but also the highest average for any single class of bulls on record in the annals of the British Shorthorns. The features of the Penrith Bull Sales are of importance, particularly to export buyers, i.e., its close proximity to the railway station, and the fact that the program as printed can be relied upon, thus enabling those who have subsequent appointments to be able to keep such appointments.

The competition for the prizes offered is an extended one, cows having four classes, heifers three classes, bulls seven classes, besides certain special prizes. The cash awarded, exclusive of challenge cups, amounted to £173.

The champion class for bulls, twenty-one of which made £520 6s. 0d. for an average, was one of the best we have ever seen together, it is generally admitted that the first six bulls formed a group which for type, character and quality were equal to any, and had probably never been excelled for a similar number, even at the Royal Show itself.

Before referring to the sale, there is one other point which is of importance to breeders in other countries. It is the representative character of this sale, practically 150 herds owned by as many breeders were represented, this shows the scope of the sale, and affords unique opportunity for comparison between one herd and another.

The record of the sale is unique, A. J. Marshall, presumably for Buenos Ayres, secured J. Robinson's champion bull, Everlasting, by the Duthie bull, Collynie Sweepstake, out of Butterfly Queen 6th, for 3,700 guineas. F. B. Wilkinson, who gave 3,100 guineas for the top-priced bull at Perth, was the runner-up. The reserve champion, bred and owned by His Grace the Duke of Northumberland, was British Honor, sired by Messrs. W. T. Garne & Sons' Aldsworth Duke, that won for them second prize at Nottingham Royal Show. His dam was British Lady, whose sire, British Ensign, was sold for a high price to go to the Argentine. E. R. Casares secured him at 1,800 guineas.

The following summary of the sale includes the leading prices: At 1,600 guineas J. Shepherd secured Tongswood Roster, bred by C. E. Gunther. At 1,000 guineas F. B. Wilkinson secured Moresby Artilleryman, bred by Mrs. Burnyeat. Lord Rhybon went to H. S. Blunt, and Priapus to Mr. J. Sidey at 700 guineas, both for the Argentine. Magnus went to E. R. Casares at 500 guineas for the same country. Moresby Fusilier went to L. Smith for U. S. A. at 400 guineas, Admiral to Peter Ross for U. S. A., Velvet Glove to Messrs. Rawes, Proud Patriot to M. Marshall, and Admiral to J. Sidey, each at 300 guineas, the latter three for U. S. A. Pipe Major went to Mr. Herrington at 280 guineas, Moresby Treasure to J. Sidey, Domino to J. Shepherd, both for Buenos Ayres; and Moresby Dragon to Mr. Kelsey Burge at 250 guineas. Proud Britisher to M. Marshall at 240 guineas, Playfellow to M. Davis at 220 guineas, Juvenal to Mr. Burton at 200 guineas. Gay Wizard to Mr. Haugh, and Gainford Rothes King to Peter Ross, U. S. A., at 180 guineas. Birdcall Illustrious Stamp 2nd went to Lady Egerton of Tattos, and Greenleaves Blend to Mr. Ritson at 170 guineas. There were forty other bulls ranging from this figure to 100 guineas.

The top-priced heifer, Vale Gem, was 210 guineas to Mr. David; Proud Daisy to Capt. Christie at 180 guineas, Barrington Duchess 25th to Olympia Co. Ltd., 160 guineas; Nonwick Valentine to F. H. Thornton and Bellina to Mr. L. Smith, U. S. A., at 150 guineas. Whitehall Music went to Mr. Williamson at 120 guineas, Lady Jane 54th to R. T. Stewart at 105 guineas and Reward 3rd to Mr. Rodas at 100 guineas.

Seraphina 3rd to Mr. O. Porritt made top price, 550 guineas. Telluria went to Olympia Co. Ltd. at 350 guineas, they also took Knowefield Duchess of Geneva 7th at 300 guineas. Turnham Somerset to Mr. Taylor and Bright Blossom to Captain Christie at 260 guineas. Cressida 44th to Olympia Co. Ltd. and Mistress Mysie to Mr. Hartnett at 200 guineas. Vintage Butterfly 2nd went to Mr. Perkins at 180 guineas, Princess 7th to Mr. E. A. Mann at 175 guineas, and

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Sharples skims clean at any speed, so it is not necessary to put on a contraption to prod you up to a fixed speed. You can judge how important this is when tests show that 95 per cent. of all separators are turned under speed much of the time, causing a waste averaging 10 pounds of butter per cow yearly. Sharples saves all this—automatically.

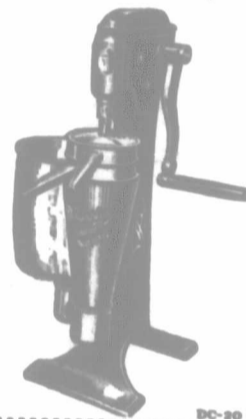
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OFFERS:—Several young bulls, all of serviceable age, and all from R. O. P. dams. These are priced right. Interested parties should write or see these at once. We also have females of breeding age.
 D. DUNCAN & SON, Todmorden P.O., Duncan Station, C.N.O.

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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.
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THE WOODVIEW FARM CANADA'S MOST BEAUTIFUL JERSEY HERD

JERSEYS 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.
 LONDON, ONTARIO Jno. Pringle, Proprietor

THE EDGELEY CHAMPION HERD OF JERSEYS

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times.
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SPECIAL OFFERING of fresh cows, in-calf heifers and Island-bred bulls. Nearly all of the Champion R.O.P. cows are directly descended from the Brampton Herd. Buy at the fountain head.
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HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

GLADDEN HILL AYRSHIRES

Herd headed by Fairvue Milkman. Have one choice bull of serviceable age for sale—a 3rd-prize senior calf at Toronto, 1917—17 months old. Also a few females. Two Canadian-bred Clydesdale stallions from Imp. stock. LAURIE BROS., AGINCOURT, ONT. C. N. R., G. T. R., C. P. R.

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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.

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Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait. W. H. PUGH, Myrtle Station, R. R., Ontario

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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

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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.

Sunnyside Chester Whites and Dorsets. In Chester Whites we have both sexes, any age, bred from our champions of many years. In Dorsets we have ram and ewe lambs by our Toronto and Ottawa champion, and out of Toronto, London, and Guelph winners. W. E. Wright & Son, Glanworth, Ont.

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Large size, hardy, thrifty stock. Only a few bred sows, but a large number of young boars and gilts. J. B. PEARSON, Manager

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Young stock for sale, both sexes, from prize-winners. WM. ROBERTS & SONS, Beaver Mead Farm, Peterboro, Ont.

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Some choice young sows bred. Sows carrying their second litters. Bears ready for service. Young stuff, any age. All orders promptly attended to. LESLIE HADDEN, R. R. No. 2, Pefferlaw, Ont.

fifteen others realized 100 guineas and above.

The summary of this notable sale is as follows: Seventy-four cows ranged from 550 guineas, and realized £8,193 3s. 0d., giving an average of £111 7s. 10d. Twenty-five cows born 1916-1917, ranged from 210 guineas and realized £2,529 0s. 0d., giving an average of £101 3s. 6d. The average of the ninety-nine females was £108 6s. 2d, and that of the 260 bulls, which ranged from 3,700 guineas, and realized £30,834 6s. 0d. was £118 11s. 10d., the general average of the sale being £115 15s. 1d. for 359 head. It will be of interest to note that at the Birmingham Annual Sale, held on March 5th and 6th, and at the Penrith Sale, held on March 7th and 8th, there were 626 Shorthorn cattle sold, which realized £74,725 6s. 0d., giving an average of £119 7s. 4d.

Gossip.

Hereford Bull Makes British Record Price.

Men and seasons come and go, but "records" run on forever in British pedigree live stock breeding and selling. The latest breed to enjoy a record—and not before it is needed—is the Hereford.

At the Hereford Herd Book Society's sale in the city of that name on Wednesday, March 13th, Lord Rhondda, the Food Controller, was paid 1,450 guineas (a guinea means 5 dollars 11 cents), for a February, 1917, bull, only second in the class he figured in, named Reformer. Sired by Conway, and out of Lady Mona, this youngster, full of character, albeit possessing beautiful quality and an ideal color, with smart markings, goes back on his grandam's line to the Lady Byrons and the Blossoms. His immediate parents cost 360 guineas to buy, so Lord Rhondda has soon got his interest back. There were many other good priced ones, and exporters for the Argentine, South Africa, and elsewhere became quite reckless in the way they bid 400 guineas and the like for bulls they would have turned their noses up at 150 guineas before the war. J. Sidey bought the champion bull of the Show, one called Thrupton Colonel and offered by Messrs. C. & E. Ockey, who only got 400 guineas for him. To the Argentine and to Bullrick's, no doubt, is his fate. So much for Herefords!

Some stupendous figures are now knocked together to prove the merit of the British Shorthorn, as shown by the prices the breed made in its first four spring sales this year—to wit, Perth, Aberdeen, Birmingham and Penrith. At those four events some 1,367 head of Shorthorns have realized £170,414 17s. 0d., or a general average of £124 13s. 3d. apiece.

Scotland's brace of sales saw 741 head aggregate £95,689 13s., or a general average of £129 apiece. That is at Perth and Aberdeen.

England's brace of sales at Birmingham and Penrith produced an aggregate of £74,725 6s. 0d. for 626 head, or a general average per beast of £119 7s. 4d. Two more big sales are in the offing—at Crew and Preston—but I do not suspect the individual record of 3,700 guineas for the bull, paid at Penrith, will be beaten till Duthie holds his bull calf sales in October next. It will be then that the English individual record stands in danger of being broken for the Scots never rest unless they have all the records.

And still furthermore records have been made—i. e., the payment of 450 guineas for a shearing Lincoln longwool stud ram called Mere A1, a son of Mere Leadenham. This event took place at the late John Pears' sale at Mere near Lincoln. The buyer was a neighbor, Lieut. Nicholson of Horkstow, Lincs. And now I think we exhausted the crop of "records" for the week ending March 16th of the Lord. ALBION.

Sales from "The Hawthornes."
Mention was made in the gossip columns, in the April 4 issue, of the live stock bred and offered for sale by Allan B. Mann, "The Hawthornes", Peterboro, Ont. The sheep were designated as Cotswolds by mistake. Leicesters are bred and are being offered for sale by Mr. Mann. He also reports the following sales of Shorthorns: One bull to Richard Nurse, Omemece; one choice, red bull to Thos. McIldoo, Ida; one nine-months bull to T. H. G. Crough, Peterboro, and one nineteen-months bull to Thos. Stuart, Egansville. The sale of one shearing Leicester ram to F. B. Fee, Omemece, is also reported.

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Our book "What the Farmer can do with Concrete" is a great help to farmers. Many a farmer has told us that the advice contained in it has helped him stop the leaks in his farm profit and has put hundreds of dollars into his pocket.

Concrete is a big factor in successful farming. Consider your own farm—the leaks it is suffering from, and how concrete stops these leaks.

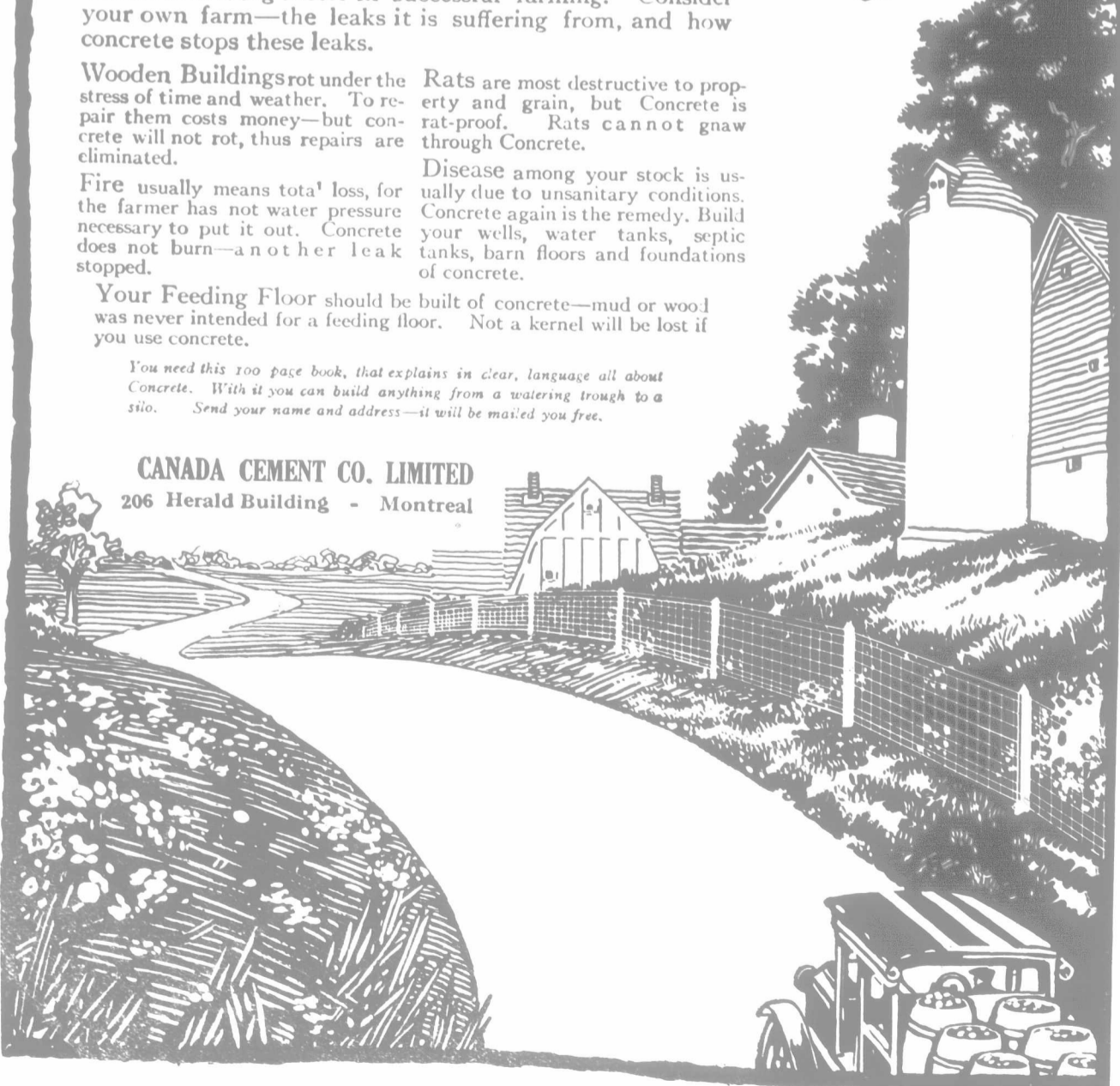
Wooden Buildings rot under the stress of time and weather. To repair them costs money—but concrete will not rot, thus repairs are eliminated.

Fire usually means total loss, for the farmer has not water pressure necessary to put it out. Concrete does not burn—another leak stopped.

Your Feeding Floor should be built of concrete—mud or wood was never intended for a feeding floor. Not a kernel will be lost if you use concrete.

You need this 100 page book, that explains in clear, language all about Concrete. With it you can build anything from a watering trough to a silo. Send your name and address—it will be mailed you free.

CANADA CEMENT CO. LIMITED
206 Herald Building - Montreal



These Premiums For Our Subscribers Only

WE do not give these premiums to people for taking The Farmer's Advocate and Home Magazine. They are given to our regular subscribers in return for sending in to us other new subscriptions.

We appreciate the friendly assistance given us by our regular subscribers, in helping to increase the number of Advocate readers, and the articles shown below are intended as a recompense to our friends for their help.

The Farmer's Advocate always sells on its merits as a first-class farm paper. Subscribers pay \$1.50 a year in advance, and the steadily increasing number of readers is the best evidence that its work is appreciated.

Any regular subscriber to The Farmer's Advocate can earn the articles shown by simply sending in the number of new subscriptions mentioned, and we recommend any of the premiums as being of excellent value.

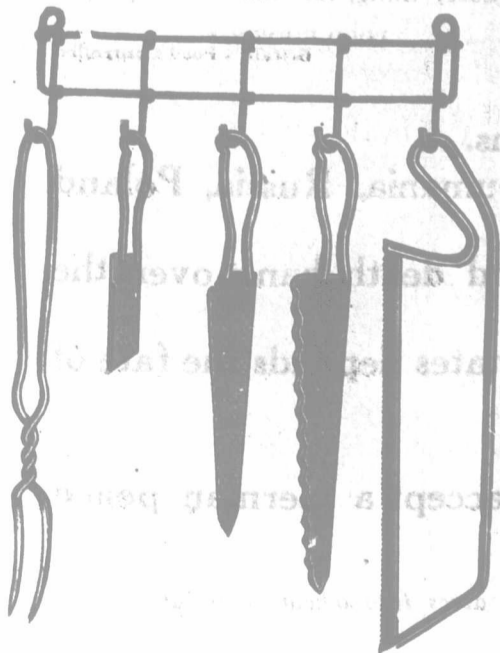
BIBLES—For ONE NEW Subscription

One style with Old and New Testaments, beautifully bound and clearly printed, with index to names of places, persons and subjects. Has 12 full-page maps. Size when open, 7x10 inches; weight 23 ounces, would cost \$1.00 to \$1.50 in any book store. Another style, same quality, with centre reference and chromatic index; size when open, 9x13 inches.

Sanitary Kitchen Set

For TWO NEW Subscriptions

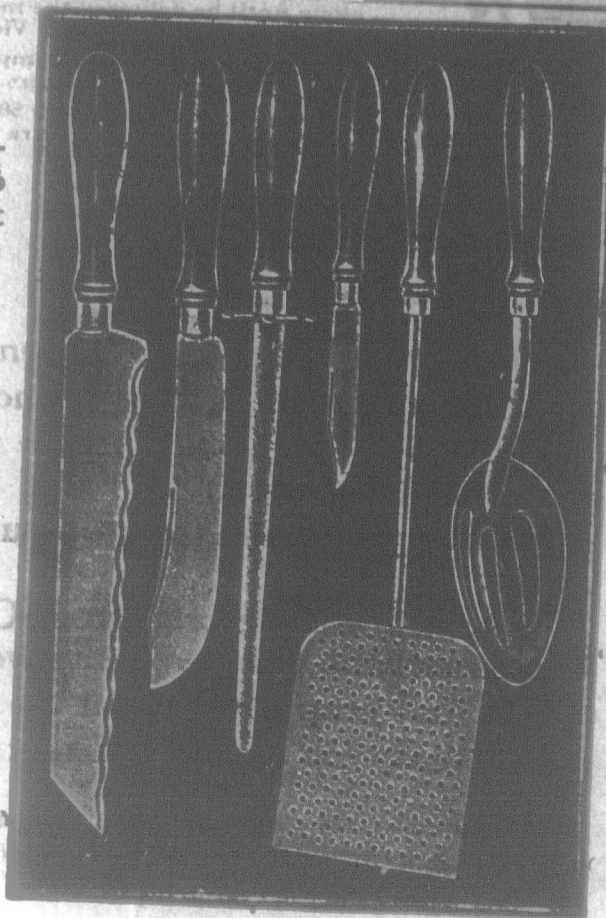
Consists of all-metal roasting fork, paring knife, wavy-edged bread knife and meat saw, with metal rack made to hold them all, and intended to hang on the wall. A most useful set in any kitchen.



Complete Kitchen Equipment

For TWO NEW Subscriptions

Pancake turner, basting spoon, large butcher knife with steel for sharpening, paring knife and wavy-edged bread-knife; all of best steel and fitted with rubberoid finished handles of hardwood.



THE WILLIAM WELD COMPANY, LONDON, ONTARIO



Attempting the Impossible



A British Tommy volunteered to take a message, the safe delivery of which meant the saving of hundreds of his comrades' lives. He had to cross a heavy enemy barrage. In attempting it he was shot down, and lay with his arm blown away. A second man was sent but was killed on the way. In the meantime, the first mangled soldier gathered himself together and walked, staggered and crawled along until he delivered the message to the hand of the officer it was intended for. He then fell back dead. He was awarded the Victoria Cross.

This hero attempted the impossible and did it. When you are asked to do what you may deem impossible, think of this hero.

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. Don't do your bit—do your BEST.

"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.

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.

Lack of Food—threatens the Battle Line

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